

RAJESH KUMAR MAURYA

M.B.A. (INTERNATIONAL AGRIBUSINESS)

2010

**PRODUCTIVITY OF FRUITS AND VEGETABLE AND
DOCUMENTATION PROCEDURE OF EXPORTS OF FRUITS
AND VEGETABLES**

**BY
RAJESH KUMAR MAURYA
B. Sc. (Agriculture)**

**INTERNATIONAL AGRIBUSINESS MANAGEMENT INSTITUTE
ANAND AGRICULTURAL UNIVERSITY
ANAND 388 110
2010**

**PRODUCTIVITY OF FRUITS AND VEGETABLE AND
DOCUMENTATION PROCEDURE OF EXPORTS OF
FRUITS AND VEGETABLES**

A PROJECT REPORT

Submitted by

RAJESH KUMAR MAURYA

(04-0885-2008)

in partial fulfillment for the award of the degree

of

**MASTER OF BUSINESS ADMINISTRATION
(INTERNATIONAL AGRIBUSINESS)**

UNDER THE GUIDANCE

OF

Prof. Y. A. Lad

Assistant Professor

INTERNATIONAL AGRIBUSINESS MANAGEMENT INSTITUTE

ANAND AGRICULTURAL UNIVERSITY

ANAND 388 110

JULY – 2010

INTERNATIONAL AGRIBUSINESS MANAGEMENT INSTITUTE
ANAND AGRICULTURAL UNIVERSITY
ANAND -388110

CERTIFICATE

This is to certify that the project entitled “**Productivity of Fruits and Vegetable & Documentation Procedure of Exports of Fruits and Vegetables**” of M.B.A (International Agribusiness) embodies bonafide research work carried out by **RAJESH KUMAR MAURYA** under my guidance and supervision and that no part of this project work has been submitted for any other degree. The assistance, guidance and help received during the course of investigation have been fully acknowledged.

Place: IABMI, Anand

(Prof. Y.A. Lad)


Date: -----


Major advisor


**INTERNATIONAL AGRIBUSINESS MANAGEMENT INSTITUTE
ANAND AGRICULTURAL UNIVERSITY
ANAND -388110**


CERTIFICATE

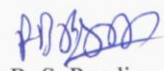
This is to certify that the project entitled **"Productivity of Fruits and Vegetable & Documentation Procedure of Exports of Fruits and Vegetables"** submitted by **Rajesh Kumar Maurya** to the Anand Agricultural University, Anand in partial fulfillment of the requirement for the degree of **M.B.A. (International Agribusiness)** after presentation and defended by the candidate before the following members of the Advisory Committee. The performance of the candidate in this project has been found satisfactory; we therefore, recommend that the project report may be approved.


(Dr. G. B. Valand)
Principal


(Prof. Y. A. Lad)
Major Advisor


(Mr. Abid Deraiya,
MD, Relish Agro Food Pvt. Ltd.)
Committee Member


(Dr. K.B. Kathiriya,
Research Scientist,
Vegetable Research Station, AAU)
Committee Member


(Dr. R. S. Pundir,
Associate Professor, IABMI, AAU)
Committee Member

Place: IABMI, Anand
Date: 28/07/2010

CERTIFICATE

TO WHOM IT MAY CONCERN

This is to certify that **Mr. RAJESHKUMAR MAURYA** student of M.B.A. (International Agribusiness), in 4th semester in International Agri Business Management Institute, Anand Agricultural University, Anand has successfully completed 16 weeks project work in **Relish Agro Food (India) Pvt. Ltd.**

I wish him best wishes in his future endeavors.

Relish Agro Food (I) Pvt. Ltd.



Director

Place: ANAND

Date: 23rd June 2010

Name : Mr. Abid Deraiya

Designation : Director

RELISH AGRO FOOD (INDIA) PRIVATE LIMITED

Head Office : Vaibhav Tower, First Floor, V.V. Nagar Road, Anand - 388 001. Tel. : +91 2692 249632 Fax : +91 2692 249631

Branch Office : Near Vegetable Market, Damnagar - 365 220 Dist. Amreli, Gujarat, India, Tel. : 0091 2793 222672, 222092

Fax : 0091-2793-222246 • E-mail : mail@relishagrofood.com

DECLARATION

I hereby declare that the project entitled **“Productivity of Fruits and Vegetable & Documentation Procedure of Exports of Fruits and Vegetables”** Submitted for the M.B.A (International Agribusiness) degree is my original work and this has not formed the basis for the award of any degree, associate ship or other similar titles.

Place: IABMI, Anand

Name : Rajesh Kumar Maurya

Date:

Reg. No. : 04 - 0885 – 2008

ACKNOWLEDGEMENT

I express my foremost gratitude to my major guide Mr. Y. A. Lad, Assistant Professor (H. R. M) International Agribusiness Management Institute and Assistant Registrar of Anand Agricultural University Anand for all able guidance, inspiration, intellectual stimulation and remarkable equanimity during the period of my Project.

I am highly obliged to other faculty members my collage Dr. Sanjiv Kumar Assistant Professor, Project and Supply Chain Management International Agribusiness Management, AAU, Anand, Dr .R. S. Pundir, Associate Professor and Project and Placement coordinator, International Agribusiness Management Institute, Anand Agricultural University Anand, and Mr. T. S. Shubin, Assistance Professor and P.G. coordinator, International Agribusiness Management Institute, Anand Agricultural University Anand, Dr. G.B. Valand Principal and Dean, , International Agribusiness Management Institute, Anand Agricultural University Anand, for their scholarly suggestions, constructive criticism and prompt help, which were indispensable for successful completion of this project work.

I tender my profound thanks to my company guide Mr. Abid Dariya Managing Director of Relish Agro food India Pvt Ltd, for allowing in his organization and giving project title and objectives, all able guidance, inspiration, intellectual stimulation and remarkable equanimity during the period of my Project. Ms. Neelam Ben Assistant Manager of Export Import Procedure, Relish Agro food India Pvt Ltd, for providing knowledge of Export Import Procedure, Mr. Moshin Assistant Manager of Export Import Procedure, Relish Agro food India Pvt. Ltd, Mr. Ramesh Bhai Assistant

Manager of Accounting, Relish Agro food India Pvt Ltd, for their help during the project.

I express my sincere gratitude to. Mr. Nivarti Godaji, General Manager and Plant Head at veraval Plant, Relish Agro food India Pvt Ltd, Mr. Amar, Production Supervisor, Mr. Salim, Production Supervisor, Mr. Jitu, Production Supervisor, Mr. Mukesh, Production Supervisor, Mr. Kapil, Production Supervisor, Mr. Bharat. Production Supervisor, Mr. Bharat Raut, Production Supervisor, Mr. Asharaf Production Supervisor, at veraval Plant, Relish Agro food India Pvt Ltd, for their help during the study.

I am indebted to my M. Sarvanan, Govind, Gulab, Giriraj, Ramesh Gurjar, Jasvant, Ramesh maurya, Mukesh for their help during the project work.

Words are not enough to express my deep love and devotion to my parents Mr. Hariram Maurya and Mrs. Saroja devi, my sister Ms. Shivekumari maurya, grand mother and my relative Arjun Maurya, Ajay Maurya and their Parents for their endless encouragement, patience, support and love which helps me to overcome the difficulties throughout my life, strengthened my volition and boosted my morale.

Rajesh Kumar Maurya

ABSTRACT



**“PRODUCTIVITY OF FRUITS AND VEGETABLE &
DOCUMENTATION PROCEDURE OF EXPORTS OF FRUITS
AND VEGETABLES”**

Rajesh Kumar Maurya

Reg. No. (04-0885-2008)

Major Advisor

Prof. Y. A. Lad

Asst. Professor

**INTERNATIONAL AGRI-BUSINESS MANAGEMENT INSTITUTE
ANAND AGRICULTURAL UNIVERSITY
ANAND 388110**

ABSTRACT

India produces 12% of the world's fruits and vegetables. The most important fruits grown in the country include Mango, Banana, Guava, Papaya and Sapota and Vegetables include Tomato, Brinjal, cauliflower, cabbage, and okra. The leading fruits and vegetable growing states in the country are Uttar Pradesh, Maharashtra, Tamilnadu, Gujarat, Karnataka, Bihar, Haryana and Punjab. In this study, the productivity of fruits and vegetables only in Gujarat has been analysed and documentation of export procedures.

With the increase in population of our country and improvement in the dietary habits, the consumption of fruits and vegetables has increased. It is a common knowledge that fruits and vegetables have high nutrient value and they are vital for health. The six Indian metropolitan cities of New

Delhi, Kolkata, Mumbai, Chennai, Hyderabad and Bangalore have the population between 60-65million people. This enormous urban market relies on fruits and vegetables from the population zone across various regions of the country.

In the present scenario, the cultivable land area is decreasing day by day due to the rapid urbanization, industrialization and shrinking the land holdings.

Fruits (Mango, Banana, Papaya, guava, and sapota) and vegetables (Tomato Brinjal, Cauliflower, Cabbage, and Okra) offer the highest income generating potential and return per hectare. During the past ten years production of fruits & vegetables has increased more than five- fold in the study area.

Fruit and vegetables in Gujarat state are cultivated in 634124 hectares with total production of about 12804002 MT. The productivity of fruit and vegetables in Surat district is about 20.1 MT/ha. In Surat district out of total ten Talukas, kamrej taluka alone produced 70 % of the total fruits and vegetables. Similarly, in Bharuch district out of eight talukas, Jambusar Taluka alone produced about 70 % of the total production of fruit & vegetables.

Cost of cultivation is divided into two parts; one is variable cost and another is fixed cost. Total cost is the sum total of fixed cost and variable cost. The cost of cultivation includes Cost of seed, transplantation, irrigation, fertilizers, insecticide & pesticide, hired labour and transportation. Farmers do not consider the labour work of family members. Cost of cultivation of major vegetables namely Tomato, Brinjal, and Cauliflower per acre was found `14675, `13950, and Rs `13200 respectively. Similarly cost of cultivation mango, banana and papaya per acre was observed `9200, ` 15700 and `11000 respectively.

Following main distribution channels were found in the study area:

- (I) Fruits & Vegetable producers —————> Consumer
- (II) Fruits & Veg. producers —————> Retail Trader —————> Consumer
- (III) Fruits & Veg. producers —————> Wholesaler —————> Trader —————> Retail
Trader —————> Consumer
- (IV) Fruits & Veg. producers —————> APMC —————> Wholesaler —————> Trader —————>
Retail Trader —————> Consumer.

As for documentation procedure, an important part of export, the procedure passes through three major export stages namely, registration, pre-shipment, post-shipment.

TABLE OF CONTENTS

| CHAPTER NO. | | TITLE | PAGE NO. |
|----------------|-------|--|-------------|
| | | <i>ABSTRACT</i> | Vii |
| | | <i>LIST OF TABLE</i> | x |
| | | <i>LIST OF FIGURES</i> | Xi |
| | | <i>NOMENCLATURE</i> | xiii |
| 1. | | INTRODUCTION | 1 |
| | 1.1 | Vegetables | 1 |
| | 1.2 | Fruits | 8 |
| | 1.3 | Gujarat | 14 |
| | 1.4 | Objective | 15 |
| | 1.5 | COMPANY PROFILE | 15 |
| | 1.5.1 | History | 15 |
| | 1.5.2 | Products of Company | 18 |
| | 1.5.3 | Plant Location and Layout | 19 |
| | 1.5.4 | Management Team | 20 |
| | 1.5.5 | Process of Frozen Vegetables | 21 |
| 2. | | REVIEW OF LITERATURE | 27 |
| 3. | | RESEARCH METHODOLOGY | 29 |
| | 3.1 | Research Methodology | 29 |
| | 3.2 | Nature of Data | 29 |
| | 3.3 | Scope of the Study | 30 |
| | 3.4 | Limitations of the study | 30 |
| 4. | | RESULT AND DISCUSSION | 31 |
| | 4.1. | Productivity of Fruits and Vegetables in Gujarat | 31 |

| | | | |
|-----------|-------|--|-----------|
| | 4.2. | Productivity of Fruits and Vegetable in Surat District | 32 |
| | 4.3. | Productivity of Fruit and Vegetable in Bharuch District | 33 |
| | 4.4. | Fertilizers | 36 |
| | 4.6. | Major Disease and Pest Occurs in Fruits and Vegetables | 37 |
| | 4.7. | Cost of Cultivation of Fruit and Vegetables | 38 |
| | 4.8. | Marketing System & It's Function | 40 |
| | 4.9. | Payment Procedure | 45 |
| | 4.10. | Problem Face by the Farmer During Cultivation of Fruits and Vegetable | 46 |
| | 4.11. | Inco terms | 47 |
| | 4.12. | Export –Import Documentation | 60 |
| | 4.13. | Problems Faced by Indian Exporters | 65 |
| 5. | | SUMMERY AND CONCLUSION | 74 |
| 6. | | <i>REFERENCES</i> | xiv-xvi |
| 7. | | <i>APPENDICES</i> | i-xviii |

LIST OF TABLE

| S.N. | Caption | Page No. |
|------|---|----------|
| 1. | Productivity of Tomato. | 2 |
| 2. | Productivity of Brinjal | 3 |
| 3. | Productivity of Cabbage | 3 |
| 4. | Productivity of Cauliflower | 4 |
| 5. | Productivity of Okra | 4 |
| 6. | Productivity of Mango | 9 |
| 7. | Productivity of Banana. | 9 |
| 8. | Productivity of Sapota. | 10 |
| 9. | Productivity of Papaya | 11 |
| 10. | Productivity of Guava | 11 |
| 11. | Productivity of fruits in Gujarat | 15 |
| 12. | Productivity of vegetables in Gujarat | 15 |
| 13. | Producing district of Gujarat | 15 |
| 12. | Management Team | 20 |
| 14. | District wise fruits & vegetable in Gujarat | 32 |
| 15. | Area Production and Productivity of Fruits and Vegetables in Surat District | 32 |
| 16. | Area Production and Productivity and Fruits and Vegetable within Bharuch District | 35 |
| 17. | Planting distance of fruits and vegetable | 36 |
| 18. | Markets of Fruits and Vegetable | 41 |
| 19. | Higher Incidence of Trade-Facilitation Problems in India. | 68 |
| 20. | Trade-Facilitation Problems | 69 |

LIST OF FIGURE

| S.N. | Caption | Page No. |
|-------------|--|-----------------|
| 1. | Contribution of India in vegetables Production in World | 1 |
| 2. | Production Share of Major Vegetables in India | 5 |
| 3. | Area Share of Major Vegetables in India | 6 |
| 4. | Percentage Share in Area for Leading Vegetables Producing States | 6 |
| 5. | Leading Vegetables Producing States | 7 |
| 6. | Percentage Share in area for leading states in India | 7 |
| 7. | Contribution of India in fruit production in world | 8 |
| 8. | Production Share under major fruits in India | 12 |
| 9. | Area Share under major fruits in India | 12 |
| 10. | Leading fruit producing states in India | 13 |
| 11. | Area Share under major fruits in India | 13 |
| 12. | Percentage Share in area for leading states in India | 14 |
| 13. | Plant Location and Layout | 19 |
| 14. | Management Flow Chart | 20 |
| 15. | Process Flow Chart of Frozen Vegetables | 22 |
| 16. | Productivity and Fruits and Vegetable within Surat District Taluka kamrej | 33 |
| 17. | Productivity and Fruits and Vegetable within Bharuch District Taluka –Jambusar | 35 |
| 18. | Distribution Channels | 43 |
| 19. | Steps Involve in Export Transaction | 48 |

NOMENCLATURE

| | | |
|-------|---|--|
| FOB | : | Free On Board |
| C&F | : | Cost and Freight |
| CIF | : | Cost, Insurance, Freight |
| DGFT | : | Director General of Foreign Trade |
| IEC | : | Importer-Exporter Code |
| ECGC | : | Export Credit Guarantee Corporation. |
| CHA | : | Custom House Agent |
| (B/L) | : | Bill of Lading |
| EP | : | Export Promotion |
| DEPB | : | Duty Entitlement Pass Book |
| SDF | : | Sales Disclosure form |
| EDI | : | Electronic Data Identification |
| CNX | : | Cranial nerve number |
| PAN | : | Permanent Account Number |
| STO | : | Sales Tax Office |
| EPC | : | Export Promotion Council |
| RCMC | : | Registration-cum-Membership Certificate |
| FIEO | : | Federation of Indian Export Organisation |
| ITPO | : | Indian Trade Promotion Organisation |
| COC | : | Chambers of Commerce |
| IIP | : | Indian Institute of Packing |
| EIA | : | Export Inspection Agency |
| EIA | : | Export Inspection Agency |

| | | |
|------|---|--|
| C&F | : | Clearing and Forwarding |
| D/P | : | Documents against Payment |
| TT | : | Telegraphic Transfer |
| L/C | : | Letters of Credit |
| FAO | : | Food and Agriculture Organization |
| NHB | : | National Horticulture Board |
| GSP | : | Generalized System of Preference |
| EU | : | Europe |
| US | : | United State |
| EPCH | : | Export Promotion Council for Handicrafts |

INTRODUCTION



I. INTRODUCT ION

Horticulture sector, which includes fruits, vegetables, spices, floriculture, and coconut, among others, covered 20.66 million hectares of land in 2008-09, accounting for 8.5 percent of the gross cropped area of the country. With production of 214.71 million tonnes in 2008-09 the sector accounted for 30 percent of GDP from agriculture. The growth rate during the eleventh plan for the sector is 7 to 8 percent. With fruit production at 68.01 million tonnes in 2008-09, India accounted for about 10 percent of the global production of fruits from an area of 4.0 million hectares and was the second largest producer of fruits in the world. With 129 million tonnes of vegetable production in 2008-09, India ranked as the highest producer of vegetables in the world. In the world, India occupied first position in the production of cauliflower, second in onion and third in cabbage.

1.1 Vegetables:-

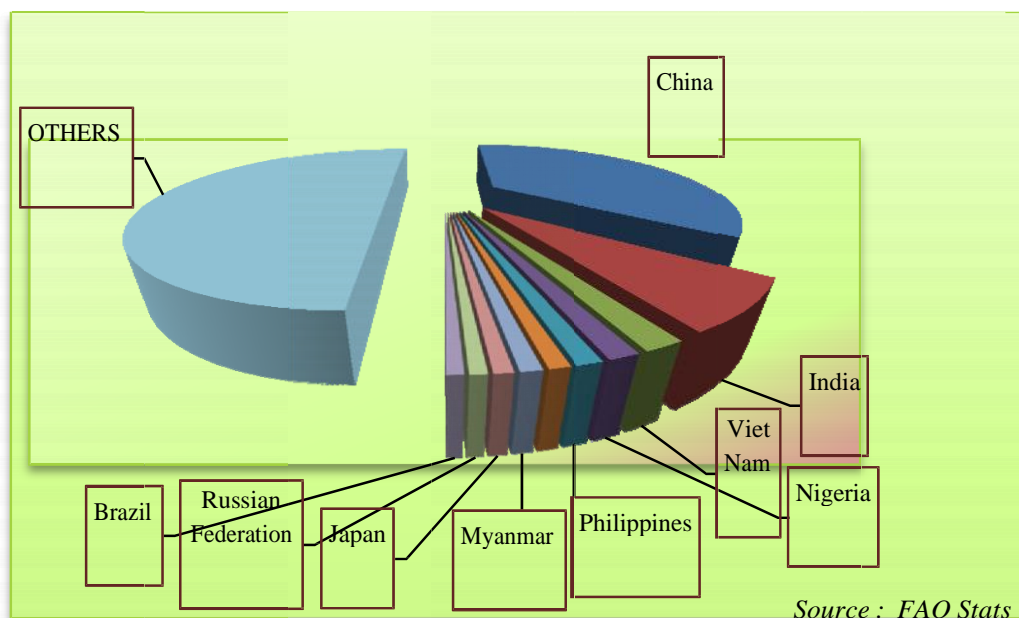


Fig 1.1: - Contribution of India in vegetables production in world

Production of vegetables in the country in 2008 – 09 is 129077 000 mt from an area 7981000 ha and productivity 16.17 mt/ha. In vegetables production, India is next only to China with an annual production of 128449000 mt from 7848000 hectares in 2007-08 having a share of 14.4% to the world production. (N H Board Data Base 2009).

Adoption of high yielding cultivars and hybrids and suitable production technologies has largely contributed for higher production and productivity 16.1 mt/ha. Per capital consumption has also increased from 95 gram to 175 gram per day. More than forty types of vegetables belonging to different groups namely Cucurbits, Cole crops, Solanaceous, Root and Leafy vegetables are grown in different agro-climatic situations of the country. Except a few, mainly Brinjal (egg plant), Colocasia, Cucumber, Ridge gourd, Sponge gourd, Pointe gourd etc. Most of the other vegetables have been introduced from abroad. (<http://agriculture.indiabizclub.com>).

Tomato: -

Tomato is one of the most important food crops of India. It is grown in 0.458 M ha area with 7.277 mt production and 18.6 mt/ha productivity. Tomato is rich source of vitamins A, C, potassium, minerals and fibres. Tomatoes are used in the preparation of soup, salad, pickles, ketchup, puree, and sauces and also consumed as a vegetable in many other ways.

Table 1.1.1: - Productivity of tomato

| Area (in 000'ha) | | Production (in 000'mt) | | Productivity (in mt/ha) | |
|-----------------------------|---------|-----------------------------------|---------|------------------------------------|---------|
| 2007-08 | 2008-09 | 2007-08 | 2008-09 | 2007-08 | 2008-09 |
| 566.0 | 599.0 | 10303.0 | 11149.0 | 18.2 | 18.6 |

Source: (N.H.B. Indian Horticulture Data Base 2009)

The major tomato producing states are as follows:

Uttar Pradesh, Himachal Pradesh, Punjab, Haryana, Rajasthan, Bihar, Jharkhand, Maharashtra, Gujarat, Madhya Pradesh, Chhattisgarh, Orissa, Karnataka, Andhra Pradesh and Tamil Nadu.

Brinjal:-

Brinjal is one of the most commonly grown vegetable crops of the country. India produces about 7.676 mt. of brinjal from an area of 0.472 m ha with an average productivity of 17.3 mt/ha. Brinjal has ayurvedic medicinal properties and white brinjal is good for diabetic patients. It is also a source of vitamins A, C and minerals.

Table 1.1.2: - Productivity of brinjal

| Area (in 000'ha) | | Production (in 000'mt) | | Productivity (in mt/ha) | |
|---------------------|---------|---------------------------|---------|----------------------------|---------|
| 2007-08 | 2008-09 | 2007-08 | 2008-09 | 2007-08 | 2008-09 |
| 561.0 | 600.0 | 9678.0 | 10378.0 | 17.3 | 17.3 |

Source: (N.H.B. Indian Horticulture Data Base 2009)

The major Brinjal (egg plants) producing states are as follows:

Andhra Pradesh, Karnataka, West Bengal, Assam, Tamil Nadu, Maharashtra, Orissa, Uttar Pradesh, Gujarat, Bihar, Rajasthan and Haryana.

Cabbage:-

Cabbage is one of the most popular winter vegetables grown in India. It is cultivated in 0.245 m ha with the total production of 5.617 mt and average productivity of 22.9 mt/ha. Cabbage is used as salad, boiled vegetable and dehydrated vegetable as well as in cooked curries and pickles. Cabbage is rich in minerals and vitamins A, B1, B2 and C.

Table 1.1.3: - Productivity of cabbage:-

| Area (in 000'ha) | | Production (in 000'mt) | | Productivity (in mt/ha) | |
|---------------------|---------|---------------------------|---------|----------------------------|---------|
| 2007-08 | 2008-09 | 2007-08 | 2008-09 | 2007-08 | 2008-09 |
| 266.0 | 310.0 | 5910.0 | 6870.0 | 22.2 | 22.2 |

Source: (N.H.B. Indian Horticulture Data Base 2009)

The major cabbage producing states are as follows:

Uttarakhand, Himachal Pradesh, Haryana, Rajasthan, Assam, Bihar, Jharkhand, Gujarat, Maharashtra, Orissa, Karnataka, Tamil Nadu, Western Area of Uttar Pradesh.

Cauliflower:-

Cauliflower is one of the most important winter vegetables of India. India produces 4.694 mt of Cauliflower per year from 0.256 m ha area with an average productivity of about 18.3 mt/ha. It is consumed as a vegetable in curries, soups and pickles.

Table 1.1.4: - Productivity of cauliflower

| Area (in 000'ha) | | Production (in 000'mt) | | Productivity (in 000'mt/ha) | |
|---------------------|---------|---------------------------|---------|--------------------------------|---------|
| 2007-08 | 2008-09 | 2007-08 | 2008-09 | 2007-08 | 2008-09 |
| 312.0 | 312.0 | 5777.0 | 6532.0 | 18.5 | 18.7 |

Source: (N.H.B. Indian Horticulture Data Base 2009)

The major cauliflower producing states are as follows:

Uttarakhand, Himachal Pradesh, Punjab, Haryana, Rajasthan, Uttar Pradesh, Delhi (Rural Area) Bihar, Jharkhand, Maharashtra and Gujarat.

Okra:-

Okra, or Ladies finger, which is also known as 'Bhindi ', is one of the important vegetables of India. It is grown throughout the tropical and

sub-tropical regions and also in the warmer parts of the temperate regions. The crop is also used in paper industry as well as for the extraction of fibre .

Table 1.1.6: - Productivity of okra

| Area (in 000'ha) | | Production (in 000'mt) | | Productivity (in mt/ha) | |
|---------------------|---------|---------------------------|---------|----------------------------|---------|
| 2007-08 | 2008-09 | 2007-08 | 2008-09 | 2007-08 | 2008-09 |
| 407.0 | 432.0 | 4179.0 | 4528.0 | 10.3 | 10.5 |

Source: (N.H.B. Indian Horticulture Data Base 2009)

The major Okra producing states are as follows:

Andhra Pradesh, Karnataka, Madhya Pradesh ,West Bengal, Bihar, Assam, Orissa, Rajasthan, Jharkhand ,Haryana and Western Uttar Pradesh.

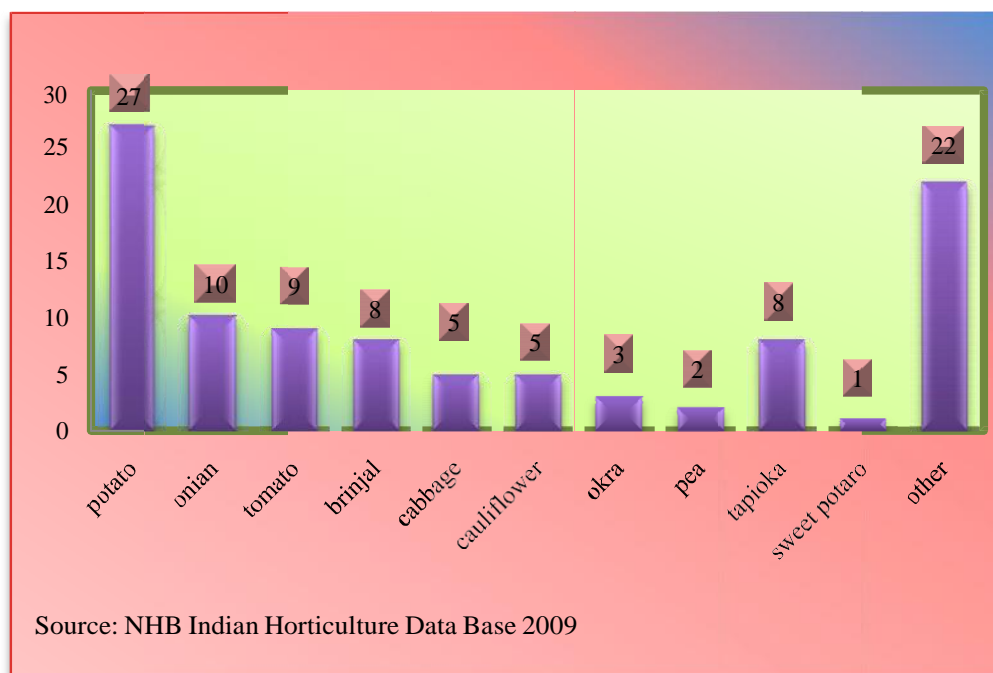


Fig1.1.2: - Production share of major vegetables in India 2008-09

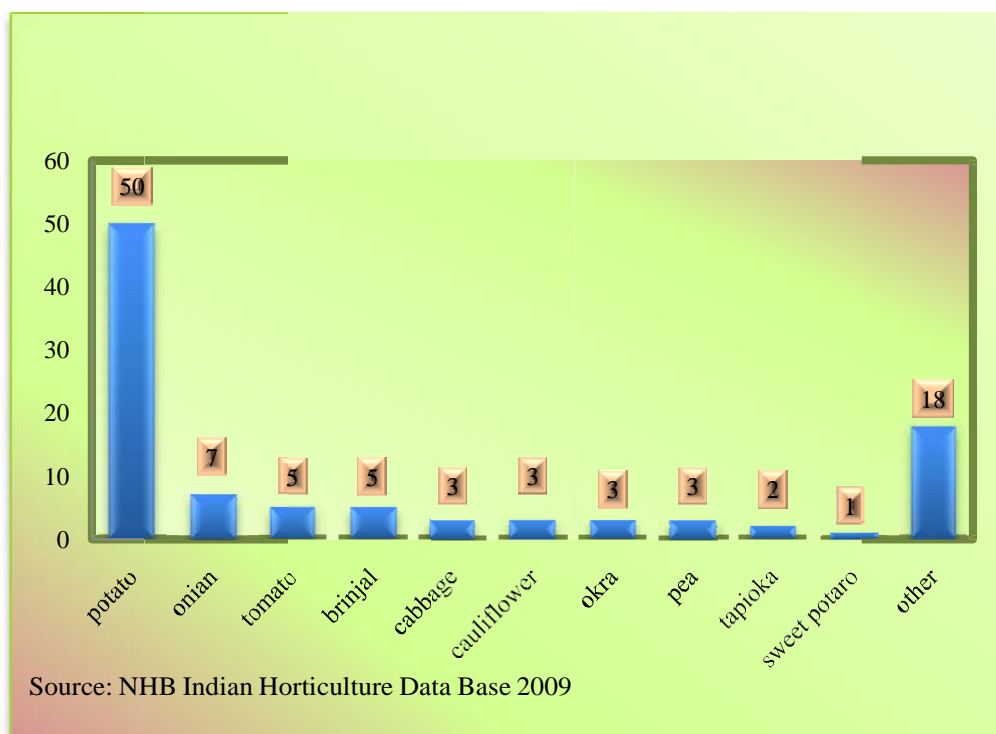


Fig1.1.3: - Area share major vegetables in India 2008-09

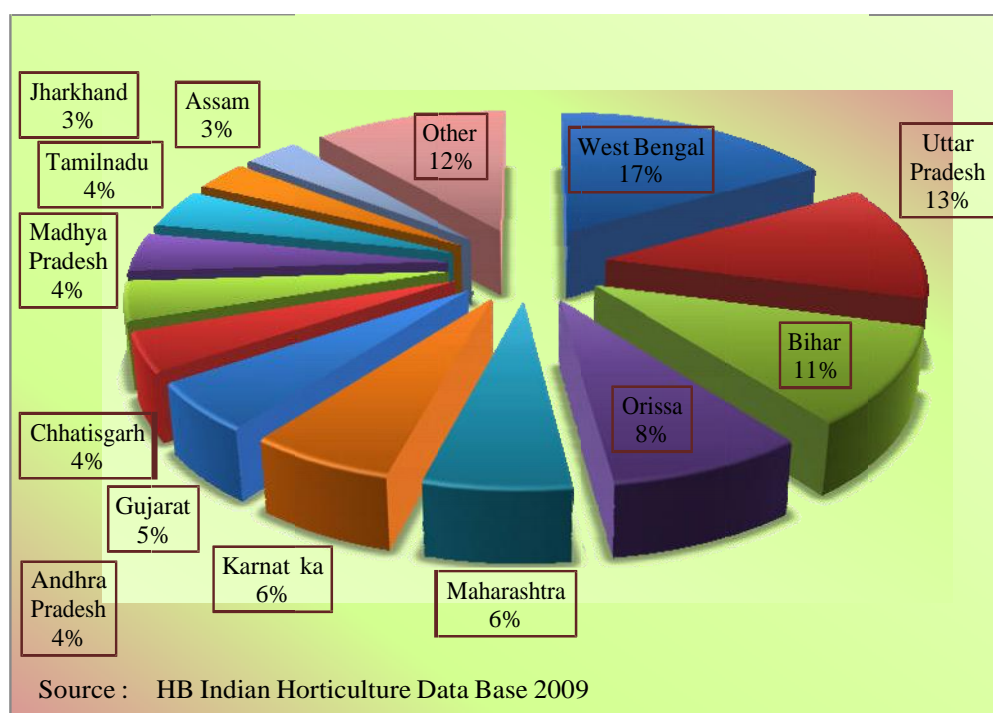
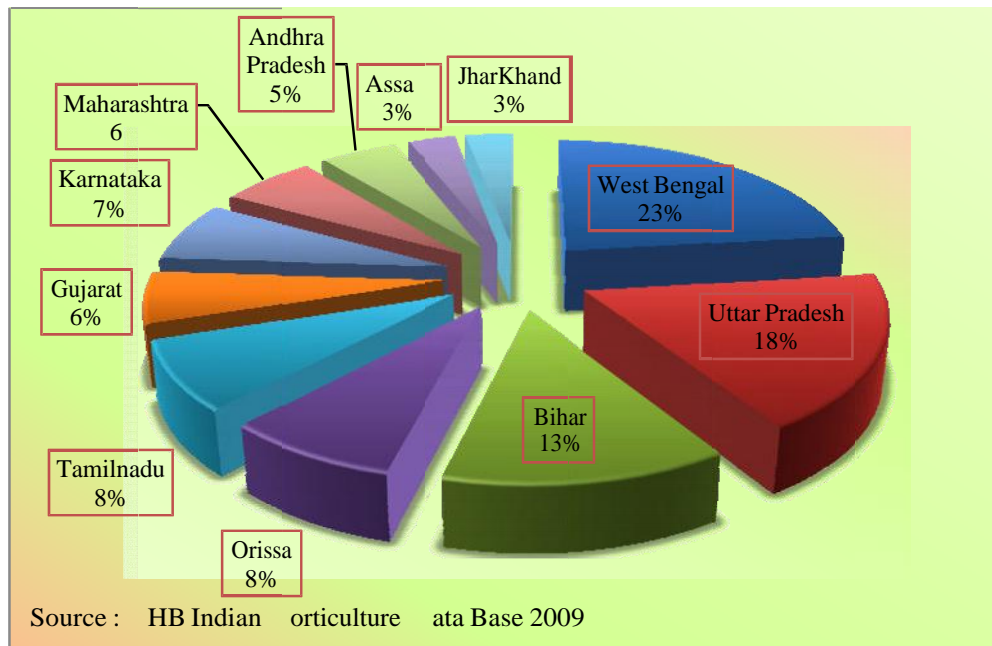
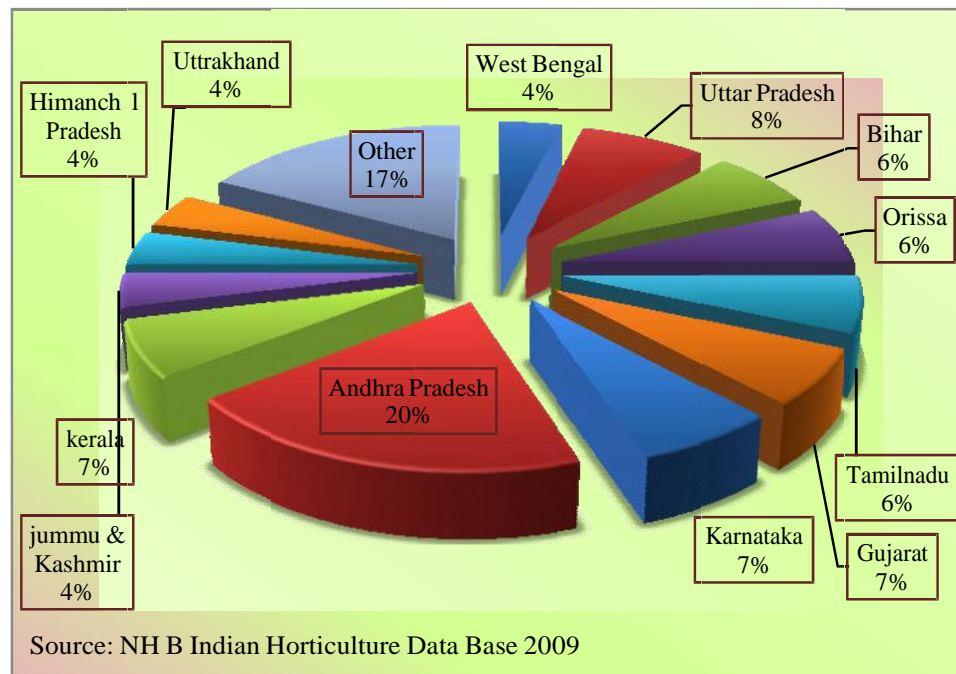


Fig 1.1.4: - Percentage share in area for leading vegetables producing states during 2008-09



1.2 Fruits:-

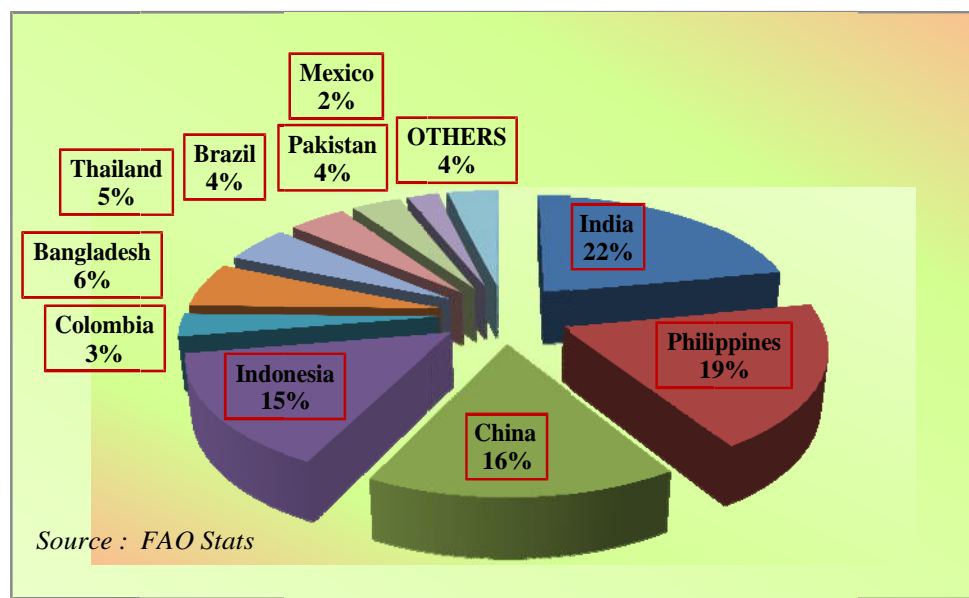


Fig 1.2:- Contribution of India in fruit production in world

Total area of fruit production in India is about 6,10,1000 ha. India ranks first in the world with an annual output of 6, 84, 66,000 mt and productivity 11.2 mt/ha in 2008-09 (National Horticulture Board Indian Horticulture Data Base 2009).

Although India is the largest producer of fruits in the world, the availability per capita is only about 100 gram per day. However, it is estimated that more than 20-22% of the total production of fruits is lost due to spoilage at various post-harvest stages. Thus, the per capita availability of fruits is further reduced to around 80 gram per day which is almost half the requirement for a balanced diet. The fruit production in India has recorded a growth rate of 3.9 percent.

The fresh fruits are mostly harvested by hand or hand tools. Sorting and grading of fruits are done on a very limited scale and based on visual inspection only. Limited pre-cooling facilities are available for fruit like grapes, strawberries etc. only for export purpose. India's

farmers suffer from an aversion to fruit growing as this requires high initial investment and long gestation period. Poor quality of seeds and other planting material available affect the yield of fruits and thereby return to the farmers. For poor educational level coupled with poor technical training/extension facilities available to the farmers, adoption of new technologies has always been a problem for implementation in field area. These result in non-uniform quality of fruits produced in India.

Mango:-

Mango is one of the most important fruits of India. It is the choicest fruit and often known as the king of fruits. It is grown in 39.16 per cent of the total area under fruits and contributes to 23.09 percent of the total fruit production in the country. Mango fruits are used for preparation of pickle, chatani, amchur, jam, squash, nectar and many other delicious products.

Table 1.2.1: - Productivity of mango

| Area (in 000'ha) | | Production (in 000'mt) | | Productivity (in mt/ha) | |
|-----------------------------|---------|-----------------------------------|---------|------------------------------------|---------|
| 2007-08 | 2008-09 | 2007-08 | 2008-09 | 2007-08 | 2008-09 |
| 109.6 | 115.96 | 930.1 | 299.81 | 10.1 | 2.6 |

Source: (N.H.B. Indian Horticulture Data Base 2009)

The major mango producing states are as follows:

Jammu & Kashmir, Punjab, Uttar Pradesh, Haryana, Bihar, and Madhya Pradesh, Chhattisgarh, Maharashtra, Gujarat, West Bengal Andhra Pradesh and Orissa Kerala, Karnataka and Tamil Nadu.

Banana:-

Banana is one of the important fruits of the world, especially of the tropics. It is often called as Apple of paradise. Banana accounts for the highest production among the fruits and contributes to 31% of the total production. In India it is cultivated in 0.482 m ha area with the total production of 16.167 mt and productivity of 33.5 tonnes/ha. Banana is a rich source of energy. The flower-buds and the central core of the pseudo stem are utilized to prepare tasty food dishes. Banana leaf is used as a “biological plate” for serving food. Attractive napkins, wafers, placemats, carry bags etc are made from banana fibre.

Table. 1.2.2: - Productivity of banana

| Area (in 000'ha) | | Production (in 000'mt) | | Productivity (in mt/ha) | |
|-----------------------------|---------|-----------------------------------|----------|------------------------------------|---------|
| 2007-08 | 2008-09 | 2007-08 | 2008-09 | 2007-08 | 2008-09 |
| 57.7 | 60.86 | 3157.7 | 3571.599 | 54.8 | 58.68 |

Source: (N.H.B. Indian Horticulture Data Base 2009)

The major Banana producing states are as follows:

Arunachal Pradesh, Assam, Sikkim, Bihar, West Bengal, Maharashtra, Gujarat, Madhya Pradesh, Orissa, Andhra Pradesh, Karnataka, Tamil Nadu and Kerala.

Sapota:-

India is considered to be the largest producer of Sapota in the world, though it is considered to be a minor crop in India. At present, total area and production under Sapota is 25,824 hectares and 3.38 lakh tones and productivity 9.8 tonnes/ha.

Table. 1.2.3: - Productivity of sapota:

| Area (in 000'ha) | | Production (in 000'mt) | | Productivity (in mt/ha) | |
|---------------------|---------|---------------------------|---------|----------------------------|---------|
| 2007-08 | 2008-09 | 2007-08 | 2008-09 | 2007-08 | 2008-09 |
| 26.5 | 26.6 | 258.9 | 255.394 | 9.8 | 9.82 |

Source: (N.H.B. Indian Horticulture Data Base 2009)

The major Sapota producing states are as follows:

Andhra Pradesh, Gujarat, Karnataka, West Bengal, Maharashtra and Orissa.

Papaya:-

Papaya is the fourth important fruit crop next to citrus, banana and pineapple in the region and is cultivated in about 12,700 ha with an annual production of 158,900 mt with a productivity of 51.0769 mt per ha which is far above the national productivity of 31.69mt per ha. Papaya has good potential in the tropical and subtropical areas of the region.

Table 1.2.4: - Productivity of papaya

| Area (in 000'ha) | | Production (in 000'mt) | | Productivity (in mt/ha) | |
|---------------------|---------|---------------------------|---------|----------------------------|---------|
| 2007-08 | 2008-09 | 2007-08 | 2008-09 | 2007-08 | 2008-09 |
| 11.2 | 14.13 | 489.2 | 721.695 | 43.7 | 51.07 |

Source: (N.H.B. Indian Horticulture Data Base 2009)

The major papaya producing states are as follows:

Andhra Pradesh, Gujarat, Orissa, Maharashtra, Karnataka, Madhya Pradesh, West Bengal and Assam.

Guava:-

Guava is the fourth most widely grown fruit crop in India. The area under guava is about 0.15 Million ha and production of 1.80 mt. Guava fruits are used for preparation of jelly, squash, nectar and many other delicious products.

Table. 1.2.5: - Productivity of guava

| Area (in 000'ha) | | Production (in 000'mt) | | Productivity (in mt/ha) | |
|---------------------|---------|---------------------------|---------|----------------------------|---------|
| 2007-08 | 2008-09 | 2007-08 | 2008-09 | 2007-08 | 2008-09 |
| 179 | 204 | 1981.0 | 2270.0 | 11.1 | 11.1 |

Source: (N.H.B. Indian Horticulture Data Base 2009

The major guava producing states are as follows:

Andhra Pradesh, Madhya Pradesh, Chhattisgarh, Gujarat, Bihar
Maharashtra, Uttar Pradesh, Karnataka, Tamil Nadu and Orissa.

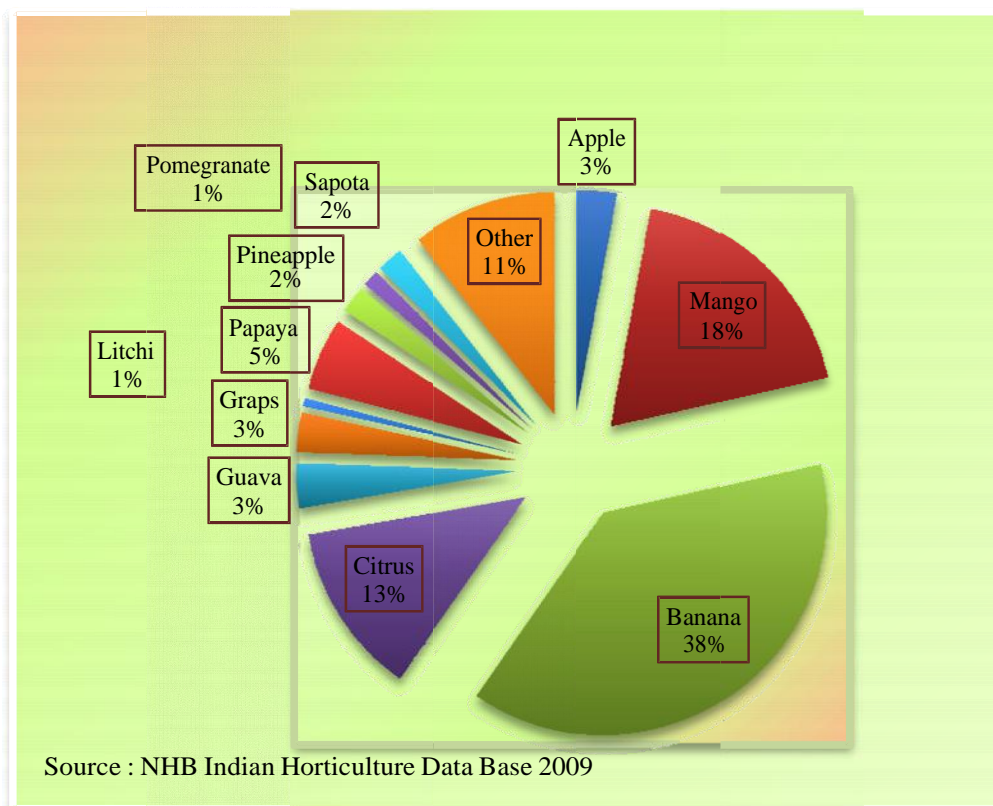


Fig 1.2.1: - Production share under major fruits in India-2008-09

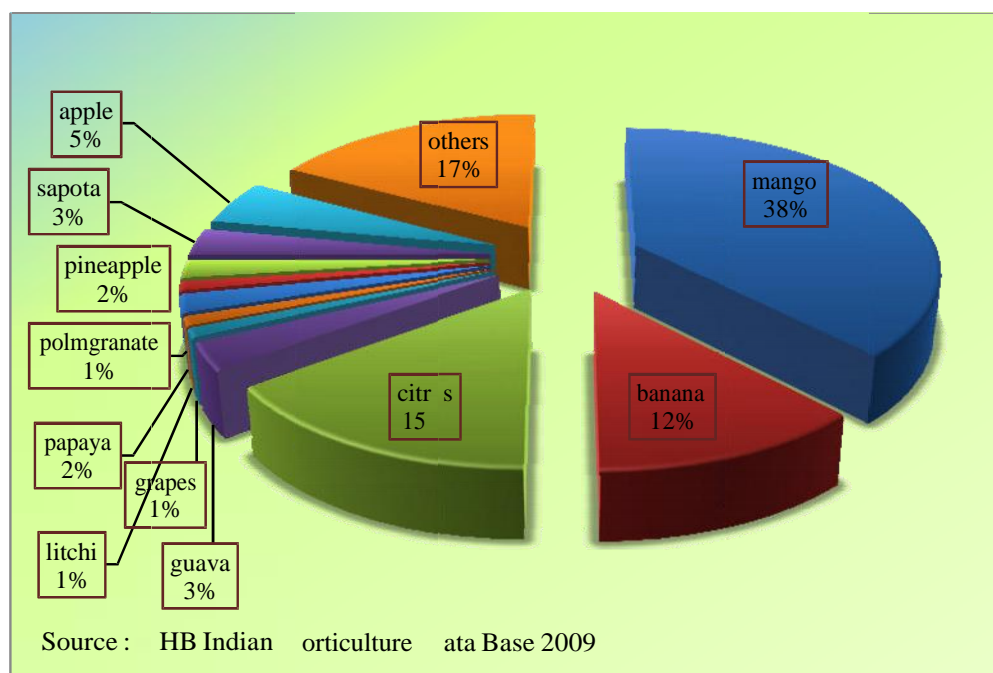


Fig 1.2.2: - Area share under major fruits in India (2008-09)

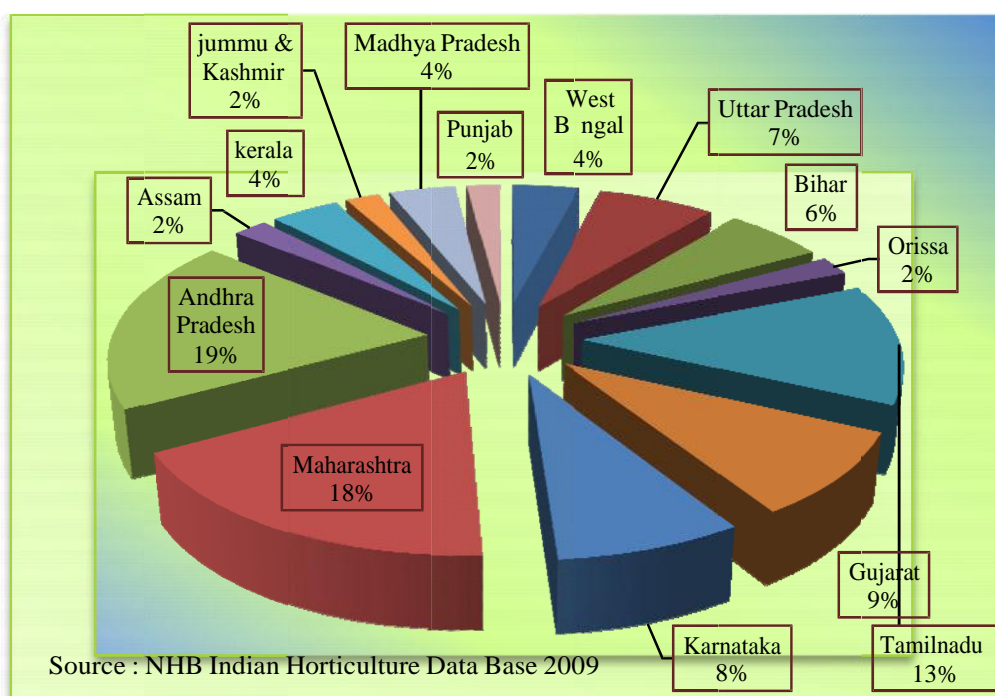


Fig 1.2.3: - Leading fruit producing states in India 2008-09

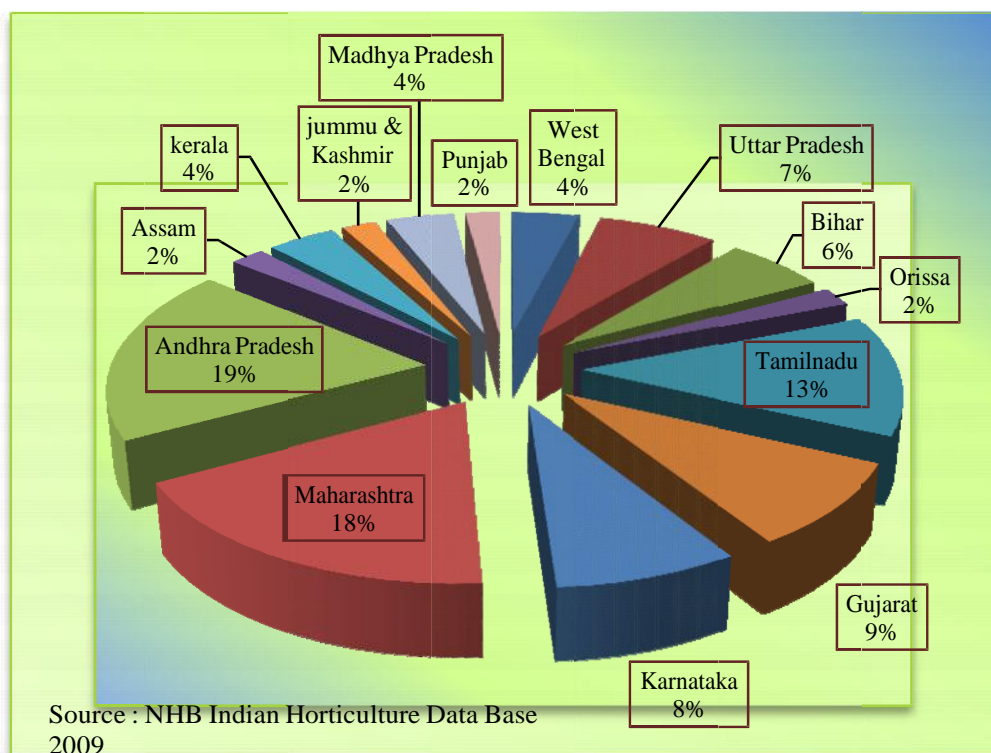


Fig 1.2.4: - Area share under major fruits in India (2008-09)

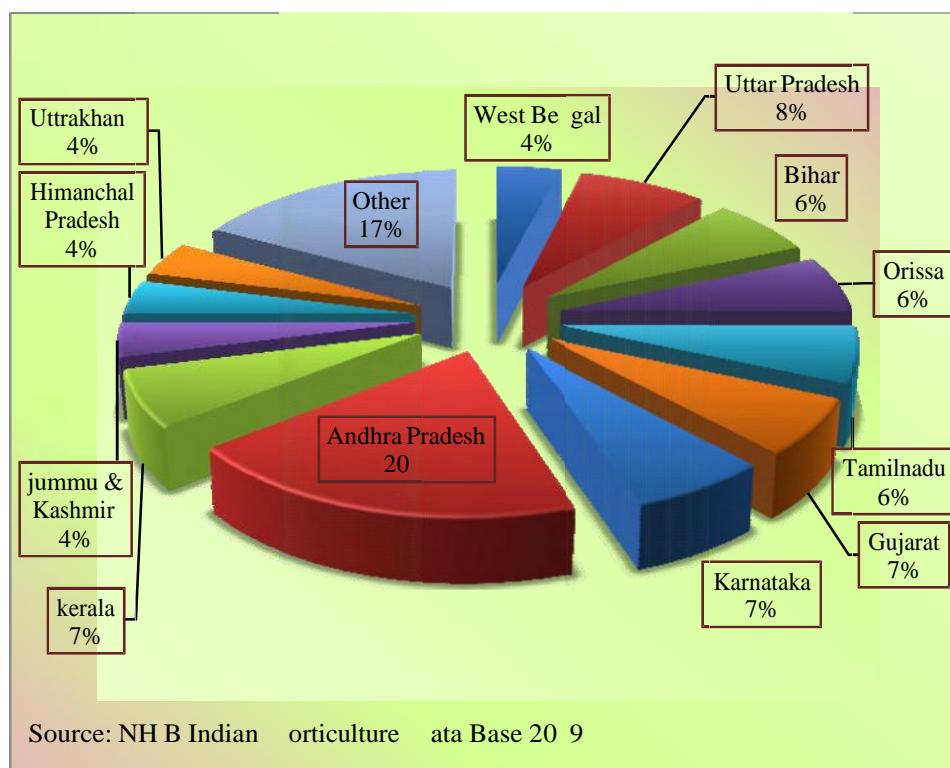


Fig 1.2.5: - Percentage share in area for leading states in India 2009

1.3. Gujarat:

The state of Gujarat has a unique agro climatic condition. The progressive and hard working farmers produce wide variety of agricultural produces. The major crops include rice, wheat, maize, oilseeds, cotton, fruits and vegetables and spices. The major crops of horticulture in Gujarat are Banana, Mango, Sapota and Papaya. The major vegetable crops grown in Gujarat are Onion, Potato, Brinjal and Tomato. In addition to this, Gujarat also produces Chillies, Cumin, Fennel and Garlic. In India, Gujarat ranks third in the production of Banana, sixth in production of Mango, second in Papaya and Sapota production. Gujarat produces about 5.2% of fruits and nuts totally produced by India. (ficciagroindia.com).

Table. 1.3.1. Productivity of fruits in Gujarat

| Area (in 000'ha) | | Production (in 000'mt) | | Productivity (in mt/ha) | |
|-----------------------------|---------|-----------------------------------|---------|------------------------------------|---------|
| 2007-08 | 2008-09 | 2007-08 | 2008-09 | 2007-08 | 2008-09 |
| 306.9 | 316.8 | 5849.7 | 5822.3 | 19.1 | 18.4 |

Source: (N.H.B. Indian Horticulture Data Base 2009)

Table.1.3.2 Productivity of vegetables Gujarat:

| Area (in 000'ha) | | Production (in 000'mt) | | Productivity (in mt/ha) | |
|-------------------------|---------|-----------------------------------|---------|------------------------------------|---------|
| 2007-08 | 2008-09 | 2007-08 | 2008-09 | 2007-08 | 2008-09 |
| 262.7 | 286.3 | 7975.7 | 8693.5 | 30.4 | 30.4 |

Source: (N.H.B. Indian Horticulture Data Base 2009)

Table.1.3.3 Producing District of Gujarat :

| S.N. | Crops | Producing District of Gujarat |
|------|-------------|--|
| 1. | Tomato | Surat, Valsad, Varodra, Ahmedabad, Gandhi- nagar, Kheda, Jamnagar Chiffore |
| 2. | Brinjal | Surat, Valsad, Varodra, Ahmedabad, Gandhi- nagar, Kheda |
| 3. | Cabbage | Mehsana, Khera, Varodra Gandhi Nagar |
| 4. | Cauliflower | Khera, Varodra, Ahmadabad Mehsana |
| 5. | Okra | Valsad, Navsari Ahmedabad |
| 6. | Mango | Bhavnagar, Surat, Valsad, Junagadh |
| 7. | Banana | Kheda, Ahmadabad Jamnagar.Anand |
| 8. | Papaya | Bharuch, Varodra, Surat |
| 9. | Guava | Bhavnagar, Ahmadabad |
| 10. | Sapota | Valsad, Surat, Navsari, Kheda & Bhavnagar |

1.4 OBJECTIVES

The present study is under taken with the following objectives:

- 1) To study of the productivity of the fruits and vegetables in Gujarat.
- 2) To analyze the factors affecting productivity of fruits and vegetable.
- 3) To study the export procedure and documentation for fruits and vegetables.
- 4) To study problem faced by the exporters for exporting the vegetable & fruit products.

1.5 COMPANY PROFILE:

“RELISH AGRO FOOD (INDIA) PVT LTD.”

1.5.1 HISTORY

The company started with the name of Relish Product in 2003. This is a partnership firm and all family members are working in this business. In October 2007 Company converted in corporate as Relish Agro Food India Pvt. Ltd from Relish product. Company has two manufacturing plants one is located at Anand and another is in Veraval. In 2007 company's turnover was ` 8 crores and today it has reached at ` 18 crores.

Company's honours being farmers are closely associated with farmers and suppliers across the world, involved right from initial stages of farming to supply of finished products on time, at affordable prices and hassle free to customers. Relish Agro Food can provide current market updates and recommend customers when is the best time to buy and make it easier for their valuable customers to make critical buying decisions, that is one of the benefits working with Relish Agro Food. Relish Agro Food even provides door delivery to customer warehouse and deal with FDA and Customs for their customers, so they can concentrate on other important things.

Quality Products:-

Relish Agro Food quality means that best materials available. Each product is strictly controlled throughout its life from planting and harvesting to delivery to the customer door.

Relish Agro Food is based on direct relationships between our team in India and our growers. Every process is carefully checked and tested on a regular basis to achieve consistency in providing excellent

quality. Wherever necessary, full audits of each process line are carried out by professional representatives.

Service:-

Whether serving our customers directly from our Bellevue office or through their office in India, our efforts are focused on providing a complete line of superior quality ingredients at competitive prices and Relish value added service. company strive to build lasting supply relationships, offer value-added services and help our customers meet their cost savings goals.

Values:-

Excellence, honesty, quality, and Relish value added service. These are the Relish Agro Food principles that have shaped and continue to guide this solid, growing and vertically integrated company.

Excellence:-

It's accomplished by hands-on management and strict attention to detail at every level, by people who make excellence a personal goal, as well as a corporate one. Given the best resources and encouragement in aggressive investment and thoughtful risk-taking, company maintains leadership position.

Pricing Policy:-

Relish Agro Food always offers competitive prices and supplies goods to customer requirements. All company personal are multi-skilled and company look forward doing business with you on a long term basis.

1.5.2 Products of Company:

1) Frozen products: -

Frozen products have been divided in three groups, 1) Vegetables, 2) Herbs and 3) Fruits.

- 1) In Vegetables Tomato, Brinjal, Bitter melon, Beans, Sweet corn, Green peas, Potato, Beans, Onion, Carrot, Okra, Spinach leaves and cauliflower etc.
- 2) In Herbs Parsly, Basil, Deel, Lemon leaves, curry leaves, Fenugreek leaves, Coriander leaves and Mint leaves.
- 3) Fruits like Pomegranate, strawberry, Apple, Banana, Guava, Mango, Sapota, Pineapple and Custard apple.

2) Indian spices

Indian Spices products have been divided in five groups, 1) Spices Powders, 2) Pickles, 3) Seeds, 4) Chutney and 5) Paste.

- 1) In Spices Powder Bay leaf, Curry leaf, Cumin, Dill, Pepper, Turmeric, Chilly, Garlic, Clove, Ginger, Basil, Mints, Fennel, Aniseed, Tamarind, Fenugreek and Poppy Seeds.
- 2) In Pickles Parchranga pickles, Pickles in Vinegar, Sweet pickles, hot pickles, Pickles in oil and garlic.
- 3) In Seeds sesame seeds, Sunflower seeds and Poppy seeds.
- 4) In Chutney Fruits chutneys and Vegetable chutneys.
- 5) In Paste Cooking paste and Curries paste.

3) Canned Products

Canned products have been divided in three groups, 1) Canned Vegetables, 2) Fruits pulp and 3) Fruits slices.

- 1) In canned vegetable Sweet corn, Peas, Mix vegetable, Okra and Beans.
- 2) In fruits pulp Mango, Papaya, Guava, Sapota, and Custard apple.

- 3) In fruits Slices Mango slice in sugar syrup, Guava slice in sugar syrup, Papaya slice in sugar syrup, Sapota slices in sugar syrup and Custard apple slices in sugar syrup.

1.5.3 PLANT LOCATION AND LAYOUT

Plant of the company Relish Agro Food (India) Pvt. Ltd. is located at Devdi road, Sammervav village, in Talala taluka, in Junagadh district. The Plant layout is shown in.

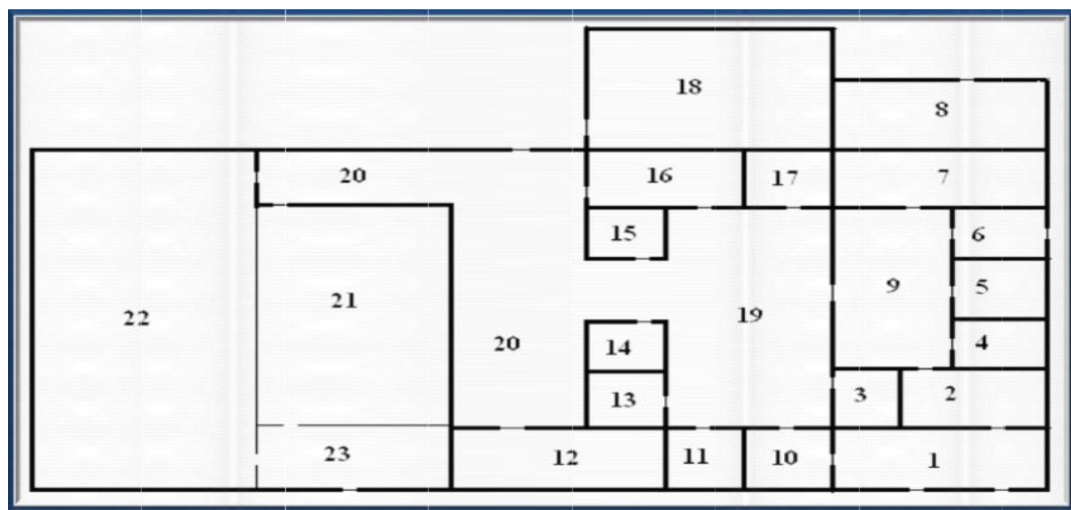


Fig 1.5.3 Plant layout of Relish Agro Food (India) Pvt. Ltd.

- | | |
|----------------------------------|----------------------------|
| 1 : Raw Material Washing Room | 13 : Plate Freezer |
| 2 : Blanching Block | 14 : Tunnel Freezer No: 2 |
| 3 : Flake Ice Room | 15 : Tunnel Freezer No: 1 |
| 4 : Chill Room | 16 : IQF Room |
| 5 : Washing Area (Crates Tubes) | 17 : Ladies Change Room |
| 6 : Waste Disposal | 18 : Maintenance Block |
| 7 : Changing Room | 19 : Processing Room |
| 8 : Changing Room | 20 : Packing Process Block |
| 9 : Pre-Processing Room | 21 : Cold Storage – 1 |
| 10 : Washing Area (Crates Tubes) | 22 : Cold Storage – 2 |
| 11 : Gents Change Room | 23 : Ventilation Block |
| 12 : Packing Material Storage | |

1.5.4 Management Team

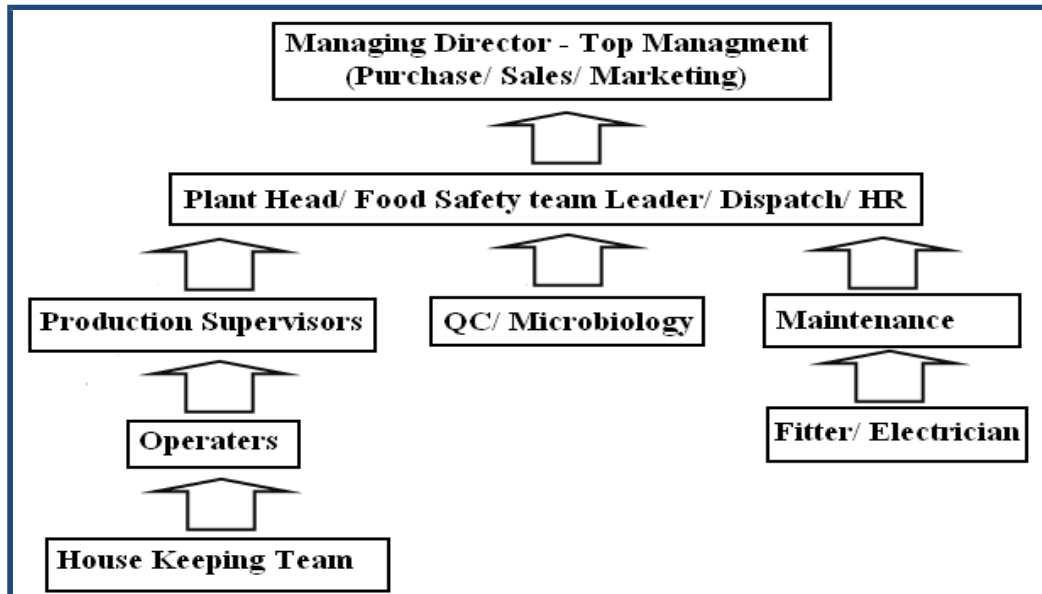


Fig 1.5.4.1 Management Flow Chart

Table 1.5.4.1 Management Team

| | | |
|-------------------------|---|---|
| Top Management – MD | : | Mr. Asif Deraiya/ Mr. Abid Deraiya |
| Sales & Marketing | : | Mr. Abid Deraiya |
| Purchase | : | Mr. Asif Deraiya |
| Plant Head | : | Mr. Nivarti Godaji |
| Food Safety Team Leader | : | Mr. Nivarti Godaji |
| HR & Admin. | : | Mr. Nivarti Godaji |
| Dispatch | : | Mr. Nivarti Godaji |
| QC/ Microbiology | : | Mr. Mahendra |
| Production Supervisors | : | Mr. Amar, Mr. Salim, Mr.Jitu, Mr. Mukesh, Mr. Kapil, Mr. Bharat. |
| Store | : | Mr. Bharat Raut, Mr. Asharaf |
| Maintenance | : | Mr. JayntiBhai |

1.5.5 Process of Frozen Vegetables:

Processing consists of a series of stages from reception of the products at the plant to their final dispatch. The first stage comprises a number of preliminary operations to prepare the product for subsequent freezing. These operations are blow dry cleaning, removal of stones and washing, inspection and selection, classification and depending on the species and variety, slicing, stoning, and cropping.

The second stage consists of blanching, and other pre-freezing treatments, and finally cooling and draining to prevent yield and energy loss during freezing.

The third and fourth stages are freezing and frozen storage, respectively. Depending on the type of product, products are frozen individually, that is, individual quick-frozen. They are then frozen-stored packaged in small containers weighing anything from 160 gm to several kilograms for direct dispatch or bulk stored in polyethylene-lined pallet boxes, which can contain several hundred kilos of product, thus helping to optimize the utilization of storage space (International Institute of Refrigeration, Paris, 1986).

The process flow chart of frozen vegetables is given below

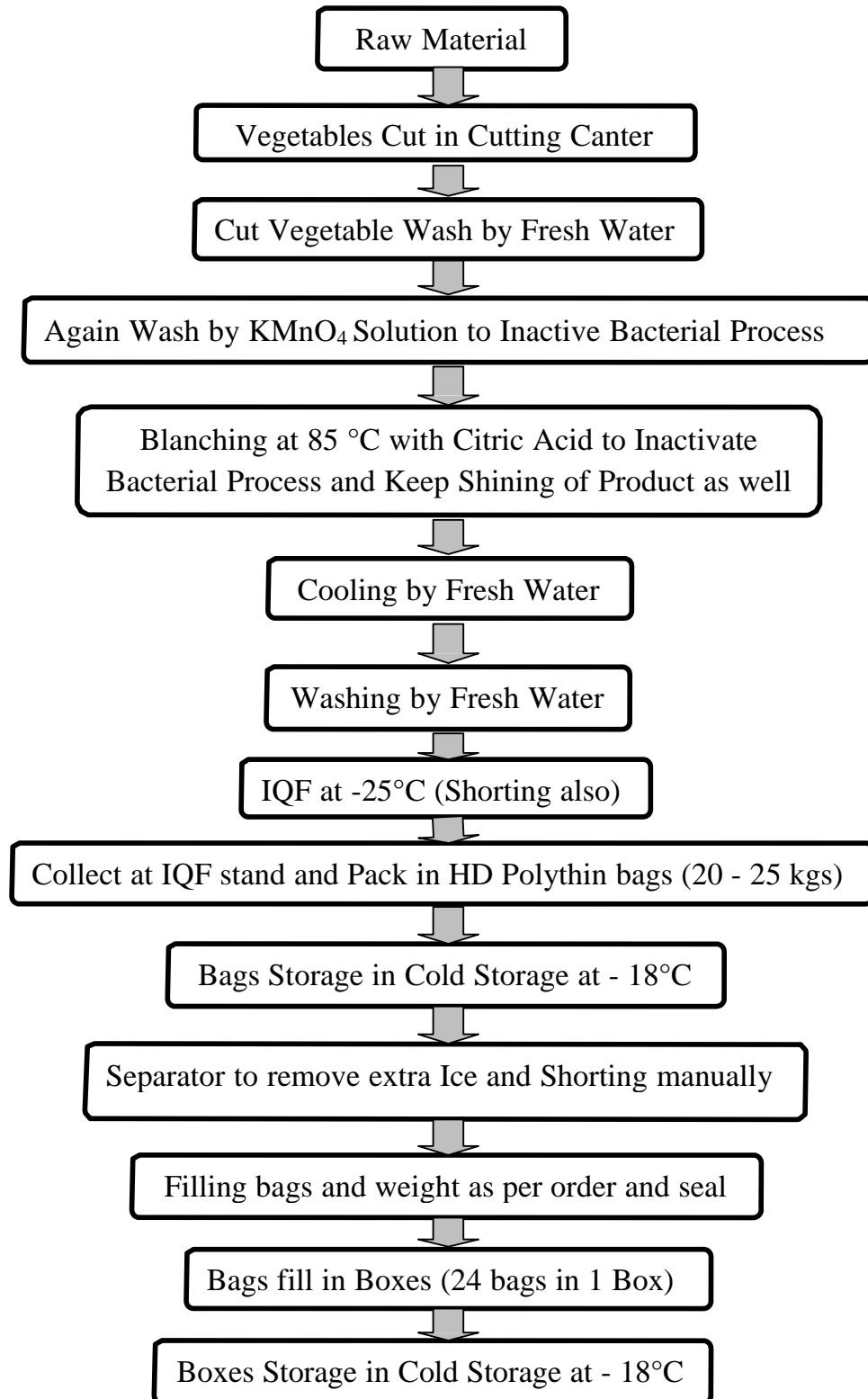


Fig 1.5.5.1 Process Flow Chart of Frozen Vegetables

1. Main Preparatory Procedures

The purpose of these procedures is to take raw vegetables as received by processors and from them make a product which once processed and frozen is “ready-to-eat” with minimal final preparation by the consumer. Following an initial selection process to meet the quality standards required, the products are cleaned by vibration or air blast to remove unwanted materials (such as leaves, husks, etc.); root vegetables and tubers are brushed to remove earth, stones, and excess dirt.

Washing cleans the product of dirt and impurities (soil and waste matter), of pesticide residues. Different types of washers are used (floating, immersion, rotary, turbulence and high-pressure sprays) depending on whether the object is a root or tuber (carrot, potatoes, etc.), is leafy (spinach, Swiss chards, etc.), or is a fruit or flower (peas, beans, cauliflower, etc.) (CCFRA, 2003).

After washing, the product may be subjected to any of the procedures (e.g., sorting, paring, stemming, trimming, cutting, and pulping), depending on the type and variety of the product. There is a wide range of equipment for high-yield performance of these operations (Urschel laboratories, 2000).

Depending on the product, after the preparatory procedures and before blanching or immediately after blanching and after cooling and draining, thorough inspections are essential to eliminate unwanted material from the line. If done manually, such inspections either reduce the line output or require a lot of manpower. There are now computerized inspection systems using visible spectrum, infrared or x-ray detectors, or TV images which help to raise output. Nowadays,

inspection is faster, more precise, and more economical, and only a small part of the inspection process is manual (P. Rutledge, 1992).

2. Blanching

Blanching is a thermal treatment commonly applied in a variety of vegetable preservation treatments and is particularly important in freezing because of its very considerable influence on quality. The product is heated, typically by brief immersion in water at 85–100 °C or by steaming at 100 °C. The primary objective is to inactivate enzymes responsible for alterations in sensory quality attributes and in nutritional value (loss of vitamins) during storage. The duration of blanching varies according to the method employed, the type and variety of product, the product size, and the degree of ripening; however, the chief factor affecting processing time is blanching temperature (W. Canet, 1989).

Blanching is the critical control step in the processing of frozen vegetables. Because it destroys most of the contaminating organisms, the micro flora of the packaged product reflect recontamination after blanching. The major source of organisms on frozen vegetables is contaminated equipment; the surfaces of conveyors, inspection belts, and filling machines units are difficult to reach for proper cleaning. The degree of difficulty in controlling post blanches contamination also depends on the type of vegetable: with corn, large amounts of starch are released onto equipment surfaces, whereas minimal quantities of soluble solids are leached from green beans and peas. (R. Brackett and D. Splittstoesser, 1992).

3. Freezing

The freezing process consists of lowering the product temperature to -18°C at the thermal centre, resulting in crystallization of most of the

water and some solutes. Ice crystallization occurs only after a degree of super cooling - that is reduction of the temperature to between -5 and -9°C in a matter of seconds. In the freezing stage, most of the water in the product undergoes a phase change to ice; this change is not complete until the final temperature at the thermal centre is at least as low as the storage temperature.

The duration of the freezing process depends on the freezing rate (°C). This is defined by the International Institute of Refrigeration (IIR, Paris, 1986) as the difference between initial temperature and final temperature divided by freezing time, freezing time being defined as the time elapsing from the start of the pre-freezing stage until the final temperature has been attained. This will be affected by product size and shape, as well as by the parameters of the heat transfer process and the temperature of the cooling medium.

There have been a number of reviews about freezing methods and equipment and about other physical and engineering aspects of food freezing. The three most frequently used methods of freezing vegetables are direct contact (typically plate freezers), air-blast freezing systems, and cryogenic freezing (W. Canet, 1989). Plate freezers for vegetables are always horizontal and are used to freeze chopped or sliced products such as spinach in packages of up to 50 mm in height. The product is frozen by contact, with conduction as the main mode of heat transfer. The advantages of this method are economical and minimum weight loss, but freezing rates are moderately slow. Vegetables are preferably presented as individually quick-frozen products, which are programmed freezing and quick freezing (5°C/min) shows that quick freezing produces minimum drip, less structural damage, and good firmness (T. Ohtsuki, 1993).

4. Packing

Frozen vegetables are available in wet pack sometimes known as solid pack and also in IQF. Generally, small amounts of about 340 gm and 500 gm of IQF frozen vegetables are packed in polythene bags. These polythene bags are packed in cartons (24 Bags/ Cartoon) and stored in the cold storage at -18 °C.

II



REVIEW OF LITERATURE

II. REVIEW OF LITERATURE

This chapter is devoted to brief review of some important studies conducted in the past. For the Sake of convince, the literature reviewed is reported under the following heading:

➤ **Vegetable**

➤ **Fruits**

Vegetable:

India is bestowed with varied agro – climate, which is high favourable for growing a large number of horticultural crops such as fruits, vegetables and other crops. India still depends on nature for production of food in a major part of the country. The failure of rains in some part of s and flood in others create unprecedented problem it is very surprising that a country with more than sixty five percent of her population cultivating over 20.66million hectares of land. To get the maximum out of soil in the minimum of time we shall have to confine ourselves to intensive cultivation in limited areas where other facilities readily available. In these areas raise such crop which grow quickly and give high yield per unit area. Most of vegetables, if properly grown, can give a yield which is five to ten times higher any cereal crops.

Chowdhury (2000) studied productivity of vegetables India is the second largest producer of vegetables in the world (ranks next to China) and accounts for about 15% of the world's production of vegetables. The current production level is over 90 mt and the total area under vegetable cultivation is around 6.2 million hecta es which is about 3% of the total area under cultivation in the country. Potato,

tomato, onion, cabbage and cauliflower account for around 60% of the total vegetable production in the country.

Paroda (2006) studied productivity of vegetables. India is next only to area and production of vegetables, contributing 13.38% to the total production. India occupies the first position in cauliflower second in onion and third in cabbage in the world. The area, production and productivity of major vegetables during 2006- 07, 75.81 lakh hectares with the production of 114.993 mt average productivity of 15.16mt per hectares.

Fruits:

Solaria (2004) studied productivity of fruits; the increased productivity is the best measure of impact of research and developmental achievement's in horticulture. The increased productivity of fruit crops during the period of forty five year has been about seventy six per cent. Among the major fruit crops, the highest increased in productivity has observed in banana, followed in papaya and guava.

Paroda (2006) studied productivity of fruits, India accounts for 10% of total world production of fruits it leads world production of mango, banana, Sapota and acid lime besides recording highest productivity of grape. Production increased five to eight time since independence 55.54 lakh tonnes in 2006.

III



METHODOLOGY

III. METHODOLOGY

3.1 Research Methodology

Methodology of the study refers to the methods used to collect and analyse the required data for research work. The data required was collected from the following sources:-

3.2 Nature of Data

a. Primary Sources:

“Data which are collected at first hand either by researcher or by someone else especially for the purpose of the study is known as primary data”.

The following sources are used for collecting primary data.

1. Interview of farmers.
2. Discussions with the manager.
3. Company's staff members.

b. Secondary Sources:

“Any data which has been gathered earlier for some other purpose are secondary data in the hand of researcher”.

The following sources are used for collecting secondary data.

1. Records of the company
2. Government Reports
3. Websites:-
 - FAO Stats website
 - NHB- website
 - APEDA websites

Data analysis method

After compilation the data were analyzed by graphical and tabular method in this report.

3.3 Scope of the Study

The topic has been selected in compliance with the company's strong desires to know actual productivity of fruits and vegetables in Gujarat states and increase their market in foreign country in the area of processed fruits & vegetables. Relish Agro Food India Pvt. Ltd is already doing the export of processed fruits & vegetables in foreign markets. To increase their market it is necessary to know how much product wise potential in foreign market and availability of raw material in Gujarat states and also the opportunity for Gujarat exporter to foreign countries as well as the scope for Gujarat to develop processing fruits & Vegetables industries. Hence, the present study.

The project will help the company as well as the exporter of processed fruits and vegetables to know the productivity of fruits and vegetables in Gujarat and opportunity for India in fruits and vegetable market. This project is also helpful for immerging exporter to know the documentation process for export.

3.4 Limitations of the study

The project was done with all possible accuracy and honesty. However, there were some limitations of the project due to which there may be some deviation in findings.

- ❖ This project is reliable on the primary data, so there is lacking of time conducting interview with the farmers. That is the major limitation of this project.
- ❖ Very less Number of Farmers are literate.
- ❖ Farmers are not maintaining any type of Account.
- ❖ Sometimes famers notable to give correct answer.
- ❖ The data obtained through secondary research may be outdated.

IV



RESULTS AND DISCUSSION

IV. RESULTS AND DISCUSSION

4.1 Productivity of fruits and vegetables in Gujarat:-

Fruit and vegetables in Gujarat state are cultivated in 634124 hectares with total production at about 12804002 mt. The productivity of fruit and vegetables in Surat district of about 20.1 mt/ha. In Surat district out of total ten Talukas the kamrej taluka alone produced 70 % of the total fruits and vegetables. Similarly, in Bharuch district out of eight talukas the Jambusar taluka alone produced about 70 % of the total production of fruit & vegetables.

In Surat district farmers grow fruits and vegetables mainly for local market and APMC and not for commercial purpose. Though, fruit and vegetables are grown in the large area in Surat district, the district is mainly known for production of sugarcane crop. The district produces more than 60% of south Gujarat's total sugarcane production and contributes over 40% in the sugarcane production in the state.

Bharuch district is bounded by Vadodara district in the north, Surat district in the south, Narmada district in the east and Gulf of Camby in the west. The district is endowed with high potential agricultural land. The district is divided into three regions viz. Eastern region (Jhagadia and Valia talukas), Western region (Jambusar, Vagara and Amod talukas) and Central region (covers Ankleshwar, Bharuch Gandhar Hansot).

The following table shows in the district wise production and productivity of fruits and vegetable of two districts.

Table 4.1.1 District wise fruits & vegetable in Gujarat

| S.N. | Districts | Production [mt] | Productivity[mt] |
|------|-----------|-----------------|------------------|
| 1. | Surat | 978111 | 24.65 |
| 2. | Bharuch | 1025842 | 37.48 |

4.2 Productivity of Fruit and Vegetable in Surat District

Production overview:

Surat: In Surat district farmers grow fruits and vegetables mainly for local market and APMC and not for commercial purpose. Though, fruit and vegetables are grown in the large area in Surat district, the district is mainly known for production of sugarcane crop. The district produces more than 60% of south Gujarat's total sugarcane production and contributes over 40% in the sugarcane production in the state. Area, production productivity of fruits and vegetables Kamraj taluka of Surat district is given below

Table 4.2.1: - Area production and productivity of Fruits and Vegetable in Kamrej of Surat district

| S.N. | Crops | Area (ha) | Production (ton) | Productivity (ton/ ha) |
|------|-------------|-----------|------------------|------------------------|
| 1. | Mango | 400 | 27580.32 | 22.98 |
| 2. | Banana | 2400 | 166800 | 69.5 |
| 3. | Papaya | 1300 | 19600 | 15.07 |
| 4. | Guava | ---- | --- | ---- |
| 5. | Sapota | 233.333 | 9332.4 | 13.32 |
| 6. | Tomato | 1866.66 | 112000 | 20.0 |
| 7. | Brinjal | 2000 | 8400 | 14.0 |
| 8. | Cauliflower | 2000 | 22560 | 37.6 |
| 9. | Cabbage | 2666.66 | 112000 | 14.0 |
| 10. | Okra | 2533.33 | 76000 | 10.0 |

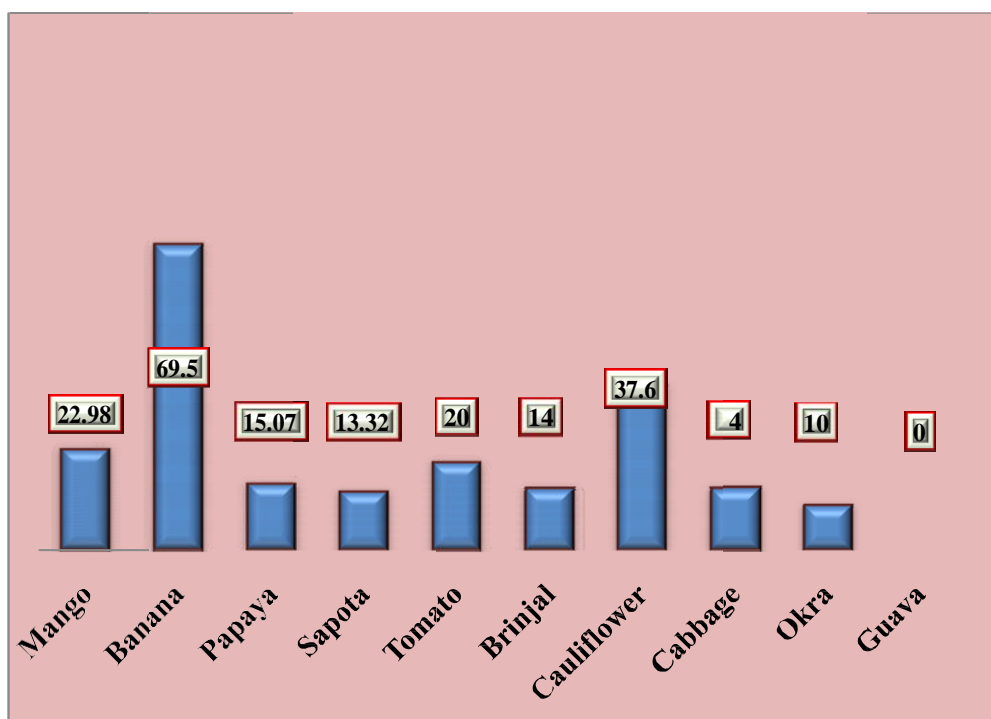


Fig 4.2.1: - Productivity of fruits and vegetable in Kamrej, Surat

4.3 Productivity of Fruit and Vegetable in Bharuch District:-

Bharuch district is bounded by Vadodara district in the north, Surat district in the south, Narmada district in the east and Gulf of Camby in the west. The district is endowed with high potential agricultural land. The district is divided into three regions viz. Eastern region (Jhagadia and Valia talukas), Western region (Jambusar, Vagara and Amod talukas) and Central region (covers Ankleshwar, Bharuch Gandhar Hansot).

Eastern region:-

This portion of the district comprises of Jhagadia and Valia talukas. The region is partly covered with forests and has also a mountain range. It is inhabited by the scheduled tribes and is declared as tribes' areas. The region has good agriculture potential.

Western region:-

The western region known as “BHARVIBHAG” consists of Jambusar, Vagara and Amod Talukas. This region has 54 miles coastal line at the Gulf of Cambay.

Central regions: -

The central part of the district which covers Ankleshwar, Bharuch and Hansot which is industrially developed. The oil field of Ankleswar and Gandhar have put Gujarat on oil map of India .The black soil of this region is very fertile and is conducive to cotton crop production. The total cultivatable area in Bharuch district is 341719 hectares. About 70% of the population depend upon the agriculture and there is no major irrigation facility. The region is mainly rain fed thus poor in farming. So far crop production on natural climatic condition which is generally adverse, so district is poor in farming.

There has been marked change in the cropping pattern of the district in recent year though cotton is the main crop of the district. Among the cereal crop jowar occupied dominant place two other crops which have bright prospect are sugarcane and groundnut.

In Bharuch district also fruits and vegetables are grown. In fruits banana covers is cultivated in 9000 hectares with annual production of about 432000 mt. Area, production and productivity of fruit and vegetables Bharuch district is given below.

Table 4.3.1 Area production and productivity and fruits and vegetable
In Jambusar, Bharuch 2008-09

| S.N. | Crops | Area (Ha) | Production (Ton.) | Productivity (Ton. / Ha) |
|------|-------------|--------------|----------------------|-----------------------------|
| 1. | Mango | 1733.33 | 5900.0 | 10.3 |
| 2. | Banana | 2476 | 101135.77 | 40.84 |
| 3. | Papaya | 1555.66 | 114672.4 | 24.56 |
| 4. | Guava | 3000 | 54000.00 | 18.0 |
| 5. | Sapota | 1466.66 | 11937.20 | 8.13 |
| 6. | Tomato | 1523.00 | 31200.0 | 20.048 |
| 7. | Brinjal | 800 | 18384 | 22.98 |
| 8. | Cauliflower | 1466 | 73333 | 50.00 |
| 9. | Cabbage | 1200 | 50400 | 42.0 |
| 10. | Okra | 1066.66 | 31999.8 | 30.0 |

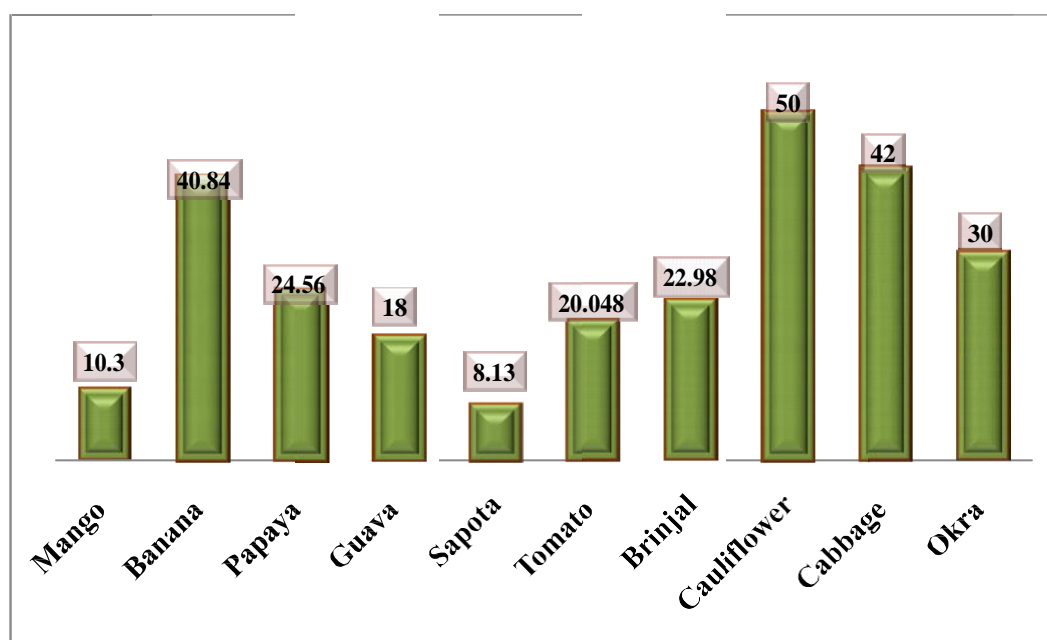


Fig 4.3.1: - Productivity of fruits and vegetable in Jambusar, Bharuch

4.4. Fertilizers:

In Gujarat, farmers use urea, super phosphate, Murate of potash, DAP, sulphate, FYM and develikakhore for fruit & vegetable cultivation. In Surat district, farmers apply two times fertilizers and one time FYM in fruit crops in a year. In case of vegetables, farmers use fertilizers two to three times and FYM one time in a season.

According to the farmers they apply FYM before the transplanting of seedlings in vegetable crops. They apply DAP & ammonium sulphate 4 days after transplantation. In fruit crops, farmer applies FYM during transplantation of fruit plant in field. And they apply DAP, urea, and potash after ten days of transplantation. All other fertilizer is used according to requirement. According to one farmer in Bharuch (karod) he is growing fruit crops applies only FYM whatever available at own farm and not using any kind of fertilizers and he is getting very good production of fruit crops. Khaleshwar and bhairavgam (Surat) and Andana and Jhanor (Bharuch) are some villages where in application of chemical fertilizer very less as compared to other villages, but there is no big difference in production of fruit crops.

Table 4. 5 Planting distance of fruits and vegetable

| S.N. | Crop | Planting Distance |
|------|-------------|-------------------|
| 1. | Mango | 10x10 meter |
| 2. | Banana | 1.5x1.5 meter |
| 3. | Guava | 6x7 meter |
| 4. | Papaya | 1.2x1.2 meter |
| 5. | Sapota | 10x10 meter |
| 6. | Tomato | 60x45 cm |
| 7. | Brinjal | 75x75 cm |
| 8. | Cauliflower | 45x60 cm |
| 9. | Cabbage | 45x45 cm |
| 10. | Okra | 60x45 cm |

4.6. Major disease and pest

Mango: Mango Hopper, Mealy bug, Mango aphids, Fruit flies, Stem borer, Shoot borer, Stone weevils, Black tip, Leaf scorch, Mango malformation.

Used pesticide: 5234, 1919, Bordeaux mixture, Sodium Carbonate, Glutathione ascorbic.

Banana: Stem borer, Root stock weevils, Leaf spot, Banana beetle, Banana aphid, Banana wilt, Bunchy top.

Used pesticide: Endosulphon wattle powder phosphomidon Malathian, Monocrotophos, Carbendazim Bavestine, and Bordeaux mixture.

Papaya: Fungal diseases, Damping off, Root rot, Black spot, Papaya mosaic virus, Papaya Leaf curl.

Used pesticide: Monocrotophos, Prophylactic Dithen M 45, Captan, Copper Oxide.

Sapota: Leaf miner, Mealy bug, Fruit borer, Leaf spots, Flattening of branch.

Used pesticide: Dithen 2-78, zineb, malathion, permethrin, endosulphogon, Dimethoate.

Tomato: Early blight, Late blight, Leaf mould, Bacterial canker, Leaf curl, Bacterial wilt, mosaic, Tomato fruit worm, Epilachna beetle.

Used pesticide: Copper compound dusting with copper lime, and use of resistant variety, Malathion, DD, Nematax,

Brinjal: Phytophthora blight, Sclerotinia Wilt, Bacterial wilt, Little leaf shoot and Fruit borer, Red mite.

Used pesticide: Sulphur, Lidane, DDT, use of resistant varieties,

Cauliflower & cabbage: Whiptail, Buttoning, Blindness, Black rot, Downy mildew, Phoma lingam, Cabbage maggot, Turnip aphids, Cabbage looper, Browning.

Used pesticide: Borax, Ammonium Molybdate, Treatment with hot water at 50°C for 25-30 minutes soil sanitation and Crop rotation, Aldrin, dieldrin, Nicotine Sulphate.

Okra: Pod borer, jassids, and Yellow vein mosaic.

Used pesticide: Uses of variety tolerant to the disease, dust fine sulphur, and DDT.

4.7. Cost of cultivation of fruit and vegetables:

Cost of cultivation includes the following:-

- 1) Cost of seed.
- 2) Cost of transplantation
- 3) Cost of irrigation.
- 4) Cost of fertilizers.
- 5) Cost insecticide pesticide
- 6) Labour cost.
- 7) Transportation cost.

4.7.1 Cost of seed:

The farmer used different varieties of seed, and their quality also varies, because of these reasons the price of seed is not same.

4.7.2 Cost of transplantation:

Fruits and vegetables seedlings transplanted with help of labour in the field. Transplantation cost include only the cost of labour requirement of the varies from farmer to farmer.

4.7.3 Irrigation cost

In Gujarat mainly flood irrigation system is used by the farmer to irrigate the crops. Drip irrigation is also used by the farmer the cost of drip irrigation is consider as fixed cost because life time of that system is approximately ten years The government provide 30% subsidy on drip irrigation.

4.7.4 Fertilizer cost

The type of fertilizers and their doses vary farmer to farmer is different to every farmer.

4.7.5 Cost of Insecticide & pesticide:

The cost of insecticide and pesticide are depending upon the type of insect and pests present in the farm. There were number of insecticide and pesticides which were used by the farmers as per requirement the cost of insecticide and pesticides is considered as variable cost.

4.7.6 Cost of labour:

The cost of labour is one of the important costs. The labour cost includes – Transplanting, irrigation, shorting cost etc. The requirement of labour is varies farmer to farmer. Because of this reason, the cost of labour is also different

4.7.7 Cost of transportation

The transportation cost depends upon the distance between village and market, more cost show more distance, and this cost is considered as a variable cost etc.

4.7.7.1 Fixed costs

Cost of drip irrigation system, cost of equipment and machinery like sprayer, duster, harvester, tractor, cultivator etc. Falls under this category.

4.7.7.2 Variable cost

Agro inputs like seeds, fertilizer, irrigation, insecticide and pesticide, transportation and harvesting cost fall under variable cost. Cost of cultivation of major vegetables namely Tomato, Brinjal, and Cauliflower per acre was found 14675, `13950, and `13200 respectively, similarly cost of cultivation of grown in the area are only mango, banana and papaya was observed ` 9200, `15700 and ` 11000 respectively.

4.8. Marketing system & its function:

4.8.1 Amalgamation:

Land texture, climate, fertilizers doses, and variety of seeds here no similarity in agro production. The quality of agriculture goods for example perishable type of goods, income ratio, type of market and scattered producer are given the important place in the amalgamation process of market. There are many varieties of fruits & vegetables production and they are grown in different season. Sometime production is less and because of it in the process of marketing amalgamation has importance.

The farmers sell the fruits & vegetable in weekly bazaar, wholesaler and through APMC. About 50-60 % & fruits & vegetables are sold through the uncontrolled markets. The fruits & vegetable distribution chain includes producer of fruits & vegetable, wholesaler, retailer and other market agent, consumer. When the fruits & vegetable producers

sell their goods in APMC they know that merchant's broker, agent and co-operative institution are buyers of fruits & vegetable.

4.8.2 Local Buyers:

The local buyer's purchase fruits and vegetables as per their requirement in the local areas. The buyer sells them, these goods in small daily markets, weekly bazaar and vegetable markets to the retailers. In the regional language the seller is known as local bepari.

4.8.3 Wholesalers at Taluka Level:

A farmer brings his goods in the taluka markets. This market place is called "Agriculture Produce Market Committee (APMC)". In APMC, there are many middle men and wholesalers. This market is normally near to Nagerpalika area. The wholesale market depends on the nature of the goods durability, transportation facilities and the number of primary market near to the wholesale market. And the number of other primary market depends upon the wholesale market. In the wholesale market fruits and vegetables are purchased by the middle man, agent and broker.

Table 4. 7.1 Markets of fruits and vegetable

| S.N. | District | Main Market | Sub Market |
|-------------|-----------------|--------------------------------|--------------------------|
| 1. | Surat | Sardar market surat | Kamraj,bardoli Umerpada |
| 2. | Bharuch | APMC Bharuch city, Jambusar | Ankleshwar, valia, Amod. |

4.8.4 Agent and Broker:-

A person who purchases from the owner deals with the owner, and for this work collect the commission is called the broker. The broker plays the role of middle man. A person who purchase goods or buy

himself and keeps the income in his possession and sells it again to the buyer and collect remuneration is called Aadaya- many brokers and agent purchase fruits and vegetable themselves.

4.8.5 Distribution chain of fruits &vegetables:

In India, production of fruits and vegetable is mainly grown in west Bengal, Maharashtra, Karnataka, Gujarat Rajasthan, Orissa, Assam, Andhra Pradesh, Uttar Pradesh and Madhya Pradesh states. The study of quality of fruits and vegetable and their distribution system is very essential. The distribution system includes fruits & vegetable producers, export organization, consulting organization, consumers and merchants.

Fruits & vegetables are sold as per demand from various market places as per the rate in the market places. Fruits & vegetable consumers are scattered in the country and out of country market. In the distribution system, there is a chain between the producing farmers and consumers and also with wholesale trading institute and retailers. The chain is called distribution chain.

Especially, the following distribution chain is formed for the sale of fruits and vegetables fruit veggies. This distribution chain includes fruits and vegetables producers, agro producing market committee wholesaler, and retailer. Fruits & vegetables are bought through this chain and sent for sale in the various states of India. The major distribution channels found in the study area are shown in the following diagram .

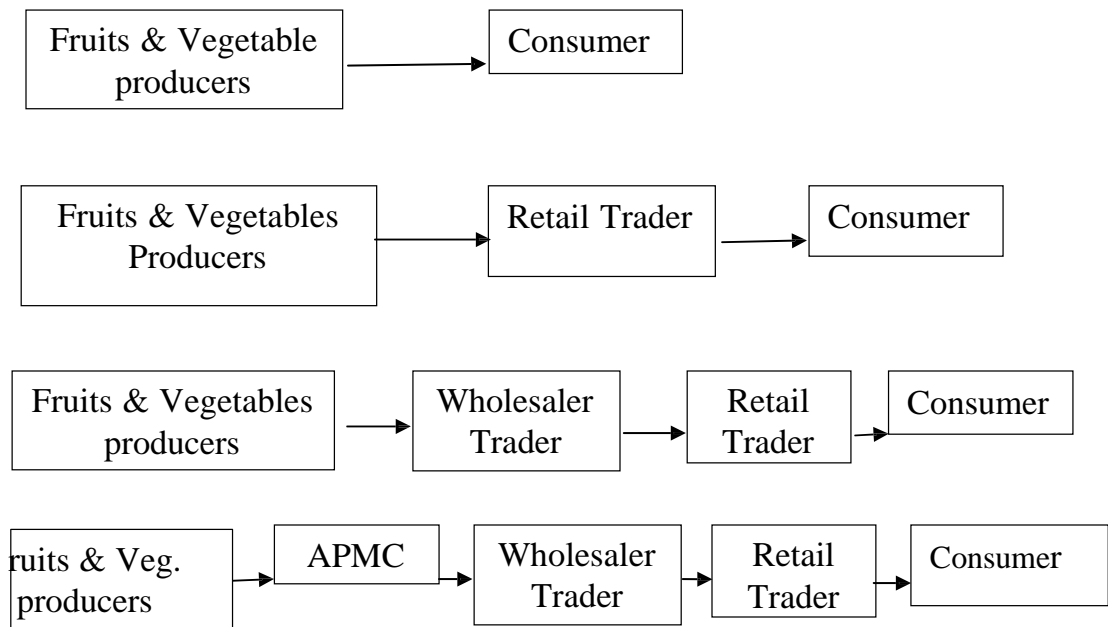


Fig 4.7 Distribution Channels

4.8.6. Purchase system of fruits and vegetable:

Ordinarily, the following system is used for purchasing of fruits and vegetable.

- **Auction system**
- **Hand system**
- **Negotiation system**

Auction system:

In this system, the farmers bring their goods to merchants and broker for sale in the market. Broker and merchant plan to sell the goods in the market. Merchants come in the market for purchase of fruits & vegetables. The broker announces the price on the behalf of the farmers. To the goods are sold merchants, who come to their buy the goods, participate in the announcement. The merchant who pay more prices to goods are sold. For this work, the broker deducts his commission from the farmer's bill.

Hand system

In this system, farmers and traders hold of each other hand under the handkerchief and to press their bob and utter special code to fix the price. The broker and trader finalize the price and transaction is gets completed. This system is prevalent in Bharuch district, but not in Surat district.

Negotiation system:

In this system, the negotiation place between the farmers and the purchasing merchant to finalize the price of sold goods. This fixes the price the current market level negotiation system of the purchase and sales. This system is prevalent in Sardar market of Surat. In this system, the middle man is totally absent.

4.8.7. Measurement system of fruits and vegetable:

The market committee has started electronic weight bridge in APMC because of this automatic weighbridge the inconveniences of fruits and vegetable have come to end and the speed of fruits and vegetables measurement has increased. In this system, the loaded fruits and vegetable tractors, trucks, pick – up van, tempos are directly weighed on the weigh bridge and after unloading the goods same vehicle weighed again. The difference between loading and unloading results the total weight of the fruits and vegetables. It is seen that the loaded vehicle are not usually weighed in the market committee. The purchasing of fruits and vegetable is done according to the number of bags, boskets, carets bought in the market for sale by the farmers. The quality of the fruits and vegetables and the fruits & vegetables bags, baskets and carets are taken into consideration to negotiate the prices. The bills are paid to the farmer as per the number of the baskets and carets.

After purchasing the fruits and vegetables, merchants give a receipt of the farmer. This receipt bears the name of APMC the name, of fruits and vegetables merchants, the farmer's name village and the date. The empty spaces are filled with the details of the farmers. The carets, bags, and baskets number and the total amount are written by the merchant in the receipt with his signature. The farmers are paid the amount as per the receipt. The tomato merchants are charged Rs 1 market fees and 0.5% supervision fee. Market fee is subtracted everyday as per the rules.

Weighing methods:

While purchasing the fruits and vegetables from farmer, his goods are not measured in the APMC or somewhere else. The farmers bring their bags, baskets and carets, for sale in the market. While fixing the prices the merchants the weight few samples randomly and the prices are fixed accordingly. After finalizing the prices baskets, carets and bags are unloaded into another basket it on the sack and the amount is paid as per baskets or bags to the farmer. In this process weight decrease is not taken into consideration as the fruits and vegetables are not weighed. Under the exceptional condition decrease of weight is considered by the merchant.

4.9. Payment procedure:

According to the buy laws of APMC, the purchaser has to make the payment as soon as the goods are sold, after unloading the fruits and vegetables from the bags, baskets, and carets, the receipt is given from the cobaltite book to the farmers. The receipt contains the name of the farmers, name of the village, date, total fruits and vegetables baskets or bags or carets and the total amount. The fruits and vegetables merchants write the total amount on that receipt as per the quantities

of the basket or carets or bags and sign on the receipt. After showing this receipt merchant's cashier, pays the amount on the spot. On any condition the payment is not denied for fruits and vegetables. This is really satisfactory. The sale of agro goods is in the hands of broker and agents odd because of this some part of the agro goods is sold by traditional method, but this ratio is very less. Fruits and vegetables are bought and sold in APMC at a large scale.

4.10.Problems faced by the Farmers during cultivation of fruits and vegetable:

- 1) Weather related problem for example to become very active due eastern air flow all type of hidden insect and pest,
- 2) Lack of availability of high yielding variety of seeds at the time of sowing and shortage of fertilizers.
- 3) At a time of irrigation electricity is not available.
- 4) Small landholdings farmers are not able to adopt new technology.
- 5) Price fluctuation is one of the biggest problems faced by the farmers.
- 6) Lack of availability of enough labour.

4.11 Incoterms

Inco-terms are conditions on which buyer and seller mutually agree to execute the transaction or order. It can also be said a type of shipment.

FOB (Free On Board) – Seller delivers customs-cleared goods with bill of lading, export license, all taxes and duties paid clean (unharmed) on board a vessel. Seller pays all expenses until goods are clean on board. Buyer determines carrier and pays the carriage (including loading expenses if part of the transport costs).

C&F (Cost and Freight) – Seller pays all expenses and transport costs to port of discharge. But responsibility for damage or loss or additional expenses is buyer's after goods loaded and stowed under deck. Seller obtains customs and port clearances, licenses, contracts with the carrier and with the insurance company regarding transport of goods to the point of loading. Buyer must obtain the import licenses; release the goods in port of discharge, issue insurance and pay for insurance and inspection of goods.

CIF (Cost, Insurance, Freight) – Seller arranges marine freight insurance for buyer and provides buyer with valid insurance policy in addition to obligations under C&F. Unless otherwise agreed, seller buys a limited “C” policy. Best to add: “free out”. It is important to mention the type of insurance and coverage sought by buyer.

Steps Involved in Export Transaction:

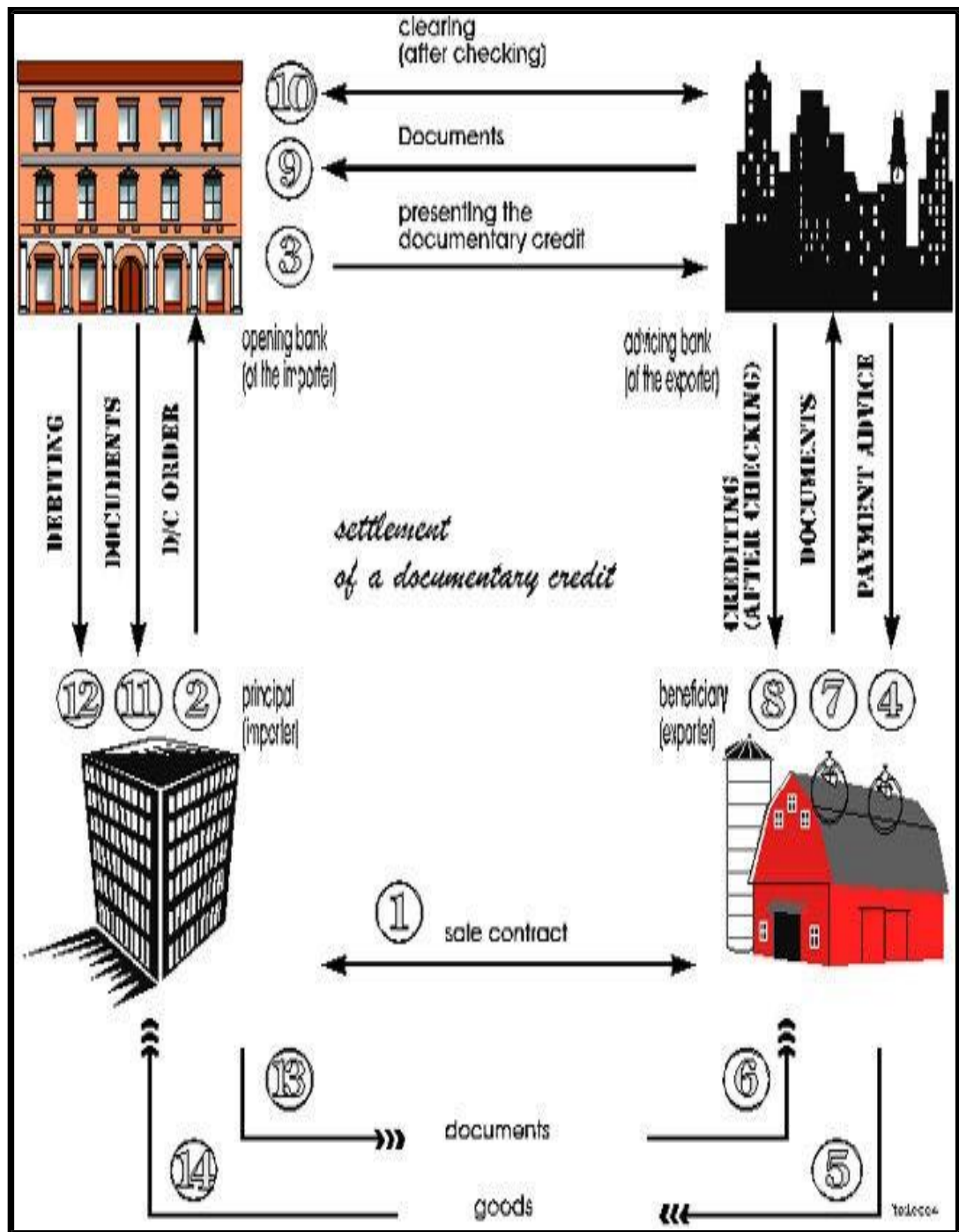


Fig.4.11.1 Steps Involve In Export Transaction

4.11.1 Process of an Export Order:

In the case of first time exporters - importers, they need to apply to the Director General of Foreign Trade (DGFT) regional office for getting Importer-Exporter Code (IEC) Number.

The exporter has to register with the concerned export promotion council (for process vegetable - APEDA) in order to obtain various permissible benefits given by the government. They need to get registered with sales tax office, and even (ECGC) Export Credit Guarantee Corporation.

Exporter's operation starts with the receipt of enquiry by the exporter from importer. Bar on the enquiry exporter submits his offer giving complete details of products technical specific price delivery payment terms etc.

- i. After the process negotiations importer sends a purchase order followed by letter of credit (if applicable).
- ii. The exporter manufactures the goods according to the specification given in purchase order.
- iii. As soon as the goods are ready the exporters invites the representative of Export Inspections Agency (EIA) for pre shipment inspection and obtain the certificate of inspection though not mandatory.
- iv. After that, the exporter prepares following documents: -
 - ✓ Invoice
 - ✓ Packing List
 - ✓ Are1 For Excise Department

- ✓ Marine Insurance Policy
- ✓ Copy Of Purchase Order / L/C

- v. Above those documentation sends to CHA by exporter.
- vi. Based on these documents CHA agent completes the customs formalities, obtain port permit and prepare shipping bill which is a customs documents.
- vii. Custom department check the export cargo on the basis of information provided on the shipping bill. If satisfy then cargo allow to loaded on the board of ship.
- viii. The shipping line gives mate receipts to CHA agents after the payment of ocean freights and port due obtains the bill of lading (B/L) from shipping line .B/L is a proof of dispatch of cargo and also a negotiable document.
- ix. After that, CHA agent send various documents back to exporter which is: -
 - ✓ Customs attested invoice and packing list
 - ✓ EP Copies
 - ✓ DEPB Copies if applicable
 - ✓ Full set of On Board bill of lading.
 - ✓ Copies of ARE1 Form duly attested by custom officer
 - ✓ SDF form in case of EDI and GR Form in case of manual.
- x. After that the exporter submits above documents for negotiation to the bank which include : -

- ✓ Commercial invoice
- ✓ Packing list
- ✓ Bill of Lading
- ✓ SDF form
- ✓ Original copy of purchases order
- ✓ Certificate of origin
- ✓ Bill of exchange
- ✓ Shipment advice

After that, bank scrutinizes these documents and if found correct make payment to exporter against documentations.

4.11.2. Export Procedure

- Registration Stage
- Shipment Stage
- Pre-shipment Stage
- Post-shipment Stage

4.11.2.1 Registration Stages

The exporter is required to register his organisation with a number of institutions and authorities, which directly or indirectly help him in the smooth conduct of export, trade.

The registration stage includes: -

- a. Registration of the Organisation:** - The form of organisation selected by the exporter must be registered under the appropriate Act of the country.
 - ✓ A company under the Companies Act, 1956.
 - ✓ A partnership firm under the Indian Partnership Act, 1932.
 - ✓ A proprietorship firm.

- b. Opening-Bank Account:** - The exporter should open a current account in the name of the firm or company with a commercial bank which is authorised by the Reserve Bank of India (RBI) to deal in foreign exchange. Such bank also serves as a source of pre-shipment and post-shipment finance for the exporter.
- c. Obtaining Importer-Exporter Code Number (I EC No.):** - Prior to 1.1.1997, it was obligatory for every exporter to obtain CNX number from the RBI. However, since then, IEC number issued by the Director General for Foreign Trade (DGFT) has replaced the CNX number. The application form for obtaining IEC number should be accompanied by fee of ₹ 1000.
- d. Obtaining Permanent Account Number- (PAN):** Export income is subject to a number of exemptions and deductions under different sections of the Income Tax Act. For claiming such exemptions and deductions, the exporter should register his organisation with the Income Tax Authorities and obtain the Permanent Account Number (PAN).
- e. Obtaining Sales Tax Number:** - Exportable goods are exempted from sales tax, provided, the 'exporter or his firm is registered with the Sales Tax Authorities. For this purpose, the exporter is required to make an application in the prescribed form to the Sales Tax Office (STO) in whose jurisdiction his (exporter's) office situated.
- f. Registration with, Export Promotion Council (EPC):** It is obligatory for every exporter to, register with the appropriate Export Promotion Council (EPC) and obtain the 'Registration-cum-Membership Certificate' (RCMC). The benefits provided in the

current EXIM Policy are extended only to the registered exporters having valid RCMC.

g. Registration with ECGC: - The exporter should also register with the Export Credit and Guarantee Corporation of India (ECGC) in order to secure overseas payments against political and commercial risks. It also helps the exporters in obtaining the financial assistance from commercial banks and other financial institutions.

h. Registration with other Authorities: - The exporter should also register with various other authorities, such as: - Federation of Indian Export Organisation (FIEO), Indian Trade Promotion Organisation (ITPO), Chambers of Commerce (COC), Productivity Councils, etc.

4.11.2.2 Shipment Stages:

Export, cargo can be exported to the overseas buyer by sea, air or land. However, shipment by sea is the most popular and generally resorted to, as it is comparatively cheaper. 95% of cargoes are exported by Sea in India. Besides, the ship's capacity is far greater than other modes of transportation. Nevertheless, transportation by air is utilized for export of expensive items like, diamonds, gold, etc.

The shipment stage includes the following steps

a. Reservation of Shipping Space: - Once the export contract is finalised, the exporter reserves the required space in the vessel for shipment. On accepting the exporter's request, the shipping company issues a Shipping Order (Delivery Order). The original copy of the shipping order is given to the exporter and the duplicate instruction by the shipping company to the commanding

officer of the ship that the goods as per the details given should be received on board.

b. Arrangement of Internal Transportation up to the Port of Shipment:

-The exporter makes necessary arrangements for transportation of goods to the port either by road or railways. On loading goods into the railway wagon, the railway authorities issue a 'Railway Receipt', which may be either 'freight paid' or 'freight to pay'. It serves as a title to the goods. The exporter does the railway receipt in favour of his agent to enable him to take delivery of the goods at the port of shipment.

c. Preparation and Processing of Shipping Documents : - As the goods reaches the port of shipment, the exporter should issue detailed instructions to the C&F agent for the shipment of cargo along with a complete set of the documents listed below:-

- ✓ Letter of Credit along with the export contract or export order
- ✓ Commercial Invoice (2 copies)
- ✓ Packing List or Packing Note
- ✓ Certificate of Origin
- ✓ GR Form (original and duplicate)
- ✓ ARE-I Form
- ✓ Certificate of Inspection, where necessary (original copy)
- ✓ Marine Insurance Policy

d. Customs Clearance: - The cargo must be cleared from the Customs before it is loaded on the ship. For this, the above mentioned documents, along with five copies of shipping bill, are to be submitted to the Customs Appraiser at the Customs House. The Customs Appraiser ensures that all the formalities relating to exchange control, quality control, pre-shipment inspection and licensing have been complied with by the exporter. After

verification, all documents, except the original GR, original copy of Shipping Bill and one copy of Commercial Invoice, are returned to the C&F agent.

e. Obtaining ‘Carting Order’ from the Port Trust Authorities: -

The C&F agent, then, approaches the Superintendent of the concerned Port Trust for obtaining the ‘Carting Order’ for moving the cargo inside the dock. After obtaining the Carting Order, the cargo is physically moved into the port area and stored in the appropriate shed.

f. Customs Examination and Issue of ‘Let Export Order’: -

The Customs Examiner at the port of shipment physically examines the goods and seals the packages in his presence. The same can be arranged for at the factory or warehouse of the exporter by making an application to the Assistant Collector of Customs. The Customs Examiner, if satisfied, issues a formal permission for the loading of cargo on the ship in the form of a ‘Let Export Order’.

g. Obtaining ‘Let Ship Order’ from the Customs Preventive Officer: -

‘Let Export Order’ must be supplemented by a ‘Let Ship Order’ issued by the Customs Preventive Officer. The C&F agent submits the duplicate copy of Shipping Bill, duly endorsed by the Customs Examiner, to the Customs Preventive Officer who endorses it with the ‘Let Ship Order’.

h. Obtaining Mate’s Receipt and Bill of Lading:-

The goods are then loaded on board the ship for which the Mate or the Captain of the ship issues Mate’s Receipt to the Port Superintendent. The Port Superintendent, on receipt of port dues, hands over the Mate’s Receipt to the C&F Agent. The C&F Agent surrenders the Mate’s

Receipt to the Shipping Company for obtaining the Bill of Lading. The Shipping Company issues two to three negotiable and two to three non-negotiable copies of Bill of Lading.

4.11.2.3 Pre- Shipment Stage

Pre-shipment stage consists of the following steps:

- a. Approaching Foreign Buyers:-** In order to secure an export order, a new exporter can make use of one or more of the techniques, such as, 'advertising in international media, sales promotion, public relation, personal selling, publicity and participation in trade fairs and exhibitions.
- b. Inquiry and Offer:** - An inquiry is a request from a prospective importer about description and price of goods, their standard or grade, size, weight or quantity, terms of payments, etc. On getting an inquiry, the exporter must process it immediately by making an offer in the form of a Performa invoice.
- c. Confirmation of Order:** - Once the negotiations are completed and the terms and conditions are finalised, the exporter sends three copies of Performa Invoice to the importer for the confirmation of order. The importer signs these copies and sends back two copies to the exporter.
- d. Opening Letter of Credit:** - The documentary credit or letter of credit is the most appropriate and secured method of payment adopted to settle international transactions. On finalization of the export Contract, the importer opens a letter of credit in favour of the exporter, if agreed upon in the contract.

- e. Arrangement of Pre-shipment Finance:** - On securing the letter of credit, the exporter procures a pre-shipment finance from his bank for procuring raw materials and other components, processing and packing of goods and transfer of goods to the port of shipment.
- f. Production or Procurement of Goods:** - On securing the pre-shipment finance from the bank, the exporter either arranges for the production of the required goods or procures them from the domestic market as per the specifications of the importer.
- g. Packing and Marking:** - Then the goods should be properly packed and marked with necessary details such as port of shipment and destination, country of origin, gross and net weight, etc. If required, assistance can be taken from the Indian Institute of Packing (IIP).
- h. Pre-shipment 'Inspection':** - If the goods to be exported are subject to compulsory quality control and pre-shipment inspection then the exporter should contact the Export Inspection Agency (EIA) for obtaining an inspection certificate.
- i. Central Excise Clearance:** - The exporters are totally exempted from the payment of central excise duty. However, the exemption should be claimed in one of the following ways: -
- ✓ Export under Rebate
 - ✓ Export under bond
- j. Obtaining Insurance Cover:** - The exporter must take appropriate policies in order to insure risks: ECGE policy in order to cover credit risks, Marine policy, if the price quotation agreed upon is CIF, Appointment of C&F Agent: - Since exporting is a complex

and time- consuming process, the exporter should appoint a Clearing and Forwarding (C&F) agent for the smooth clearance of goods from the customs and preparation and submission of various export documents.

4.11.2.4 Post Shipment Stage:

The post-shipment stage consists of the following steps: -

a. Submission of Documents by the C&F Agent to the Exporter: -

On the completion of the shipping procedure, the C&F agent submits the following documents to the exporter:-

- ✓ A copy of invoice duly attested by the Customs.
- ✓ Drawback / DEPB copy of the shipping bill
- ✓ Export promotion copy of the shipping bill
- ✓ A full set of negotiable and non-negotiable copies of bill of lading
- ✓ The original L/C, export order or contract
- ✓ Duplicate copy of the ARE-I form

b. Shipment Advice to Importer: - After the shipment of goods, the exporter intimates the importer about the shipment of goods giving him details about the date of shipment, the name of the vessel, the destination, etc. He should also send one copy of non-negotiable bill of lading to the importer.

C. Presentation of Documents to Bank for Negotiation: -

Submission of relevant documents to the bank and the process of getting the payment from the bank are called “Negotiation of the Documents” and these documents are called ‘Negotiable Set of Documents’. The set normally contains: -

- ✓ Bill of Exchange, Sight Draft or Usance Draft

- ✓ Full set of Bill of Lading or Airway Bill
- ✓ Original Letter of Credit
- ✓ Commercial Invoice including one copy duly certified by the Customs
- ✓ Packing List
- ✓ Foreign exchange declaration forms, GR/SOFTEX/PP forms in duplicate
- ✓ Exchange control copy of the Shipping Bill
- ✓ Certificate of Origin, GSP or APR Certificate, etc.
- ✓ Marine Insurance Policy, in duplicate

d. Dispatch of Documents: - The bank -negotiates these documents to the importer's bank in the manner as specified in the L/C. Before negotiating documents, the exporter's bank scrutinises them in order to ensure that all formalities have been complied with and all documents are in order. After receipt of payment from the importer, an exporter submits the Bank Certificate to his bank for certification. The bank then returns the Bank Certificate after verifying it and attested with bank's sign and seal along with attested copies of commercial invoice to the exporter.

e. Acceptance of the bill of exchange:- Bill of exchange accompanied by the above documents is known as the Documentary Bill of Exchange. It is based on the credit term of the transaction.

f. Processing of GR Form: - On receiving the export proceeds, the exporter's bank intimates the same to the RBI by recording the fact on the duplicate copy of GR. The RBI verifies the details in duplicate copy of GR with, the, original copy of GR received from

the Customs. If the details are found to be in order then the export transaction is treated to be completed.

g. Realisation, of Export” Incentives: - If the exporter is eligible for export incentives, then he should submit claim for the same accompanied by the bank certificate to the appropriate authority.

4.12. Export –Import Documentation

Pro-forma Invoice:

Pro-forma Invoice, as the name suggests, is a proforma of the invoice. It is prepared by an exporter and sent to the importer for necessary acceptance. It suggests to a buyer what the actual invoice would look like and is sent to him when he is ready to purchase the goods.

Commercial Invoice:

An invoice is very important as it contains the names of the exporter, importer, and the consignee, and the description of goods. It has to be signed by the exporter. Other documents are prepared by deriving information from the invoice. It is required to be presented before different authorities for different purposes.

Packing List:

This statement gives the packing details of goods in a prescribed format. It is a very useful document for customs at the time of examination and for warehouse keeper of the buyer to maintain a record of inventory and to effect delivery.

Certificate of Origin:

This certificate issued by the local Chamber of Commerce indicates that the goods, which are being exported, are actually manufactured in a specific country mentioned therein. It is sent by the exporter to the

importer and is useful for the clearance of the goods from the customs authority of the importing country.

Shipping Bill/Bill of Entry:

It is a requisite for seeking the permission of customs to export goods .It contains a description of export goods by sea/air. It contains a description of export goods, number and kind of packages, shipping marks, and number numbers, value of goods, the name of the vessel, the country of destination, etc. On the other hand, importers have to obtain copies of document called Bill of Entry for customs clearance. Later, a copy has to be given to the bank for verification.

ARE-1 Form:

This form is an application for the removal of excisable goods from the factory premises for export purposes. The ARE-1 form has six copies (First – The White copy, Second- Buff, Third or Triplicate – Pink Copy, Fourth – Green, Fifth – Blue and Sixth – Yellow.) which are distributed to different authorities, including Customs, Range office of Excise, Refund office of Excise, etc. Triplicate pink copy is to be submitted along with the original and duplicate to the Excise authority for the purpose of rebate.

Exchange Declaration Form (GR/SDF Form):

The RBI has prescribed a GR form (SDF), a PP forms to declare the export transactions. The GR form contains:

- a) Name and address of the exporter and description of goods.
- b) Name and address of the authorized dealer through who proceeds of the exports have been or will be realized.
- c) Details of commission and discount due to foreign agent or buyer.

d) The full export value, giving break up of FOB, Freight, Insurance, Discount, and Commission, etc.

e) Declaration by exporter that the payment will be realised within maximum limit of 180 days.

4.12.1 Bills of Exchange:

It is an instrument in writing, containing an order, signed by the maker, directing a certain person to pay a certain sum of money only to the order of a person to the bearer of the instrument. It is commonly known as a draft.

✓ **Documents against Payment (D/P):** - Under this method, exporter draws a sight bill on the importer and hands over the relative documents specified in the contract to his banker with the instructions to deliver the documents only on payment. The documents are sent to the correspondent's bank, where the importer is located, with the instructions given by the exporter. When the importer makes the payment, he can get title to the goods and possession.

✓ **Documents against Acceptance:** - Under this method, exporter draws usance bill on the importer. Usance period may be 30 to 180 days. Usance period cannot exceed 180 days as the export proceeds are to be collected within a maximum period of 180 days as per Exchange Control restrictions. The essence of the transaction is the exporter is not only willing to ship the goods but also prepared to part with the title and possession of goods, before payment is received and even extending the agreed period of credit.

- ✓ **Telegraphic Transfer (TT):** - This is a method or remitting foreign payments through telegraphic transfer of funds to persons in foreign countries. The money is deposited with the banks in India and the Indian banker sends a cable, telegram or fax to the foreign branch/correspondent to make certain payments to the specific party, on that very date. Then, the foreign branch/correspondent makes necessary payments in foreign exchange to the specific party. In export-import trade, this practice is commonly adopted where realizations are received through bank, when documents are sent for collection.

- ✓ **Letters of Credit:** - This method of payment has become highly popular in recent times. The greatest attraction to the exporter is elimination of credit and payment risks. Exporter is not concerned with the creditworthiness of the borrower while entering into the contract. In other words, the credit of the banker is substituted for that of the importer. There is no payment risk as negotiating bank makes the payment to him, once the stipulated conditions are complied with. Above all, an important advantage from the viewpoint of the exporter, he can obtain the payment from a bank, at his own centre. The documentary bills finance a large part of overseas trade. At the request of the importer, bank makes a commitment to the exporter to make payment, under certain circumstances and up to a limit, provided the stipulated documents in the letter of credit, requested by the importer, are presented and found to be in order. Exporter may draw the draft on the importer or importer's bank. The documents usually required are full set of bill of lading, invoice and marine insurance policy.

4.12.2 Inspection Certificate:

It is required by some importers and countries in order to get the specifications of the goods shipped attested. The attestation is usually performed by a government agency or by independent testing organizations.

4.12.3 Bill of Lading:

This document is issued by the shipping company acknowledging the receipt of the goods mentioned in the bill, for shipment on board of the vessel. The B/L is the legal document to be referred in case of any dispute over the shipment. It contains:

- a) The shipping company's name and address
- b) The consignee's name and address
- c) Name and address of shipping agent in the importing country.
- d) The port of loading and port of discharge
- e) Shipping marks and particulars
- f) Number of packages and the goods
- g) Gross weight and net weight
- h) Freight details and name of the vessel
- i) Signature of the shipping company's agent

4.12.4 Insurance Certificate:

This document, obtained from the freight forwarder, is used to assure the consignee that insurance will cover the loss or damage to the cargo during transit (marine/air insurance).

4.12.5 Duty Entitlement Pass Book (DEPB) Scheme: -

The exporter who is not desirous of availing the Advance licensing facility may avail the facility of DEPB scheme. The objective of the scheme is to neutralize the incidence of customs duty on the import

content of export product. An exporter is eligible to claim import duty credit at a specified percentage of FOB value of exports made in freely convertible currency. Eligible products and rates against them are specified by DGFT. The exporter can use this credit for the import duty payable on the import of inputs required for the manufacture of the export product or not. The claim for the import duty credit is admissible only after the realization of the export proceeds. Both the manufacturer and manufacturer exporter are eligible for the benefit under DEPB scheme. They can apply within 180 days from the date of export or 90 days from the date of realization, whichever is later. This is reckoned with reference to each shipment. The import duty credit granted under DEPB scheme is freely transferable. Materials imported availing the benefits of DEPB are also freely transferable.

4.13 Problems faced by Indian Exporters:

The exporters cite Rules & Regulations related problems as the most common in all countries/regions except in the Middle East and Japan, where Documentation requirements are the major cause of problems faced. In the Middle East, Fees and Charges are also an issue.

Exporters' problems are classifiable in the following categories:

4.13.1 Rules and Regulations related problems:

Overall 8% exporters have encountered trade related problems due to complicated rules/regulations and frequent changes in the same. Frequent changes in rules and regulations have caused maximum problems for Indian exporters in EU, Middle East, South East Asia and Japan. However, 6% of the exporters to USA have faced problems due to complicated rules and regulations.

Food products exporters site frequent changes in rules (15%) and complicated rules (9%) as major causes of problems. The incidence is highest in EU and lowest in USA. Service providers – 12% of the respondents find that the rules are complicated and undergo frequent changes.

4.13.2 Clearance of Goods:

Overall 9% of exporters have faced problems in clearance of their consignments in destination countries, due to lack of adequate certification facilities within India. In USA time taken for clearance by custom authorities is the prime cause of problems for Indian exporters. For Food products, inadequate certification facilities in India are by far the major cause of problems faced in clearance of goods. Exporters of food products have faced SPS related problems (Overall and in EU). Service providers – 22% state that Indian exports face clearance problems due to certification facilities in India (highest in Middle East and South East Asia).

4.13. 3 Documentation/Data requirements for clearance of goods:

Eight percent exporters have faced problems due to excessive documentation/data requirements for clearance of goods in the destination countries. For exporters to EU, the time taken for compliance with documentation and data requirements is the biggest source of problems.

Food product exporters, which are mostly small scale enterprises, find meeting documentation/data requirements very time consuming. 17% Service providers find the documentation/data requirements to be excessive, particularly in Middle East.

4.13.4 Inspection requirements in destination countries:

Eight percent exporters cite multiplicity of inspection requirements as the cause of problems faced in destination countries. Significantly, 4% of exporters (overall and in EU) have faced discriminatory treatment during inspection of their consignments in destination countries. Exporters of food products (10%) think that there are too many inspections – overall and in EU Textiles and Garments – 11% multiplicity 27% Service providers find the multiplicity of inspections a major cause for trade related problems faced by Indian exporters - highest in USA and EU.

4.13.5 Fees and Charges for Clearance of Goods:

Five percent exporters each have reported problems due to fees and charges being high and frequently changing. Textiles and Garments – due to 11% frequent changes.

4.13.6 Losses suffered:

Overall about 18-20% exporters have reported having suffered losses due to various reasons such as changes in rules, delays in clearance, demurrage etc. About 8% Indian exporters have suffered losses due to demurrage charges levied on their consignments. Food: 10% respondents suffered losses due to frequent changes in rules Food products suffered losses due to delays – overall and in EU Service providers – 20% exporters suffer losses due to delays, 17% due to conditional clearance and demurrage. The losses are highest in EU and Middle East.

4.13.7 Disputes Handling:

Time consuming mechanism for handling of disputes has caused problems for 5% of exporters. However, the other aspects of disputes handling, namely lack of formal mechanism, lack of clarity about

authority and high cost, are also equally significant. Significantly, Food: 16% respondents blame time consuming systems for disputes settlement for problems, 16% also feel that there is no formal mechanism for disputes handling in Middle East.

4.13.8 Intimation of the export-related problem:

The Indian exporters get to know of the problem(s) mostly on arrival of the consignment in the destination country or during clearance. Usually the buyer or the shipping agency informs the exporter regarding the nature of the problem.

4.13.9 Higher incidence of trade-facilitation problems within India:

Indian exporters face more trade-related problems in India than in the destination countries.

Table 4.13.9 Incidence of Trade-Facilitation Problems in India:

| | Within India | Outside India |
|-------------------------------------|--------------|---------------|
| All exporters | 65% | 35% |
| Handicrafts exporters | 61% | 39% |
| Engineering goods exporters | 100% | 1 0% |
| Food & Agri products exporters | 58% | 42% |
| Textiles and Garments | 72% | 28% |
| Service (Trade Logistics) Providers | 62% | 38% |

In addition to the tabulation of responses regarding trade related problems faced by Indian exporters, a compilation of various problems reported by survey respondents is provided below. Some of these are not really problems or inputs for the purposes of this study

but have been reported for transparency. Listing of Problems in Destination Countries reported.

Table 4.13.9.1 Trade-Facilitation Problems

| Type & Description of problem | Nature of problem | | | |
|--|-------------------|-----------------------|--------------|----------------------|
| | Commercial | Procedures/ Document. | Coordination | Destination Specific |
| Holding up of containers | | Yes | | USA |
| Introduction of ACD and Screening of containers. Any discrepancy (mismatch in number, weight due to human error) between ACD, Packing List or BL leads to Heavy Penalties (up to \$ 5000). | | Yes | | USA |
| Delays in getting payment. Banks release goods to buyers Without clearing payment. Lack of mechanism for Resolving this issue. | Yes | | | |
| No direct touch with the importers or destination authorities | | | Yes | |
| Poor response from buyers after the Pragati Maiden Fair Organized by EPCH. | | | Yes | |
| Lack of screening of buyers to ascertain their business Integrity. | | | Yes | |

| | | | | |
|---|-----|-----|------------|-------------|
| Customs clearance cumbersome & “fatiguing”, though procedures are easy, Lack of transparency | | Yes | | USA. EU |
| Language problem | | | Yes | EU, SE Asia |
| Lack of cooperation & heavy demurrage due to custom clearance | | Yes | Yes Brazil | Brazil |
| Delay in trans-shipment | | Yes | | Africa |
| In spite of a certificate of “Shut out” given by the Customs authorities, US authorities insisted on a fresh invoice, Leading to Demurrage & Penalty. | | Yes | | USA |
| Detention of consignment as invoice showed embarkation from Mumbai, while the vessel Left from Nava Sheva. | | Yes | | US |
| Unfair means adopted by Shipping line who asked the importer to pay charges from Port to his location, even though it was shipped on prepaid Door delivery basis. | Yes | | | EU |

| | | | | |
|--|--|-----|--|---|
| Requirement of legalization of documents by the Embassy after the Chamber of Commerce has stamped the documents (BL, Invoice & Packing list. It costs ₹ 8000 to 10000 and causes a delay of 10 to 15 days. | | Yes | | Saudi Arabia (sometime other Gulf countries and Mexico for textiles |
| Requirement of cleaning of Container exterior. Penalty of \$250 is levied, even if it becomes dirty in the vessel in Transit. | | Yes | | Australia |
| Requirement of a Phytosanitary certificate for Handicrafts. | | Yes | | Mexico |
| Fumigation by some shipping lines, even though the destination country does not want it. De-fumigation at destination costs \$ 300-400 or leads to returns or destruction of the consignment, causing huge losses. | | Yes | | EU Israel |
| Changes in cost/ port tariff, | | Yes | | |

| | | | | |
|---|--|-----|--|--|
| leading to disputes & Retention. | | | | |
| Disparity in charges between ports for hazardous material, Including fumigation. | | Yes | | Gulf & Rotterdam |
| Disparity in fumigation requirements | | Yes | | US – Wooden furniture, Australia & New Zealand – all items |
| Requirement of hazardous material to be physically escorted manually, which is Very costly. | | Yes | | Spain |
| Problem in trans-shipment of Pork, even if it is not unloaded. | | Yes | | Gulf |
| Sudden changes in the contents of the Health Certificate, leading to delays, heavy costs and loss of business | | Yes | | Turkey |
| Disparity in Plant Quarantine certificate given by Indian Authorities and importer requirements. | | Yes | | |
| Disparity in requirements e.g. “Kosher” certificate, Radioactive material, Phyto sanitary and legalization | | Yes | | US |

| | | | | |
|---|--|--|--|------------------------|
| certificates | | | | |
| Lack of cooperation in understanding our procedures, documentation and certificates | | | | US, EU |
| Sudden changes in Custom fees. | | | | US, EU |
| Too many inspections & time consuming customs procedures, rules not clear and Not easily accessible, prefer to work through agents. | | | | Middle East, SE Asia |
| High tariffs in some countries forces customers to import via neighboring countries | | | | Africa & Latin America |
| Due to short Transit time, the documents do not reach in time. | | | | Middle East, Sri Lanka |
| Generalized System of Preference (GSP) classification problem | | | | EU |

V



SUMMARY AND CONCLUSION

V. SUMMARY AND CONCLUSION

India produces 12% of the world's fruits and vegetables. The most important fruits grown in the country include mango, banana, guava, papaya and sapota and vegetables include tomato, brinjal, cauliflower, cabbage, and okra. The leading fruits and vegetable growing states in the country are Uttar Pradesh, Maharashtra, Tamilnadu, Gujarat, Karnataka, Bihar, Haryana and Punjab. In this study, the productivity of fruits and vegetables in Gujarat has been analysed apart from documentation of export procedures.

With the increase in population of our country and improvement in the dietary habits, the consumption of fruits and vegetables has improved. It is a common knowledge that fruits and vegetables have high nutrient value and they are vital for health. The six Indian metropolitan cities of New Delhi, Kolkata, Mumbai, Chennai, Hyderabad and Bangalore have the population between 60-65million people. This enormous urban market relies on fruits and vegetables from various regions of the country.

In the present scenario, the cultivable land area is decreasing day by day due to the rapid urbanization, industrialization and shrinking land holdings.

Fruits (Mango, Banana, Papaya, guava, and sapota) and vegetables (Tomato Brinjal, Cauliflower, Cabbage, and Okra) offer the highest income generating potential and return per hectare. During the past ten years production of fruits & vegetables has increased more than five-fold in the study area.

Fruit and vegetables in Gujarat state are grown in 634124 hectares with the total production of 12804002 mt. The productivity of fruit and vegetables in Surat district is about 20.1 mt/ha. In Surat district out of total ten Talukas, kamrej taluka alone produced 70% of the total fruits and vegetables. Similarly, in Bharuch district out of eight taluka, Jambusar taluka alone produced about 70% of the total production of fruit & vegetables.

In Surat district farmers grow fruits and vegetables mainly for local market and APMC and not for commercial purpose. Though, fruit and vegetables are grown in the large area in Surat district, the district is mainly known for production of sugarcane crop. The district produces more than 60% of south Gujarat's total sugarcane production and contributes over 40% in the sugarcane production in the state.

In Gujarat, farmers use urea, super phosphate, Murate of potash, DAP, sulphate, FYM and develikakhore for fruit & vegetable cultivation. In Surat district, farmers apply two times fertilizers and one time FYM in fruit crops in a year. In case of vegetables, farmers use fertilizers two to three times and FYM one time in a season.

Cost of cultivation is divided into two parts; one is variable cost and another is fixed cost. Total cost is summation of fixed cost and variable cost. The cost of cultivation includes cost of seed, transplantation, irrigation, fertilizers, insecticide & pesticide, hired labour and transportation. Farmers do not consider the labour work of family members. Cost of cultivation of major vegetables namely Tomato, Brinjal, and Cauliflower per acre was found ₹14675, ₹13950, and ₹13200, respectively. Similarly cost of cultivation of mango, banana and papaya or acre was observed to be ₹ 9200, ₹ 15700 and ₹ 11000, respectively

Following three main distribution channels were found in the study area:

- (I) Fruits & Vegetable producers —————> Consumer
- (II) Fruits & Veg. producers —> Retail Trader —> Consumer
- (III) Fruits & Veg. producers —> Wholesaler —> Trader —> Retail
Trader —> Consumer
- (IV) Fruits & Veg. producers —> APMC —> Wholesaler —>
Trader —> Retail Trader —> Consumer

Major Export Stages:

Export, cargo can be exported to the overseas buyer by sea, air or land. However, shipment by sea is the most popular and generally resorted to, as it is comparatively cheaper. About 95% of cargoes are exported by Sea in India. This is mainly because the ship's capacity is far greater than other modes of transportation. Nevertheless, transportation by air is utilized for export of expensive items like, diamonds, gold, etc there are three major stages:

Registration Stages:

The exporter is required to register his organisation with a number of institutions and authorities, which directly or indirectly help him in the smooth conduct of export, trade.

Pre- Shipment Stage

Pre-shipment stage consists of the following steps:

- Approaching Foreign Buyers
- Inquiry and Offer
- Confirmation of Order
- Opening Letter of Credit
- Arrangement of Pre-shipment Finance
- Production or Procurement of Goods

- Packing and Marking
- Pre-shipment 'Inspection
- Central Excise Clearance
- Obtaining Insurance Cover

Post Shipment Stage:

On the completion of the shipping procedure, the C&F agent submits the following documents to the exporter:-

- ✓ A copy of invoice duly attested by the Customs.
- ✓ Drawback / DEPB copy of the shipping bill.
- ✓ Export promotion copy of the shipping bill.
- ✓ A full set of negotiable and non-negotiable copies of bill of lading.
- ✓ The original L/C, export order or contract.
- ✓ Duplicate copy of the ARE-I form.

Types of problems faced by Indian Exporters, as studied in the project, are as follows:

- Rules and Regulations related
- Clearance of Goods
- Documentation/Data requirements for clearance of goods
- Inspection requirements in destination countries
- Fees and Charges for Clearance of Goods
- Losses suffered
- Disputes Handling
- Intimation of the export-related problem
- Higher incidence of trade-facilitation problems within India



REFERENCES

References

- Anonymous,** (1986) Recommendations for the Processing and Handling of Frozen Foods, 3rd ed., Paris: International Institute of Refrigeration, pp. 32, 34, 38.
- Anonymous,** (2000) How to cut fruits and vegetable products, Urschel laboratories incorporated. Calumet Avenue, U.S.A.
- Anonymous,** (2003) Raw Material Guidelines for Quick Freezing, CCFRA Guidelines, Campden and Chorleywood Food Research Association, U.K.
- Arthey, D.** (1993) Freezing of vegetables and fruits, In: Mallett, C.P. ed., Frozen Food Technology Chapman and Hall, London, UK.
- Brackett, R.E. and Splittstoesser, D.F.** (1992) Fruits and vegetables, Compendium of Methods for the Microbiological Examination of Foods, 3rd ed. Washington: American Public Health Association, pp. 919.
- Canet, W.** (1989) Quality and stability of frozen vegetables, In: S. Thorne, Ed. Developments in Food Preservation - 5. London and New York: Elsevier Applied Science Ltd, pp. 50.
- Cioubanu, A. and Niculescu, L.** (1976) Fruits and vegetables. In: A Cioubanu, G Lascu, V Bercescu, L Niculescu, Eds., Cooling Technology in the Food Industry. Kent, U.K.: Abacus Press, pp. 377.
- Choudhary, B.** (1998) Vegetables, 3rd edition, National book Trust, Delhi. p: 55, 63 & 70,185
- Desrosier, N.W. and Tressler, D.K.** (1977) Fundamentals of Food Freezing, AVI Publishing Co. Inc, Westport CT.



APPENDIX

ANNEXURE. 1

| INVOICE | | | | | | | |
|--|--------------------|-------------|---------------------------|-------------|--|------------|---------------|
| EXPORTER: | | | | | INVOICE NO. AND DATE | | |
| | | | | | BUYER ORDER NO. AND DATE | | |
| CONSIGNEE: | | | | | BUYER (IF OTHER THEN CONSIGNEE) | | |
| | | | | | COUNTRY OF ORIGIN | | |
| NOTIFY | | | | | TERM OF DELIVERY OF PAYMENT | | |
| PORT OF DISCHARGE | | | VESSEL/FLIGHT NAME | | BANK NAME AND ADDRESS | | |
| PORT OF LOADING | | | FINAL DESTINATION | | A/C NO. : | | |
| | | | | | SWIFT NO.: | | |
| SHIP | DESCRIPTION | QTY | UNIT | QTY | RATES | PER | AMOUNT |
| MARK | OF GOODS | PACK | PACK | CASE | USD | | USD |
| | | | | | | | |
| | | | | | TOTAL IN USD | | |
| <p>Total C & F invoice value in USD in word:</p> <p>Declaration: We declare that this invoice shows the actual price of goods described and that the all the information is true and correct.</p> <div style="text-align: right;"> <p>For.</p> <p>Authorised Sign.</p> </div> | | | | | | | |

INVOICE

| | | | | | | | |
|-------------------|-------------|------|--------------------|------|---------------------------------|-----|--------|
| EXPORTER: | | | | | INVOICE NO. AND DATE | | |
| | | | | | BUYER ORDER NO. AND DATE | | |
| CONSIGNEE: | | | | | BUYER (IF OTHER THEN CONSIGNEE) | | |
| | | | | | COUNTRY OF ORIGIN | | |
| NOTIFY | | | | | TERM OF DELIVERY OF PAYMENT | | |
| PORT OF DISCHARGE | | | VESSEL/FLIGHT NAME | | BANK NAME AND ADDRESS | | |
| PORT OF LOADING | | | FINAL DESTINATION | | A/C NO. : | | |
| | | | | | SWIFT NO.: | | |
| SHIP | DESCRIPTION | QTY | UNIT | QTY | RATES | PER | AMOUNT |
| MARK | OF GOODS | PACK | PACK | CASE | USD | | USD |
| | | | | | | | |
| | | | | | TOTAL IN USD | | |

Total C & F invoice value in USD in word:

Declaration: We declare that this invoice shows the actual price of goods described and that the all the information is true and correct.

For.

Authorised Sign.

PACKING LIST

| | | | | | | | |
|-------------------|-------------|------|--------------------|------|---------------------------------|-------------|--------------|
| EXPORTER: | | | | | PACKING LIST NO. AND DATE | | |
| | | | | | BUYER ORDER NO. AND DATE | | |
| CONSIGNEE: | | | | | BUYER (IF OTHER THEN CONSIGNEE) | | |
| | | | | | COUNTRY OF ORIGIN | | |
| NOTIFY | | | | | TERM OF DELIVERY OF PAYMENT | | |
| PORT OF DISCHARGE | | | VESSEL/FLIGHT NAME | | BANK NAME AND ADDRESS | | |
| PORT OF LOADING | | | FINAL DESTINATION | | A/C NO. : | | |
| | | | | | SWIFT NO.: | | |
| SHIP | DESCRIPTION | QTY | UNIT | QTY | WEIGHT IN KGS. | | |
| MARK | OF GOODS | PACK | PACK | CASE | Net Weight | Tare weight | Gross Weight |
| | | | | | | | |
| | | | | | TOTAL WEIGHT | | |

Note:

| | | | |
|--------------------|---------|-------|------------------|
| Total BAGS | : | Boxes | For. |
| Total Gross Weight | : | Kgs | |
| Total Tare Weight | : | Kgs | Authorised Sign. |
| Total Net Weight | : | Kgs | |

ANNEXURE 'C'

Office of Superintendent of Central Excise

Range -

Division -

Commissioner ate-

| | |
|---|--|
| Container No. : | |
| Date: | |
| 1. Name of Exporter | |
| 2. a) IEC. No. | |
| b) Branch Code: | |
| c) BIN (Pan Based business Identification No. of the Exporter) | |
| 3. Name of Manufacture (if different from Exporter) & Factory Address | |
| 4. Date of Examination | |
| 5. Name of designation of the Examining Officer / Inspector/ E.O/ PO. | |
| 6. Name & Designation of the Supervise Officer- Appraiser /Superintendent. | |
| 7. a) Name of commissioner ate/ division/ Range b) Location Code | |
| 8. Particulars of Export Invoice a) Export Invoice No. & date b) Total No. of Packages. c) Name and Address of Consignee Abroad. d) Shipment. | |
| 9. a) Is the Description of goods, the quantity & their value as per particulars furnished in the Export Invoice? b) Whether samples drawn for being forwarded to port of Export. If the yes number of seal of the package contains. The sample central excise/custom. Seal no. | |
| 10. a) For non-containerized seal no. No. of packages. b) Containerized Cargo Size. | |
| Factory stuffing permission No:- | |

Note :-

- 1) Invoice & any other document accompanying this document should be attested by the office supervising the examination.
- 2) To be filled by the exporter before filling this document at the time of goods, registration in the Export.

Signature of Exporter

Signature of Inspector
Examiner

Signature of Superintendent

APPENDIX-1

FORM OF SDF

Shipping Bill No.....

Date.....

Declaration Under Foreign Exchange Regulation Act, 1973

1. I/We here by declared that I/We am/are the seller/ consignor of the goods in the respect of which this declaration is made and that the particulars given in the Shipping Bill No:- _____, dated _____ are true and that.
 - a) The value as contracted with the buyer is same as the full export value _____ declared in the above shipping Bill.
 - b) The export value of the goods is not ascertainable at the time of export and that the value declared is that which I/we having regard to the prevailing market conditions, expect to receive on the sale of goods in the overseas market.
2. I/We undertake that I/We will deliver to the bank named here in _____ (NAME IF THE BANK AND A/C NO.) the foreign exchange representing the full export value of the goods before _____ in the manner prescribed in the rule 9 of the foreign Exchange Regulation Rules 1974.
3. I/We further declared that I/We am/are resident of India and I/We have a place of business in India.
4. I/We am/are of am/are not in the caution list of the Reserve Bank of India.

For.....

AUTHORIZED SIGNATURE

Date: _____

Name of Exporter: (COMPLETE NAME AND ADDRESS OF THE EXPORTER)

State appropriate date of delivery which must be date due for payment, which in 6 month from the date of shipment whichever is earlier but for export to ware house established outside with permission of the Reserve Bank, the date of delivery must be within fifteen months.

APPENDIX 22A
BANK CERTIFICATE OF EXPORT AND REALISATION

FORM NO.-1

To, **The Jt. Director General of Foreign Trade**, (Name and address of Licensing Authority).
We, (Name and address of the Exporters) hereby declare that we have forwarded a
documentary export Bill to (Name and address of bank i.e. Branch and city) for
collection/ negotiation/ purchase as per particulars given here under.

| Invoice | | Export promotion copy of shipping bill duly authenticated by the customs | | Description of goods as given in the customs authenticated shipping bill | Bill of lading /PP/Receipt /Airways bill | | Destination of goods Country name | Bill Amount CIF/C&F/ FOB (In foreign Exchange) |
|---------|------|---|------|--|--|------|---|---|
| No. | Date | No. | Date | | No. | Date | | |
| [1] | [2] | [3] | [4] | [5] | [6] | [7] | [8] | [9] |
| | | | | | | | | |

| Freight amount as per bill of lading /Freight memo USD | Insurance amount as per insurance company's bill/Receipt USD | Commission/ Discount paid payable USD | Whether the export is in freely convertible currency or in Indian Rupees USD | FOB value/ FOB value actually released in free Foreign Exchange /Rupees | Date of realisation of export proceeds | GRI/ PP/ SDF form no. | No. Date & category of applicable Licence/ Authorisation |
|---|---|--|--|---|---|-----------------------------------|--|
| [10] | [11] | [12] | [13] | [14] | [15] | [16] | [17] |
| | | | | | | | |

We further declare that the aforesaid particulars are correct (Copies of invoice relevant to these exports and
custom attested EP, copy of relevant shipping bill is attached for verification by the bank).

Signature of the exporter :
Name in block letter :
Designation :
Place:
Date:
Full official address :
Full Residential address :
Official Seal/ Stamp

BANK'S CERTIFICATE

Authorised Foreign Exchange Dealer

Code N. allotted to the bank by RBI:

Ref. No. :

Date:

Place:

1. This is to certify that we have verified the relevant export invoices, customs attested E.P. Copy the shipping bill and other relevant documents of M/S.
We further certify that the particulars are given in Co. 1 to 17 have been verified and found to correct. We have also verified the F.O.B. value mentioned in col. 14 above with reference following documents:-

(i) Bill of lading/PP receipt/Airways Bill:

Date:

(ii) Insurance policy/ Cover/Insurance Receipt.

2. FOB actually realised and date of realization of export proceeds are to be given in all cases except where consignment has been sent against confirmed irrevocable letter of credit or export made against the Government of India/EXIM Bank line of Credit or export made under Deferred Payment/suppliers Line of Credit Contract backed by ECGC cover. An endorsement to that effect needs to be endorsed in BRC.
3. We have also verified that the data of export is (Applicable only in respect of export by air.)
4. This is to certify that we have certified the amount of the Commission paid/payable, as declared above, by the exporter with G. R. forms and found to be correct.

(Signature of the Bankers)

Full address of the Bankers

Branch and City

Official Stamp

Note:

1. Bank can issue a consolidated certificate (consignment-wise) for more than one consignment.
2. FOB actually realised and date of export proceeds are to be given in all cases except where consignment has been against confirmed irrevocable letter of credit.
3. This shall be required wherever specifically in the policy/ procedure.

INTIMATION LETTER

To,
The Superintendent
Central Excise & Customs

Date:

SUB: A Request to seal a Container

Respected Sir,

We request to inform that our consignment ready to load for export on _____ (Date). So, we need to seal our Container by your authority. Our stuffing address is below:

(ADDRESS OF STUFFING)

We request to come on the next day and seal our container and oblige.

Thanking You,

Yours Truly,
For.....

Authorized Signature

GATE PASS

(NAME OF THE COMPANY/EXPORTER)

TO,
THE MANAGER
(NAME OF THE RELEVANT PORT)

DATE:

NAME OF THE SHIPER:

SHIPPING LINE:

VESSEL:

VIA:

CONTAINER NO:

CONTAINER SEAL NO.:

VEHICLE NO:

CUSTOMS SEAL NO:

ITEM:

PURCHASE ORDER NO:

NET WT: KGS

GROSS WT: KGS

PLACE OF STUFFING:

P.O.D. (PLACE OF DELIVERY):

FINAL DESTINATION:

CONTAINER DISPATCH TIME & DATE:

TEMPERATURE AT THE DISPATCH TIME:

PURCHASE ORDER

ORDERED BY:

(NAME OF THE IMPORTER)

Purchase Order No.:

Date Issued:

To:

Ship To:

| Good Thru | Ship Via | Account No. | Term of Payment | |
|-----------|----------|-------------|------------------|--------|
| | | | | |
| Quantity | Item | Description | Unit Cost USD | Amount |
| | | | | |
| TOTAL USD | | | | |

For.

AUTHORISED SIGN.

| BILL OF EXCHANGE | | | | | | |
|--------------------------|---------------------------------|---------------------------------|--|--|----------|-----------|
| EXPORTER | | Invoice No. & Date | | SB No. & Date | | |
| | | AR4/AR4A No. & Date | | | | |
| | | Q/Cert. No. & Date | | IEC No. | | |
| Consignee | | Export Trade Control | | | | |
| | | If export under | | | | |
| | | Deferred Credit | | | | |
| | | Joint Venture | | | | |
| | | Rupee Credit | | | | |
| | | Others | | | | |
| | | RBI's Approval/ Cir. No. & Date | | | | |
| Custom House Agent | L/C. No. | | | | | |
| Pre-Carriage by | Place of Receipt by Pre-Carrier | Type of Shipment | | | | |
| | | Outright Sale | | | | |
| | | Consignment Export | | | | |
| Vessel/Flight No. | Rotation No. | Other (Specify) | | | | |
| | Port of loading | Nature of Contract | CTF | C&F | FOB | |
| | | Other (Specify) | | | | |
| | Port of Discharge Destination | Counter of | Exchange Rate w/s 14 of CA Currency of Invoice | | | |
| Sr. No. | Marks & No. | Container Nos. | No. & Kind of Pkgs. | Statistical Code & Description of Goods | Quantity | Value FOB |
| | | | | | | |
| | Net Weight | | | | | |
| | Gross Weight | | | | | |
| | Total FOB Value (in words) | | | | | |
| Analysis of Export Value | | Currency | Amount | Full Export value or where not ascertainable, the value which exporter expects to receive on the sales of goods. | | |
| FOB value | | | | | | |
| Freight | | | | | | |
| Insurance | | | | | | |
| Commission Rate | | | | | | |

CERTIFICATE OF ORIGIN

The undersigned _____ (Owner or Agent)
_____ (Name and Address of Shipper)
declares that the following mentioned goods shipped on _____ on
the date _____ consigned to: _____ are
the products of the India.

| Marks and Numbers | No. of Pkgs. Boxes or Cases | Weight in Kilograms (Gross) | Description |
|-------------------|--------------------------------|--------------------------------|-------------|
| | | | |

Sworn to before me

This _____ day of _____

(Signature of Owner or
Agent)

The _____
a recognized Chamber of Commerce under the laws of the State of _____,
according to the best of its knowledge and belief, finds that the products named originated in the
India.

Secretary _____

Ocean Bill of Lading

| | | | |
|---|--|---|---|
| Shipper/Exporter ABC Company 123 Main Street Somerset, NY, 10018 United States | | Document Number 1000125 | Booking Number 901 |
| Consignee Some Company 65 Enterprise Way Nashville, TN, 08584 Canada | | Exporting References Ref #:6755 | |
| Notify Party Some Company 65 Enterprise Way Nashville, TN, 08584 Canada | | Forwarding Agent (Name & Address) Some Company 65 Enterprise Way Nashville, TN, 08584 Canada | |
| Pre-Carriage By YFSY | | Place of Receipt By Pre-Carrier NY Port | |
| Exporting Carrier ABCD | | Port of Lading Port 64 | Loading Pier / Terminal 12 |
| Foreign Port of Unloading Canada | | Place of Delivery By On-Carrier Shop | Domestic Routing / Export Instructions |

| Marks and Numbers | Number of Packages | Description of Packages and Goods | Gross Weight | Measurements |
|-------------------|--------------------|-----------------------------------|---------------------|---------------------|
| 1 | 2 | Clothes | 100 Lbs 45.4 Kgs | 12 Cft 0.340 Cbm |

| | | | |
|--------------------|----------------|----------------|---|
| | Prepaid | Collect | <p>RECEIVED by carrier for shipment by ocean vessel between port of discharge, and for arrangement or procurement of pre-carriage from place of receipt and on-carriage to place of delivery, where stated above, the goods as specified above in apparent good order and condition unless otherwise stated. The goods to be delivered at the above mentioned port of discharge or place of delivery, whichever is applicable.</p> <p>IN WITNESS WHEREOF 1 original Bills of Lading have been signed, not otherwise stated above, one of which being accomplished the others shall be void</p> <p>Signature: _____</p> <p>Place: Vancouver</p> <p>Date: Apr 13, 2005 B/L No: 1000125</p> <p>_____</p> <p style="text-align: center;">Month Day, Year</p> |
| kids clothing | 1400 | 0 | |
| | | | |
| Grand Total | 1400 | 0 | |

GR FORM

PHONE PREFIX ZERO

EXCHANGE CONTROL DECLARATION (GR) FORM NO. BC0771281 Duplicate

| | | | |
|---|--|--|--|
| Exporter: whether Government or Private RELISH AGRO FOOD (INDIA) PVT. LTD. NEAR VEGETABLE MARKET, JAMNAGAR - 385 220 GUJARAT (INDIA) | | Form No. & Date RAJUB-10083 DT. 25/02/2010 A.R.E. - DATE of No. & Date 5-18519/09-10 DT. 02-03-10 Import/Export Control No. and Date 0937C15107 | |
| Consignee FBC INTERNATIONAL PTY. LTD. 57, 53-75 HUNTLEY STREET, ALEXANDRIA AUSTRALIA. TEL: 02 93105885 | | State of Origin/Export If Export Under: Deferred Credit <input type="checkbox"/> <input type="checkbox"/> Joint Venture <input type="checkbox"/> <input type="checkbox"/> Rupee Credit <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Other Approvals/Contract No. & Date | |
| Custom House Agent M/S. LADHUBHAI KESHAV LODHARI CHA LIC. NO. CHAMPBRN/19/7073 | | Type of Shipment Outright Sale <input type="checkbox"/> <input type="checkbox"/> Consignment Export <input type="checkbox"/> <input type="checkbox"/> Others (Specify) <input type="checkbox"/> <input type="checkbox"/> | |
| Pre-Carriage by Vessel / Flight No. | | Place of receipt by the Carrier Port of Loading Country of Destination SYDNEY AUSTRALIA | |
| Nature of Goods (Statistical Code & Description of Goods and EXM Scheme Code where applicable) 1 TO 2208 TOTAL 2208 BOXES CODE NO. 07105000 07102100 FROZEN VEGETABLES (IQF) 250 BOXES CUT OKRA 50 BOXES BABY OKRA 250 BOXES GREEN PEAS 300 BOXES GREEN CHILLIES 175 BOXES KAPPA 250 BOXES TUMER ULVA 200 BOXES PALAK 125 BOXES METHI 150 BOXES SLURTY INDIAN MIX 250 BOXES TINDORA 80 BOXES SURIN 100 BOXES PATIKA (15 X 500 PACKED IN POLYBAGS AND IN CORRUGATED MASTER CARTONS) CONTAINER NO: PCIU-0021211 SEAL NO: PIL 3358413 | | Quantity NET KGS 16590.000 Value - FOB FOB RS. 1,034,410.00 | |
| Net Weight 16590.000 KGS Gross Weight 17800.000 KGS Total FOB Value in Words RS. TEN LAC THIRTY SIX THOUSAND NINE HUNDRED TEN ONLY Analysis of Export Value Customs Excise For Export value on return not ascertainable, the value which Exporter expects to receive on the sale of goods. | | Currency US DOLLARS Amount 22,080.00 2,400.00 25,517.20 (LIFT) DEPB Rate 1.5% OF FOB State List Sr. No. 27 (D) SCN Sr. No. E-1 Product Or Code 02-03-1a DEPB No. 15054/09-10 Dt 02-03-10 | |
| Other Deductions St. No. Export Tariff No. Assessable Value (Less Duty) Rate Amount Rate Amount Total Duty & Cess Duty Exemption Particulars | | Declaration: a. We are exporting these goods under DEPB Scheme in terms of para 4.3 of the Exm Policy (2005-2006). b. We shall not claim any duty drawback or benefits or duty free licence under Duty Exemption Scheme in respect of exports made against this shipping bill. c. The benefits under DEPB Scheme against this export product shall not exceed 50% of the FOBV. d. We declare that all particulars given herein are true and correct. | |

 Collection Stamp
 M/s. L. K. Lodhari
 (N. L. LODHARI)
 Signature of Exporter / CHA & Date

GR10007165

IGNORE PREFIX/ER0

EXCHANGE CONTROL DECLARATION (GR) FORM NO. BC 0771281

| | |
|--|---|
| <p>Is Export under L/C arrangements? Yes [] No []</p> <p>If yes, name of advising bank in India _____</p> <p>Bank through which payment is to be received _____</p> <p>Whether Payment is to be received through the A/C: YES/NO []</p> | <p style="text-align: center;">FOR CUSTOMS</p> <p>Customs Assessable Value Rs. 1036910.00</p> <p>(Rupees <u>Ten Lacs Thirty Six Thousand Nine Hundred Ten only</u>)</p> <p>Export Value Verified _____</p> <p>Cargo shipped in full/part _____</p> <p>Quantity <u>2200 Boxes</u></p> <p>Value <u>(Rs 1036910.00)</u></p> <p>Date of Shipment <u>25-03-10</u></p> <p style="text-align: right;">Superintendent of Customs Customs House, Pipavav (G.P.L.)</p> |
|--|---|

Declaration under Foreign Exchange Management Act, 1999: We hereby declare that We are the * Customs House, Pipavav (G.P.L.) in respect of which this declaration is made and the goods are given above are true and that a) the value as contracted with the buyer is the same as the full export value declared (provided) in this declaration; and b) if the goods are not exportable at the time of export and that the value declared is that which (We, having regard to the prevailing market conditions, expect to realize on the sale of goods in the overseas market.

(We undertake that (We will deliver to the bank) herein the foreign exchange representing the full export value of the goods on or before _____ in the manner specified in the Regulations made under the Act.

(We further declare that (We) (import) (export) (re-export) and (We) have a place of business in India. ARLISH AGRO FOOD (INDIA) PVT. LTD.

(We) are OR are not not a resident of the Reserve Bank of India.

AUTHORISED SIGNATURE
(Signature of Exporter)

Date: 25-03-10

(p) State appropriate date of delivery which must be within six months from the date of shipment, but for exports to warehouses established outside India, with the permission of the Reserve Bank, the date of delivery must be within fifteen months.

* State out warehouse is not applicable.

FOR AUTHORISED DEALER'S USE

Uniform Code Number _____

* Indicate [] in the box applicable

Date of (a) negotiation (b) receipt for collection _____ Bill No. _____

Type of Bill * (a) DA [] (b) DP [] (c) Others [] (Specify) _____

Type of Shipment * (i) Firm Sale Contract [] (ii) Consignment Basis [] (iii) Other [] (Specify) _____

The GR form was included in the Statement sent to the Reserve Bank with the R-Return for the fortnight ending _____ sent on _____

We certify and confirm that we have received the total amount of _____ as under being the proceeds of exports declared on this form (Currency) (Amount)

| Date of receipt | Currency | Credit to Nostro Account in _____ (Country) | | Debit to R/R Rupee Account of a Bank in _____ (Country) | | Period of R-Return with which the modification has been reported to RBI |
|-----------------|----------|---|------------------|---|-------------|---|
| | | In our name | In the name of * | Held with us | Held with * | |
| (1) | (2) | (3) | (4) | (5) | (6) | (7) |
| | | | | | | |
| | | | | | | |
| | | | | | | |

* (Write the name of the concerned Indian Authorized Dealer Branch). Any other manner of receipt (Specify) _____

(Stamp & Signature of authorised dealer)

Date _____

Address _____

SPACE FOR USE BY RESERVE BANK OF INDIA

QUESTIONNAIR

1. Name of Formers..... Date
2. Address..... Village..... Taluka..... District.....
3. Contact number
4. Which are crops grow.....
5. Any major fruit crop

| S.N. | Fruit crops | 2007 | | 2008 | | 2009 | |
|------|-------------|------|------------|------|------------|------|------------|
| | | Area | Production | Area | Production | Area | Production |
| 1 | Mango | | | | | | |
| 2 | Banana | | | | | | |
| 3 | Papaya | | | | | | |
| 4 | Guava | | | | | | |
| 5 | Sapota | | | | | | |

6. Any major vegetable crop.....

| S. N. | Vegetable crops | 2007 | | 2008 | | 2009 | |
|-------|-----------------|------|------------|------|------------|------|------------|
| | | Area | Production | Area | Production | Area | Production |
| 1 | Tomato | | | | | | |
| 2 | Brinjal | | | | | | |
| 3 | Cauliflower | | | | | | |

| | | | | | | | |
|---|--------|--|--|--|--|--|--|
| 4 | Cabage | | | | | | |
| 5 | okra | | | | | | |

7. How to sell and what price

8. Any major problem

I. Weather.....

II. .Seed.....

| S.N. | Company | | Price | Seed Rate/acre | Availability | Any Other Problem |
|------|----------|------|-------|-------------------|--------------|----------------------|
| 1 | PREVIOUS | THIS | | | | |
| 2 | | | | | | |
| 3 | | | | | | |
| 4 | | | | | | |
| 5 | | | | | | |

III. Fertilizer

Which are fertilizers uses?

Cost of fertilizer /acre.....

Availability.....

Any other problems.....

IV. Irrigation

Type

Cost/acre.....

Period

Any problems.....

9. How much total cultivated area?

V. Any major pest

Which are pesticides uses.....?

Cost /acre.....

Any Problem

VI. Availability of credit.....

10. Whom to sell.....?

APMC.....

Direct.....

Agent

Company

How to decide the price.....

Any problems.....