Sudipta Behera
Asst. Professor, SoABE

RELECTION OF THROUGH YNOWLES

INTRODUCTION

Centificanal horticultural paradise because of its rich diversity of agro climatic and socio

However, the loss incurred in terms of quality and quantity is estimated to be 5-30% of the total production annually.

India grows a variety of horticultural crops namely potato, tuber crops, mushrooms, spices & condiments, fruits and vegetables, plantation crops like coconut, cashew, cocoa, tea, coffee and rubber, medicinal & aromatic crops.

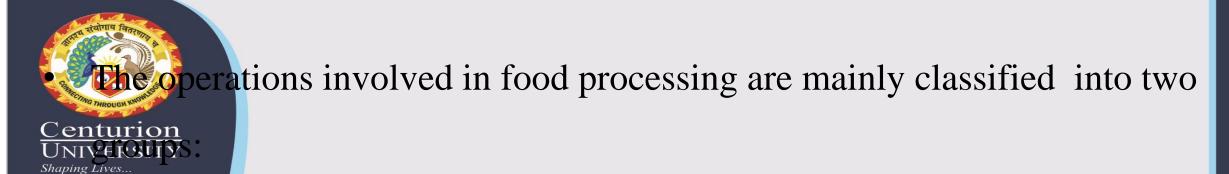
India is the largest producer of mango, banana, coconut, areca nut, cashew nut, ginger, turmeric, back pepper and 2nd largest producer of fruits, vegetables and tea.

Agricultural produce and by-products are perishable in nature and thus gets exploited on the market floor compelling distress sales, intervention of the faces of marketing Centurion UNIVERSHE absence of matching post-harvest technology (PHT) and agro-processing Empowering Communities...

infrastructure.

Agricultural Engineering inputs are therefore needed to assure remunerative prices to the growers and share in the value addition to the growers through on-farm PHT and value addition to their produce and by-products.

Thus processing plays a vital role in conservation and effective utilisation of these perishable produce.



Primary processing

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- Secondary processing
- Primary processing relates to conversion of raw agricultural produce into a commodity that is fit for human consumption. It involves steps such as cleaning, grading, sorting, packing, etc.
- Secondary and tertiary processing usually deal with higher levels of processing where new or modified food products are manufactured.

SCOPE OF FOOD PROCESSING IN INDIA

Celturidia, there is an opportunity for large investments in food and food processing UNIVERSITY

Emported Enrolling ies, skills and equipment, especially in areas of Canning, Dairy, Packaging,

Frozen Food/Refrigeration and Thermo-Processing, Fruits & Vegetables

Processing, Fisheries, Milk & Milk Products, Meat & Poultry,

Packaged/Convenience Foods, Alcoholic Beverages & Soft Drinks and Grain processing are important sub-sectors of the food processing industry.

• The consumer product groups like confectionery, chocolates and cocoa products, Soyabased products, mineral water, high protein foods, soft beverages, alcoholic and non-alcoholic fruit beverages, etc. along with the health food and health food supplements is another rapidly rising segment of this industry which is gaining vast popularity.

KEY CONSTRAINTS FOR FOOD PROCESSING

Though there are many promising dynamics which support good growth of this industry, Centurion to the some significant constraints which, if not addressed properly, can impede the grown prospects of the Food Processing Industry in India.

Capital intensive: It creates a strong entry barrier and allows lesser number of players to enter the market. Lesser players mean lesser competition and lesser competition means reduced efforts to improve the quality standards.

Poor quality standards and control for processing and packaging the processed foods. For example, vegetables may not be washed properly and processed into either 'ready to eat food' or packaged as 'cut and ready to cook' vegetables.

Continuity of utilities i.e quality power, good quality of water for processing,

Instruments for rapid and reliable analysis, versatile instruments/equipments for multicommodity,

Cultivars are not suitable for specific processing, etc. are other limitations for food processing industry.

POST HARVEST LOSSES IN FRUITS AND VEGETABLES

University of the product after harvest that decreases its value.

The losses may range from slight defects to total loss of the produce.

The losses can be:

- Economic loss
- Quantitative loss
- Pilferage and incidental loss
- Qualitative loss
- Nutritive loss

CAUSES OF POST HARVEST LOSSES

The post harvest losses can be studied as primary and secondary University

Primary causes are those for which certain mechanical, physiological, pathological, or environmental factors are directly responsible.

Secondary causes are due to inadequate harvesting, transportation, storage and marketing facilities.

The post harvest losses can be minimized by proper cultural operations, harvesting, transportation, storage and pre and post harvest treatments.

FOOD SUPPLY CHAIN

The food supply chain involves farmers, seed producers, fertilizer factories, financial Centinstontions, millers, government, warehouses, fair price shops, retail shops, UNIVERSITY
Shaping Lived I Ways, truck transport companies, etc.
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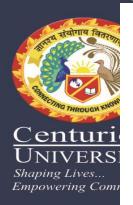












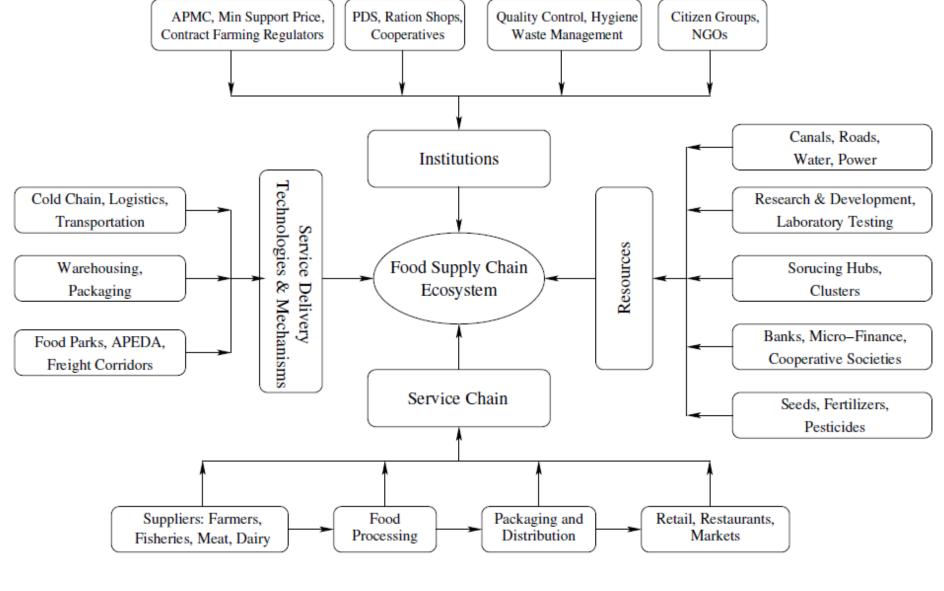


Fig. 2.4 Food supply chain ecosystem

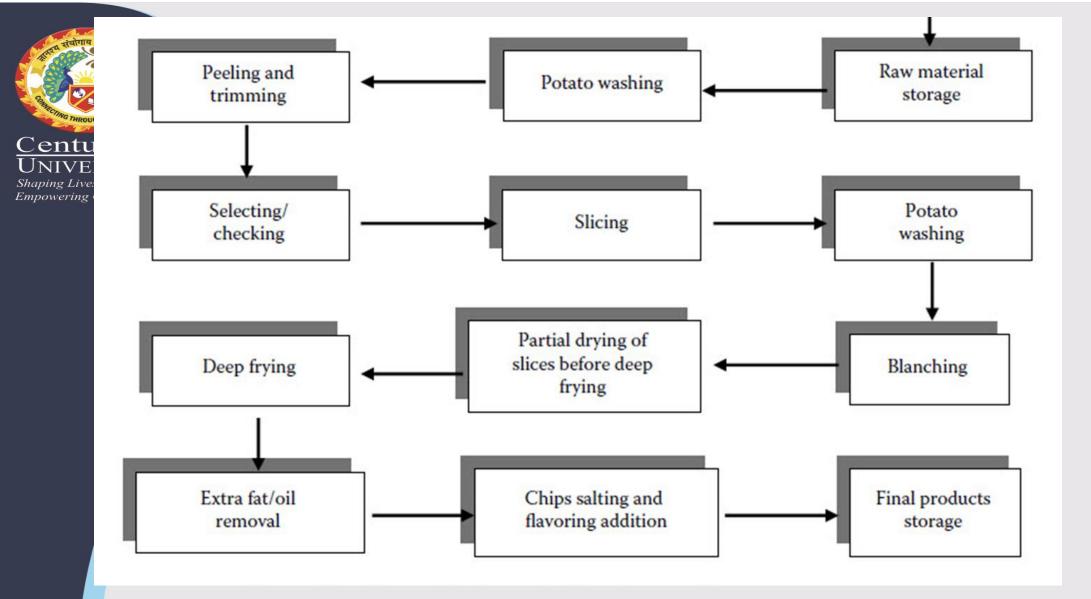


PROCESS FLOW CHART

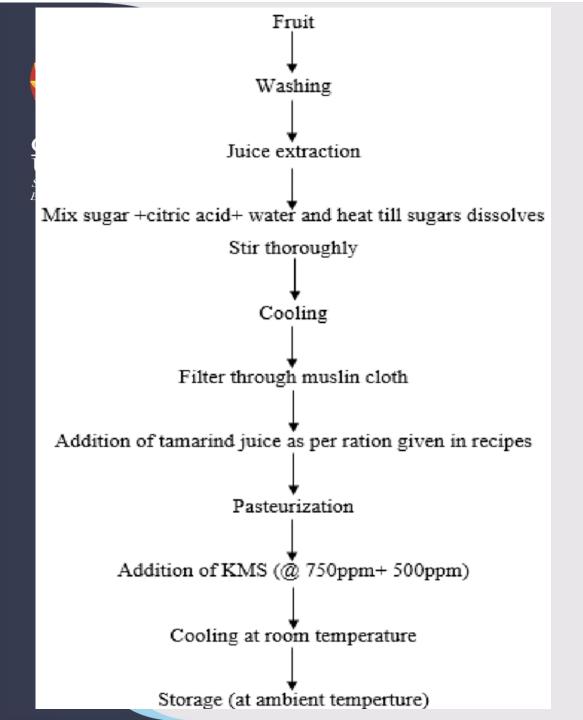
process.

It helps in identifying each unit operation in the process which helps in proper selection of equipment and better management of man and machines.

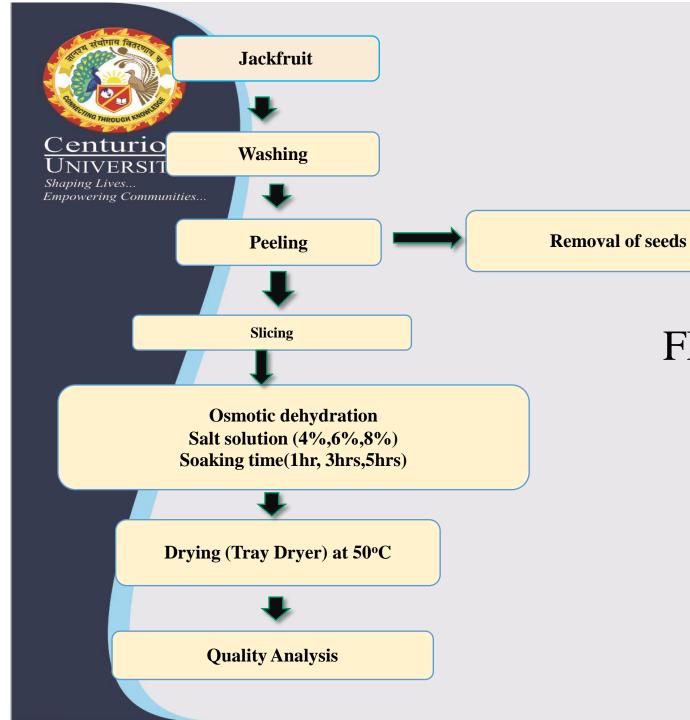
It's used as a means of getting a top-down understanding of how a **process** works, what steps it consists of, what events change outcomes etc.



PROCESS FLOW CHART OF PREPARATION OF POTATO CHIPS



PROCESS FLOW CHART OF FRUIT JUICE RTS BEVERAGE



FLOWCHART OF OSMOTIC DEHYDRATION OF JACKFRUIT BULBS



Process Flow in Packing House Receive vegetables in ante area

Store in chiller

Pre-cool in suitable pre-cooling facility

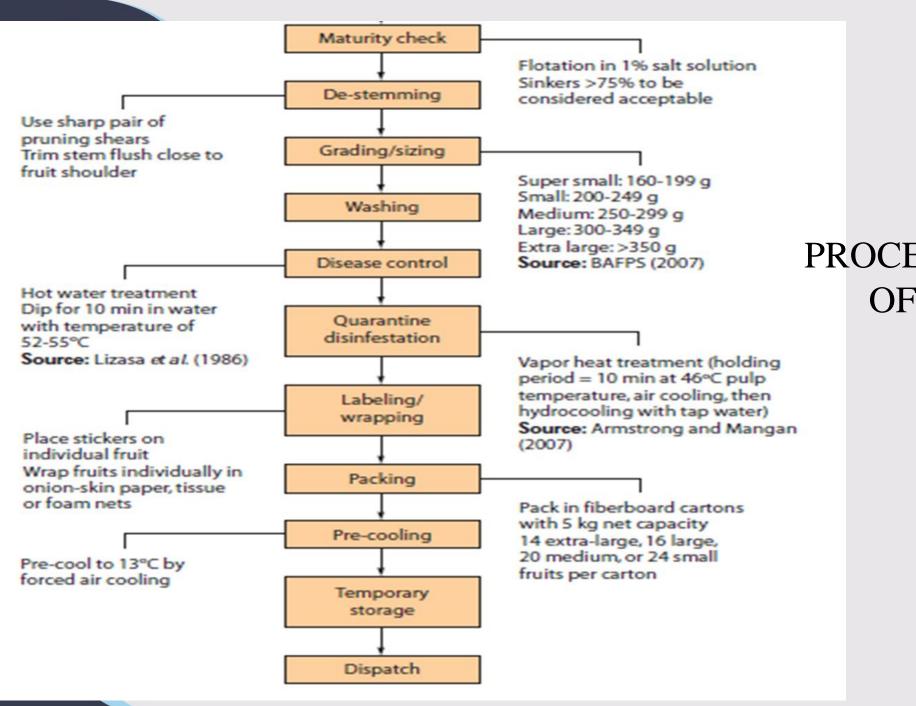
Trim, sort, grade, weigh and

pack in packing room

Store in chiller

Load onto trucks in loading area

Deliver to retail



PROCESS FLOW CHART OF MANGO FOR EXPORT









Exposure to sun and rough handling





Gentle handling to prevent bruising





Transportation in refrigerated van







ASSIGNMENT

mentioning the states.

Write about the share of major spices in total spices production in India.

Also write its production and productivity.

Write about the production and productivity of major plantation crops in India.

Write the present status of food processing in India.