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HACCP Implementation in India

Experience of Certification Body

Chinmayee Deulgaonkar

Head: F&B, India Subcontinents
DNV GL – Business Assurance

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What I will be covering..

- Indian Food Industry

- The HACCP History

- HACCP in current scenario

- Government initiatives

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Indian Scenario

- 35 states

- Economy - US $ 1.843 trillion*

- GDP - 10.4% in 2010*

- Labour Force - 467 million *

- Agriculture sector share – 28%

- Biodiversity

* International Monitory Fund

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India ranks

Irrigated Land	(55 Million Ha)
Milk	(91 Million T)
Cattle & Buffaloes	(283 Million)
Tea	(980 Million Kg)

Arable land	(181 Million Ha)
Food Grains	(220 Million T)
Fruits & Vegetables	(151 Million T)
Sugarcane	(245 Million)
Sheep & Goat	(182 million)

Coarse Grains including maize	(204 million T)
Edible oil seeds	(230 million T)
Fish & Poultry	(6.3 & 489 Million T)

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Major food processing sectors

Pie chart: Major food processing sectors

- Fruit and Vegetable Processing 4%
- Food Grain Milling 34%
- Dairy Products 16%
- Meat and Poultry Processing 10%
- Fish Processing 4%
- Bread and bakery 20%
- Alcoholic beverages 3%
- Aerated water/soft drinks 9%
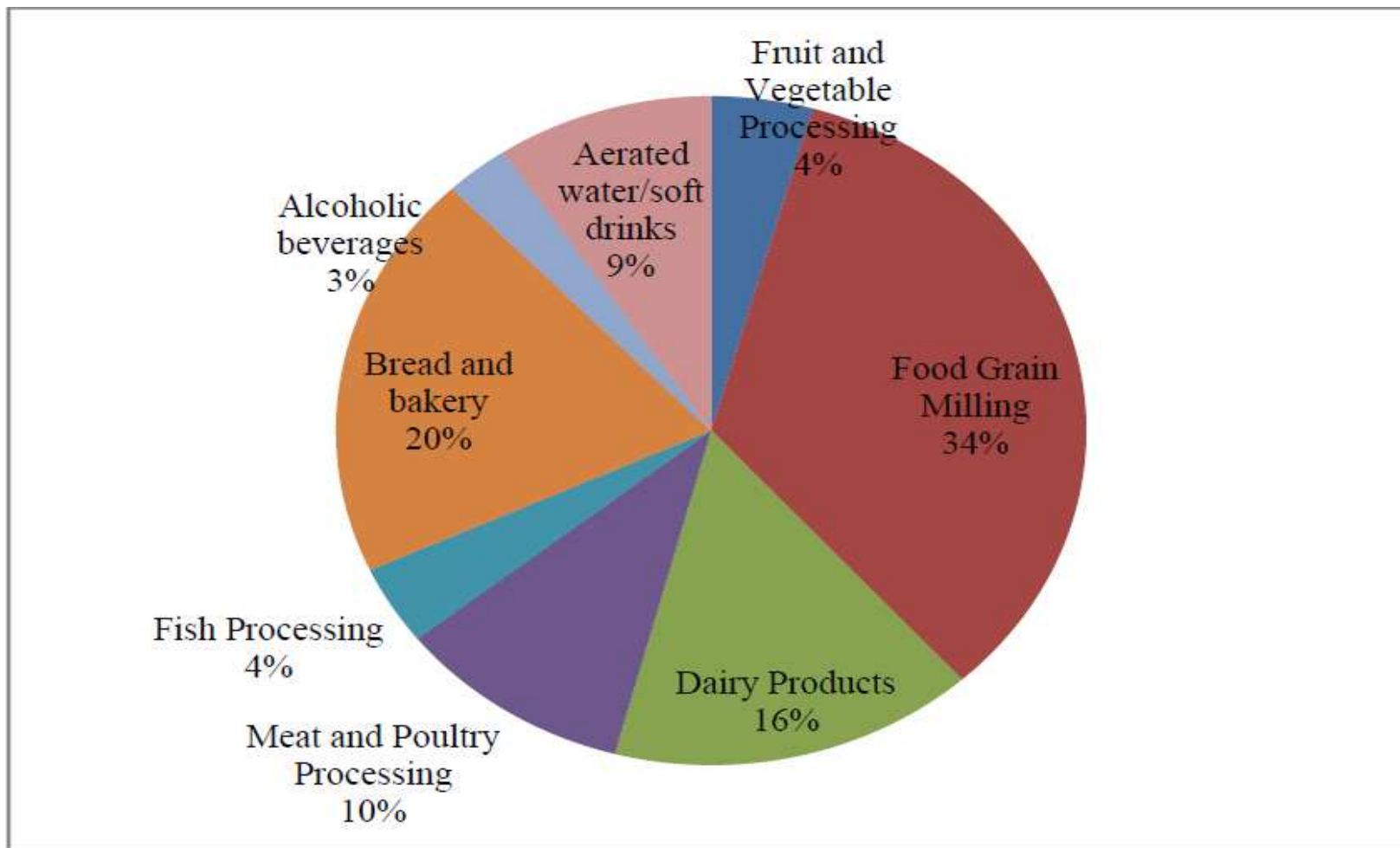
The History of HACCP Implementation...

1990 ➤
- Globalization
- Started with Fish & Meat industries, HACCP approval by Govt. bodies

2000 ➤
- Government schemes for HACCP implementation
- Encouraged other industries for HACCP
- Indian Standard IS 15000
- Nation specific HACCP standards like Irish HACCP, Dutch HACCP, SA HACCP were used for certification.
- **Codex HACCP, being guideline, is not certifiable.**
- Essentially...**FOOD** industries

2005 ➤
- ISO 22000:2005 published.
- Scope...Food Chain

2008 ➤
- GFSI approved standards certification like BRC Food, FSSC 22000, IFS

2011 ➤
- **Food Standards and Safety Act of India. Schedule IV**

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What is FSSAI?

Sector Classification

Petty Food Manufacturer

- Small / Cottage industry
- Stall holder / Hawker
- Petty retailer of snacks/tea
- Dhaba
- Food Stalls / arrangements in religious gatherings, fairs
- Fish / Meat / Poultry Shop / Seller
- Home based canteens / dabba-walas
- Milk vendors

Manufacturer/ Processor

Storage / Warehousing

Distribution

Retailer

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Registration and Licensing

Petty Manufacturer	**Registration** by State FSSAI Comply with Schedule IV requirements
Small Manufacturer Warehouse / Distributors	License by State FSSAI Comply with Schedule IV requirements **HACCP Plan approval by 3rd party CB**
Big Manufacturer	License by Central FSSAI Comply with Schedule IV requirements **Food Safety Management System certification by 3rd party CB**

So, what are food safety licensing requirements?

What are licensing requirements?

- Food Safety

  – Compliance to GMP-GHP requirements as per Schedule IV

  – Plant Layout

  – Details of equipment & machinery

  – Water analysis report

  – Source of raw material procurement for milk and meat

  – FSMS Plan / certificate

  – Medical fitness certificates

  – Qualification details of production technical personnel

- Legal

  – Proofs

  – Nominee

  – Annual returns

So, what are Schedule IV requirements?

Schedule IV requirements

General Hygiene and Sanitary Requirements for

Part I		Petty Food Business Operators
	A	Food Manufacturer / Processor / Handler
	B	Street Food Vendors and Units other than manufacturing / Processing
Part II		Food Business Operators (FBO)
Part III		FBO in manufacture, processing, storing and selling of Milk and Milk products
Part IV		FBO in manufacture, processing, storing and selling of Meat and Meat products
	A	Slaughter House
	B	Meat Processing Units
	C	Meat shops
Part V		FBO in catering / food service establishments

Part II: Requirements for FBO applying for license

Location & Surroundings

Layout & design of food establishments

Equipment

Facilities

Food operations & control

Management and Supervision

Food Testing Facilities

Audit, Documentation & Records

Sanitation and maintenance of establishments

Personal Hygiene

Product information and consumer awareness

Training

Some pictures

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Some pictures

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Schemes by Governments

M⊙FPI
MINISTRY OF FOOD PROCESSING INDUSTRIES
Government of India
सत्यमेव जयते

APEDA
Agricultural & Processed Food Products
Export Development Authority
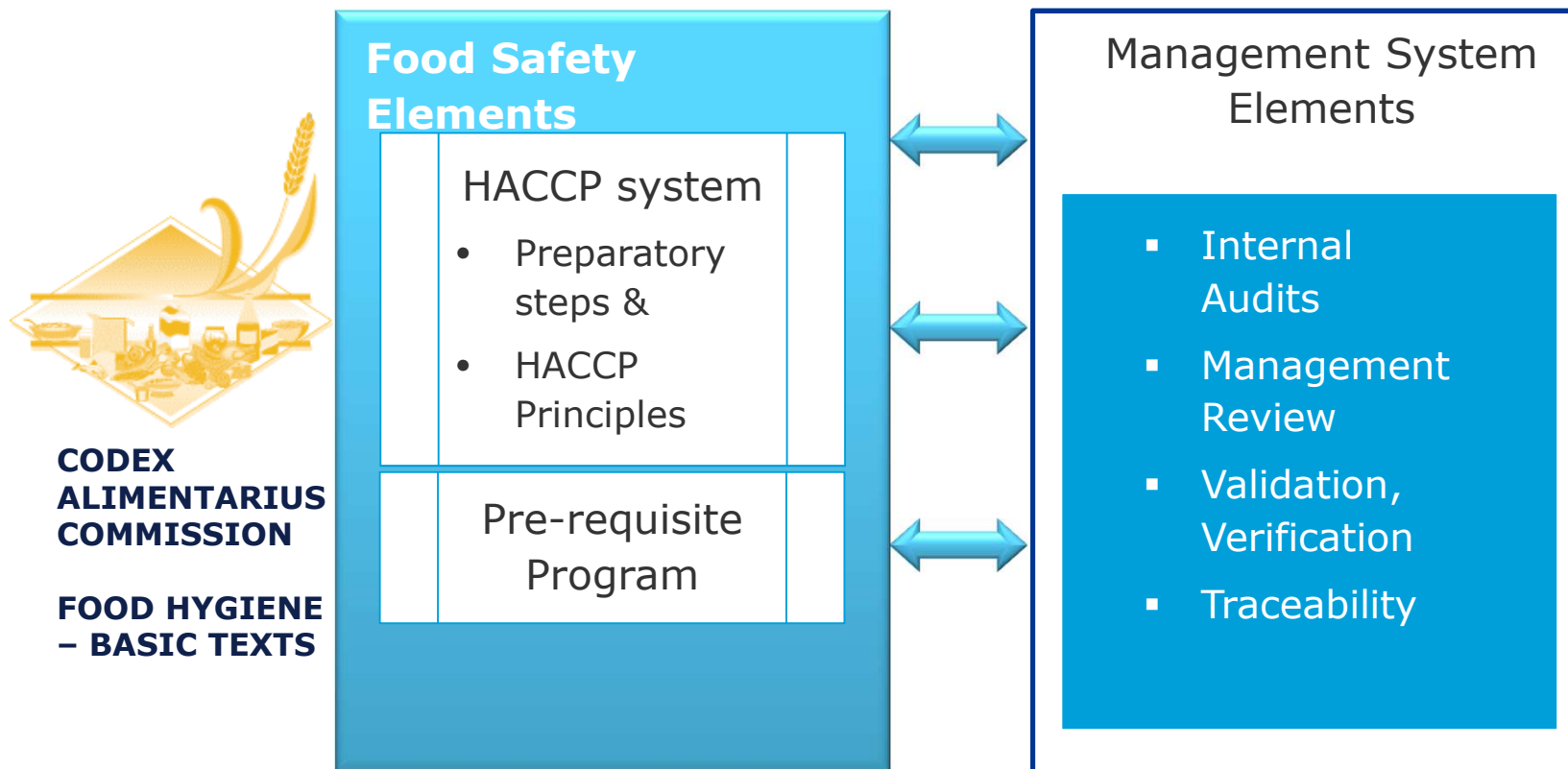Ministry of Commerce & Industry, Government of India
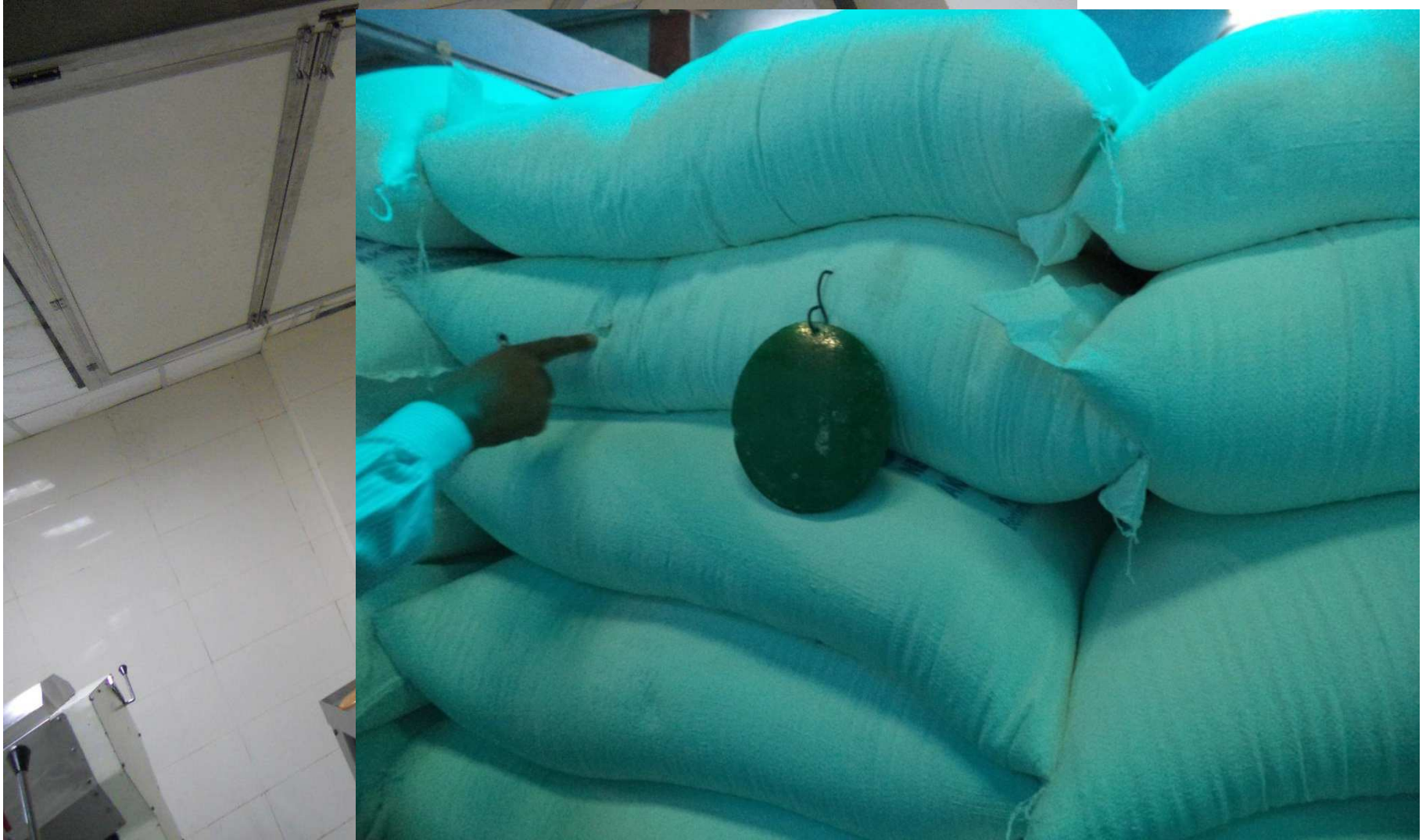
- Implementation : Reimbursement of 50% up to max of 25 lakhs

- Expansion/ Up-gradation: 50 lakhs

- Implementation : Reimbursement of 33% up to max of 4 lakhs

- Expansion/ Up-gradation: 10 lakhs

- Cold storage

- Qualification criteria for CB and Auditors (Food microbiology, Dairy technology, Food technology etc)

- CB Must have local accreditation

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Codex HACCP vs Management System standards

CODEX ALIMENTARIUS COMMISSION

FOOD HYGIENE – BASIC TEXTS

Food Safety Elements

HACCP system
- Preparatory steps &
- HACCP Principles

Pre-requisite Program

Management System Elements

- Internal Audits
- Management Review
- Validation, Verification
- Traceability

Linkages with ISO 22000 based FSMS

C4: Control of Documents and Records

- Control of Forms, Annexures, Records

C6: Resource Management

- Personnel Training
- Technically qualified personnel for supervision
- Details of machinery & equipments

C8: Validation, Verification, Improvement

- Internal Audit
- Traceability & Product Recall plan

C5: Management Commitment

- SOP for top management
- FSMS Certificate / Plan for licensing

C7: Planning for safe production

- Schedule 4 – GMP/GHP requirements
- Product information and Consumer Awareness
- Food Product Standards - Limits for Contaminant, Toxin & Residue, Food Additives, Microbiology
- Sampling requirements

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Everyone responsible for Food Safety
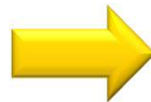
Government →
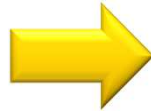
- Food Legislation & Enforcement
- Guidelines for Industry/ Trade
- Information Gathering and Research
- Provision for Health related services
- Consumer Education

Academia →

- **Introducing HACCP in the curriculum**

Industry →

- Follow GMP-GHP requirements
- Quality Assurance
- Trained Managers and Food Handlers
- Appropriate Process and Technology
- Informative labeling

Consumer →

- Educated & Knowledgeable Public
- Active Consumer Groups & community participation

Key Challenges:

- Appropriate understanding HACCP as per nature of the organization

- Improper implementation of Pre-requisites / Basic hygiene principles

High / Heavy / Complicated documentation

- Perception that HACCP implementation requires high cost

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Food

Personal Care

Ayurvedic

Tobacco

Toothpaste

Pet Foods

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Summary

- Codex HACCP is the basic requirements to comply for compliance towards food safety

- Codex HACCP defines the technical requirements, however management system elements are essential for its continual maintenance.

- FSSAI has made Basic principles of Hygiene and food safety mandatory through its licensing requirements.

- It's a shared responsibility of all…..

- Wider application

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Thank you !!!

Chinmayee Deulgaonkar
Chinmayee.Deulgaonkar@dnvgl.com
+91 22 26669800

www.dnvgl.com

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