

Sustainability & Food Safety ~ The Indian perspective

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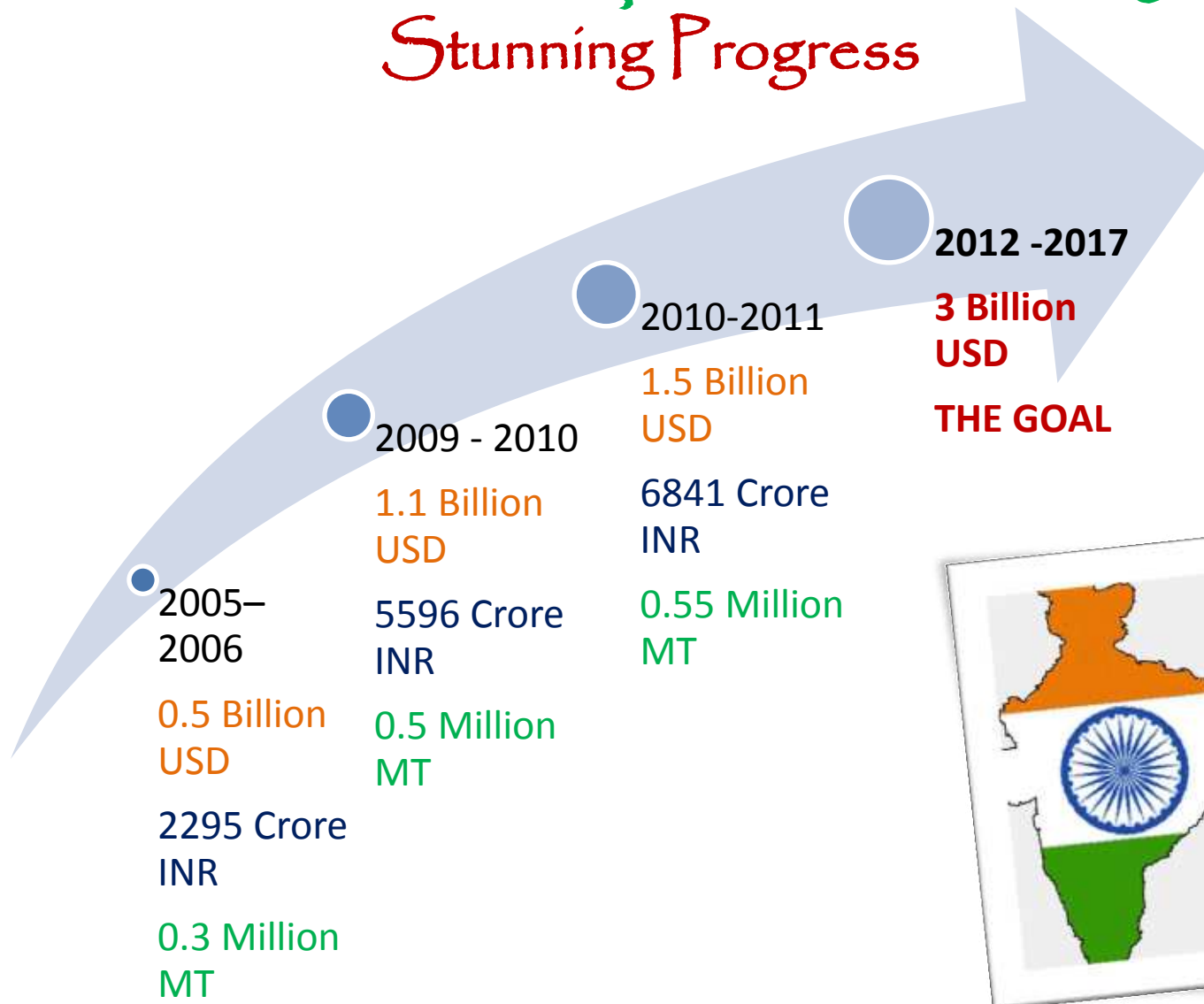
Synopsis



- Spice Industry – An Overview
- Challenges
- World Spice Organisation
- New Direction
- The Way Forward

The Indian Spice Industry

Stunning Progress



India initiatives

Across the supply chain



Production

Post harvest

Processing

Quality testing

Challenges



Legislations
and
Regulations

Rising
Customer
Expectations

Residues &
Contaminants

Shortage of
Raw Materials

Infinite
Disconnects

**The Spice
Industry**

Challenges



Legislations & Regulations

- Food Safety Laws in importing & producing countries.
 - Stringent
 - Sometimes unclear
- Discord between importing countries across parameters -
Mycotoxins, MRLs Microbiological and Micro sanitary - Codex is not mandatory
- Product recalls – huge product liability.

Challenges

Rising Customer Expectations



- Growing health concerns - Foodborne illness
- Pathogen free products – market is not ready to absorb the cost
- Superior Organoleptic properties - VO, flavor, color, aroma ...
- Just in time delivery

Challenges



Residues & contaminants

- 430 PR test in EU – most of MRL <0.01 ppm
- MRL only for 14 Chemicals in the US & 8 by FSSAI – **Others to assume Zero**
- Mycotoxin – **20% sampling by EU - RASFF**
- Micro sanitary – **IF 50/25gms even in sterile products**
- Full onus to the processor.

Challenges

Shortage of raw material



- Production is not increasing in line with the population growth
- Deterioration of flavor profile and Intrinsic values
- Huge wastage - Quality diff between farm produce and end use specification – both domestic and for exports

Challenges

Infinite Disconnects



- ✓ Lab to Land
- ✓ Farmer to Consumer
- ✓ Legislations Vs awareness
- ✓ Need Vs Resources
- ✓ Potential Vs Technology

Our Vision & Goal 2012-2017

(12th 5 year plan)



- To become the international processing hub and premier supplier of clean and value added spices and herbs to the industrial, retail and food service segments of the global spices market adhering to Food Safety requirements.
- Achieve a sales turnover of \$ 3 billion

Opportunity (\$3 billion)



- Immense Bio diversity (52 spices across India)
- Excellent research base and germplasm
- Technological advancement & New investment opportunity
- Passionate support & financial assistance from Spices Board - Spices parks & testing laboratories
- Retail Private Label business within India & exports – 100% FDI
- High value addition possibilities - Seasonings, RTE, Nutraceuticals

Overwhelming Questions



- How do we improve our farm produce in alignment to international food safety laws?
- How do we strengthen the communication between farmer and end user?
- How do we create an exportable surplus meeting global food safety standards?
- Do we work in isolation or is it time for a collaborative effort and a joint vision?

World Spice Organisation

Joint vision in new direction



WSO objectives



- **Food Safety** – Products are free from all physical, chemical and Microbiological contaminations – safe for human and animal
- **Food Security** – Improve productivity, Reduce wastage & mechanized post-harvesting
- **Sustainability/GAP**– Social, Economics and Environment (soil, water, biodiversity, social and human welfare, animal welfare, value chain, economy & training)
- **Collaborative efforts & Open dialogue**

World Spice Organisation

Joint vision in new direction

Farmer and
Exporter/M
anufacturer
Associations

End Consumer

Processor
Manufacturer
Trader

Research
Houses

Farmer

Governments
And Regulatory
Bodies

World
Organiz
ations



New Direction 5 year plan

Focus Products and respective focus areas



Integrated Pest Management (IPM) & Post harvest



Develop to suit to Indian condition



Enhance production - High VO & Piperine



IPM & enhancement of VO



Mechanical drying to tackle Aflatoxin issues

New Direction



Improve Curcumin



Improve Texture & VO



Quality and Flavor Issues



Integrated Pest Management (IPM)



Trade and supply related issues

New Direction



Training & Dissemination

- Campaign against Aflatoxin contamination in Nutmeg
- GAP/IPM awareness program in the traditional Chilli belt

Regular interactions with Policymakers

- Working together with FSSAI, WTO and Codex

Conscious collaboration

- Farmers (SGS), Scientists, processors, Regulators & consumers

The way forward



Spreading Awareness and Best Practices

- Extensive Training program at farm level
- Finalize Sustainable/GAP program for Spices

Research and Technology

- Mechanized farming and Post-harvesting
- Market driven research & collaborated efforts

Growing in Non-traditional Areas

The way forward



Collaboration and 'Good Policy Practice' (GPP)

- Harmonized testing methods - Single test by any NABL accredited lab
- Alignment to international regulations
- Compulsory licensing & auditing of Processing facility
- Codex to be made mandatory for all countries
- Ban all unwanted and harmful chemicals
- Bringing industry stakeholders together in Trust and co-operation.

Thank You

Philip Kuruvilla
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