



Indian MRL – Overview and Trends

California Speciality Crop Council, MRL Workshop
San Francisco, 1-2 June 2011
Thomas Mueller, Syngenta Crop Protection, Switzerland

Overview

- Facts about India
- Regulation of pesticides
- MRLs and import tolerances
- Monitoring and enforcement
- Consumer perception



What do you know about India?

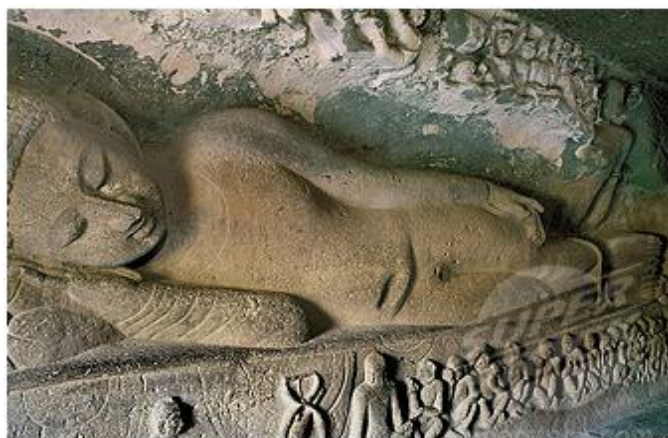
UNESCO World Heritage sites



Taj Mahal, Agra



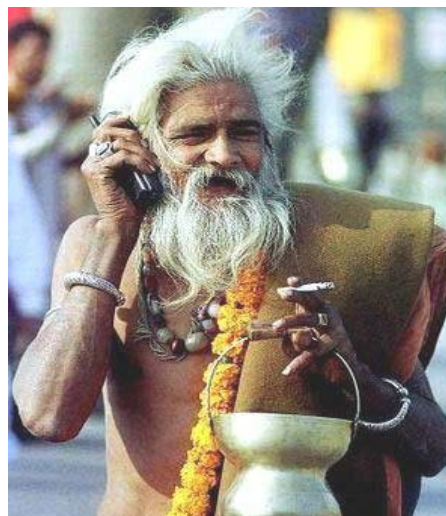
Red Fort, Delhi



Elora caves, Aurangabad

What do you know about India?

Country of extremes



Facts about India

- Union of 28 states and 7 union territories with capital New Delhi
- Democratic republic
- Parliament system of government
- Council of States and Council of People

President

Mdme Pratibha
Devisingh Patil



Prime Minister

Dr Manmohan
Singh



Parliament



Council of States



Council of People



Facts about India

- 7th largest country in the world (1.3 m sqmiles)
- Population: 1.1 billion (latest estimate)
- Labour force: 478 m (2010)
52% in agriculture
- GDP USD 1.43 trillion (2010)
 - Agriculture 16%
 - Industry 29%
 - Services 55%
- Major crops
 - rice, wheat
 - lentils, pulses
 - cotton, jute
 - sugarcane

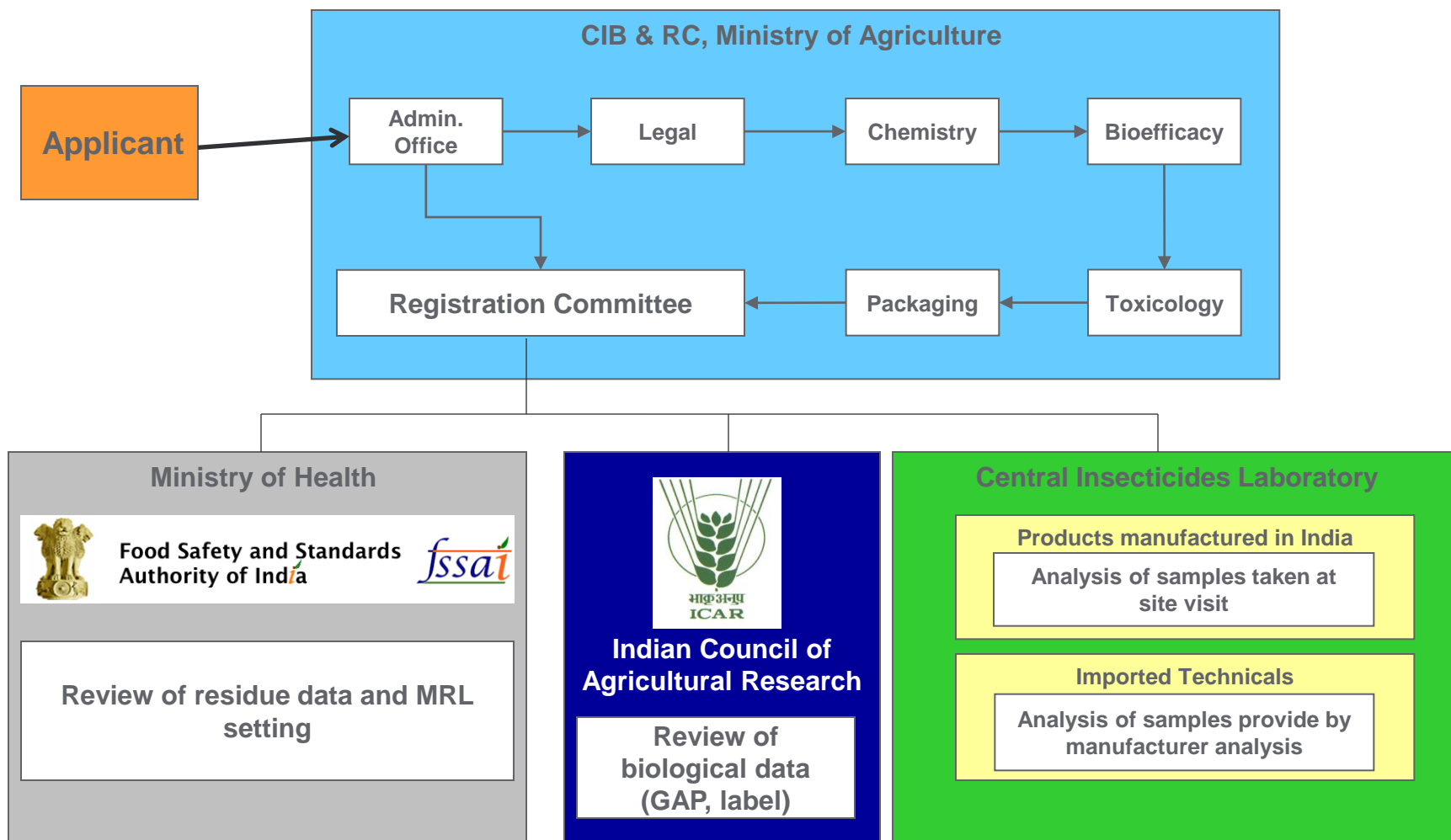


Legislation for regulating pesticides

- Central Insecticide Act came into force in 1968, frame work and data requirements
- Insecticides Rules were adopted in 1971 laying out the regulations and processes



Registration of pesticides



Data requirements for MRL setting

- Four locations (different agro-climatic zones), one season data for insecticides and fungicides
- Three location, two season data for herbicides
- Residue data on recommended and double dose is required.



Registration timelines

- Lengthy approval process that currently takes about 3 years for a new active substance
- MRL setting is not transparent

Activity	9(4) “Me-Too” Registration	9(3) and 9(3b) New Registration
Document verification by legal	0.5 month	1 month
CIB&RC analysis <ul style="list-style-type: none"> • Chemistry • Bioefficacy • Toxicology • Packaging 	1-3 months	6-12 months
Sample submission, collection, analysis	2-6 months	2-6 months
MRL Fixation (Ministry of Health)	1-2 months	3-12 months
Issuance of registration certificate	2 months	2 months
Overall process	Min. 6 months	12-36 months

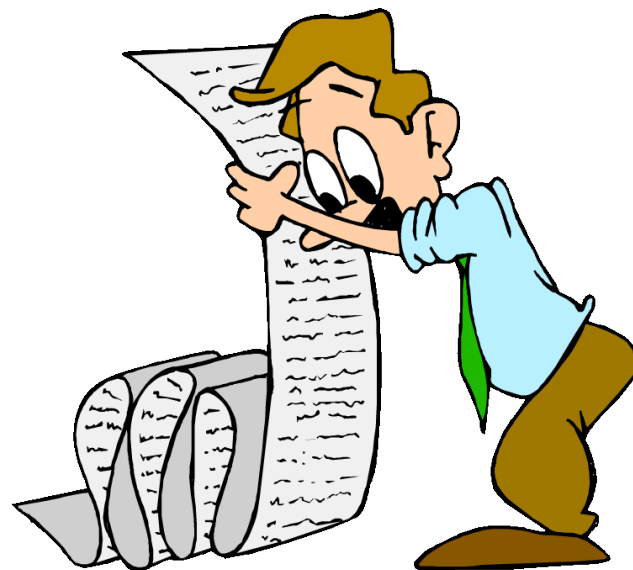
Import tolerance

- Differing to codex alimentarius
 - If no domestic MRL
 - If domestic MRL lower than codex MRL, the domestic one supersedes
- No procedure to increase MRL for imported commodity
- Proper process has to be established since Food Safety and Standards Act (aligned with WTO SPS) demands control of imported food commodities



Number of registrations and MRLs

- 815 molecules included in the Schedule to Insecticides Act
- 185 MRLs set
- ▶ High number of unauthorized uses
- ▶ Potential health risk for consumer
- New Pesticide Bill (voting in parliament pending) demands MRLs for all registered uses and crops
 - Several thousand MRLs have to be established in the coming years



Capacity building

- In October 2010, CropLife India and regulators held a workshop sponsored by the Ministry of Agriculture to discuss modern ways of MRL setting and consumer and food safety
- Recommendations to CIB&RC
 - Adopt JMPR principles for consumer risk assessment
 - Align protocols of residue trials with international standards
 - Build crop groupings in line with codex alimentarius to maximize MRL setting
 - Update national dietary intake data
 - Establish import tolerance process



MRL enforcement and residue monitoring

- Government of India has established the All India Network Project on Pesticide Residues
- Mission
 - To conduct multi-location 'supervised field trials' following good agriculture practice
 - The data for setting MRLs and pre-harvest intervals (PHI)
- Joint Parliamentary Committee (JPC) concluded that exact level of pesticides & its metabolites on food commodities and environmental samples need to be ascertained at the National level so that the risk involved in their use can be scientifically assessed



MRL enforcement and residue monitoring

- Collection of market sample (cereals, pulses, fruits, vegetables, dairy products, spices, meat, eggs, seafood, honey, ground and surface water)
- 21 laboratories are participating in the scheme including laboratories in Mumbai, Kolkata and Chennai for imports
- Uniform test methods, equipments and reporting of results
- More than 30000 samples analyzed between 2008 and 2010
 - 1.6% exceeded MRL
 - Use of non-recommended products on crop is major issue (lack of MRL)



Consumer perception

Fruits , vegetables in India highly toxic.

NEW DELHI: Rampant use of banned pesticides in fruits and vegetables continues to put at risk the life of the common man. Farmers apply pesticides such as chlordane, endrin and heptachlor that can cause serious neurological problems, kidney damage and skin diseases.

Times of India, December 23, 2010

High Court sets up panel to probe pesticide levels in fruits and veggies

NEW DELHI: Concerned about the pesticide levels in fruits and vegetables being consumed by city residents, the Delhi high court on Wednesday set up a panel to purchase these eatables at random and subject them to lab testing

Times of India, Mar 10, 2011

Consumer perception

- The majority of shopping happens in small mom-and-pop shops, roadside vendors and open air markets
 - Quality issues
 - Adulterated produce
 - Hard bargaining
- Customers used to buy fresh produce (fruits and vegetables) every day



Consumer perception

- The urban middle class wants quality and safe (non-adulterated) food
 - New retail shops (e.g. Reliancefresh)
 - New opportunities for farmers by cutting out middle men
 - Direct selling to collection centre (no commission)
- Food scandals created consumer awareness
 - Pesticides in sodas
 - Banned pesticides in vegetables



Thank you for your kind attention !

