

# Responsible management of crop protection packaging

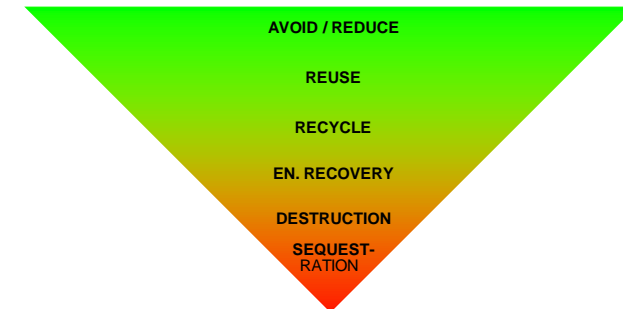
## Possible Roadmap for Roll-out in India

CropLife India  
Virtual Symposium on Empty Pesticide Container Management  
25<sup>th</sup> May 2022

# Roadmap for successful Container Management

## Elements of sound Container Management

1. **Suitable packaging and labelling**
2. Massive and repeated **communication & training campaigns**
3. **Proper rinsing and drainage of empty containers; Container puncturing**
4. **User-friendly collection; Clear & easy Collection rules; Inspection!**
5. **Dedicated collection and management system**
6. **Efficient logistic** to maximise collection and minimize costs
7. Safe and controlled **material recycling** or energy recovery; Landfill ban!
8. Clear **role & responsibilities** for all stakeholders (e.g. EPR; Shared Responsibility of supply chain)
9. Work on **enabling regulations**



➔ Multi Stakeholder Task

# Roadmap for successful Container Management

## Enabling legal framework

### Waste classification

- ✓ Properly rinsed and inspected empty containers can be classified as **non-hazardous waste**
- ✓ That promote rinsing by farmers, i.e. minimise residues at the sources & production of hazardous waste
- ✓ That facilitates return by waste owners (farmers) and the collection by sales points
- ✓ That enable the recycling of high-value material
- ✓ Lower cost for Container Management;

### Sound waste management:

- ✓ Promote Circular Economy for plastics
- ✓ Progressive, ambitious but achievable collection & recycling targets
- ✓ Landfill ban for recyclable materials

### Faire shared responsibility

- ✓ **Extended Producer Responsibility**
  - ✓ Establishes a level playing field among all producers & importers; prevents free-riders
  - ✓ Provides financial and/or operational responsibilities
  - ✓ Allows EPR systems for specific wastes
- ✓ **Take-back obligation on retailers/distributors**
  - ✓ Information to users
  - ✓ Take-back obligation
- ✓ **Waste duty of care on pesticide users:**
  - ✓ Rinsing & puncture of empty containers
  - ✓ Return packaging waste to approved collection schemes
  - ✓ Prohibit burying, burning and littering

## Enforcement, Control, Sanctions

# Roadmap for successful Container Management

## Options when establishing a collection programme for pesticide packaging

### Setup of pesticide collection programmes:

- **Mandatory or voluntary scheme**

- **Dedicated EPR** for the management of pesticide packaging or agricultural plastics
- **Specific stream** for EPC managed by an **EPR organisation** for normal packaging
- **Voluntary collection programme** for pesticide packaging

- **Strategy for country-wide systems' setup**

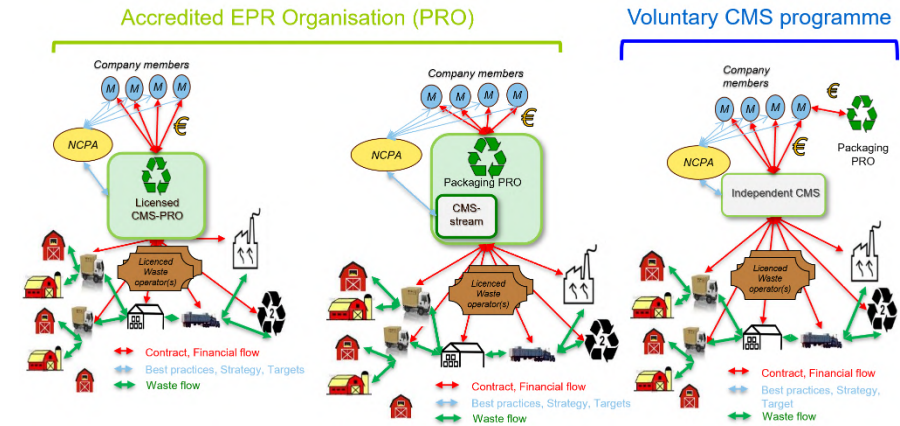
- **National programme / Regional/State programmes** (with harmonised mandatory minimum requirements; National monitoring tool)
- Avoid local competing schemes that would create a race to the bottom and cherry-picking

- **Collection modes**

- **Permanent return centres** (e.g. sales points)
- **Temporary collection points**
- **Farm collection**
- Unmanned **drop-off stations**

- **Scope of collection programme**

- Pesticide packaging (primary packaging)
- Other agriculture packaging; All agriculture plastics
- Products' leftovers, obsolete/unwanted products





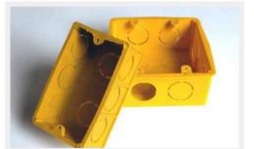
# Roadmap for successful Container Management

## Practical measures for the safe recycling of pesticide packaging materials

- Empty pesticide containers should be **properly rinsed** by users and **inspected** upon reception
- Packaging material processed by **approved** and **monitored recyclers**
- **Contaminants reduction** through mechanical washing; extrusion with melt-filtration & vacuum degassing; etc.
- Selection of new applications for recycled plastics based on **risk analysis** to minimise risks to humans and the environment.
- Must not recycle containers into products destined for the food, drink, toy, pharmaceutical, furniture, veterinary, pet, clothes & hobby garden sectors
- **CropLife International** collects statistical data and end-use applications via the national CropLife associations to monitor, enhance and share recycling best practices. A list of **end-use applications** that have undergone risk analysis is available on the CropLife International website



(inpEV, Brazil)



Electrical box  
(inpEV, Brazil)



Battery box  
(inpEV, Brazil)  
Battery box  
(inpEV, Brazil)

Plastic being recycled into unknown or untested applications is considered an industry risk!



Cable cover  
(Agrecovery; NZ)



Drainage pipe  
(ACRC; US)



Drainage pipe  
(ACRC; US)



Core tubes for agro-film  
(ADIVALOR, France)



Underground internet tube  
(SCCP, Bulgaria)



Cable conduits twin-layers  
(Rgk/PAMIRA, Germany)



Concrete saver  
(inpEV, Brazil)

# Roadmap for successful Container Management

The way forward

## Roadmap

### ✓ Situation analysis:

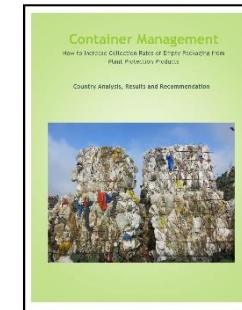
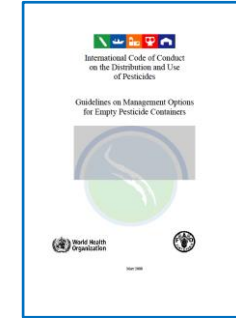
- ✓ Legal review;
- ✓ Survey packaging portfolio & quantity
- ✓ Rinsing practices; Current management practices
- ✓ Look at options and best practices
- ✓ Willingness of stakeholders
- ✓ Waste management capacity
- ✓ ....

### ✓ Container Management Strategy(ies) & Feasibility study

- ✓ Models for Container Management setup; Look at Best Practices (local; international)
- ✓ Build partnerships with stakeholders
- ✓ Business plan
- ✓ Communication & training strategy

### ✓ Container Management setup and roll-out

- ✓ Pilots trials
- ✓ Roll-out communication and training campaign
- ✓ Monitor, consolidate, roll-out programme
- ✓ Consolidate regulatory framework



Material	2020	2019	2018	2017	2016	2015
By volume (kg)	1000000	1000000	1000000	1000000	1000000	1000000
By weight (kg)	1000000	1000000	1000000	1000000	1000000	1000000
By number (containers)	1000000	1000000	1000000	1000000	1000000	1000000
By volume (litres)	1000000	1000000	1000000	1000000	1000000	1000000
By weight (tonnes)	1000000	1000000	1000000	1000000	1000000	1000000



# Roadmap for EPC Management System in India

	Action	Scope	Responsibility
	Develop an SOP for handling EPCs defining good practices of triple rinsing, separation, storage, and transport to collection points	All retail use pesticide packs comprising of rigid / multi-layered plastics/ others	Competent Government Institutions (CIBRC & CPCB) in collaboration with AgChem Industry Associations
	Awareness raising campaigns at farm level	Training farmers/users for proper triple rinsing of EPCs	AgChem Industry CSR programs in collaboration with Govt agencies
	De-listing triple rinsed EPCs from hazardous waste	Amendments in HWMR Rules 2016	MOEFCC (Technical Review Committee) in collaboration with AgChem Industry Associations
	Develop SOP for the recycling of EPCs	Specify amendments in - IS 14534: 1988 - Guidelines to recycling of Plastics; Plastic Waste Management Rules, 2016	Competent Government Institutions CIBRC / MoEFCC in collaboration with AgChem Industry Associations
	Notify end use for recycled EPCs namely, Drainage/sewage piping, Electricity pylon plastic cross piece insulators, Sound barriers, Traffic Cones, Roads, Speed Bumps, Railroad ties, Marine pilings, Toilets, Landscape timbers, Construction site mat, HDPE Rope, PET Rope, Agricultural fence posts, Pallets etc.	Amendments to the relevant Waste Management Rules Acts & Rules to incorporate end uses of EPCs	Competent Government Institutions - MoEFCC & CIB&RC in collaboration with AgChem Industry Associations
	Identify and Qualify PROs	Specify Qualification criteria for EPC management	CPCB/SPCB in collaboration with AgChem Industry Associations
	Implementation of a Pilot Container Management System for EPCs	Verify assumptions under practical use conditions	MoEF&CC, MoAFW, CPCB/SCPB in collaboration with AgChem Industry

**Thank you**

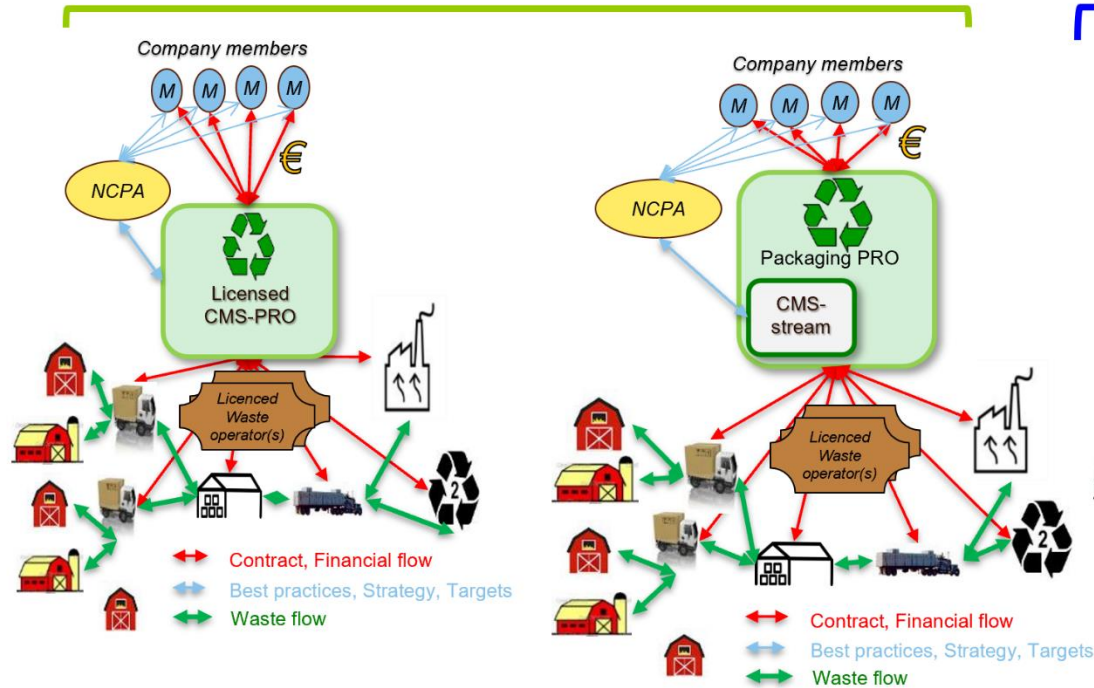


# Back up information

## Container Management Strategies

Implementation options for CMS (ex. Europe)

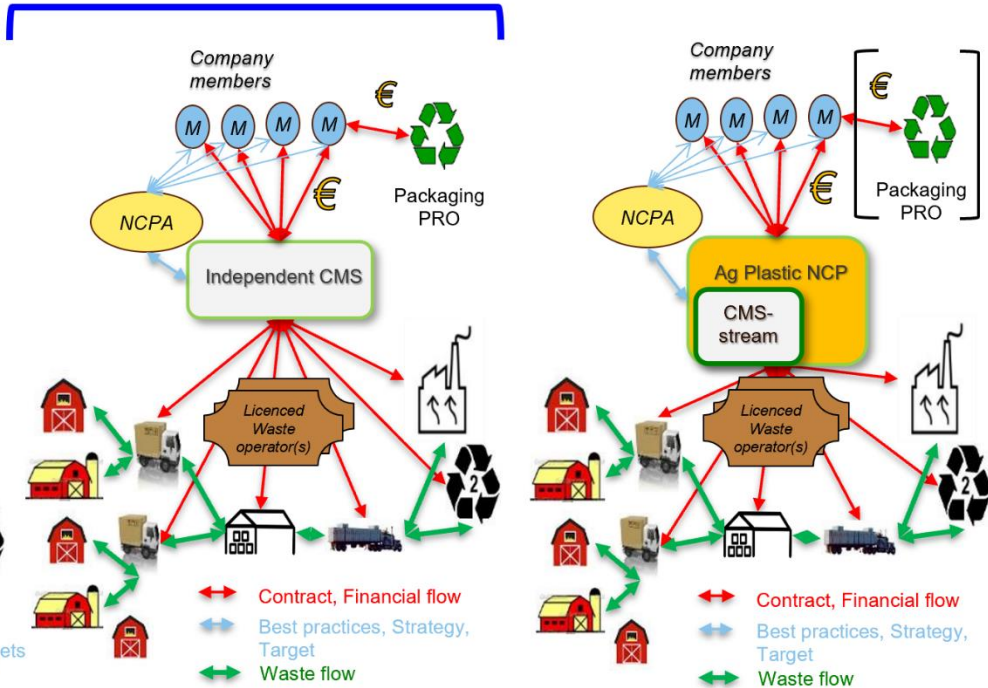
### Accredited EPR Organisation (PRO)



ES; (FR); DE;  
GR\* (2021); PL; PT

CY\*; SI; SR\*  
(PRO: Green dot)

### Voluntary CMS programme



BE & LU; BG; HU;  
LT\*; RO; SK\*;

SE; IE

NCPA: National Crop Protection Association  
NCP: National Collection Scheme (e.g. for agricultural plastics)  
PRO: Extended Producer Responsibility Organisation

\*) Pilot programmes