



UPL Group

'Doing Things Better'

Welcome on behalf of UPL Group

By:

Vijay Sardana
Head – Food Security & Agribusinesses



Policies for Enhancing Food Security:

Effects on Employment, Livelihood & Food Security

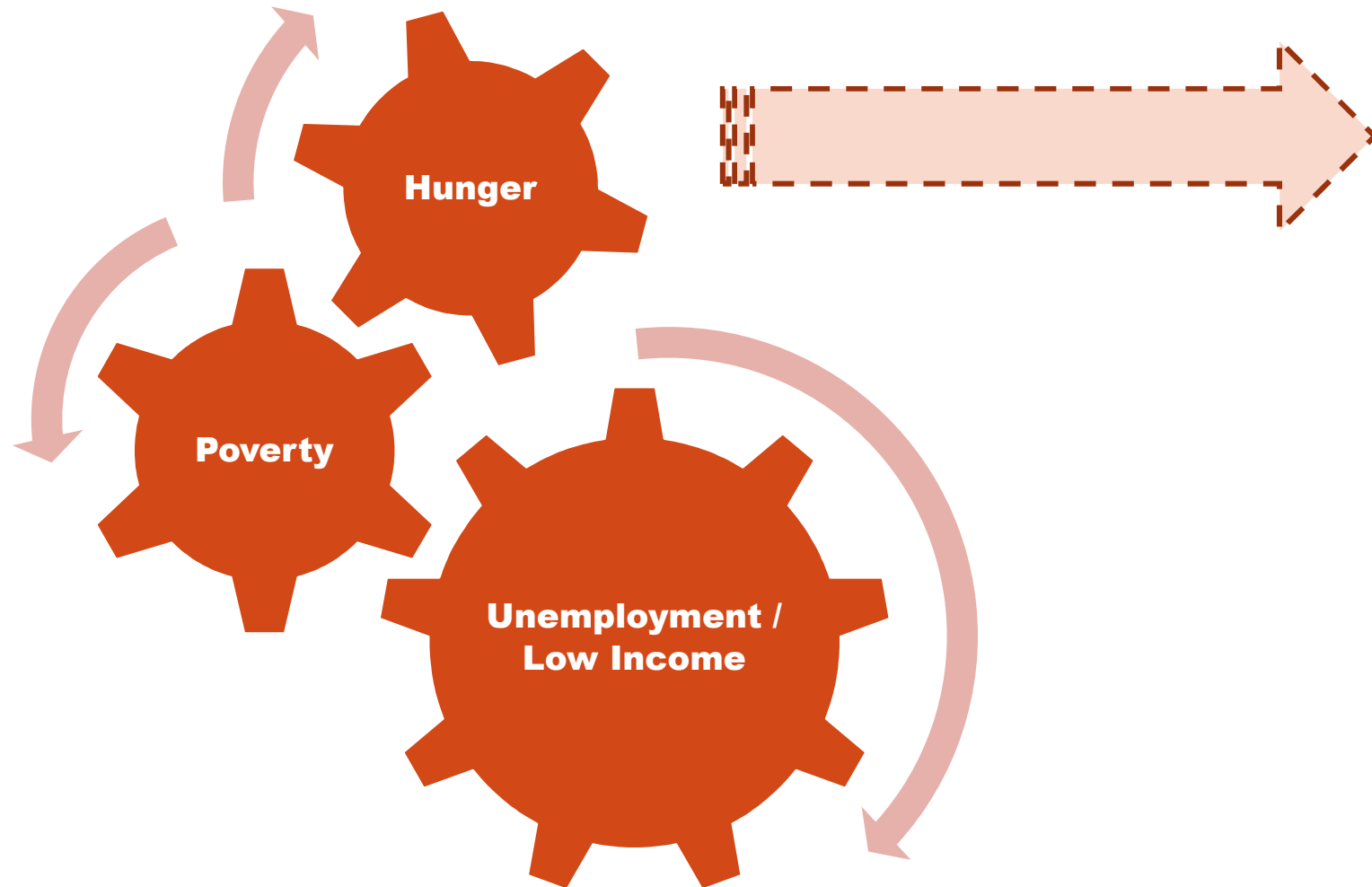
By:

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**Head – Food Security & Agribusinesses,
UPL Group – (World Wide)**

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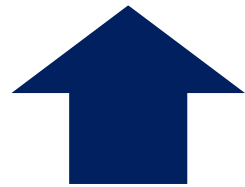
Learning from Global Experience



Hunger kills more people every year
than **AIDS, malaria & tuberculosis** combined.



How to break this vicious circle?



Farmers' Income



Farmers' Cost



Farm Productivity



Farm Produce Losses

Let me share facts with you all...

- 1. How basic technologies can improve productivity in Africa**
- 2. How food losses can be minimized in Africa**

How to improve productivity to address Employment, Livelihood and Food Security Challenges?

CROP - RICE

1. Hybrid – **PAC837** of Advanta vs Local popular variety – **Gambiaca**
2. No of locations: 1

Hybrid	PAC837	Gambiaca
Company	Advanta	Local variety
No of panicles/hill	26	20
Panicle length (cm)	30	19
No of grains/panicle	140	110
Avg yeild in Kg (25 Sq m)	15.85	12.15
Avg yield (Kg/Ha)	6340	4860
Yield comparison	130%	100%
Yield advantage	30% over check	

**PAC837 is superior in yield over popular local variety
Gambiaca by 30%**

Blog: Vijay Sardana Online

CROP - SORGHUM

1. Hybrid – **PAC501** of Advanta vs Local popular variety (NAD)
2. No of locations: 2

Hybrid	PAC501	NAD
Company	Advanta	Local variety
Plant height (cm)	162.5	141
Panicle length (cm)	38.5	22.5
Panicle weight (gm)	230	137.5
Avg yeild in Kg (25 Sq m)	9.75	6.35
Avg yield (Kg/Ha)	3900	2540
Yield comparison	154%	100%
Yield advantage	54% over check	

PAC501 is superior in yield over popular local variety

NAD by 54%

Blog: Vijay Sardana Online

CROP - CORN

1. Hybrid – **PAC740** of Advanta vs Local popular research variety
2. No of locations: 1

Hybrid	PAC740	Research Var
Company	Advanta	Local variety
Plant height (cm)	185	110
Cob length (cm)	24	12
No of grain/cob	480	150
Avg yeild in Kg (25 Sq m)	18.75	5
Avg yield (Kg/Ha)	7500	2000
Yield advantage	275% over check	

PAC740 is superior in yield over popular local research variety by 275%

Blog: Vijay Sardana Online

UPDT on Potatoes: Improves Yield by >30%



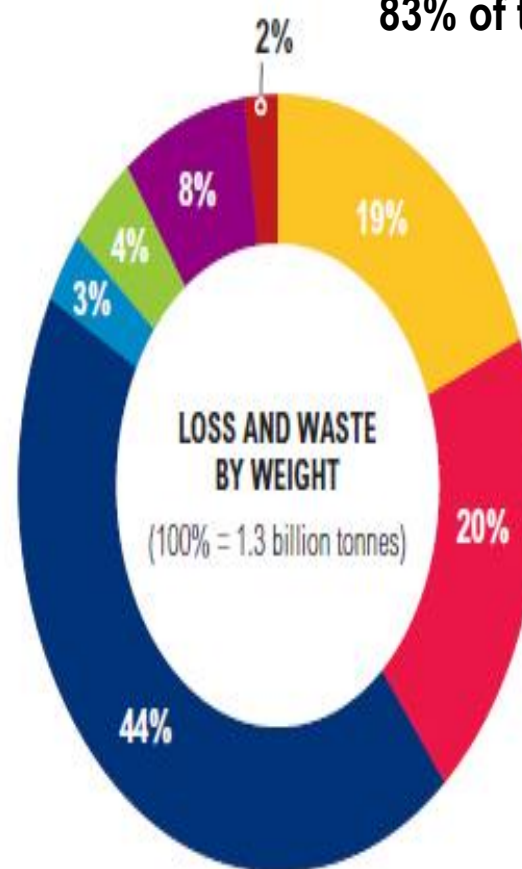
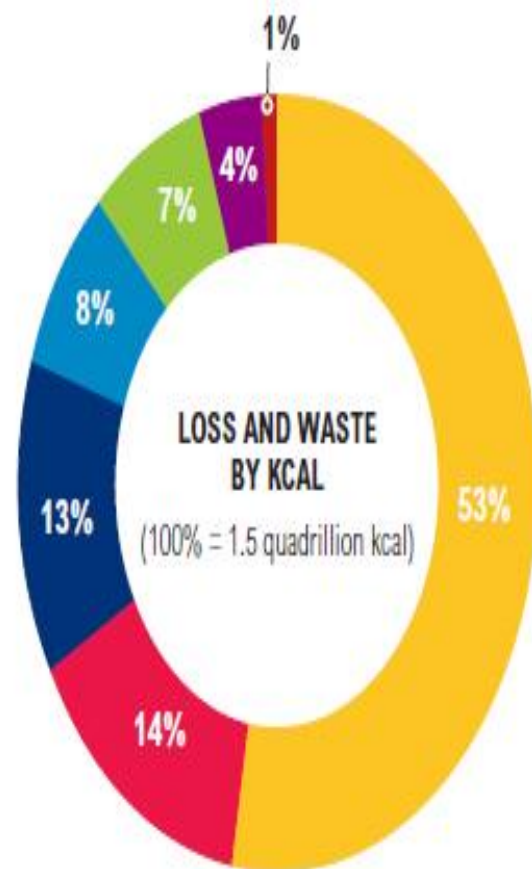
Avg. Wt : 173.6 gms

Avg. Wt: 139.6 gms

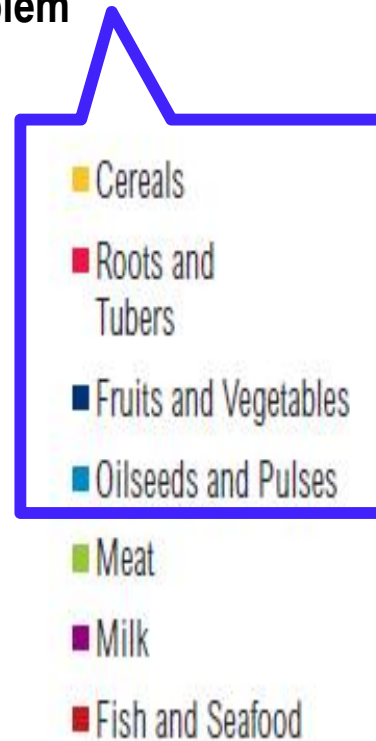
Avg. Wt : 70.6 gms

How to minimize food losses to address Employment, Livelihood and Food Security Challenges?

Figure 1 | **Share of Global Food Loss and Waste By Commodity, 2009**



UPL can be part of the solution for 83% of the problem



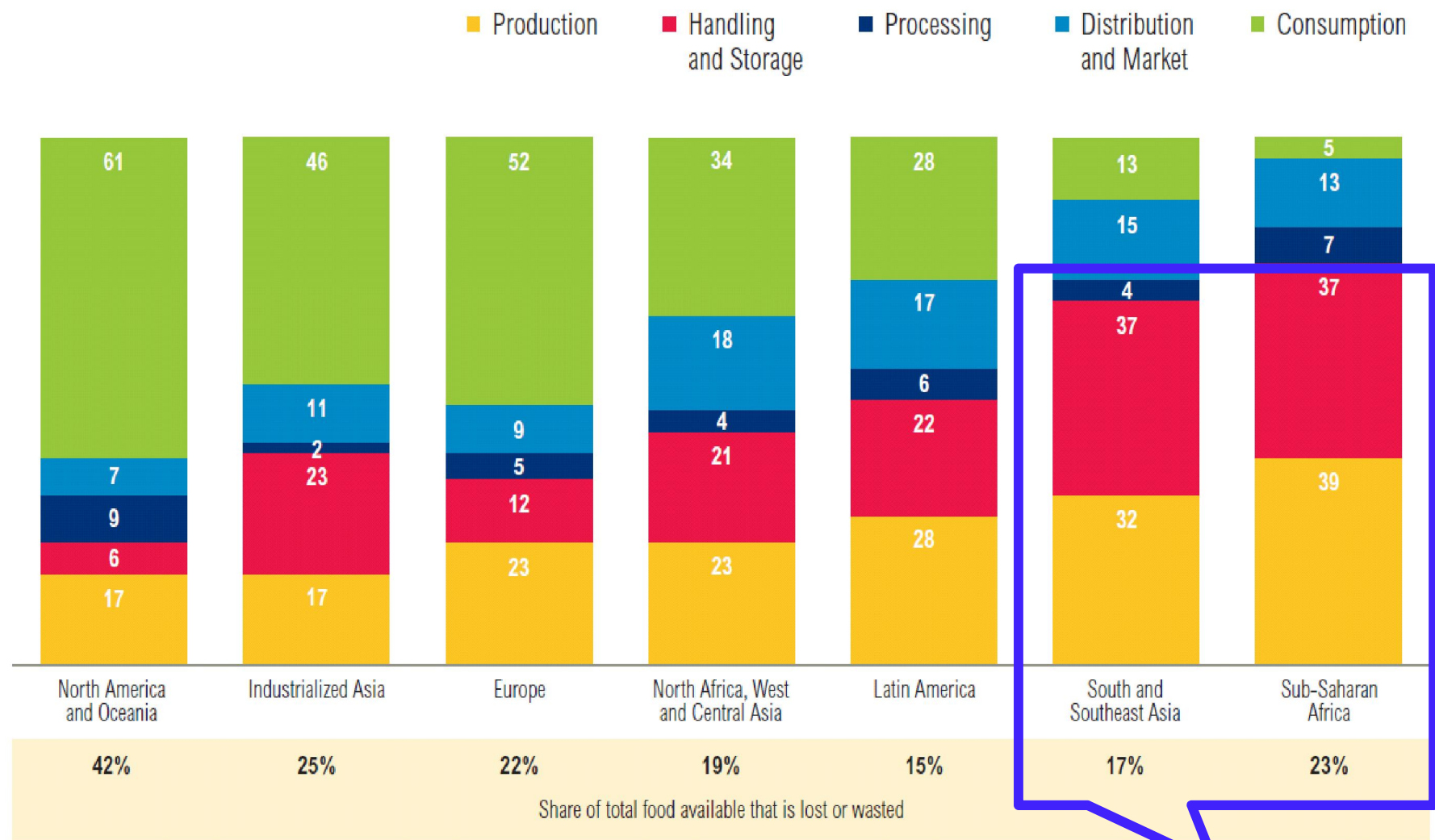
Source: WRI analysis based on FAO. 2011. *Global food losses and food waste—extent, causes and prevention*. Rome: UN FAO.

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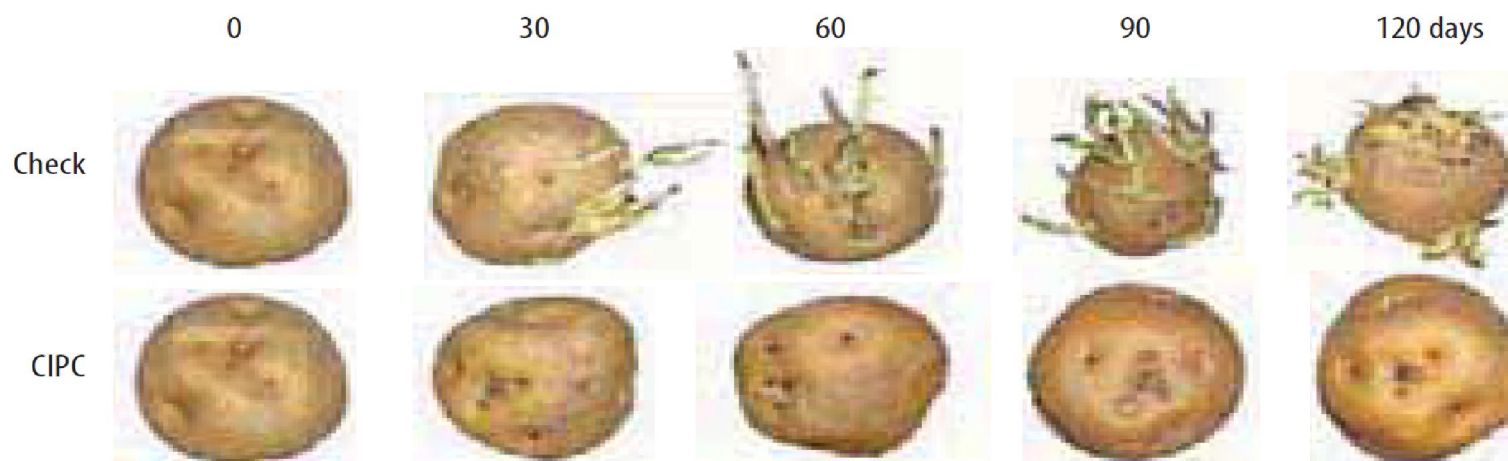
Table 2 | Food Loss and Waste Along the Value Chain

Production	Handling and Storage	Processing and Packaging	Distribution and Market	Consumption
DEFINITION				
During or immediately after harvesting on the farm	After produce leaves the farm for handling, storage, and transport	During industrial or domestic processing and/or packaging	During distribution to markets, including losses at wholesale and retail markets	Losses in the home or business of the consumer, including restaurants/caterers
INCLUDES				
Fruits bruised during picking or threshing	Edible food eaten by pests	Milk spilled during pasteurization and processing (e.g., cheese)	Edible produce sorted out due to quality	Edible products sorted out due to quality
Crops sorted out post-harvest for not meeting quality standards	Edible produce degraded by fungus or disease	Edible fruit or grains sorted out as not suitable for processing	Edible products expired before being purchased	Food purchased but not eaten
Crops left behind in fields due to poor mechanical harvesting or sharp drops in prices	Livestock death during transport to slaughter or not accepted for slaughter	Livestock trimming during slaughtering and industrial processing	Edible products spilled or damaged in market	Food cooked but not eaten
Fish discarded during fishing operations	Fish that are spilled or degraded after landing	Fish spilled or damaged during canning/smoking		

Figure 6 | **Food Lost or Wasted By Region and Stage in Value Chain, 2009**
(Percent of kcal lost and wasted)



UPL Technologies Minimizes Post Harvest Losses & Saves up to 40% Electricity



When World is benefitting from these developments, why Africa is taking time?

**Biggest Challenge is “Mindset” &
Tendency to “Reinvent the Wheel” &
“To show Authority & Power of denial”**

**In this process, Who is suffering?
African People & African Economy.**

Who is Gaining?

Those who are supplying food to your country.

What is the Way Forward?

- **Let us decide to review all laws and regulations those are creating time lag and adding transaction cost in development and discouraging investment.**

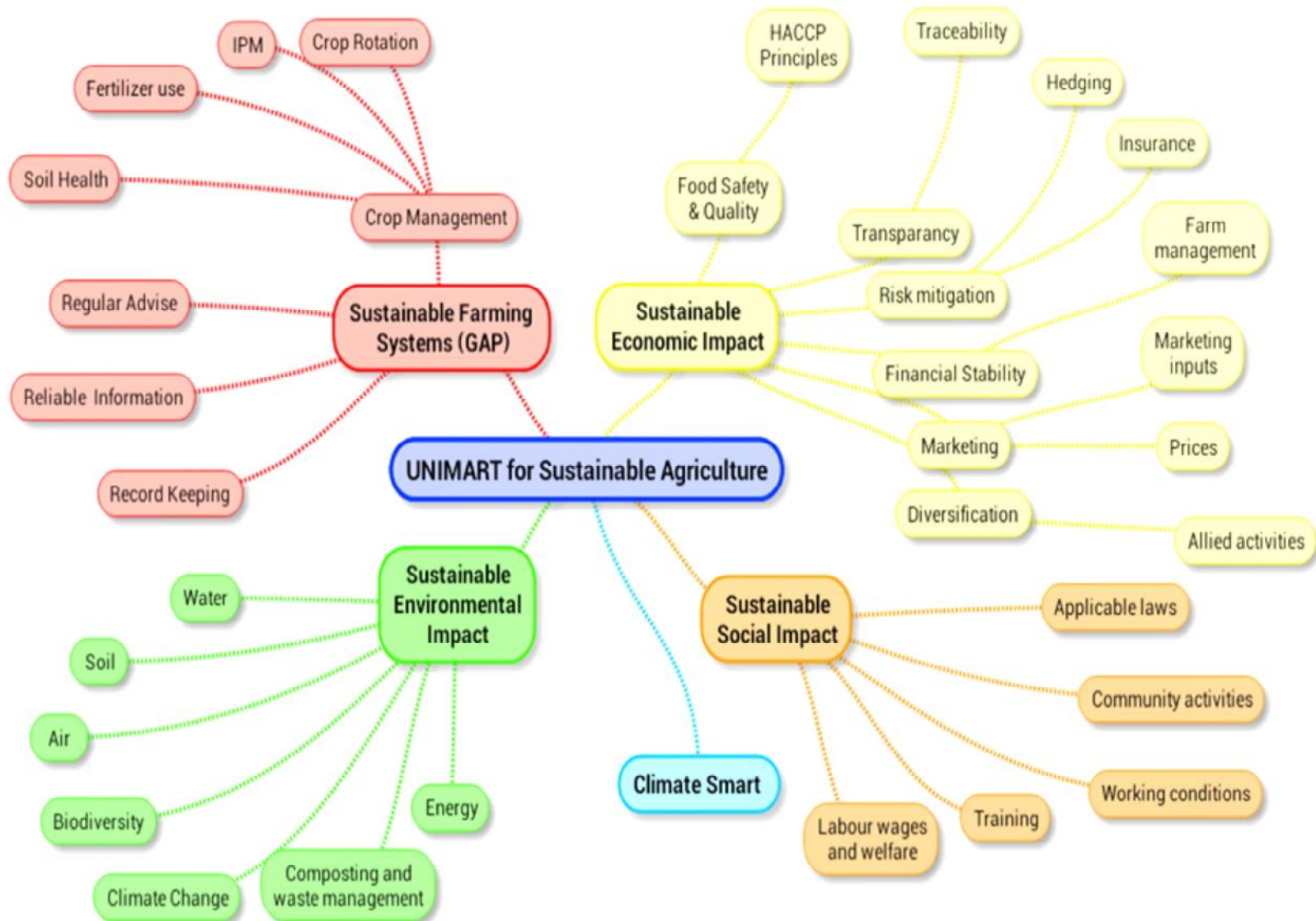
Example: Government of India has decided to repeal about 2000 laws, rules and regulations to improve investment and productivity in the Country.

- **Have single point agenda – “Open the thought process and Mindset - We have to move ahead and Fast**

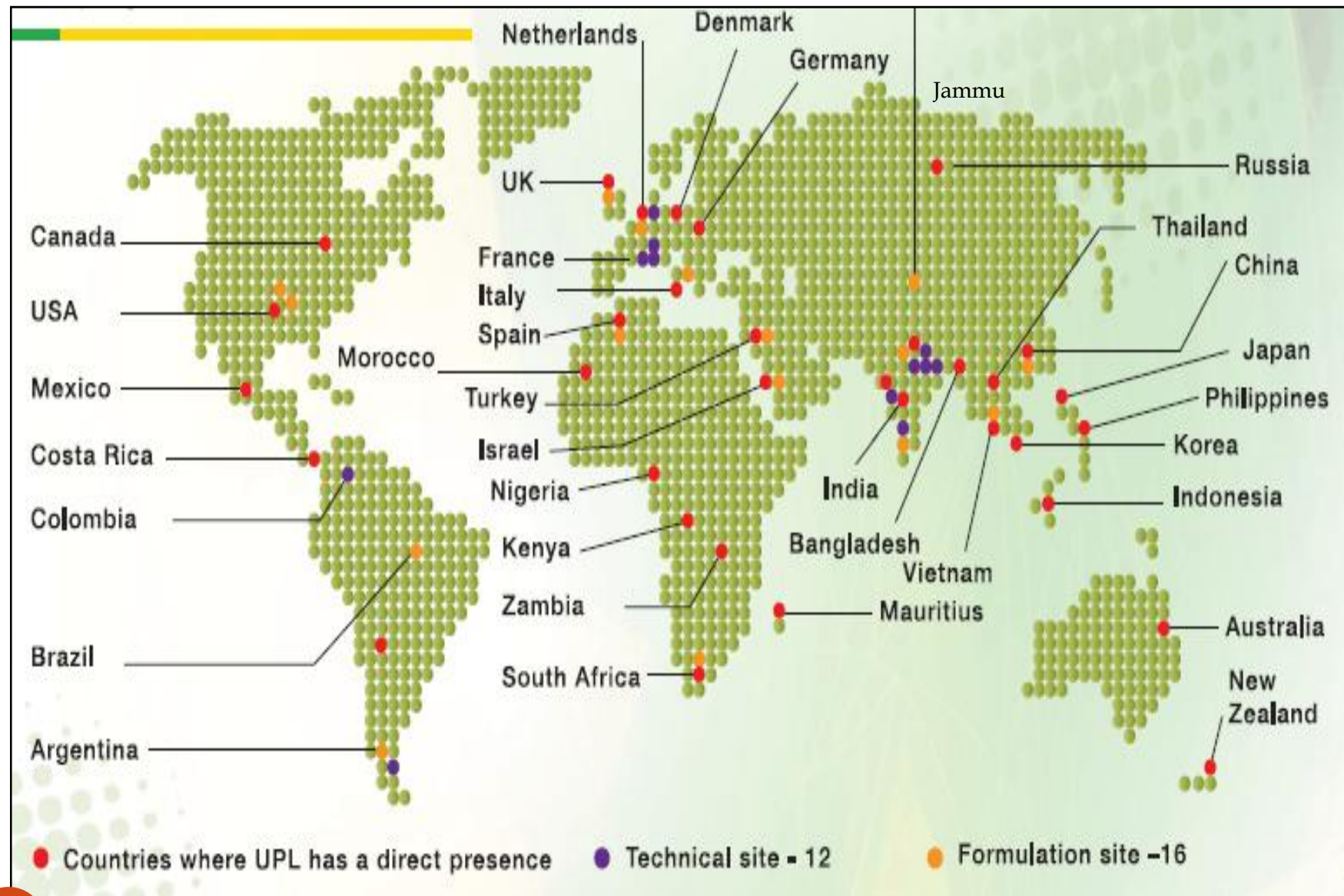
Example: learn from others mistake and move ahead and fast, because hungry people are not interest in 5 year plan and she or he needs answer on yesterday basis.

What we UPL do for you?

UPL MODEL for FOOD and FEED SECURITY



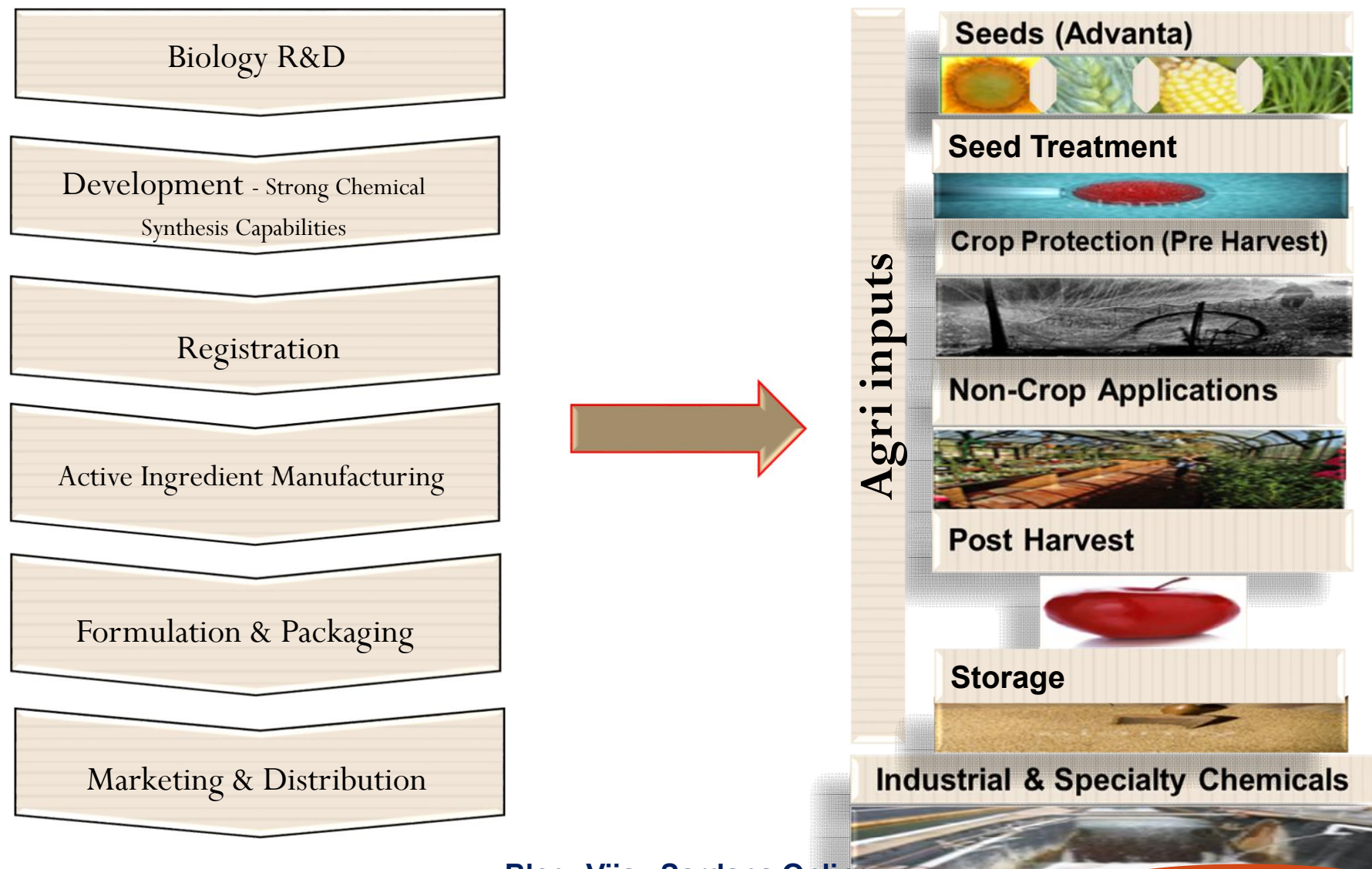
Global Footprint OF UPL GROUP








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Sales Presence in more than 120 countries that account for 90% of Worlds Food basket.
Manufacturing presence across 28 sites (9 in India and 19 International)

Upl - Presence Across Value Chain



Presence Across the Value Chain

	Seeds (Advanta)	Crop Protection (UPL)	Non-Crop Applications (UPL)	Specialty Chemicals (UPL)	Post Harvesting (UPL)
					
Products & Services	Hybrid Seeds GM Seeds	Herbicides Fungicides Insecticides Seed Treatments Fumigants	Turf & Ornamentals Lawn & Nursery Dom. & Indsl. Pest Control	Chlor-Alkali Chemicals Phosphorus Halides Phosphonates Flame Retardants Antioxidants	Decco: Fresh fruits protection/ coatings Fumigation – Grain Storage Oorja - Potato
Brands / Crops	➤ Sorghum, Corn, Rice, Sunflower, Canola, Mustard, Vegetables	➤ Devrinol ➤ Penncozeb ➤ Beet up ➤ Microthiol ➤ Cuprofix ➤ Quickphos	➤ Tengard ➤ Surflan Green ➤ Devrinol ➤ Asulox	N.A	➤ Shellac ➤ Ethoxyquine ➤ Carnauba ➤ Quickphos

Adjacent Technologies & Innovations

Seed Treatment

Drought Mitigation Technologies

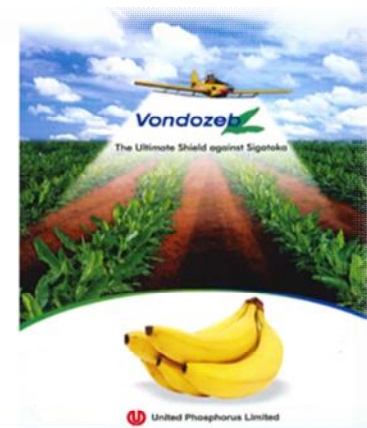
Biological Solutions

Bio Activators and Adjuvants

Crop Nutrition and Soil Health

Vector Control

Crop Solutions & Services



Product Portfolio

Crop Expertise

Aerial Spray



Some Highlights from the Global Development for Africa

FORAGES



Growing importance of forages in developed and emerging markets
– animal productivity under focus
– we have traditional strength in sorghum and millet with BMR technology

Investment in markers and breeding programs in Australia, Argentina & USA to bring higher quality products

SORGHUM



Investment in development of sorghum seed.

CORN



Investment in development of Corn seed.

UPL : A GLOBAL Family – with Africa



Feel free to contact us...
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Open for Discussion