



INDIA PULSES AND GRAINS ASSOCIATION

## **IPGA Trade Meet**

**21<sup>st</sup> March 2015 , Mumbai , India**

### **Global Pulse Markets**

### **Why Pulses ?**

### **Role of Pulses in Global Food Security**

### **International Year of Pulses – 2016**

### **How can Pulses save the world ?**

**Presented by**

**Sudhakar TOMAR**

**Managing Director -Hakan Agro DMCC-Dubai**

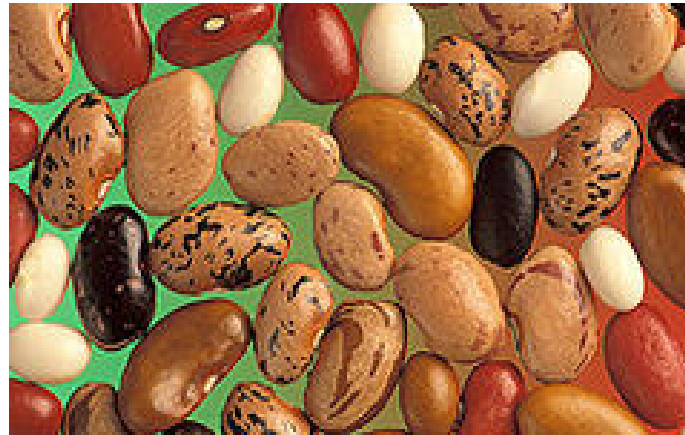
**Honorary Chairperson ( C&S)/Member –IYPO (Promotion)**

**Global Pulse Confederation (CICILS)**



# Global Pulse Markets

# United colours of Pulses - Present





# United colours of Pulses - Future





# Pulses vs. other food products

Product	Production (Million MT)	Global-Trade (Million MT)	Protein (As % body weight)
<b>Pulses</b>	<b>62</b>	<b>11</b>	<b>20 to 25%</b>
<b>Palm Oils</b>	38	30	N/A
<b>Corn</b>	771	87	3 to 4%
<b>Rice</b>	660	32	7 to 8.3 %
<b>Wheat</b>	676	116	10 to 12.5%
<b>Barley</b>	153	19	10%
<b>Poultry Meat</b>	93	9.6	23%

**Pulses industry size : 62 Million Tons**

**Value : US\$ 100 Billion**

**Food-Feed-Protein-Agronomical benefits**

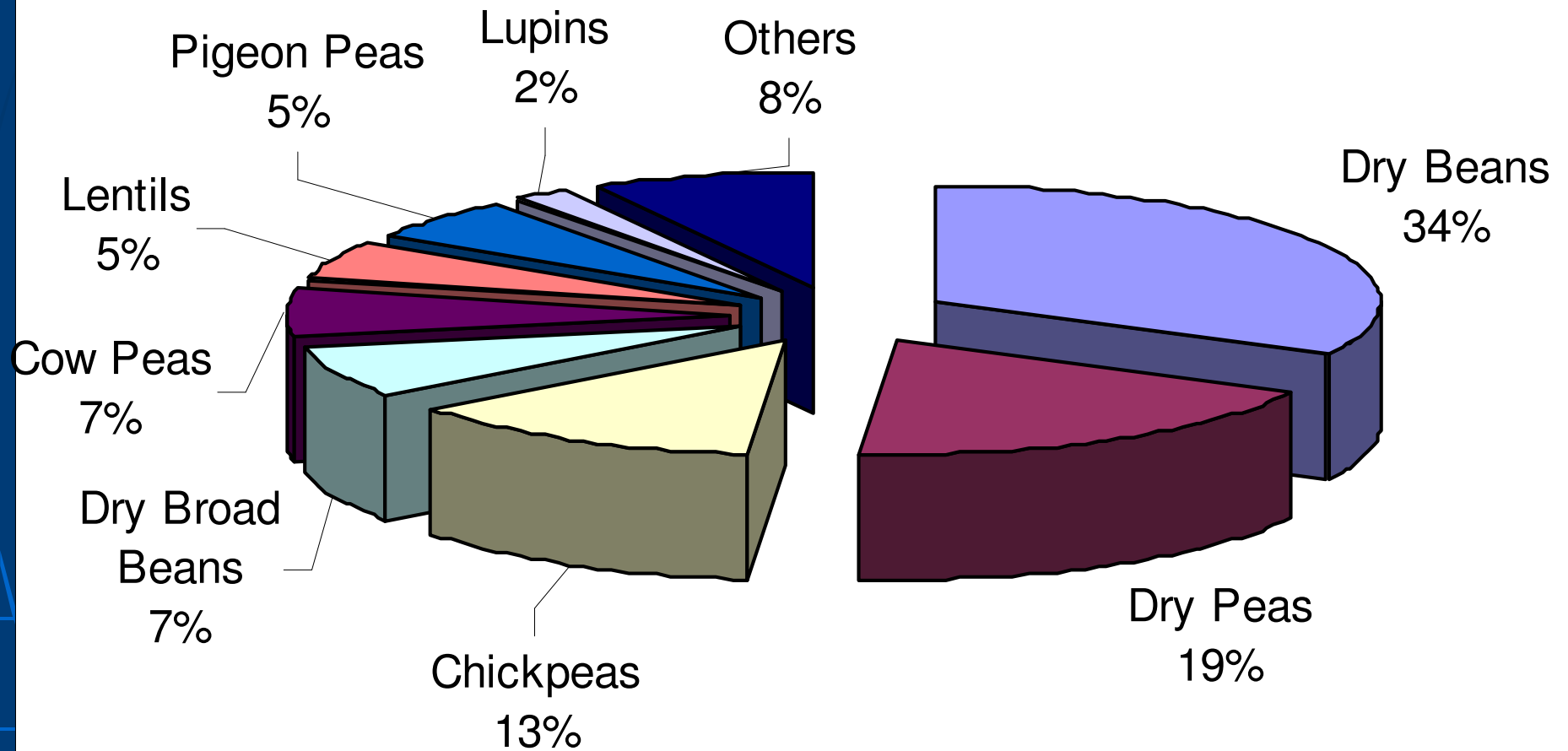
**Environment friendly-Ethical-Green**

# Production of select commodities (Million MTs)

Commodity	Avg 61-63	Avg 09-11	% growth
Wheat	235.3	678.8	188
Maize	210.0	853.1	306
Rice, paddy	225.8	705.0	212
Soybeans	27.4	250.3	814
Pulses	43.8	67.7	54

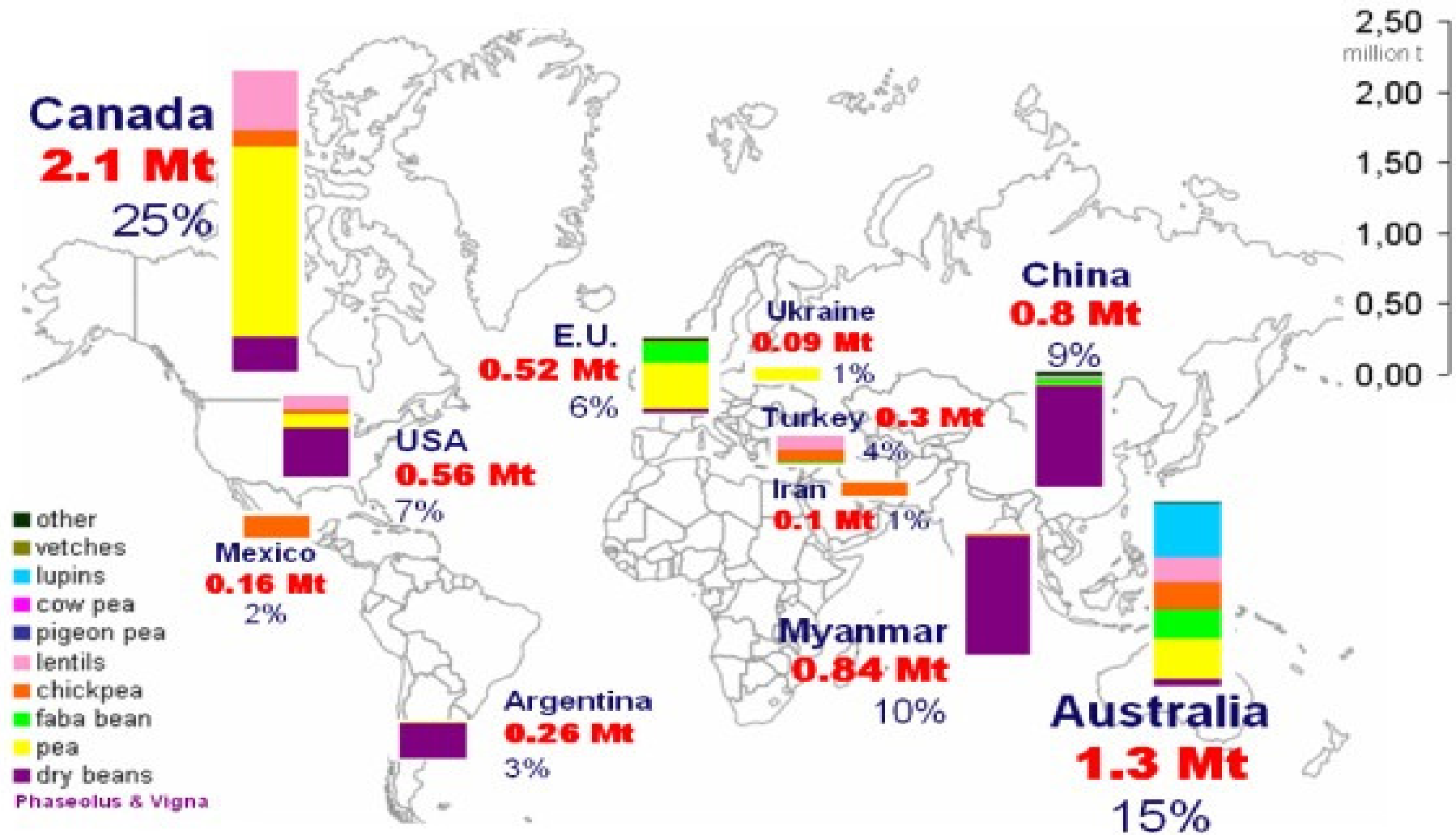


# What kind of pulses are grown in the world ?



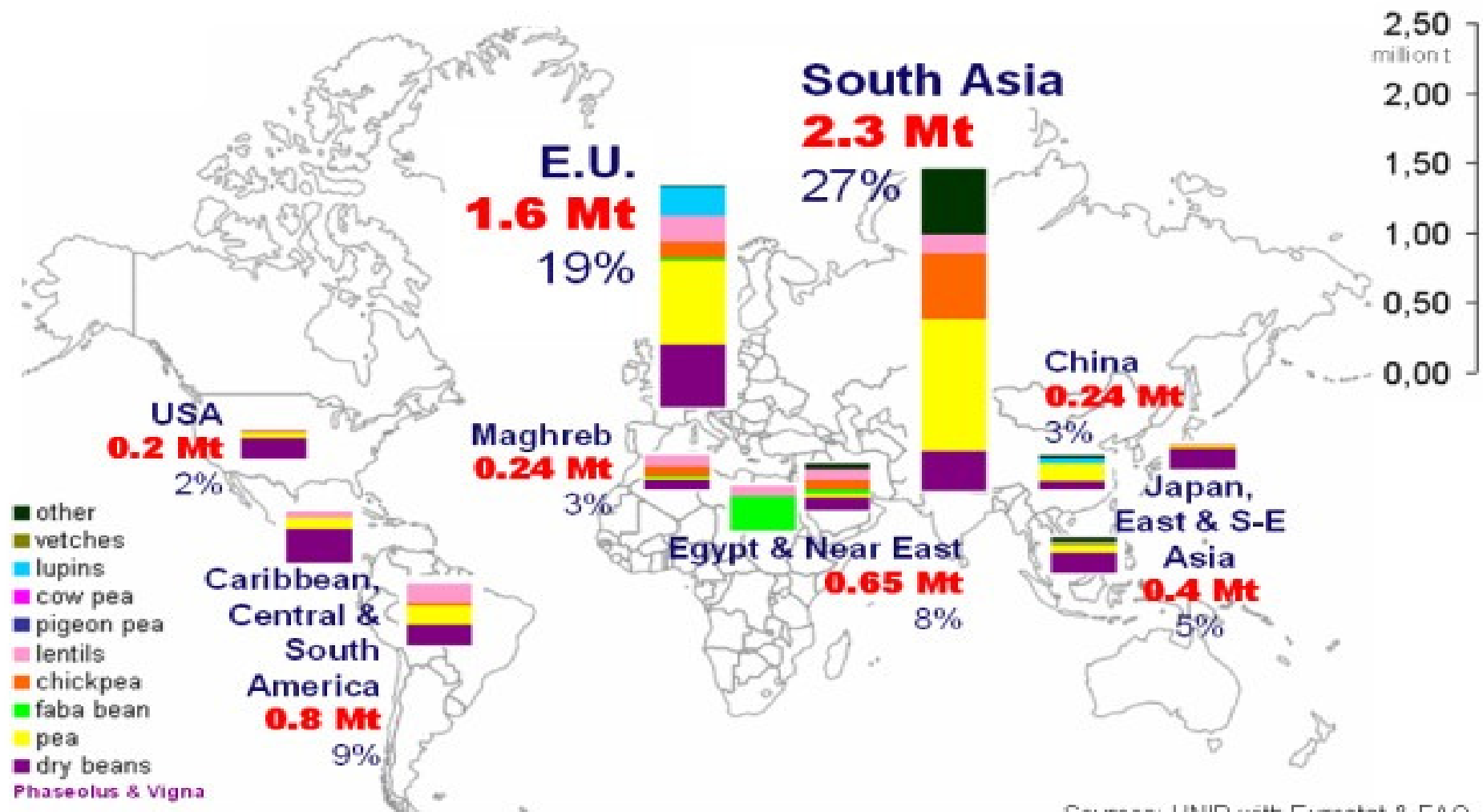


# Major Exporters

















Sources: UNIP with Eurostat & FAO  
average 4 years 2000-2003

# Major Importers of Pulses



Sources: UNIP with Eurostat & FAO average 4 years 2000-2003

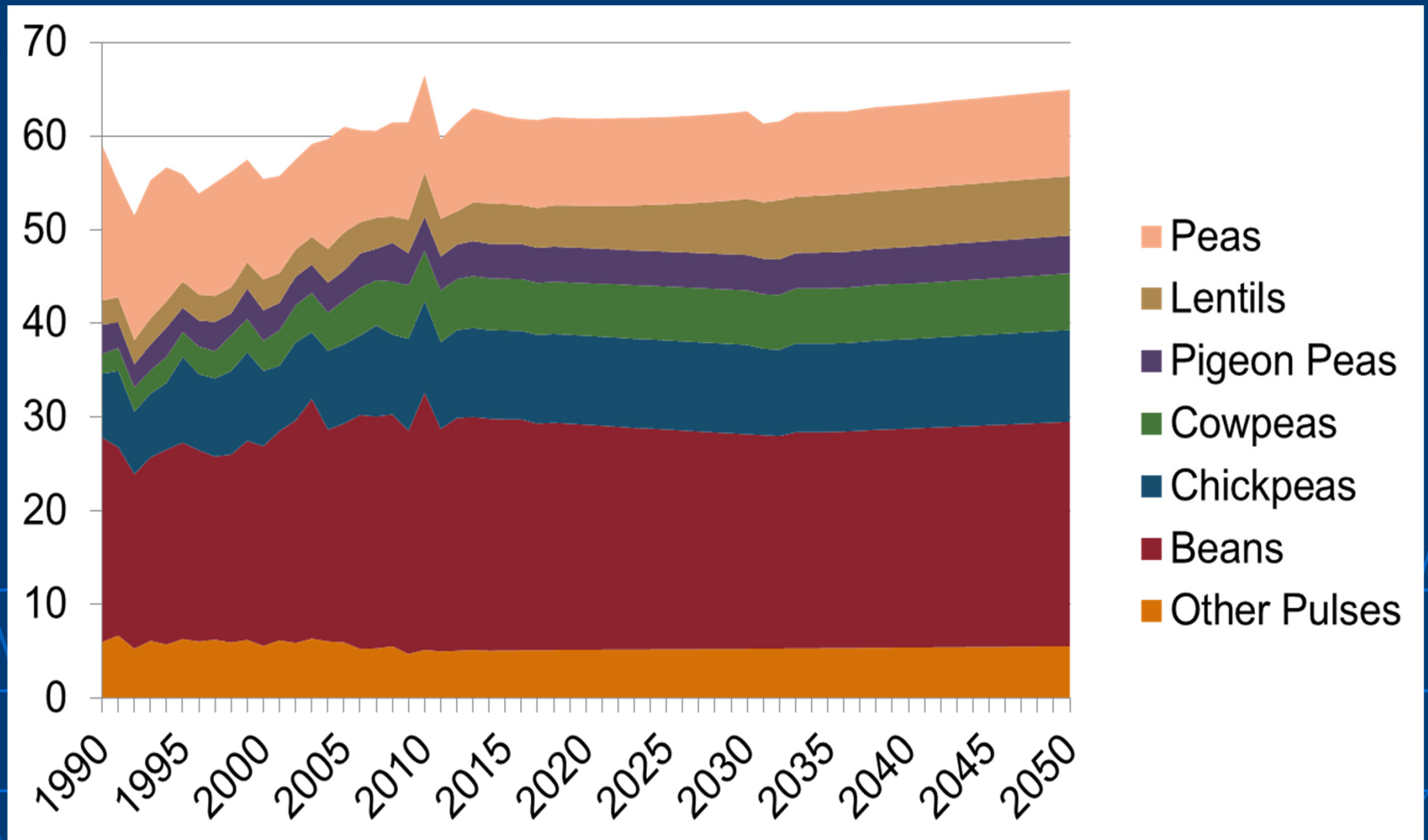
# Global Pulses Calendar

	 Sowing  Harvest	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
<b>Australia</b> Chickpea Faba bean Field pea Lentil Lupin													
<b>Canada</b> Chickpea Field pea Lentil													
<b>Turkey/Syria</b> Chickpea Lentil													
<b>India (rabi)</b> Chickpea Field pea Lentil													
<b>India (kharif)</b> Chickpea													
<b>Pakistan</b> Chickpea Field pea Lentil													
<b>Egypt</b> Chickpea Faba bean Field pea Lentil Lupin													
<b>EU (spring)</b> Chickpea Faba bean Field pea Lentil Lupin													
<b>EU (winter)</b> Chickpea Faba bean Field pea Lentil Lupin													
<b>China (north)</b> Chickpea Faba bean Field pea Lentil Lupin													
<b>China (south)</b> Chickpea Faba bean Field pea Lentil Lupin													

**Overall a diversified  
supply , demand and  
production base**

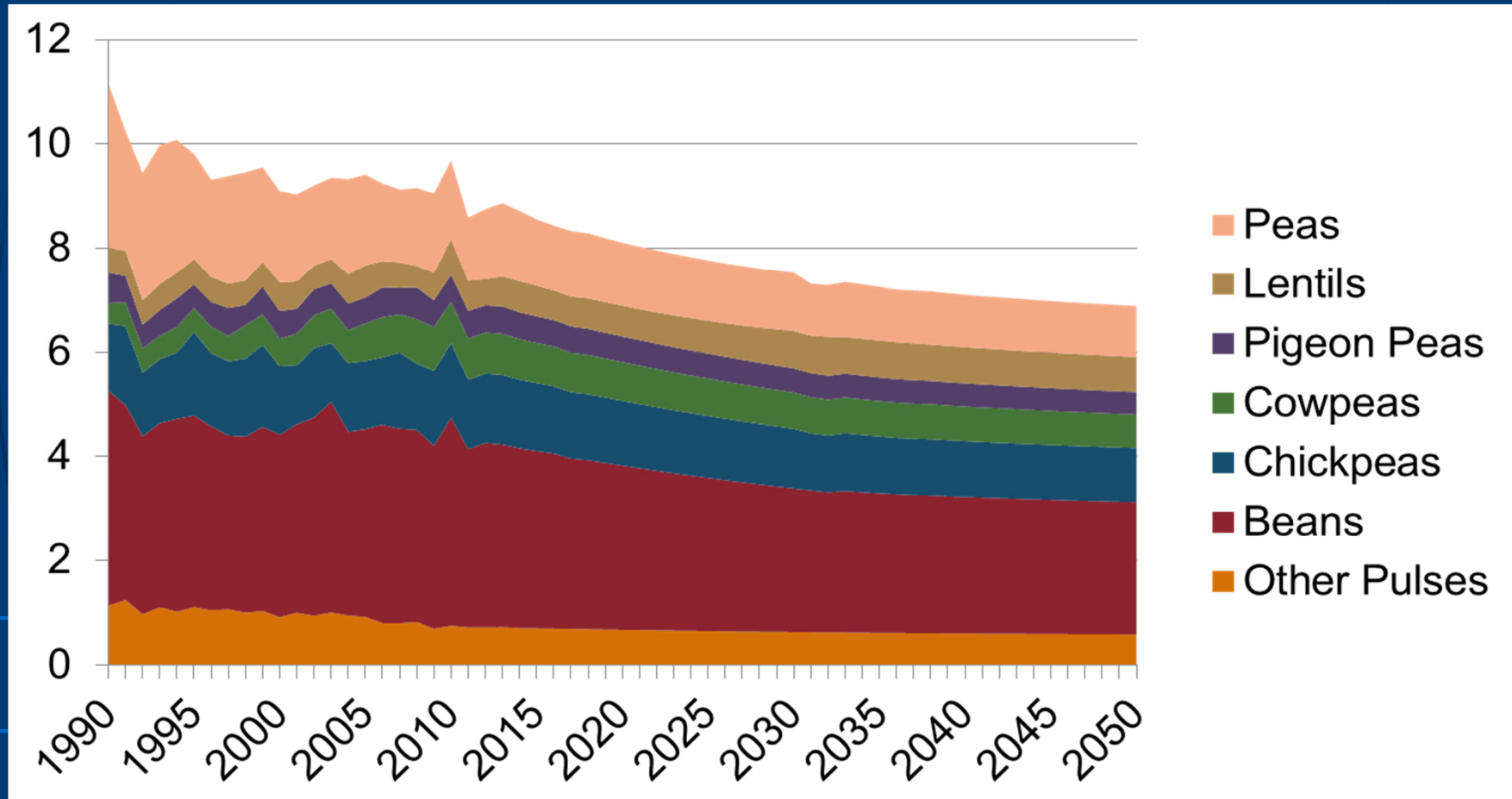
# Global Pulse Output Trend

(million metric tons)



# Global Pulse Usage Trend

(kilograms per person - cumulative)





# World Pulses Production Outlook

## Major Pulses ( MMTs)

■ Crop	2013-14	2014-15
■ Dry bean	23.1	23.8
■ Pea	11.2	11.2
■ Lentil	3.8	4.1
■ Desi chkp	10.8	11.5
■ Kabuli	1.9	1.9

# Estimate of world trade Major Pulses ( MMTs)



<b>Pulses</b>	<b><i>2013-14</i></b>	<b><i>2014-15</i></b>
- Pea	4.4	4.6
- Lentil	2.4	2.4
- Bean	3.9	4.4
- Kabuli	0.5	0.5
- Desi	0.4	0.2



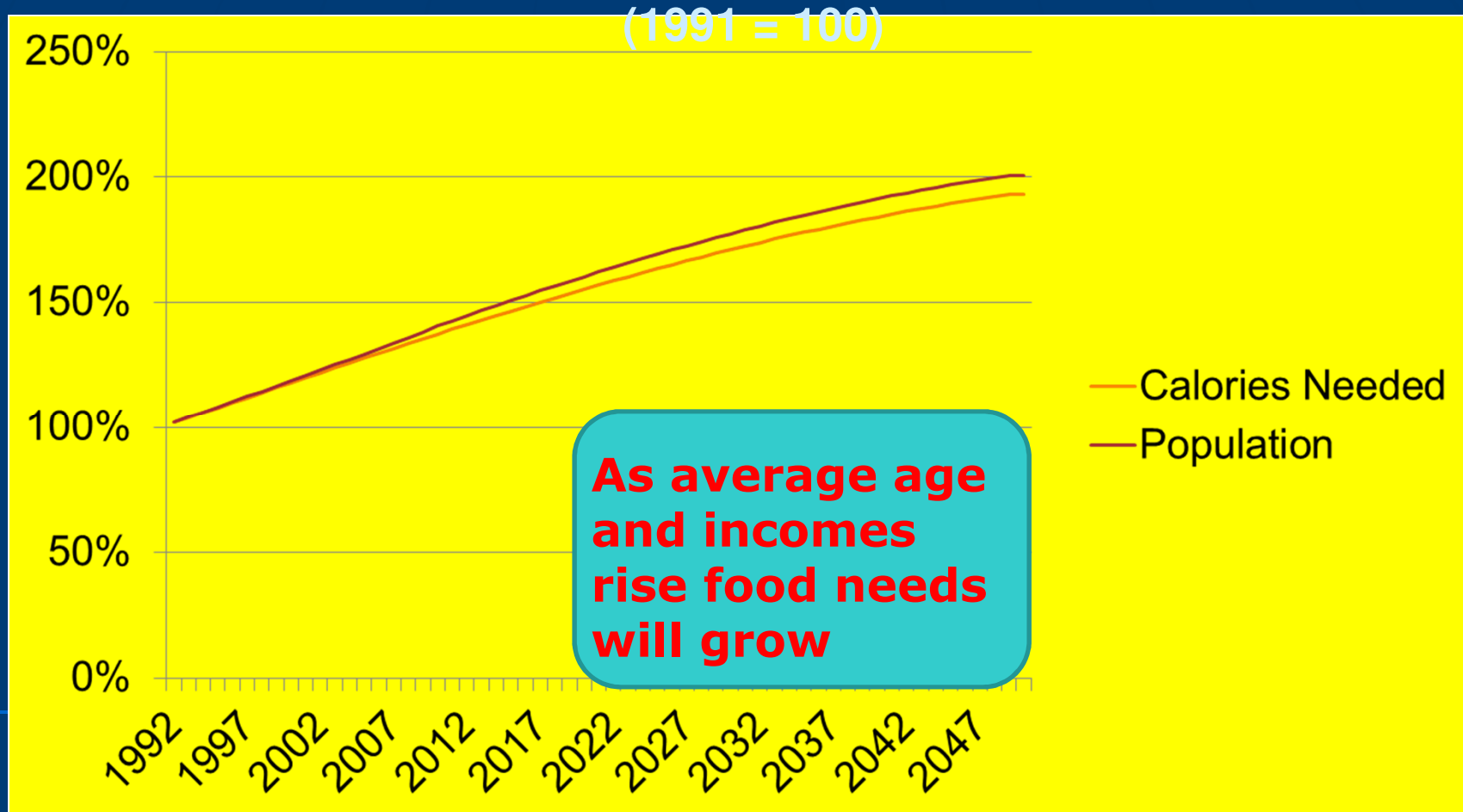
# What is in it for India ?

# Pulse Trade Dynamics in India

## India – Pulse Supply and Demand Forecast (hectares, metric tons)

Production	Season	2011-12	2012-13	2013-14	2014-15
Tur	Kharif	2,650,000	3,020,000	3,290,000	2,740,000
Gram	Rabi	7,700,000	8,830,000	9,880,000	7,930,000
Urad	Kharif	1,230,000	1,430,000	1,070,000	1,150,000
	Rabi	540,000	470,000	450,000	405,000
	Total	1,770,000	1,900,000	1,520,000	1,555,000
Moong	Kharif	1,240,000	790,000	980,000	710,000
	Rabi	390,000	400,000	510,000	459,000
	Total	1,630,000	1,190,000	1,490,000	1,169,000
Other	Kharif	940,000	620,000	680,000	600,000
	Rabi	2,400,000	2,730,000	2,410,000	2,169,000
	Total	3,340,000	3,350,000	3,090,000	2,769,000
All Pulses	Kharif	6,060,000	5,860,000	6,020,000	5,200,000
	Rabi	11,030,000	12,430,000	13,250,000	10,963,000
<b>Total Production</b>	<b>Total</b>	<b>17,090,000</b>	<b>18,290,000</b>	<b>19,270,000</b>	<b>16,163,000</b>
Pulse Imports	Peas	1,457,000	1,690,000	1,469,000	1,763,000
	Chickpeas	244,000	677,000	426,000	341,000
	Lentils	259,000	793,000	637,000	811,000
	Beans	1,067,000	1,272,000	960,000	1,098,000
<b>Total Imports</b>	<b>All Pulses</b>	<b>3,027,000</b>	<b>4,432,000</b>	<b>3,492,000</b>	<b>4,013,000</b>
Available Supply and Inferred Consumption (production plus imports)					
<b>Total Supply</b>	<b>Pulses</b>	<b>20,117,000</b>	<b>22,722,000</b>	<b>22,762,000</b>	<b>20,176,000</b>

# India's Growing Food Needs



# India – Projected Pulse requirements 2012-2030

Crop	2012	2017	2022	2025	2030
Chickpea	6.47 (2.00)	7.87 (4.00)	9.12 (3.00)	9.68 (2.00)	10.22 (4.00)
Pigeonpea	2.75 (2.25)	3.59 (5.50)	4.58(5.00)	5.04 (3.25)	5.52 (4.75)
Mungbean	1.52 (5.25)	1.89 (4.50)	2.30 (4.00)	2.53 (3.25)	2.75 (3.50)
Urdbean	1.97 (5.75)	2.43 (4.25)	2.96 (4.00)	3.23 (3.00)	3.58 (4.00)
Lentil	1.31 (4.00)	1.73 (5.75)	2.21 (5.00)	2.41 (3.00)	2.62 (3.80)
Peas	1.03 (4.00)	1.30 (4.75)	1.58 (3.75)	1.70 (3.00)	1.98 (4.35)
Others	1.97	2.91	3.70	4.83	5.33
Total pulses	17.02 (3.50)	21.72 (5.00)	26.43 (4.00)	29.43 (3.65)	32.00 (4.20)

# To grow 32 Million MTs in 2030 Can it be done ?

**Quote...** To meet the projected requirement for 1.68 Billion Indians the productivity needs to uplift at 1361 kg per ha and about 3.million ha additional area has to be brought under pulses besides reducing the post-harvest losses. **Unquote**

**1.Increasing government procurement prices ( MSP) in reality**

**2.Bringing additional 3-5 Million Hectares under Pulses cultivation**

**3.Improving yield from 700 Kg/Ha to 1361 Kg/Ha**



# International Year of Pulses 2016





INTERNATIONAL PULSE TRADE  
AND INDUSTRY CONFEDERATION

CONFÉDÉRATION INTERNATIONALE DU COMMERCE  
ET DES INDUSTRIES DES LÉGUMES SECS

- **Global Pulses Confederation - Non-profit confederation of Global Pulses Industry** head quartered in UAE representing production of over 60 Million tons of crop valued at US\$ 100 Billion
- **Membership base : 18** national associations including IPGA , governmental bodies , trade promotion bodies, NGOs and 5000 + primary & secondary corporates /growers from over 50 countries.
- **CICILS (World Pulses Organization)** is an **observer status body with United Nations , FAO & other multilateral trade bodies.**

2016 International Year of

**PULSES**

**CICILS** GLOBAL PULSE CONFEDERATION  
International Pulse and Protein Confederation

**GET ON BOARD**

**FOR**

**2016**



# International Year of Pulses 2016

Project started under CICILS in 2011

Phase I: FAO Council – April, 2013 (Unanimous)

Phase II: FAO Conference - June, 2013  
(Unanimous)

**Phase III: United Nations : General Assembly –  
December, 2013 (Unanimous )**



# Proposed IYOP Theme Areas

**Creating Awareness**



**Health, Nutrition & Food Innovation**



**Market Access & Stability**



**Production & Environmental Sustainability**



**Food Security**



**IYOP 2016 Initiatives**



# **Many top names On Board Already!**

- **International Center for Agricultural Research in the Dry Areas (ICARDA)**
- **International Crops Research Institute for the Semi-Arid Tropics (ICRISAT)**
- **International Food Policy Research Institute (IFPRI)**
- **Commonwealth Scientific and Industrial Research Organisation (CSIRO)**
- **University of Saskatchewan**
- **McGill University**
- **Michigan State University**
- **University of Minnesota**
- **Institute national de la recherche agronomique (INRA)**
- **Pan American Health Organization (PAHO)**
- **The INCLEN Trust International (International Clinical Epidemiology Network)**

## Major initiatives

Conferences in Zambia , Italy , Turkey ,  
India and USA

\*Leo Burnett Branding Project

Announcement and unveiling of new  
Pulse Brand at **CICILS Convention 2015**  
**in Las Vegas**

The logo for Leo Burnett, featuring the name "Leo Burnett" in a cursive script font, enclosed in a black rectangular border.

Leo Burnett

# Fundraising

- Target \$ 8.1 Million
- \$ 3.6 Million Fundraising is being completed, with many more proposals nearing completion!



INTERNATIONAL PULSE TRADE  
AND INDUSTRY CONFEDERATION  
CONFÉDÉRATION INTERNATIONALE DU COMMERCE  
ET DES INDUSTRIES DES LÉGUMES SECS



**ILTA  
COMMODITIES  
S.A.**

# GET ON BOARD!

- **Join us in helping to plan IYOP 2016 activities!**
- **Donate to CICILS IYOP!**
- **Join our National Committees and plan your own IYOP 2016 Activities!**



A collage of various agricultural products, including beans, lentils, and rice, displayed in woven baskets. The products are arranged in a grid-like pattern, showcasing a variety of colors and textures. The background is a mix of orange and green, with a central white banner containing the title.

# Changing face of global agriculture

# WORLD HUNGER



Hunger and malnutrition kill more people every year than AIDS, malaria and tuberculosis combined

More people die from hunger than in wars

Malnutrition often leads to disease, devastating the lives of both children and adults

One child dies every five seconds from hunger related causes

More than 800 million people know what it is like to go to bed hungry; most of them are women and children

Category	1	2	3	4	5	no data	incomplete data
Undernourished	>35%	20-34%	5-19%	2.5-4%	<2.5%		
Description	Very high	Moderately high	Moderately low	Very low	Extremely low		

**World Food Programme**  
Feeding The World's Hungry

Source: The State of Food Insecurity in the World 2002, Food and Agriculture Organization of the United Nations  
© 2002 United Nations World Food Programme

# World – Balance Sheet

**Available Calories /person/day : 2720**  
(FAO)

**Trade Balance : US\$ 43 Billion**

**Per Capita Income : US\$ 11,058** (World Bank)

**Food Exports : US\$ 800 Billion**

**Average GDP growth : 3.1%**

**Arable Land : 10.7%**

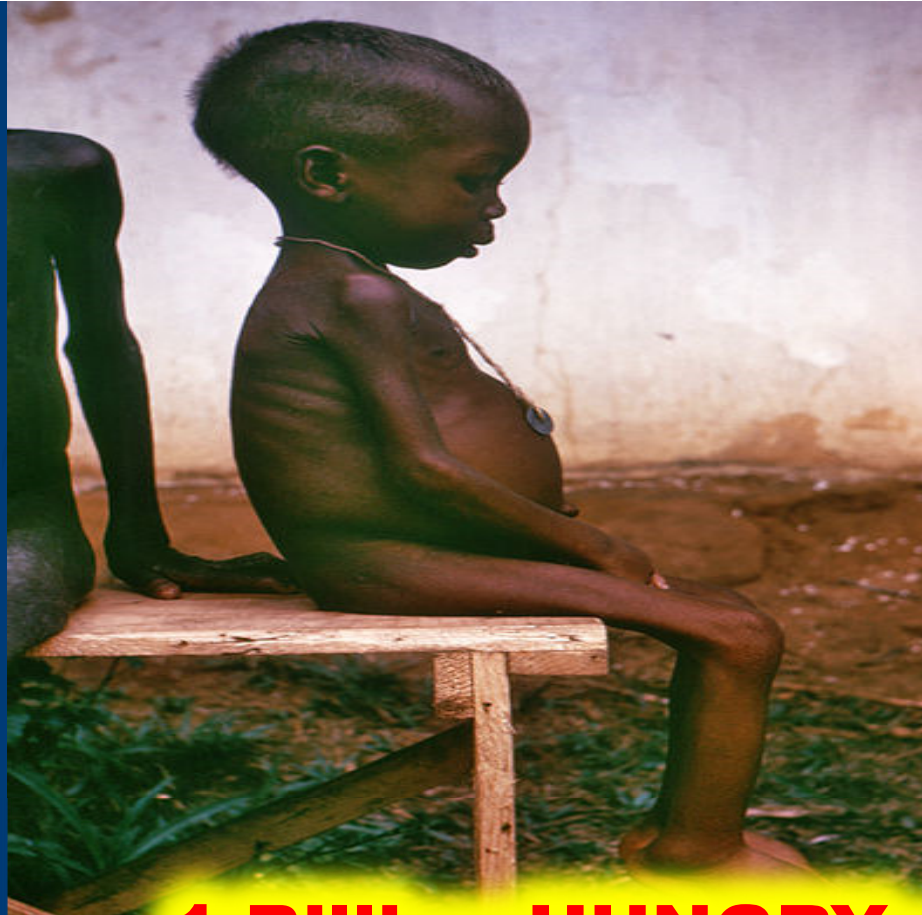
**Population : 7 Billion**

**Literacy : 82.2%**

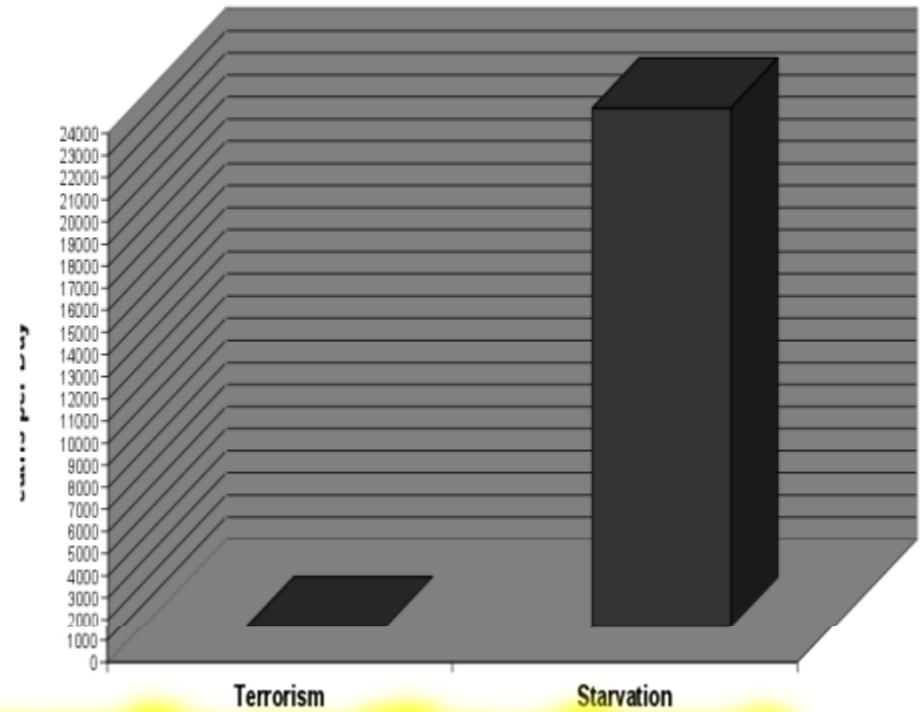
**Urban Population : 50%**

## Changing face of GLOBAL FOOD SUPPLY CHAIN SCENARIO

1. Population is **growing**
2. Global food production **stagnating**
3. Food Demand is **Increasing**
4. Burning Food for Oil – **Unsustainable**
5. Global Income **Rising**
6. Eating habits **Changing**
7. Subsidies **Declining**
8. Costs of Agri-Inputs **Increasing**
9. Funds **Speculating**
10. Urbanization **Increasing**
11. Climate **Changing**



Deaths from Terrorism vs. Starvation per Day  
Based on CIA and UN Data from 1968 through 2003  
Terrorism 1.25 per day (CIA) vs. Starvation 23,468 per day (UN)  
Starvation.net



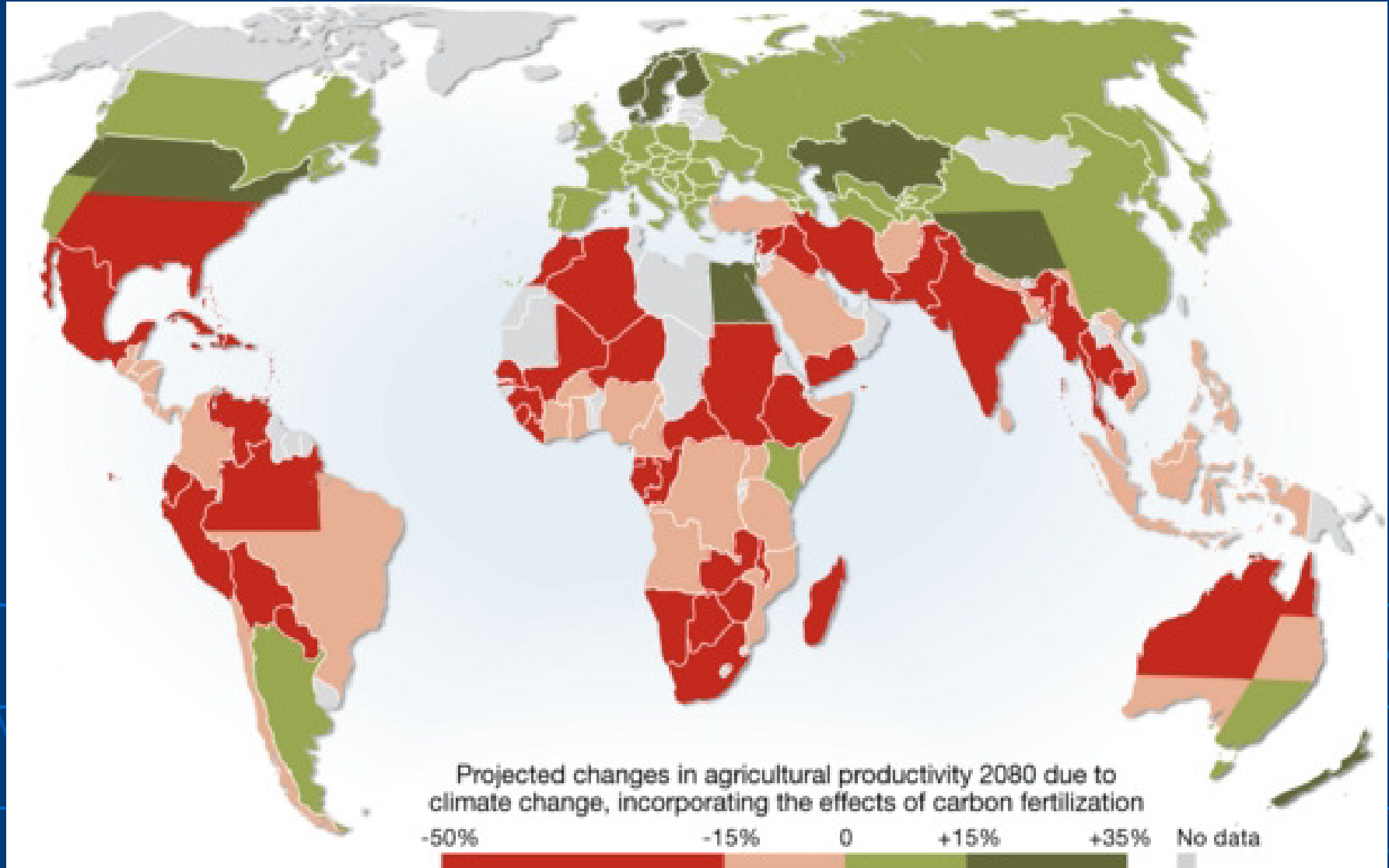
**1 Billion HUNGRY people on the planet**

**1 Billion have no CLEAN DRINKING WATER**

**Every day 35,000 die HUNGER & WATER  
born diseases**

Food Crisis - Sidhakar Tomar

# Climate Change Losers & Winners in 2080



**.....but at the same  
time “The classic  
mismatch”  
between**



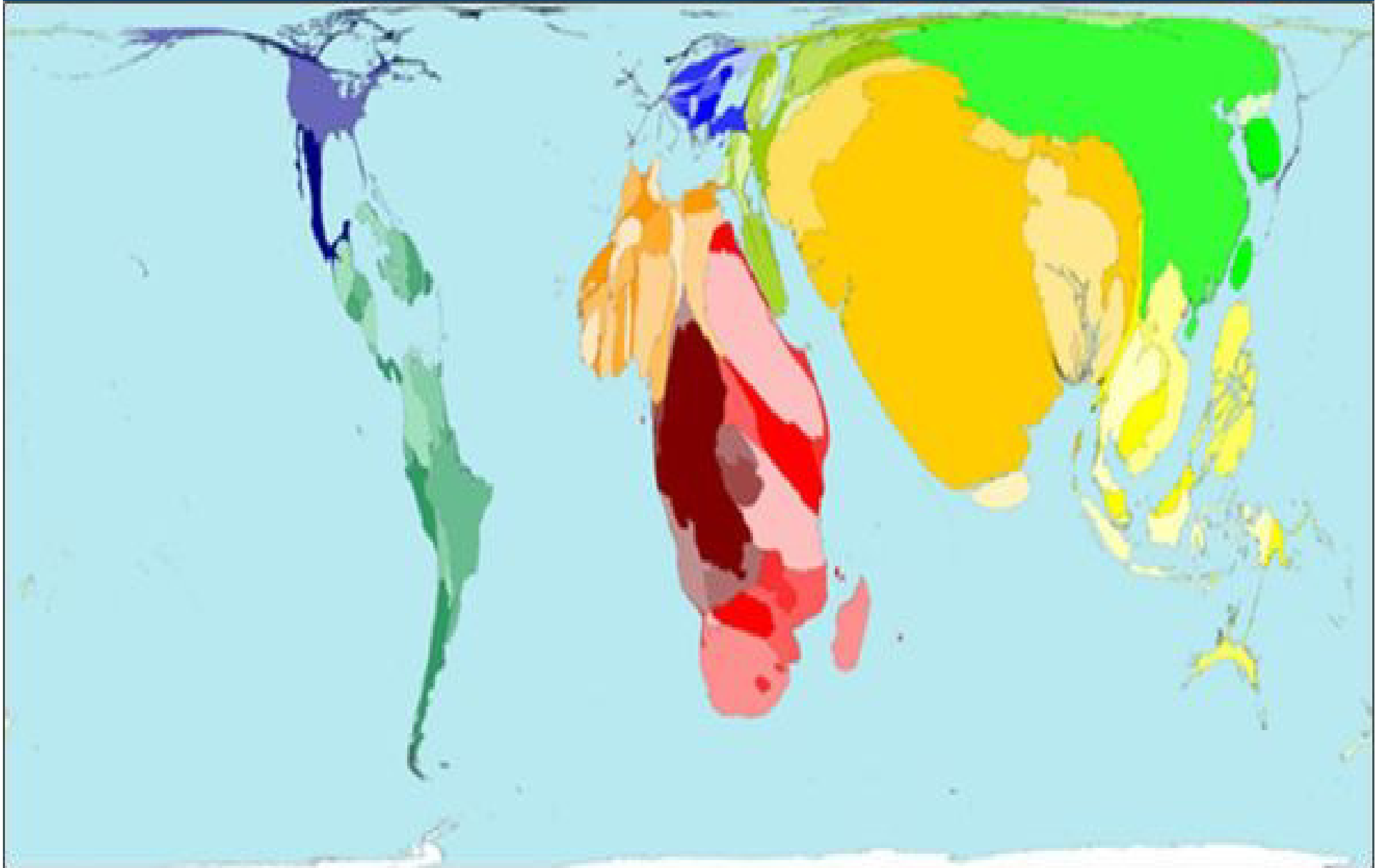


**>40% of Rich Countries is OBESE**





# Global Malnourishment Map



# Lowest Water Footprint

**1.1 Billion** people don't have access to clean drinking water but we use **15,500 Ltrs** of water to produce **1 Kilo of Beef**

**Just 360 Ltrs of water to produce one Kilo of Pulses**



**1,857  
Gallons/  
lb**

**Beef**



**756  
Gallons/  
lb**

**Pork**



**469  
Gallon  
s/lb**

**Chicken**



**360  
Gallons  
/lb**

**Peanuts**



**216  
Gallons  
/lb**

**Soybeans**



**43  
Gallons  
/lb**

**Pulses**

Source: Arjen Y. Hoekstra and Ashok Chapagain, *Globalization of Water*, U. of Twente, Waterfootprint.org  
National Geographic, April 2010

Every 4 **minutes 2090 Cows ; 9150 Pigs ; 334,120 Chickens** are slaughtered to feed the people but at the same time **100 children** die of hunger.

**Pulses are Ethical , Smart & Efficient Food  
Food-Feed-Protein**

**Agronomical benefits**

**Environment friendly**

**Lowest Water & Carbon Footprints**

Global consumption of  
Meat , abt 300 Million  
MTs , requires over 4.5  
Billion MTs of  
agricultural crops to  
grow

A target of just **10%** **replacement** of animal protein (**Meat & Dairy**) with vegetable protein (**Pulses**) will free up about **500 million MTs of food crop** in the market ensuring **adequate ECONOMICAL food supply to the world**

**USA alone could feed  
800 million people  
with grain that  
livestock eat** (without  
compromising the required per capita  
meat consumption)

**Cornell university ecologists**



**So in a  
nutshell**



**PULSES**







# Take Home Message

**= Promote Pulses & IYOP =**

**Help Fight Hunger & Malnutrition**

**Help Marginal Farmers**

**Give way to Healthy living**

**Save your soil & environment**

**Combat Climate Change**

# Thank you Invitation

**CICILS - WORLD PULSES CONVENTION**

**APRIL 2015**

**LAS VEGAS, USA**

**Estimated Attendees : > 800**

**From > 60 countries**

**[www.cicilsiptic.org](http://www.cicilsiptic.org)**



# Acknowledgements

**CGIAR**

**IFPRI ) Pulses Value Chain Potential in Ethiopia** Constraints and opportunities for enhancing exports July 2010

**USDA**

**BRIAN CLANCEY / STATPUB**

**FAOSTAT /FAO**

**WFP**

**CICILS-IPTIC**

**GAVIN GIBSON /HAKAN BAHCECI**