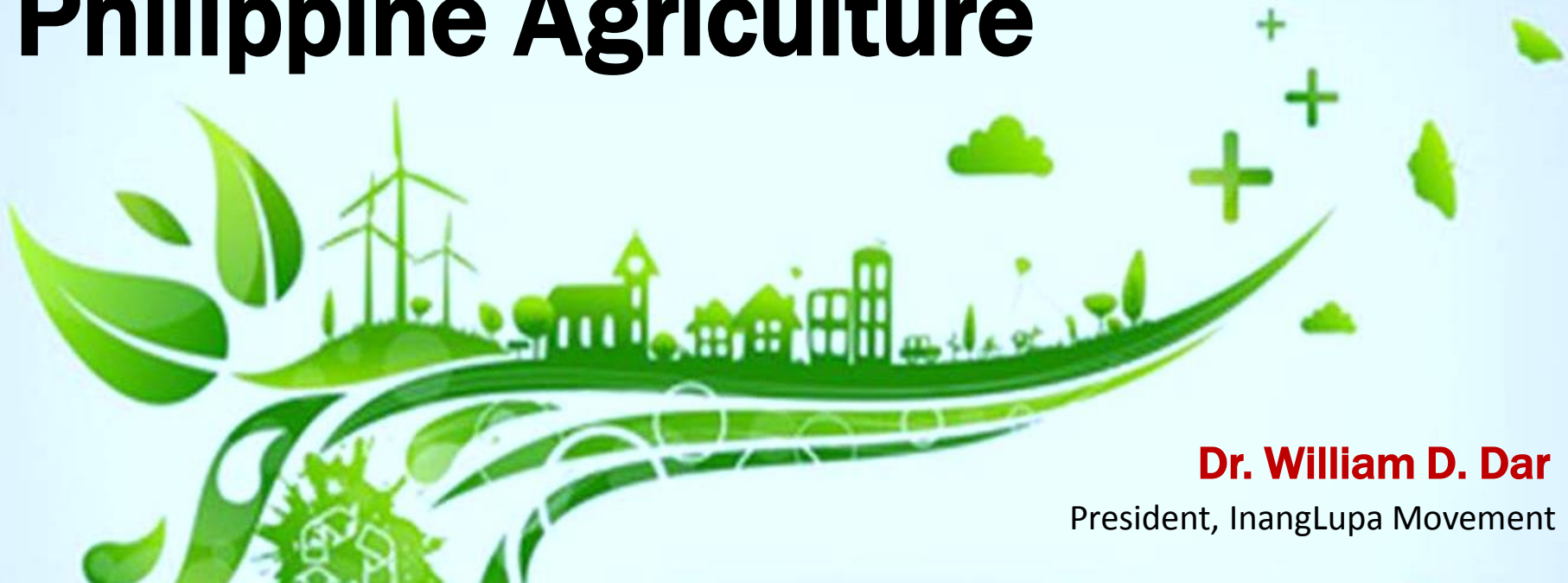


Modernizing & Industrializing Philippine Agriculture



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President, InangLupa Movement



Philippines Demographic Picture

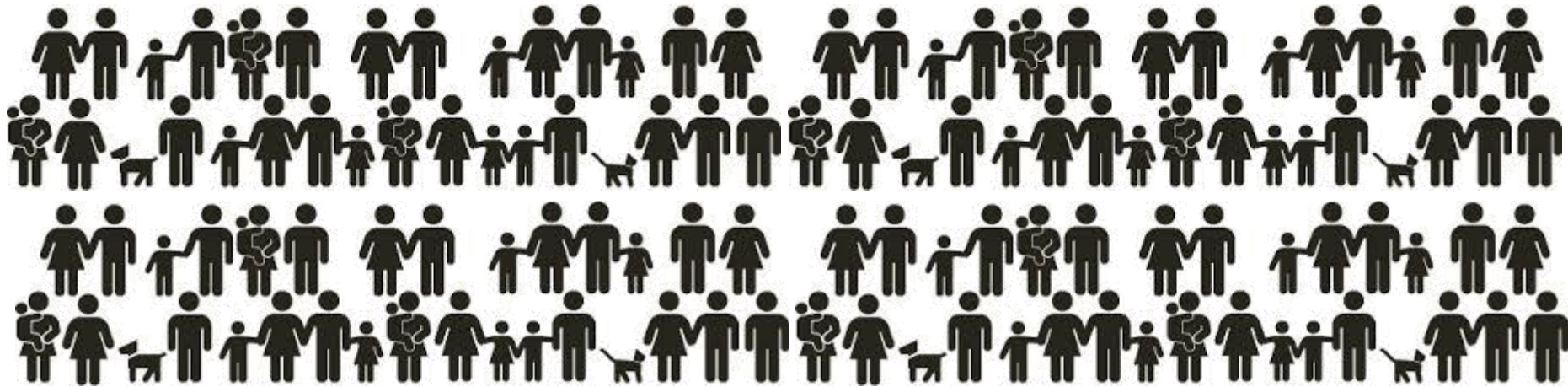
142 million

expected Philippine population
by **2045**



42 million

new born Filipinos in a span of
30 years, given the current
population of 100 million

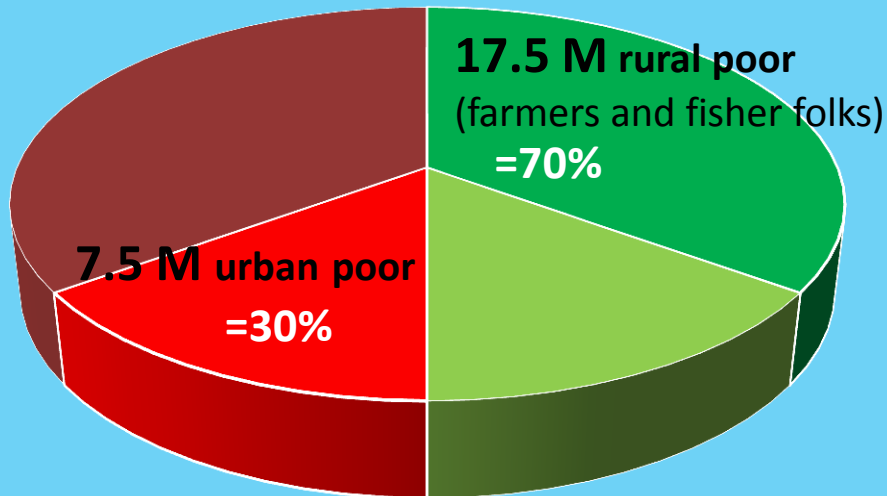


Philippine Poverty Statistics

2012, more than **quarter** Filipinos were poor
Using the poverty threshold income of **P 7,891**/month

25.2% = 25 M
National Poverty Incidence

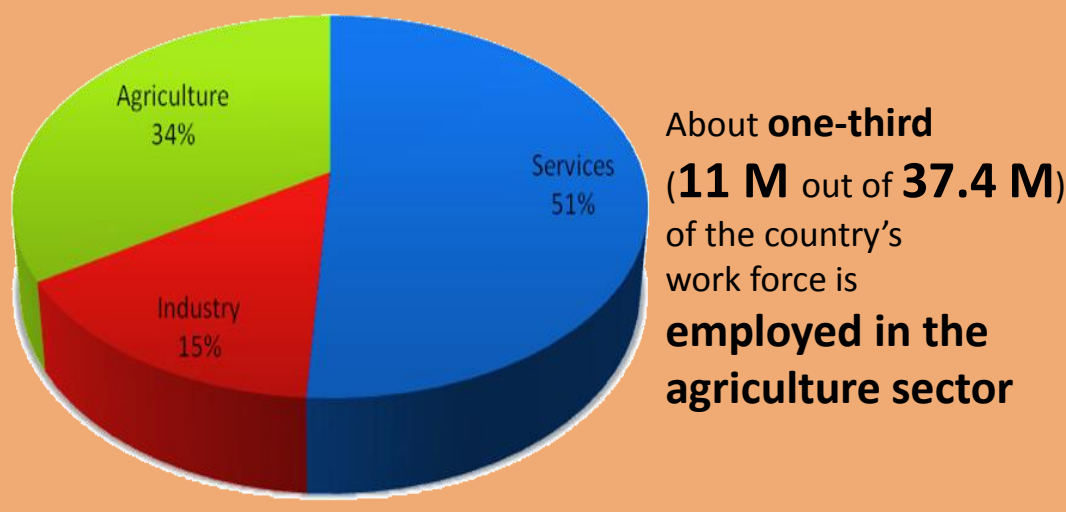
Distribution of the Poor



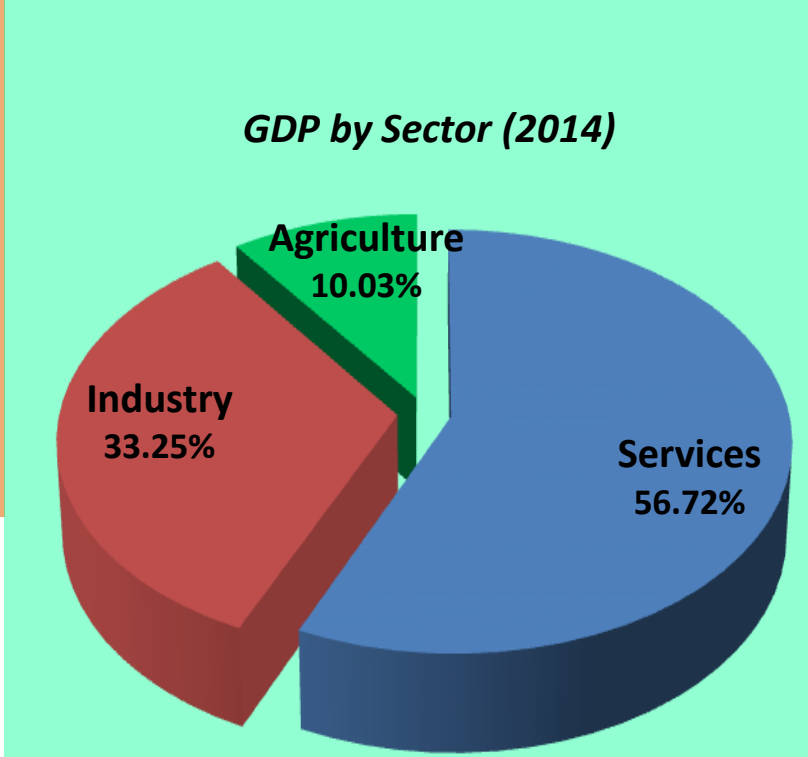
Poverty remains a mainly rural phenomenon, though urban poverty is on the rise. The **majority of the poor** are still found in rural areas and in the **agriculture sector**, primarily as **farmers** and **fisher folks**.



State of Philippine Agriculture

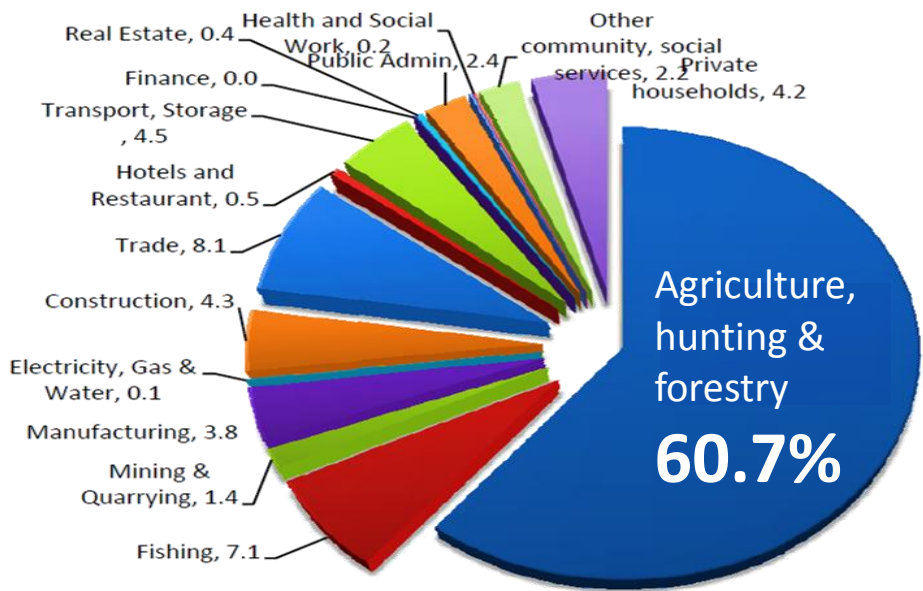


About **one-third** (**11 M** out of **37.4 M**) of the country's work force is **employed in the agriculture sector**



1995, the agriculture sector shares a relatively high value of **23%** of the country's Gross Domestic Product (**GDP**)

2014, one of the smallest contributor amounting to only **10.03%** of the **GDP**



Distribution of poor underemployed worker (2010)

Philippine R&D investments

2nd to the lowest

GERD (Gross Expenditure for R&D) as a percentage of
GDP among Southeast Asian countries
(at the same level as Vietnam and Myanmar)

2002, GERD was **0.15%** of GDP

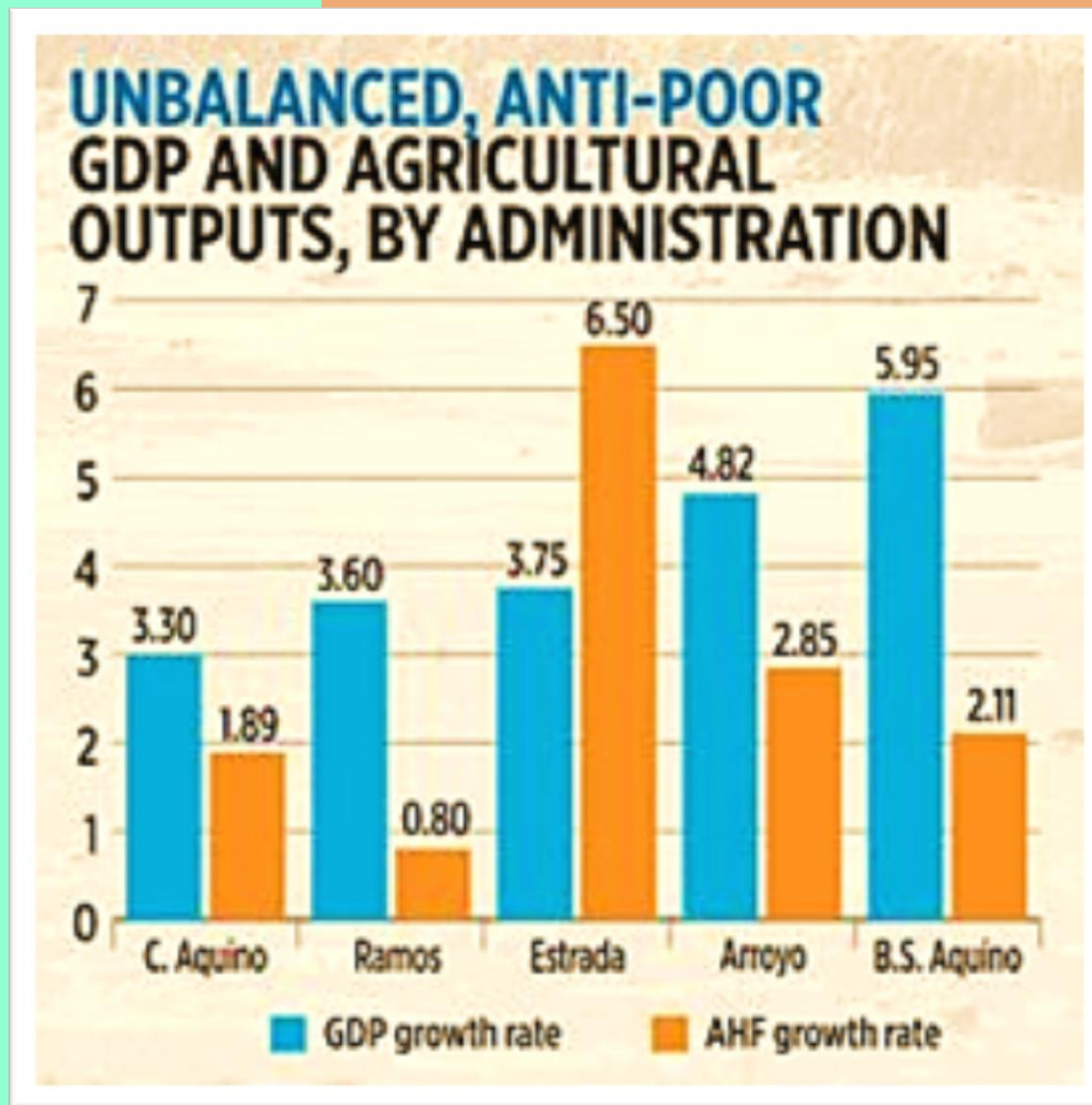
2003, GERD was **0.14%** of GDP

2005, GERD was **0.12%** of GDP

UNESCOs recommended GERD

1% of GDP

In subsequent years, Philippine GDP has grown significantly and GERD has been estimated also to increase, but GERD as a percentage of GDP has remained **below 0.5%**



*Performance of Agriculture for the period **1986-2014** was not impressive.
The agriculture sector grew by an average of **2.4%**.*

*(Philippine Statistics Authority
and Business World)*

Issues & Challenges

In terms of Human Capital, the Farmers and Fisher folks

- *Ageing and inadequate knowledge and skills of farmers and fisher folk*
- *Meager income*

In terms of Services

- *Limited access to market, credit, and financing*
- *Inadequate Capability*

In terms of Commodities

- *Costly production inputs*
- *Low productivity*
- *Supply Chain Inefficiencies*



In terms of Infrastructure

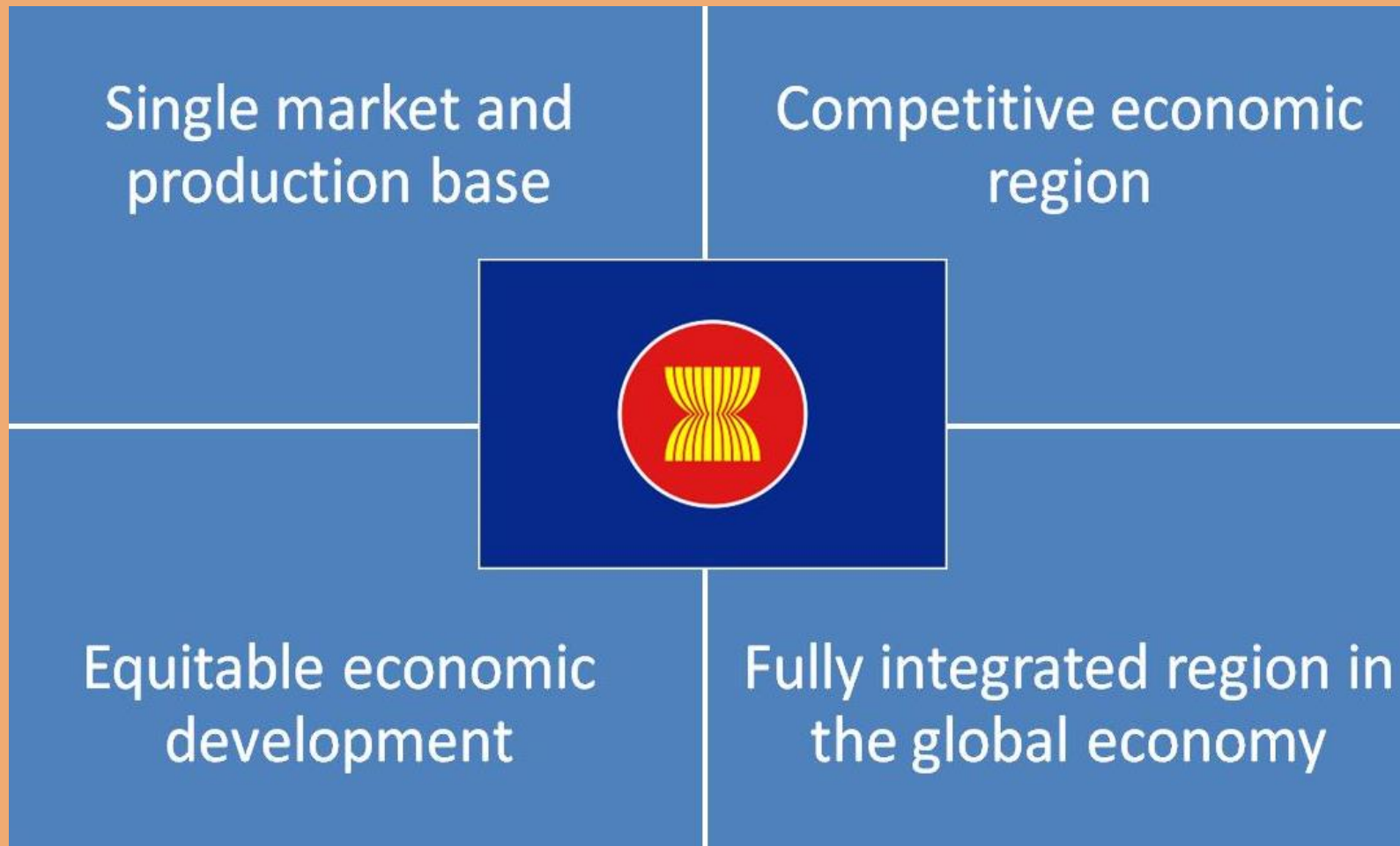
- *Limited adoption of technologies*
- *Problems with Irrigation infrastructure*

Climate change and Environmental Degradation as cross-cutting issues

- *Climate Change*
- *Environmental Degradation*
- *Indiscriminate Land Conversion*

**How did the
Philippines
do in ASEAN?**

AEC regional integration pillars

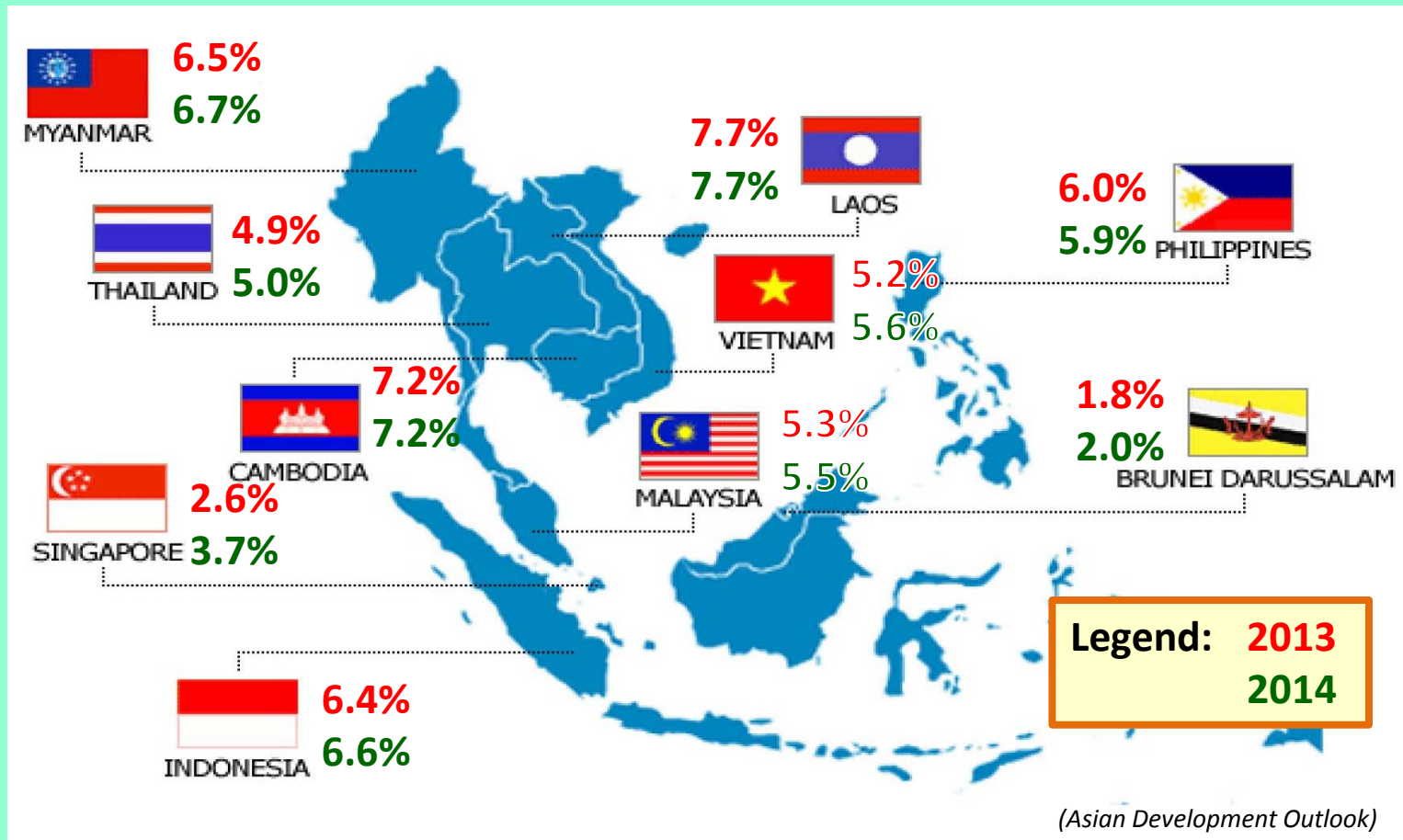


45.7% in AEC scorecard;
average ASEAN score is **67.5 %**

World Bank's Ease of Doing Business Report:
Philippines' rank **dropped** from
141 in 2009 to **144** in 2010

ASEAN Economic Community (AEC) GDP growth rate (% per year)

Free trade + effective policies =
promise of inclusive growth and development



Is Philippine agriculture ready for AEC?

Top Philippine agricultural exports



Coconut (oil) – 26%



Fresh banana – 8.7%



Pineapple & products – 6.3%



Tuna – 5.8%



Seaweeds & carrageenan – 3.9%



Tobacco manufactured – 3.7%



Fertilizer manufactured – 3.3%



Milk & cream products – 3.2%



Fresh mango – 0.3%

Other Philippine agricultural commodities that can be developed for exports



Cacao



Coffee



Rubber



Palm oil



Peanuts & mixed nuts



Prawns



Papaya



Healthy drinks



Raw sugar

Self-sufficiency ratio (SSR)

- measure of the capacity of the country's domestic production to satisfy and meet its utilization requirements, including buffer stocks



SSR for Rice

Early 2000s – 90%

2011 – 95%

2010 – 80%

2014 – 96%



SSR for Beef – 80% and below



SSR for Pork & Chicken – 90% or up



SSR for Corn – 95%-100%

Comparison of Rice Statistics in Philippines, Thailand and Vietnam (2012)

	Rice Harvested Area*	Irrigated Rice Area	Rice Production (Paddy)	Population	Rice yield
	Million ha	Million ha	Million tons	Million	Average ton/ha
Philippines	4.7	35%	18.0	100	3.8
Thailand	10.8	> 60%	30.6	88.8	2.8
Vietnam	7.7	97%	44.2	64.5	5.7

**Including double- or triple-cropped irrigated areas (IRRI)*

How can we grow Philippine agriculture at 4-6% annually?



What should be done to eradicate poverty in agriculture?

- Make agriculture a profitable and competitive sector
- Link agriculture with manufacturing (value-adding) and trade (exporting)
- Government must provide a nurturing enterprise/business environment
- Bring more private sector investment in agriculture

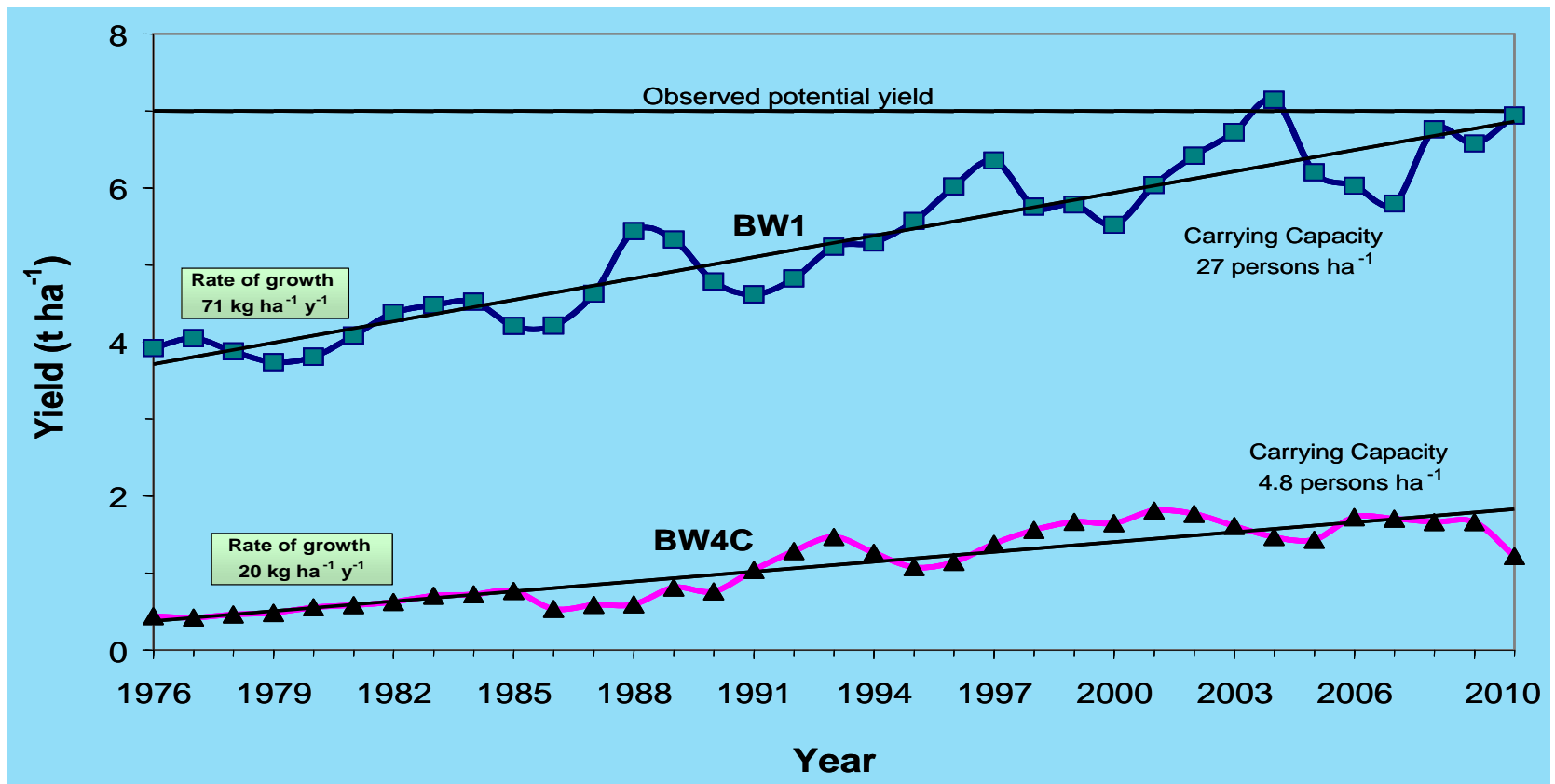


- Utilize science and technology to bridge agricultural gaps including breaking yield barriers
- Need for a world-class and well-compensated agricultural research system
- **Invest more in R&D for high-value commodities including product development**
- Reduction of cost of production

Narrowing the yield gaps

Rainfed agriculture: a large untapped potential

- Current farmers' yields are lower by 2 to 5 folds than the achievable yields
- Vast potential of rainfed agriculture needs to be harnessed



What should be done to eradicate poverty in agriculture?



- Improve poor people's access to land and water
- Craft watershed management – water supply framework (supply chain of water from source to sea)
- Irrigation service to high value crops other than rice
- Craft agenda that combines food and nutrition security, economic security and environmental sustainability

- Strengthen public extension service
- Make social protection complementary to agricultural growth
- Encourage youth to take agricultural courses to strengthen the country's agricultural workforce
- Need to develop the tree crops and aquaculture sectors



A green tractor is shown from a front-three-quarter view, moving through a vast, flat green field under a blue sky with light clouds. The tractor is pulling a dark-colored implement, and the field is filled with rows of young green plants.

Vision:

***A modern and industrialized
Philippine Agriculture***

An aerial view of a lush green field, showing a dense pattern of young plants in neat rows, stretching towards the horizon.

4 Pillars of a new Philippine Agriculture



4 Development Goals for the Agriculture Sector

Food Sufficiency

For the country to be sufficient in rice along with the diversification into high-value commodities.



Economic Security

For the farmers and fisher folk to consider agriculture as remunerative ventures thru enterprise development including value addition.



Nutritional Sufficiency

For the crops and other commodities to meet the nutritional demands of the people following the balanced diet framework.



Environmental Security

For the conservation and sustainable management of natural resources including coping with climate change.



4 Major Objectives



Productive

High productivity can be achieved by utilizing high yielding varieties, using innovative & efficient technologies for production, & employing effective ways of processing agricultural & fisheries outputs.



Profitable

High profitability can be achieved by reducing losses in harvesting, processing, and transport; it is also achieved by obtaining higher prices for farm produce.



Competitive

For our agricultural products including value-added products to be competitive in the global market, we must produce quality commodities that can meet and satisfy the international export standards.



Sustainable

Sustainability is the capability of a farm undertaking to produce continuing benefits with minimal long-term effect on environmental resources such as vegetation and water.

Plans and Programs

categorized on development goals

1. Food Sufficiency

- Rice and other staples program
- Corn program
- Water catchments to supply irrigation water
- Seed banking
- Post-harvest training and technologies



2. Economic Security

- High value commodities (crops, livestock, fisheries)
- Agro-fisheries Enterprise Development
- Coconut, vegetable and legumes
- Research on product development
- Mechanization through a common service facility
- Pursue and enhance international trade relations and marketing arrangements
- Enhance regulatory and related services

Plans and Programs

categorized on development goals



3. Nutritional Sufficiency

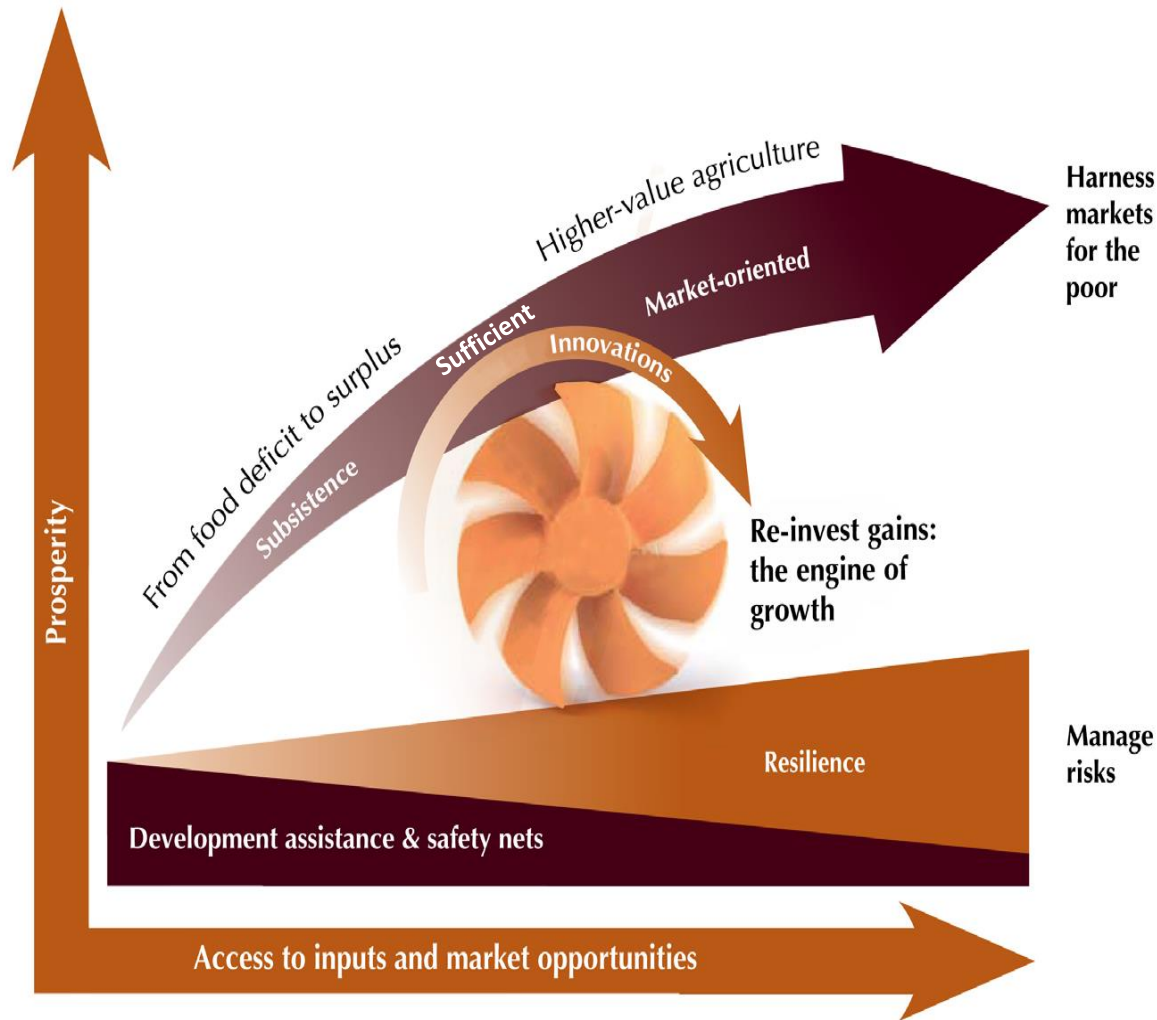
- The balanced diet framework will be strengthened
- Promotion of urban agriculture

4. Environmental Security

- Conduct of soil analysis and rejuvenation programs
- Agrometeorological Information Services
- Climate-resilient infrastructure
- Effective disaster management
- Sustainable conservation and management of fisheries resources



Inclusive Market-Oriented Development (IMOD)



- is a development pathway in which value-adding innovations (technical, policy, institutional and others) enable the poor to capture larger rewards from markets, while managing their risks. The larger rewards motivate the adoption and impact of these innovations.

How is IMOD different from the value chain approach?

Proactively including the poor, managing risks and including a development pathway all distinguish IMOD from conventional value chain approaches.

Farmer Empowerment

5 qualities of a farmer

1. Producer
2. Team player
3. Scientist/Technologist
4. Businessman/Entrepreneur
5. Environmentalist



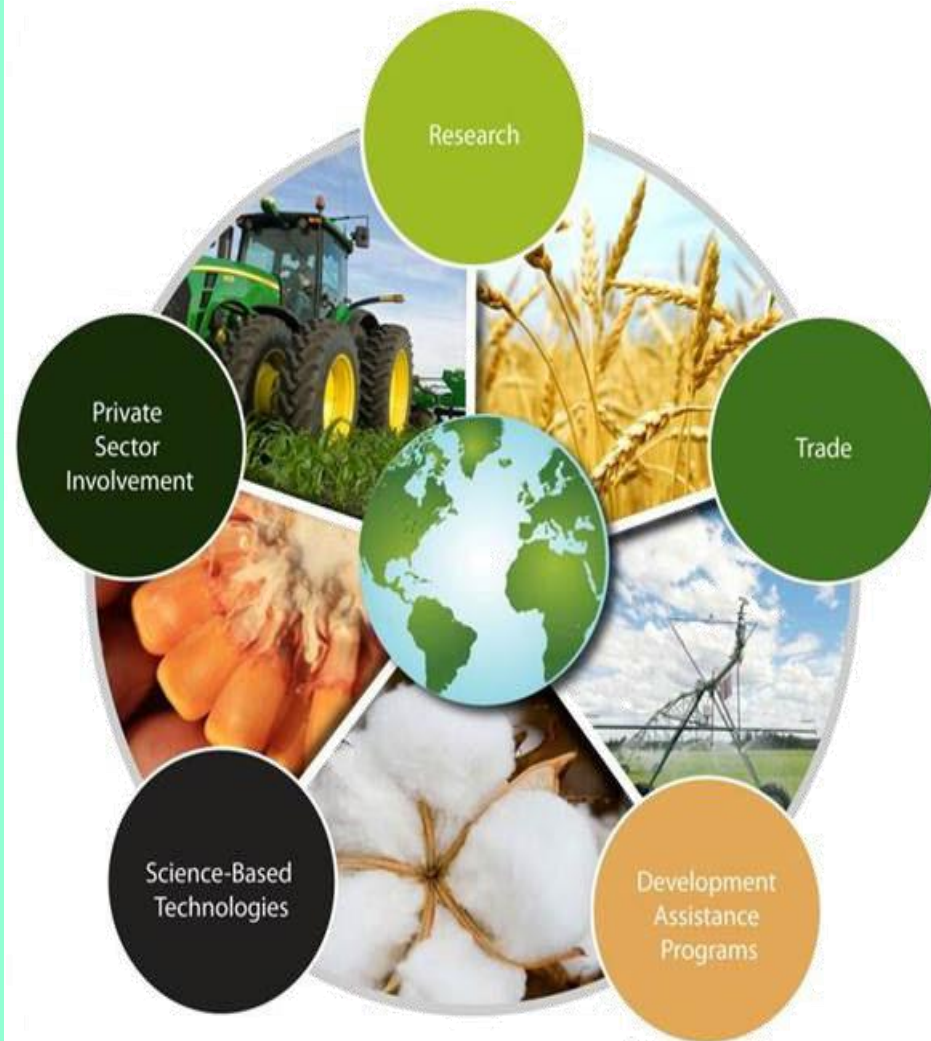
Agricultural Modernization

Agricultural Modernization is the process of transforming the agricultural sector into one that is dynamic, technologically advanced, and competitive, yet centered on human resource development, guided by the sound principles of social justice.



Agriculture and Fisheries Modernization Act of 1997

- production and marketing support services
- human resource development
- research development and extension
- rural non-farm employment
- trade and fiscal incentives
- enterprise development
- value-addition
- processing
- trade and export



Agribusiness: catalyst to drive regional economic transformation

Transform & upgrade agriculture from traditional farming to a globally competitive agribusiness sector

Phase I 2014-2017

- rubber, coconut, mangoes, coffee, cacao, banana, palm oil; other high value crops
- supply chain gaps

Phase II 2018-2021

- strengthen agro-processing & its linkages to production ---R&D; strengthen supply chains, upgrade commodity clusters; access to technologies, finance; regulatory & certification system

Phase III 2022-2025

- deepen participation in Global Value Chain (GVC)
- Philippines as agribusiness regional hub

(Source: RM Aldaba, DTI)

Agricultural Industrialization

- Linking agriculture with manufacturing (value-adding) and trade (exporting)
- Continuing process of mechanization
- Able to produce large quantities of food due to the farming methods used. Instead of animal and manpower, industrialized agriculture utilizes large machines, which are more powerful and can work faster and harder



Maraming salamat po!

“Towards an inclusive, science-based, resilient and market-oriented Philippine agriculture”

Email me at:

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Become an InangLupa volunteer, register at :

<http://inanglupa.weebly.com/become-a-volunteer.html>

