

# **Socio-economic Transformation of Agriculture and Rural Development**

## **Long Term Scenario of A Lower Middle Income Country: Indonesia Case**

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# Introduction

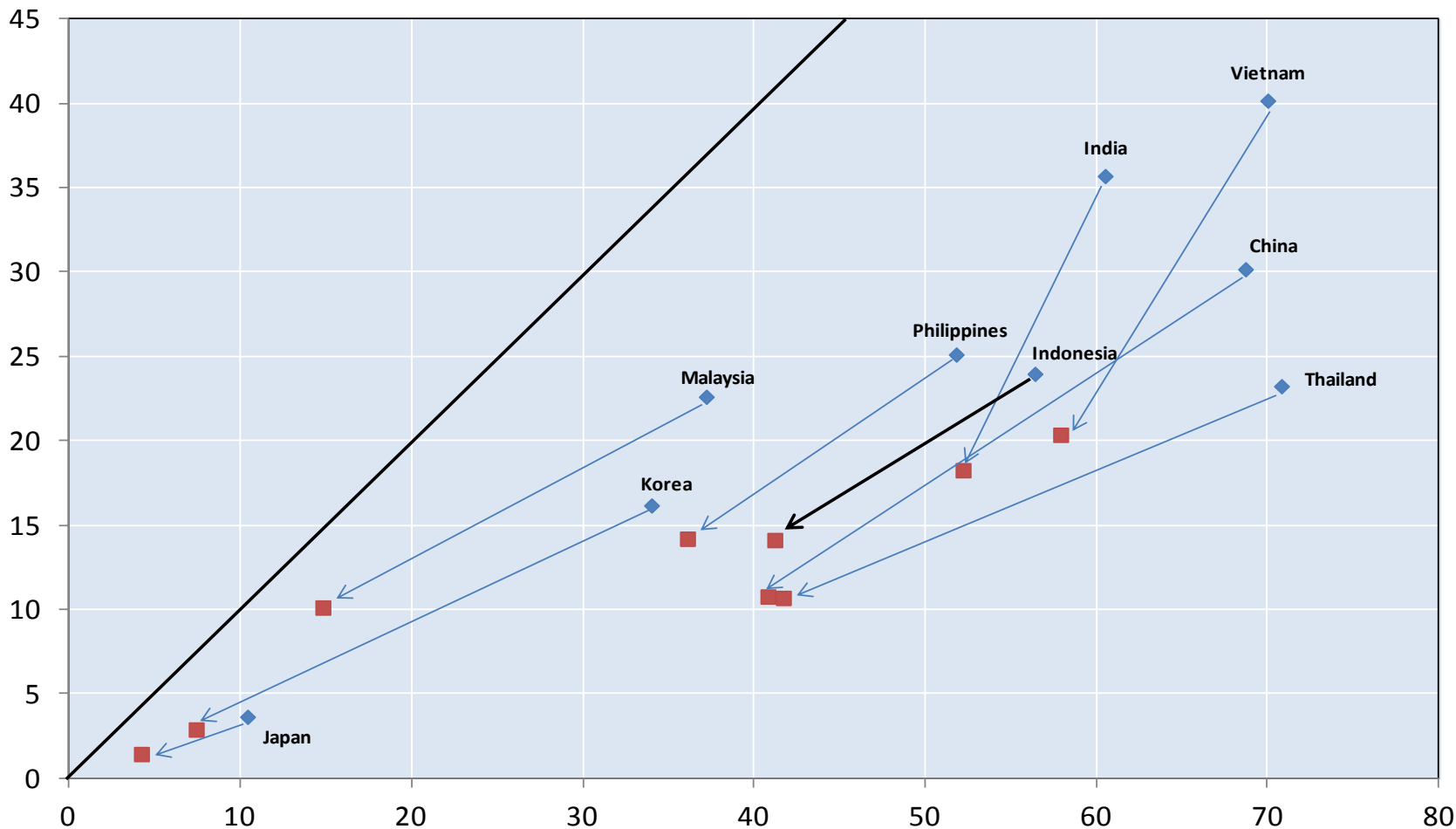
- Indonesia is the 4th most populous country in the world with a population of 237.6 million people in 2010 of which 49% lives in rural areas (BPS, 2010).
- GDP at PPP: USD 1 030 billion in 2010 (the world's 16<sup>th</sup> largest economy)
- GDP per cap. of USD 4 300 at PPP (2010)
- Indonesia is ranked as a lower middle-income country.

- The country has progressively shifted from a primarily agrarian economy towards stronger reliance on industry and services over the past five decades.
- The industrial sector contributed 47% to total GDP in 2010, including around 8% by the oil and gas sector, and 24% of manufacture.
- Agriculture share on GDP: 15% and employment share: 38%

# Comparison of countries share of agriculture sector in GDP and share of employment (1980-2007)

◆ 1980 ■ 2007

Agricultural sector's share of GDP



Agricultural sector's share of employment

# Long Term Transformation Challenges for Rural Development

Current Traditional Challenges

as a lower middle income countries

(poverty, less access to basic need, minimum public facilities and capital, low productivity of human resources, food security)

Vs

Globalization, Climate Change,

New Paradigm of Sustainable Development

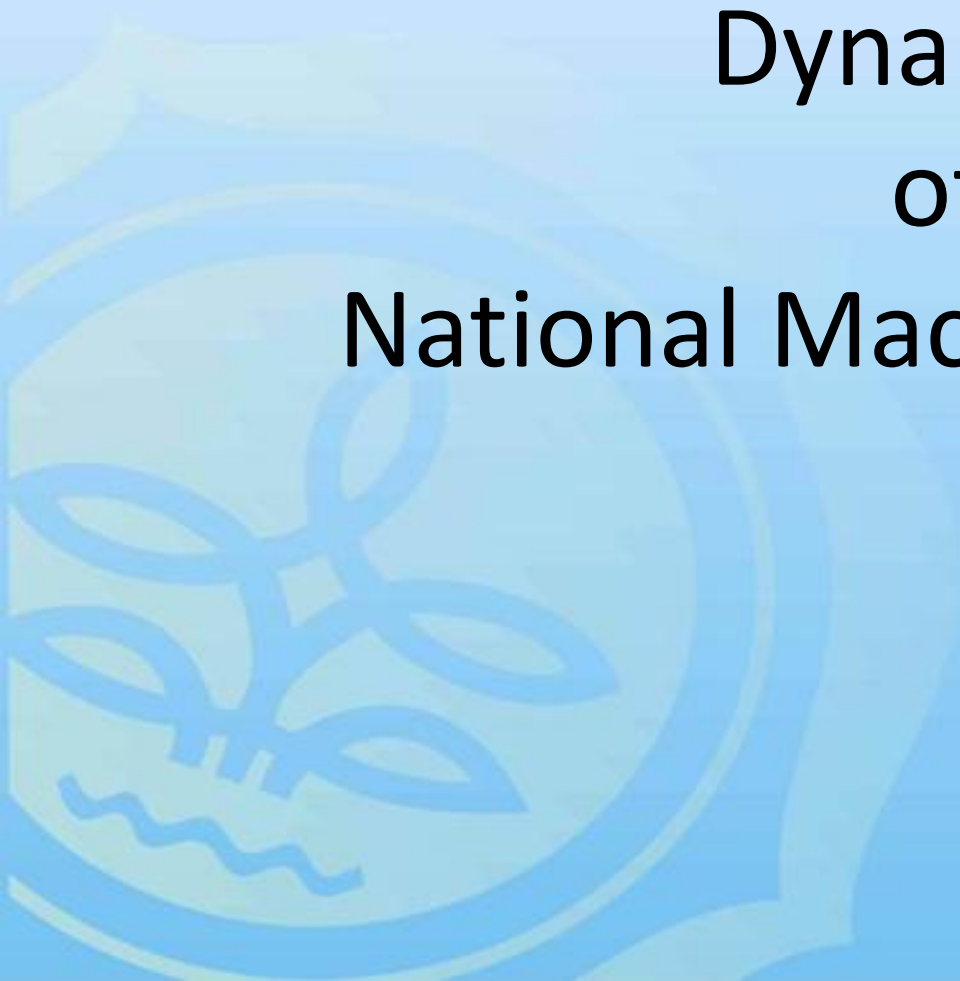
- (1) Diversification of Rural Economy
- (2) New and renewable energy, and
- (3) Shifting of consumption pattern

- Domination of small-scale/landless and low productive traditional farmers have been creating labor surplus in rural areas (disguised unemployment)
- Massive rural-urban migration, overurbanization in main cities, informal sectors, trans-national labor mobility and others.
- Population growth rate is considered high (1.5% per year) and still high for more then next 2 decade including in rural,
- **Job-creation policy** is the most important issue
- Developing rural based agricultural and bio-processing (downstream sectors) in rural areas: shaping a more convergence urban-rural development

- The Ministry of Agriculture is preparing “Long-Term Development Planning for Integrated Agriculture System in Indonesia 2013-2045” (including Forestry, Fishery, Agro/bioindustry and Rural Development)

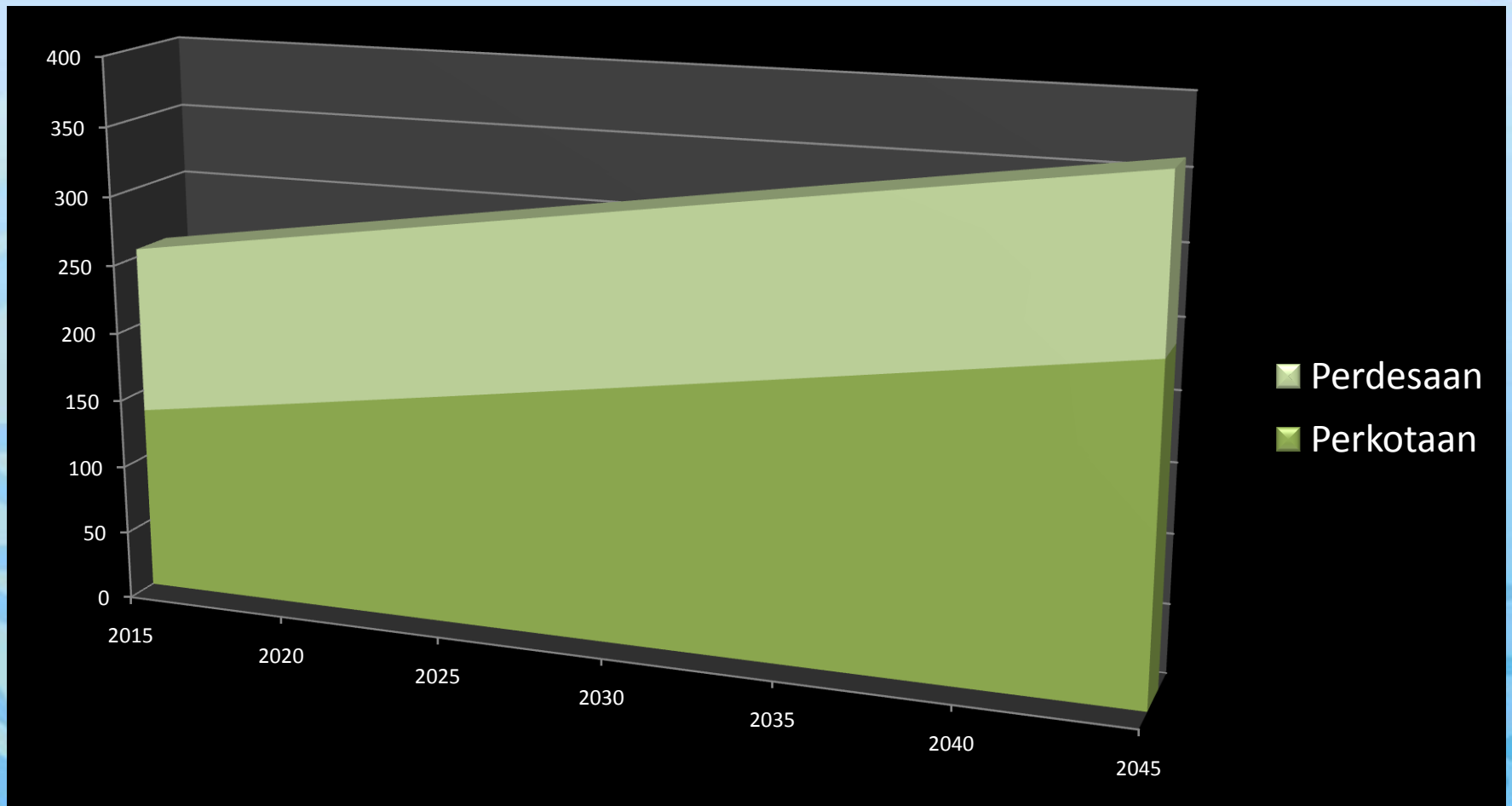
Bioindustry development have been chosen as long term rural based economic prime mover

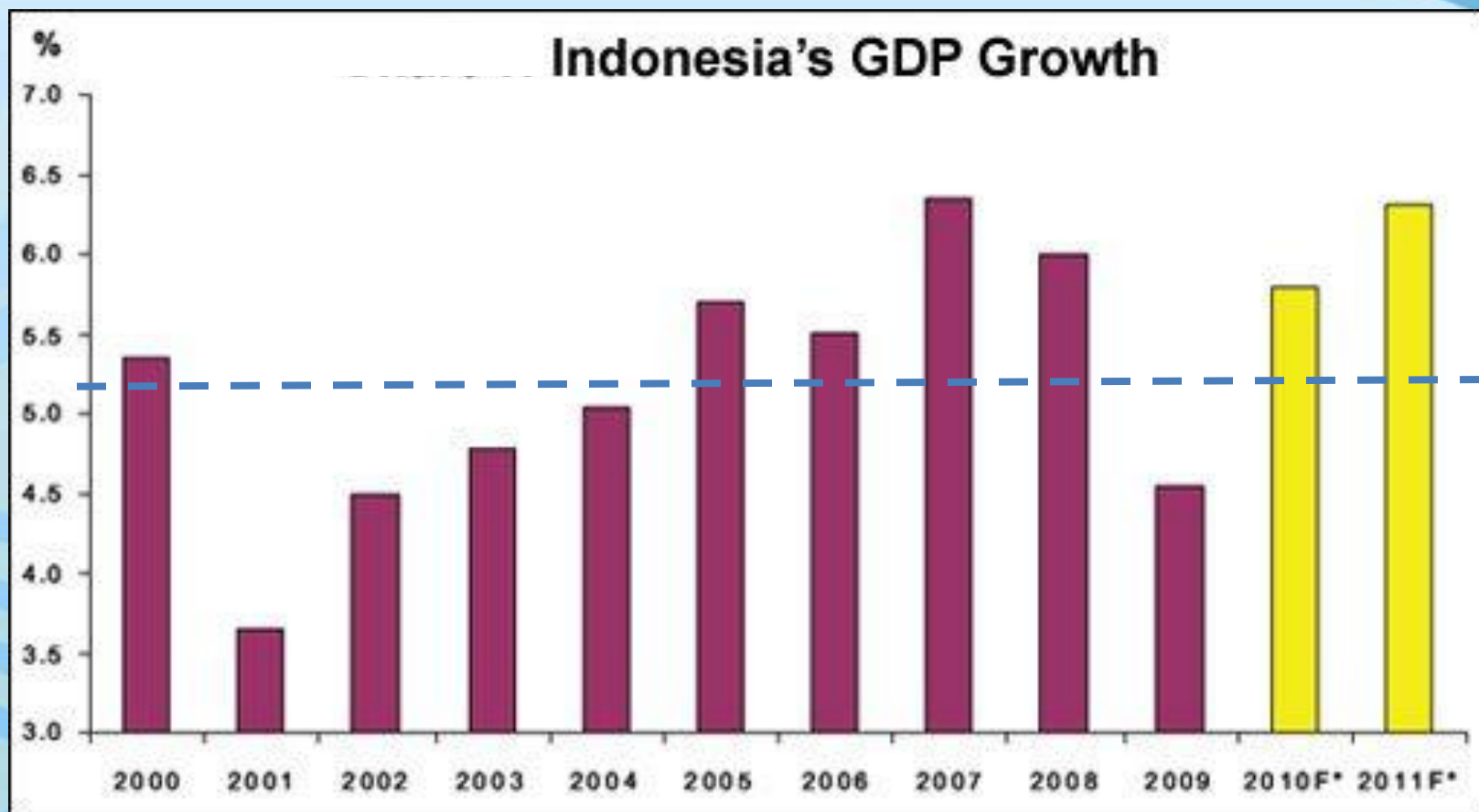
# Dynamics of National Macro economy



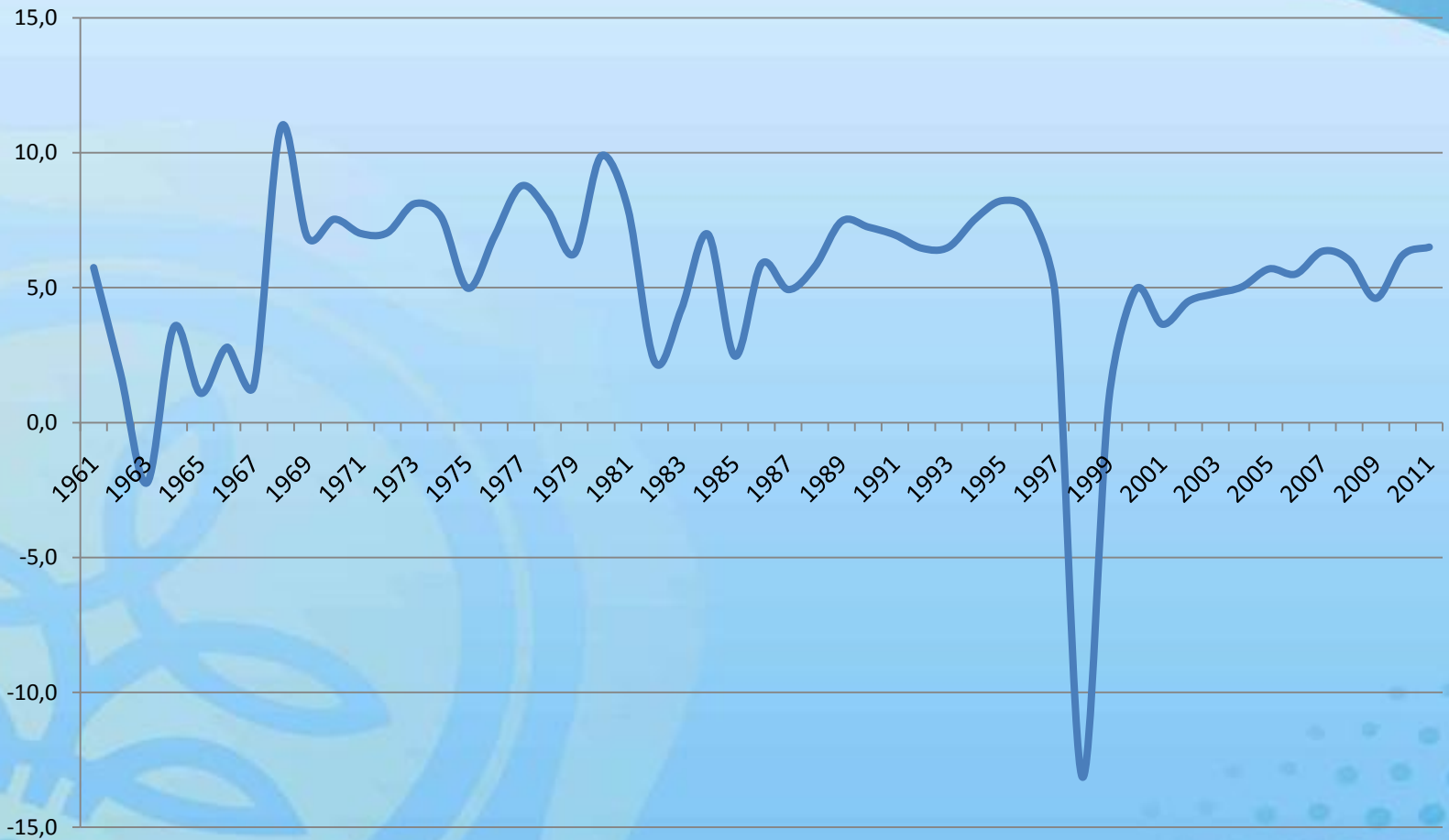


# Pertumbuhan Penduduk Perkotaan dan Perdesaan (2015 -2045)



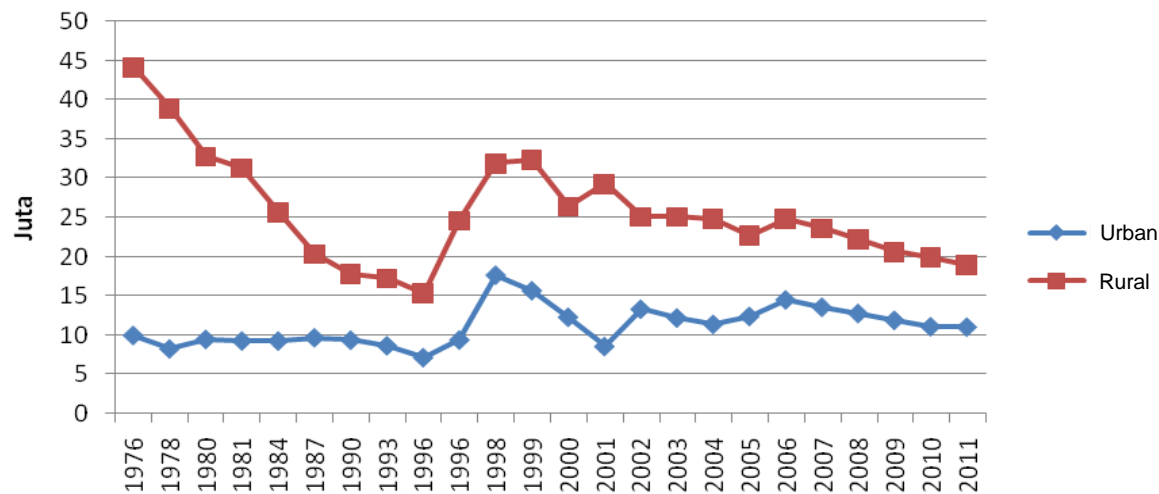


# Economic growth rate(%), 1960-2011

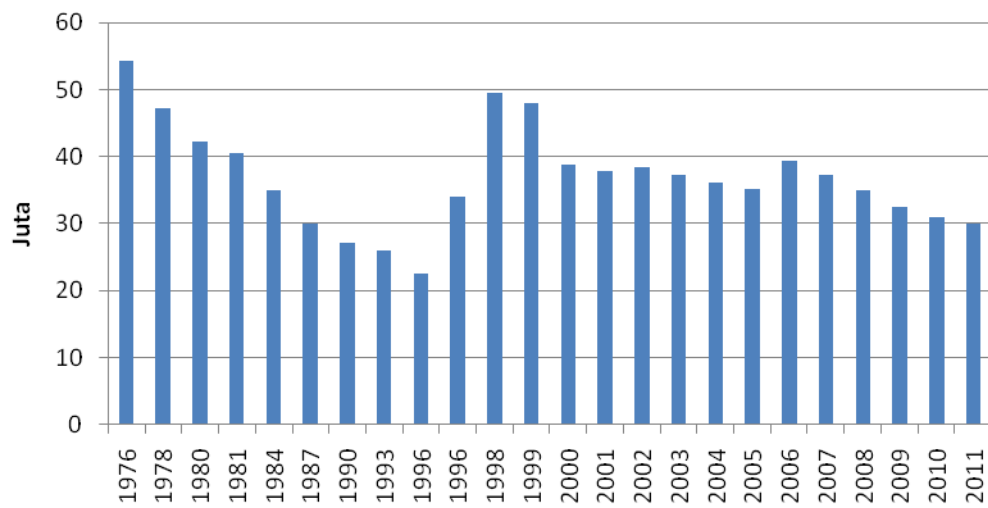


Sumber: Badan Pusat Statistik

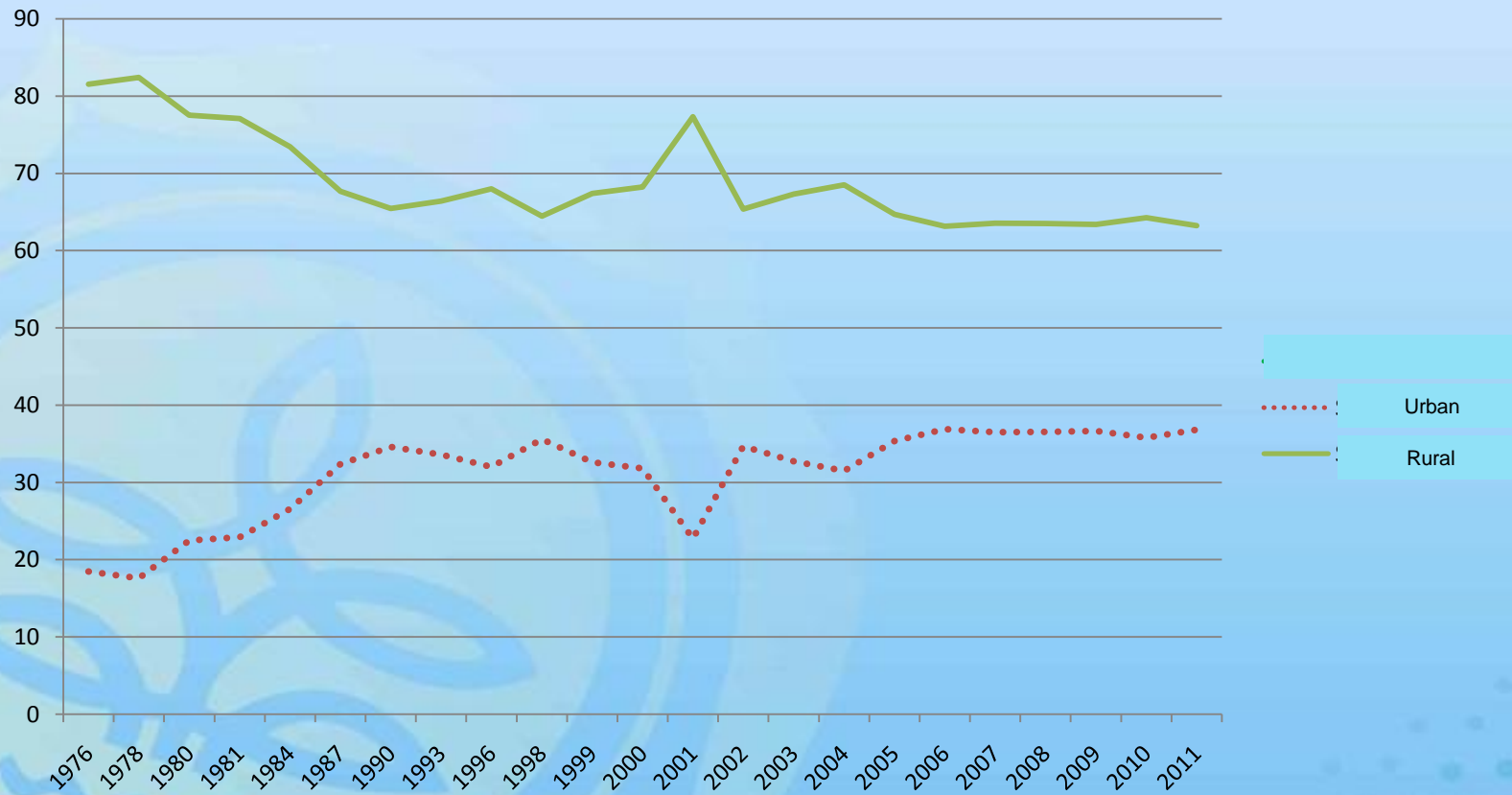
### National Poverty Rate (%)



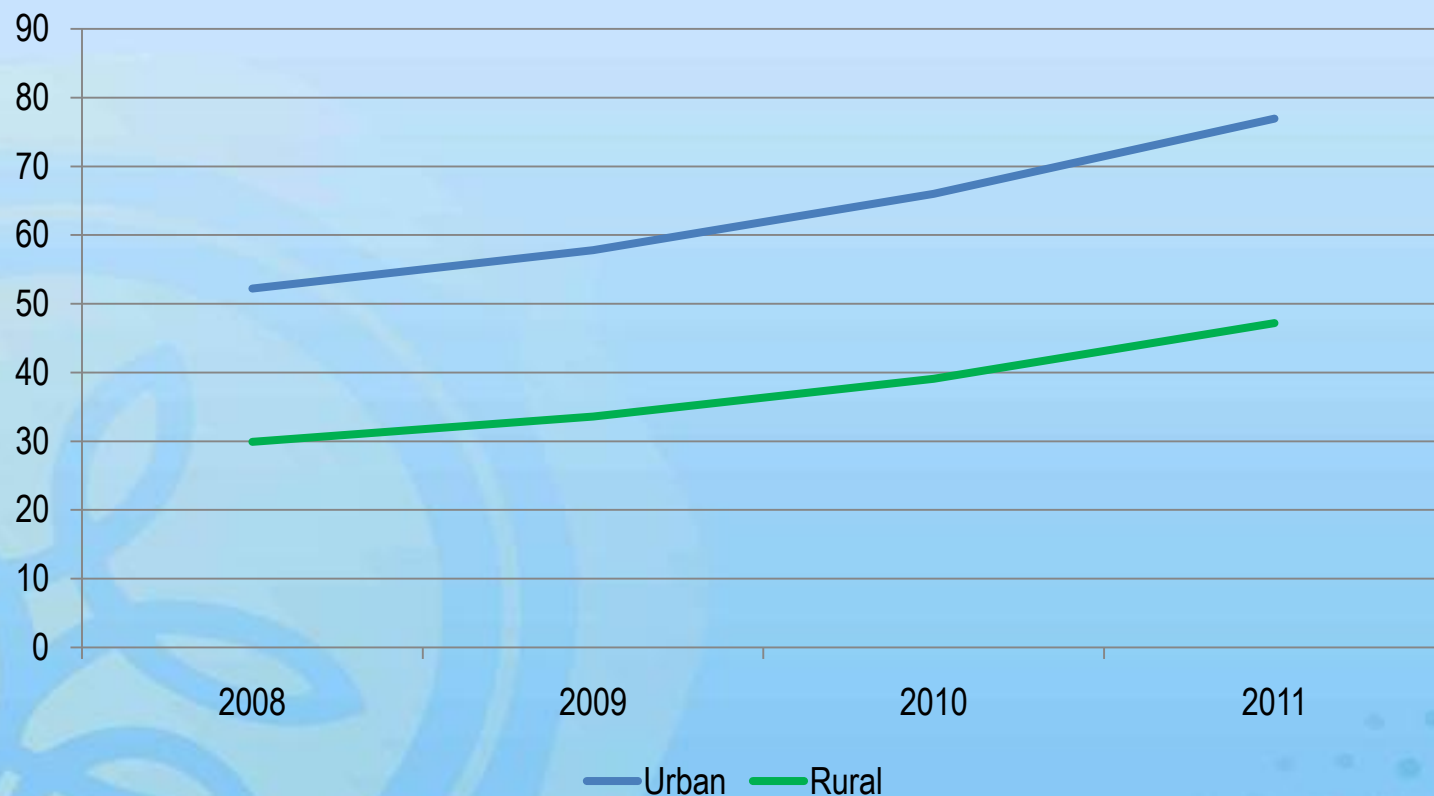
### National Poor Population



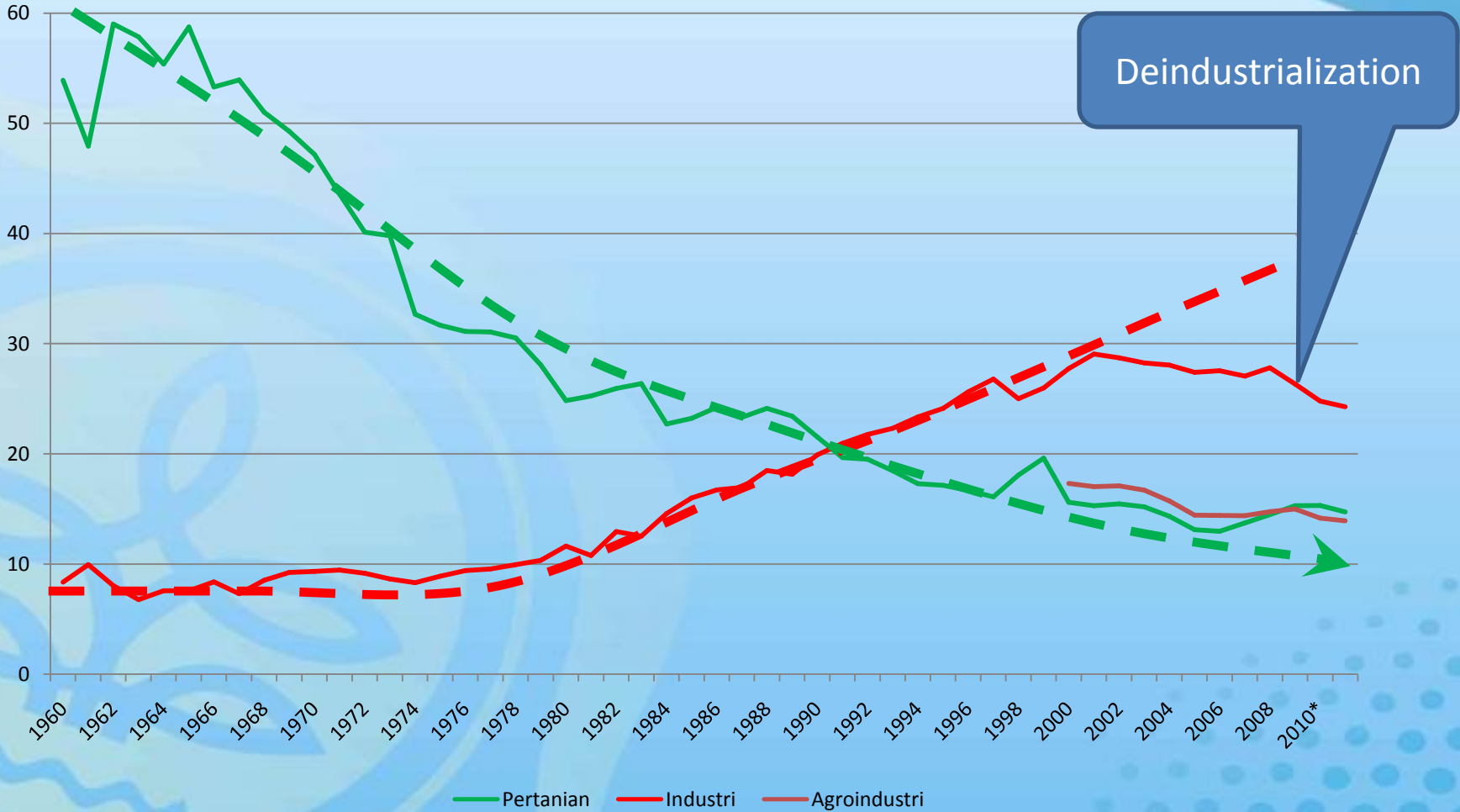
# Share of Urban and Rural Poverty (1976-2011)



# Urban & Rural Monthly Income per capita (US\$, 1\$=9.500)



# Manufacture Industry vs Agriculture sectors Shares in National GDP (1960-2010)



# A need for Industrial-Agriculture Transformation

**Deindustrialization:** For more than a decade, Indonesia has been experiencing a relatively stagnant transformation in term of GDP (agriculture vs manufacture)

**Lack of labor absorption in Manufacture:** Manufacture sectors capacity on creating job (labor absorption) is consider very low, far behind its GDP's growth and its GDP share (25%). Labor absorption in manufacture was relatively stagnant (12%) for more than two decades.

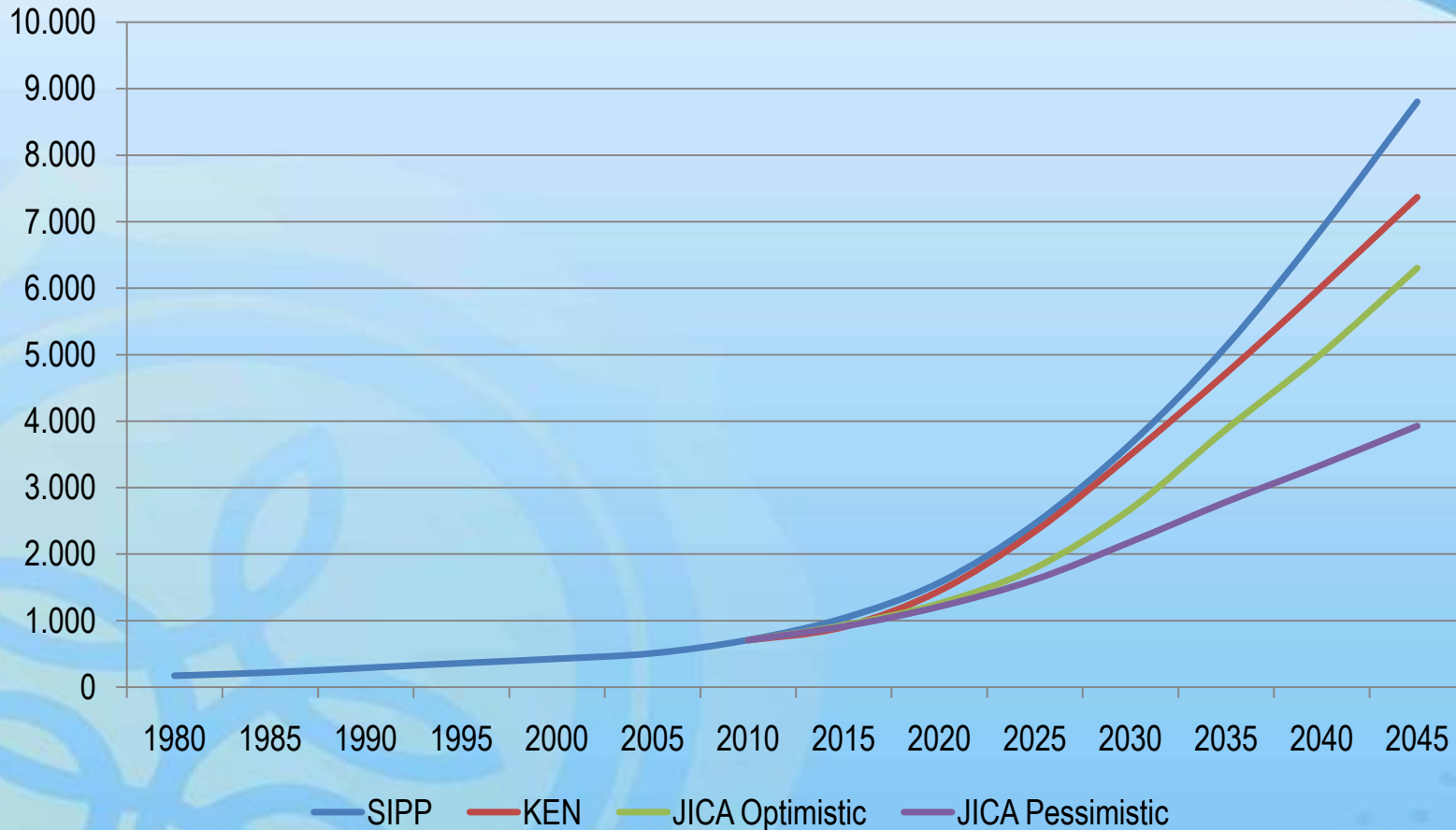
Foot loose Industries

Rural economies that predominated by leading Primary sectors (palm oil, rubber, coal mining, etc) are trapped to be raw material exporters

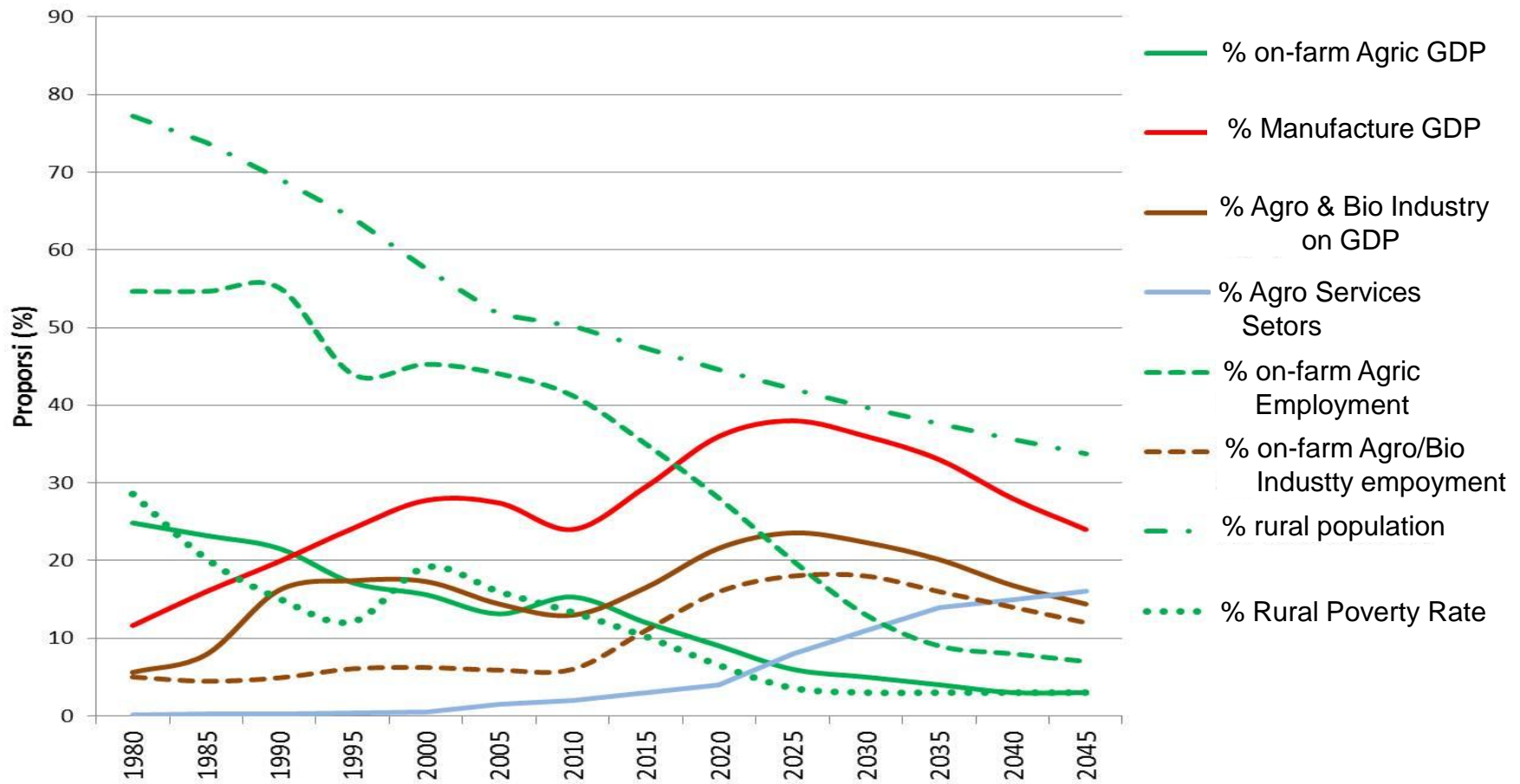
Weak linkages between main primary sectors and manufacture industry.



# Indonesia **GDP** Scenario (constant 2010 billion US\$)



the world's  
10<sup>th</sup> largest  
economy



**Long term  
Scenario of Economic Transformation (1980-2045)**

# CONCEPTUAL FOUNDATION for Long Term National Development 2013-2045

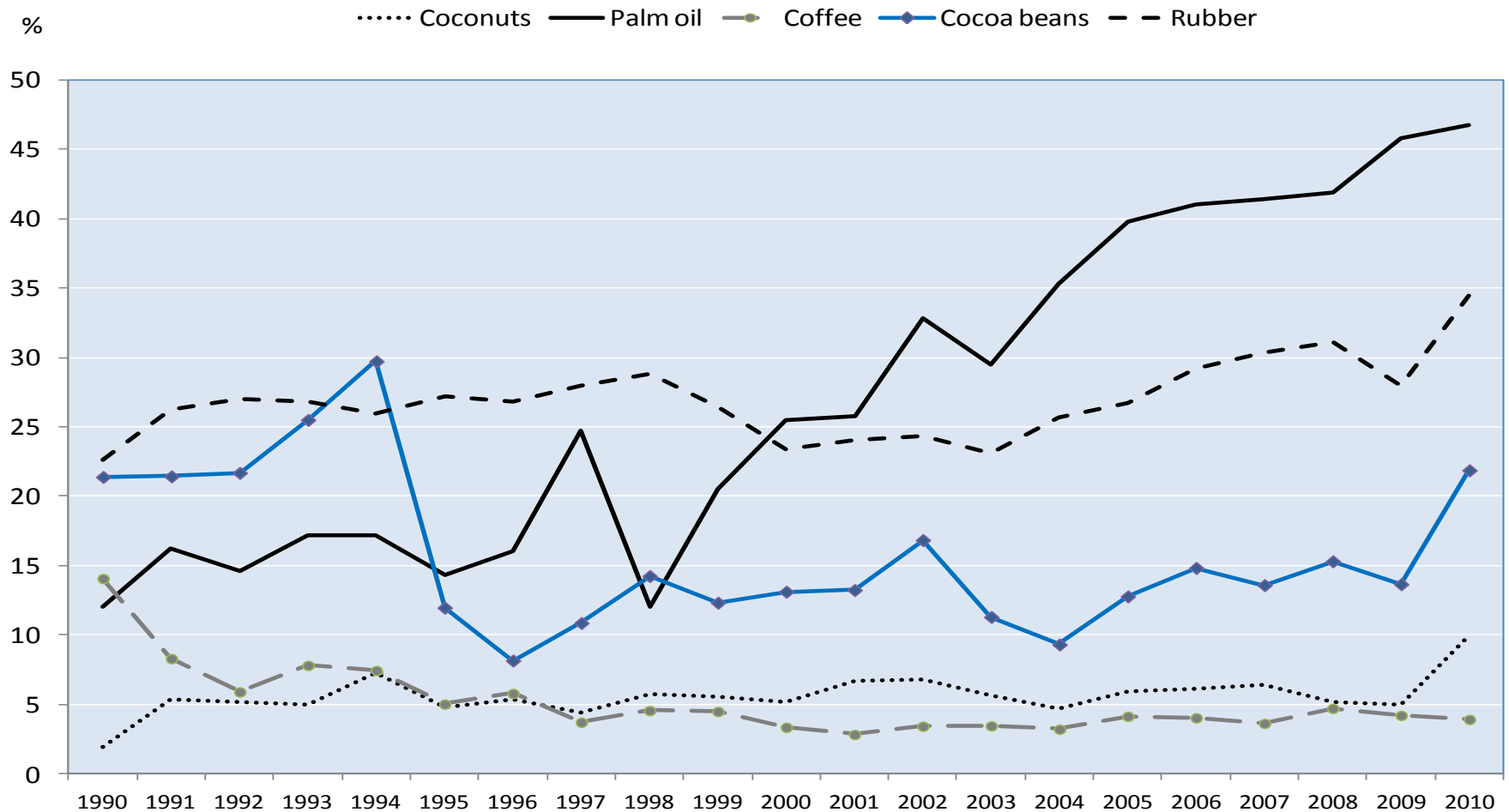
## TIERED STRATEGY:

1. GENERAL STRATEGY: THE DEVELOPMENT OF **BIOECONOMY- TECHNOLOGY AND BASED SCIENCE**
2. OPERATIONAL STRATEGY :
  - a. NATIONAL LEVEL: the development of the based “Agriculture for Development” paradigm, and
  - b. SECTORAL LEVEL: the development of Sustainable systems agriculture-based Bioindustry in rurals.**

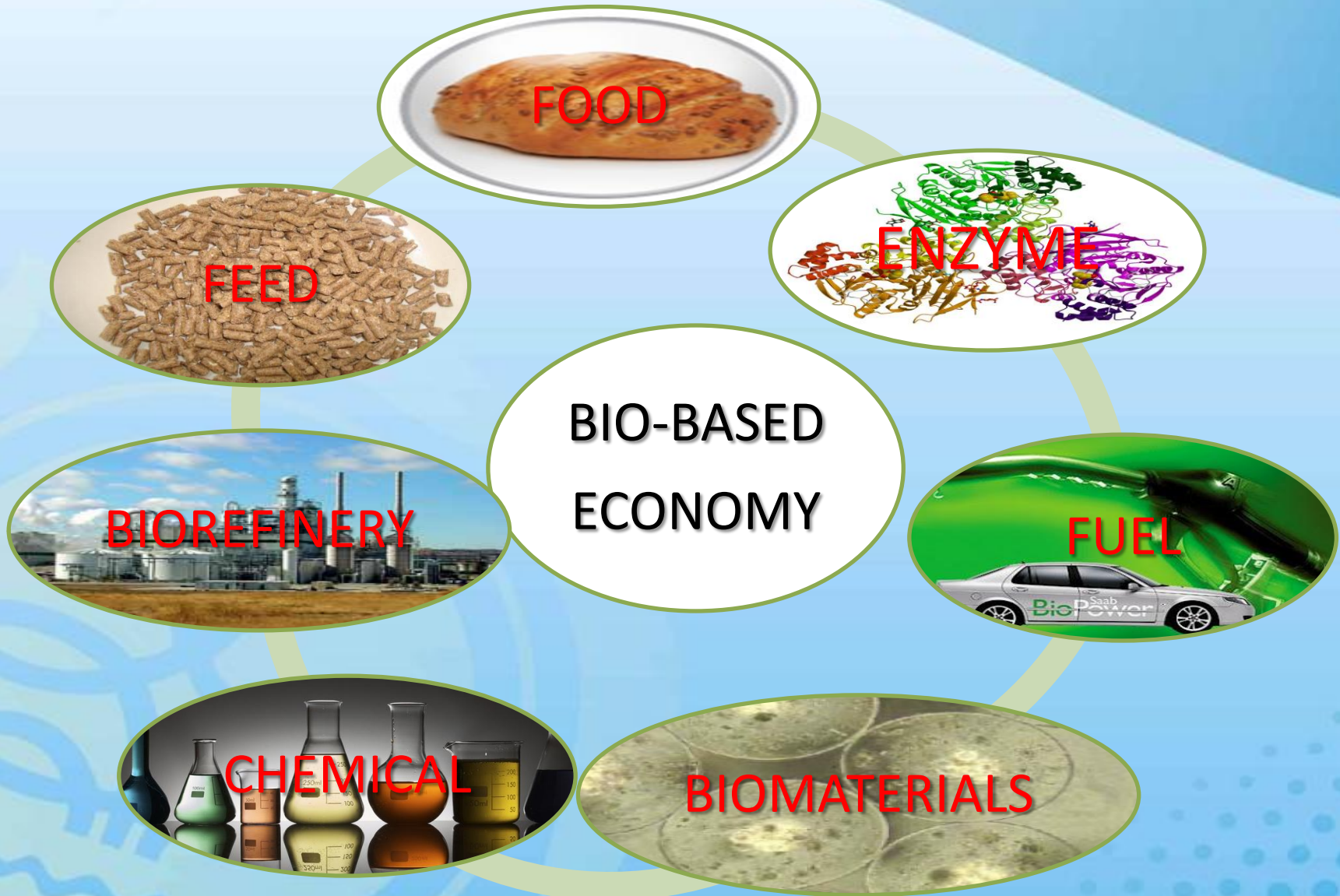
# Bioprocess (agriculture) as solar energy transformation through bio-processing

- It takes million years to produce fossil-based energy through bio-geo-chemical process
- But we only need a hundred year to consume it
- Agriculture and bio-processing (plant, animal and microorganism) can produce energy, biomass and traditional agricultural products (food, feed, fiber, etc)

# Indonesia Export Share on some agricultural in the World (1990-2010)



# COMPONENT OF BIOECONOMY



# VISION of AGRICULTURE AND RURAL DEVELOPMENT 2045

“To be a prosperous, dignified, independent, fair and prosperous country with **competitive and sustainable agricultural bioindustry system** supported by advanced technology driven agriculture, forestry and marine resources economy”

# MISION

1. To develop spatial plan and agrarian reform as the basis for sustainable bioindustry system development;
2. To develop sustainable agroecological tropical integrated agriculture bioindustry system through the protection, preservation, utilization and development of genetic resources, and extension, development and conservation of agricultural land;
3. To develop economic activities for agricultural input, production, information, and technology within the sustainable bioindustry system through the protection and empowerment of agriculture human resources;
- 4. To develop agriculture processing system through increased added value of extended post harvest within rural based agro-energy and bioindustry;**
5. Develop domestic and global agricultural value chain management system for farm products through the development and empowerment of agriculture quarantine;



# MISION...

6. Develop agricultural research for development system based on local specific innovation, quality human resources development, improved entrepreneurship, and strengthening agriculture social capital to accelerate agricultural total factor productivity growth;
- 7. Develop rural agricultural infrastructure to accelerate the transformation process for agricultural and the national economy;**
8. Carry out imperative legislation, regulation and management program for the development of sustainable nationwide agriculture bioindustry.

# DIRECTION AND TARGETS

1. Annual income of industrial individual farmer of \$ 1,845 by 2020 and annual income of industrial agro-services farmer of \$ 7,500 by 2040;
2. National food self-reliance status by 2020, national food sovereignty by 2025, and community food sovereignty by 2030;
3. **Self-reliance in energy through the implementation of integrated agro-energy for a quarter of the total rural areas by 2020, and for the total rural areas nationwide by 2035;**
4. **Integrated rural agriculture-bioindustry system for substitution of 75 percent of national fossil-based products national product by 2030 (bio-fuel)**
5. **Bioservices/agroservices sector as economic prime mover for a quarter of total rural areas by 2030, and throughout the country rural areas by 2040;**

In developing sustainable agriculture-bioindustry system an integrated macroeconomic and sectoral policies are required.

## Toward Integration of:

Ministry Agriculture

Ministry Forestry

Agro/bio industries sectors

Rural Development

**THANK YOU**

