











#### **ASEAN Agricultural and Biosystems Engineering** Cooperation Framework and Complementary Action in support to ASEAN Food Security and Climate Change **Adaptation and Mitigation**

#### (ASEAN ABE Cooperation Framework)

3rd Regional Forum on Sustainable Agricultural Mechanization in Asia and the Pacific 3rd ASEAN Conference on Agricultural and Biosystems Engineering Co-located with the 12th Engineering Research and Development for Technology in Agriculture 9-11 December 2015, Manila, the Philippines

#### PRESENTATION CONTENTS

- 1. Background
- 2. ASEAN ABE Cooperation Framework
- 3. Implementation Updates



**ASEAN AND ITS DIALOGUE PARTNERS** 

#### **ASEAN Economic Community**

#### Strategic Schedule of the AEC Blueprint (2008-2015)

### Pillar 1 Single Market & Production Base

- Free flow of goods
- Free flow of services
- Free flow of investment
- · Freer flow of capital
- Free flow of skilled labor
- Priority Integration Sectors
- Food, agriculture and forestry

## Pillar 2 Competitive Economic Region

- Competition policy
- Consumer protection
- Intellectual property rights
- Infrastructure development
- Taxation
- E-Commerce

## Pillar 3 Equitable Economic Development

- SME development
- Initiative for ASEAN Integration

## Pillar 4 Integration into the Global Economy

- Coherent approach towards external economic relations
- Enhanced participation in global supply networks

MOBILITY OF Agri-Fishery Products, Services and Skilled Labor - ASEAN IMPORT/EXPORT

**HUMAN RESOURCE DEVELOPMENT** 

RESEARCH AND DEVELOPMENT

Agricultural and Bio-systems Engineering- is the application of engineering science and designs to the processes and systems for the sustainable production, post production and processing of safe food, feed, fiber, timber and other agricultural and biological materials and the efficient utilization, conservation and management of natural and renewable resources in order to enhance human health in harmony with the environment

Source: International Commission on Agricultural Engineering (CIGR) and Philippine Agricultural Engineering Law

Ist ASEAN Conference on Agricultural and Biosystems Engineering (ACABE-1)
September 24-27,2013, Manila, Philippines



□ Adoption of ASEAN Agricultural and Biosystems Engineering Framework for Cooperation and Complementary Action in support to ASEAN Food Security and Climate Change Adaptation and Mitigation (ASEAN ABE Cooperation Framework) Theme: Integrating Agricultural and Biosystems Engineering for Food Security, Climate Change Mitigation and Global Practice in the ASEAN.



#### **ASEAN ABE Cooperation Framework**

#### **ASEAN ECONOMIC COMMUNITY 2015**



Component 3- COMPETITIVE AND SECURED ASEAN ABE WORKFORCE

Agricultural Engineers; ABE Technicians & Operators



Component 2- COMPETITIVE ASEAN
ABE EDUCATION

Higher Education; Tech-Voc; and Basic Education



Component 1- SAFE & EFFICIENT ABE FACILITIES & TECHNOLOGIES FOR ASEAN FOOD SECURITY, BIOENREGY AND CLIMATE CHANGE MITIGATION

Agricultural Mechanization, Irrigation, Agro-Processing, Renewable Energy, etc.

#### ACABE-2, September 11-14,2014, Serpong, Indonesia



Hosted and organized by the Ministry of Agriculture of the Republic of Indonesia through the Indonesian Agency for Agricultural Research and Development (IARD)

- ➤ Discussed the implementation of ABE Cooperation Framework
- ➤ Organization of the ACABE Coordinating Committee chaired by Philippines

Special Senior Officials Meeting of the ASEAN Ministers on Agriculture and Forestry (SOM-AMAF), August 12-14,2015 at Nay Pyi Taw, Myanmar



- ➤ Philippines presented the ASEAN ABE Cooperation Framework
- ➤ Unanimously welcomed,
  Philippines to submit Action
  Plan in support to ASEAN
  Food Security Framework

# ASEAN INTEGRATED FOOD SECURITY (AIFS) FRAMEWORK & STRATEGIC PLAN OF ACTION ON FOOD SECURITY IN ASEAN 2015-2020 (SPA-FS 2015-2020)

#### AGRICULTURAL AND BIOYSTEMS ENGINEERING COOPERATION IN ASEAN





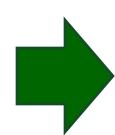












#### **OBJECTIVES**

- > sustain and increase food production
- reduce post harvest losses
- ensure food safety and quality
- ensure sustainable, efficient and effective use of land, forest and water resources- to minimize risks and impacts of climate change (AFCC)

#### ASEAN Universities Consortium on Food and Agro-based Engineering & Technology (AUCFA)



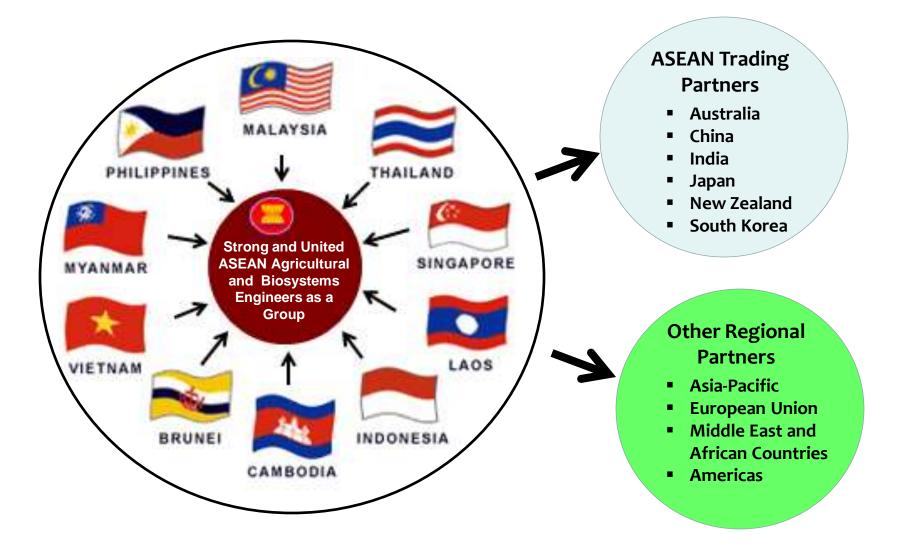
3<sup>rd</sup> annual AUCFA meeting and 1st International AUCFA Student Seminar and Idea Competition on Food and Agrobased Engineering and Technology, October 15-17, 2014 at IPB International Convention Center, Bogor, Indonesia.

- Organized in 2012, spearheaded by Indonesia
- Cooperation/
  Cooperation of ASEAN
  Agricultural and
  Biosystems Engineering
  Education and R & D

#### ASEAN Mutual Recognition Arrangement (MRA) on Engineering Services



- Accreditation of ASEAN Chartered Professional Engineer (ACPE)
- Includes Agricultural and Biosystems Engineering, Philippines has 3 ACPE



The Vision for ASEAN Agricultural and Biosystems Engineers

