



Implemented by:



ASEAN Sustainable Agrifood Systems (ASEAN SAS)

Pouchamarn Wongsanga

**Regional Knowledge Sharing Consultation on
“Sustainable Agrifood Systems for Food Security and
Sustainable Development in the ASEAN Region”**

1-3 May 2017

Eastin Grand Hotel Sathorn, Bangkok, Thailand



Outline

- Linkages of ASEAN SAS Project to ASEAN Policy Framework
 - AEC Blueprints
 - FAF Vision and Strategic Plan
 - AIFS Framework and SPA-FS 2015-2020
- ASEAN SAS Project
 - Introduction
 - Interventions/Components
 - Key Challenges for Future Perspective



AEC Blueprint 2016-2025

Pillar A

A Highly Integrated and Cohesive Economy

- ▶ Trade in Goods
- ▶ Trade in Services
- ▶ Investment Environment
- ▶ Financial Integration, Inclusion, Stability
- ▶ Movement of Skilled Labour
- ▶ Participation in Global Value Chains

Pillar B

A Competitive, Innovative, and Dynamic ASEAN

- ▶ Competition Policy
- ▶ Consumer Protect
- ▶ Intellectual Property Rights
- ▶ Productivity, Innovation, Technology
- ▶ Taxation Cooperat.
- ▶ Good Governance
- ▶ Good Regulatory Practice
- ▶ Sustainable Economic Development
- ▶ Global Megatrends/ Trade-Related Issues

Pillar C

An Enhanced Connectivity and Sectoral Cooperation

- ▶ Transport
- ▶ ICT
- ▶ E-Commerce
- ▶ Energy
- ▶ Food, Agriculture, Forestry
- ▶ Tourism
- ▶ Healthcare
- ▶ Minerals
- ▶ Science and Technology

Pillar D

A Resilient, Inclusive, People-Oriented ASEAN

- ▶ MSMEs
- ▶ Role of the Private Sector
- ▶ Public Private Partnership
- ▶ Narrowing the Development Gap
- ▶ Contribution of Stakeholders on Regional Integration

Pillar E

A Global ASEAN

- ▶ FTAs and comprehensive economic partnership agreements (CEPs)
- ▶ Promote complementarities and seek mutual benefits for ASEAN



ASEAN Economic Community Blueprint 2025 (2)

C.5. Food, Agriculture and Forestry

55. ASEAN cooperation on food, agriculture and forestry (FAF) plays a crucial role in the context of rising population, strong income growth and an expanding middle class.

56. Going beyond 2015, the vision for the FAF sector will be *“Competitive, inclusive, resilient and sustainable FAF sector integrated with the global economy, based on a single market and production base, contributing to food and nutrition security, and prosperity in the ASEAN Community”*, **with the goals of ensuring food security, food safety and better nutrition** gaining from access to global market as well as increasing resilience to climate change.



ASEAN Economic Community Blueprint 2025 (3)

C.5. Food, Agriculture and Forestry

57. The following interventions will be considered to promote deeper integration of the FAF sector in the region and the world through, among others:

- (i) enhancing trade facilitation and economic integration;
 - (ii) strengthening cooperation and capacity for sustainable production;
 - (iii) enhancing agricultural productivity;
 - (iv) increasing investment in agricultural science and technology; and
 - (v) ensuring the involvement of agricultural producers in globalisation process.
- There are 8 Strategic measures.



ASEAN Cooperation in Food, Agriculture and Forestry (2016 - 2025)

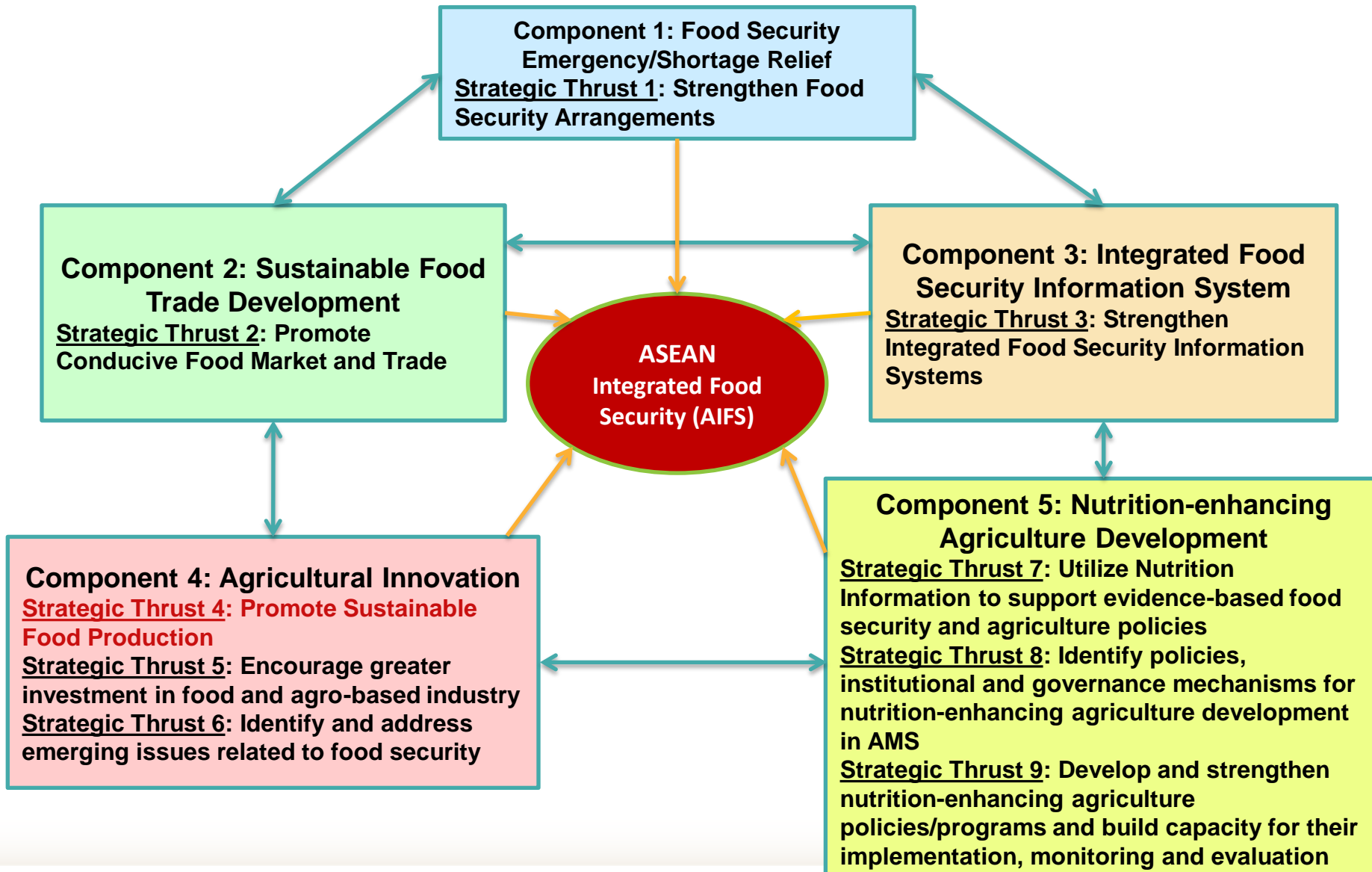
Vision: A competitive, inclusive, resilient and sustainable FAF sector integrated with the global economy, based on a single market and production base contributing to food and nutrition security and prosperity in the ASEAN Community

Goals:

- Equitable (gender, household and regional)
- Sustainable and inclusive growth
- Poverty alleviation & hunger eradication
- Food security, food safety and better nutrition
- Deeper regional integration
- Gain from access to global markets
- Increase resilience to & contribute to mitigation & adaptation of climate change, natural disasters and other shocks
- Sustainable Forest Management (SFM)

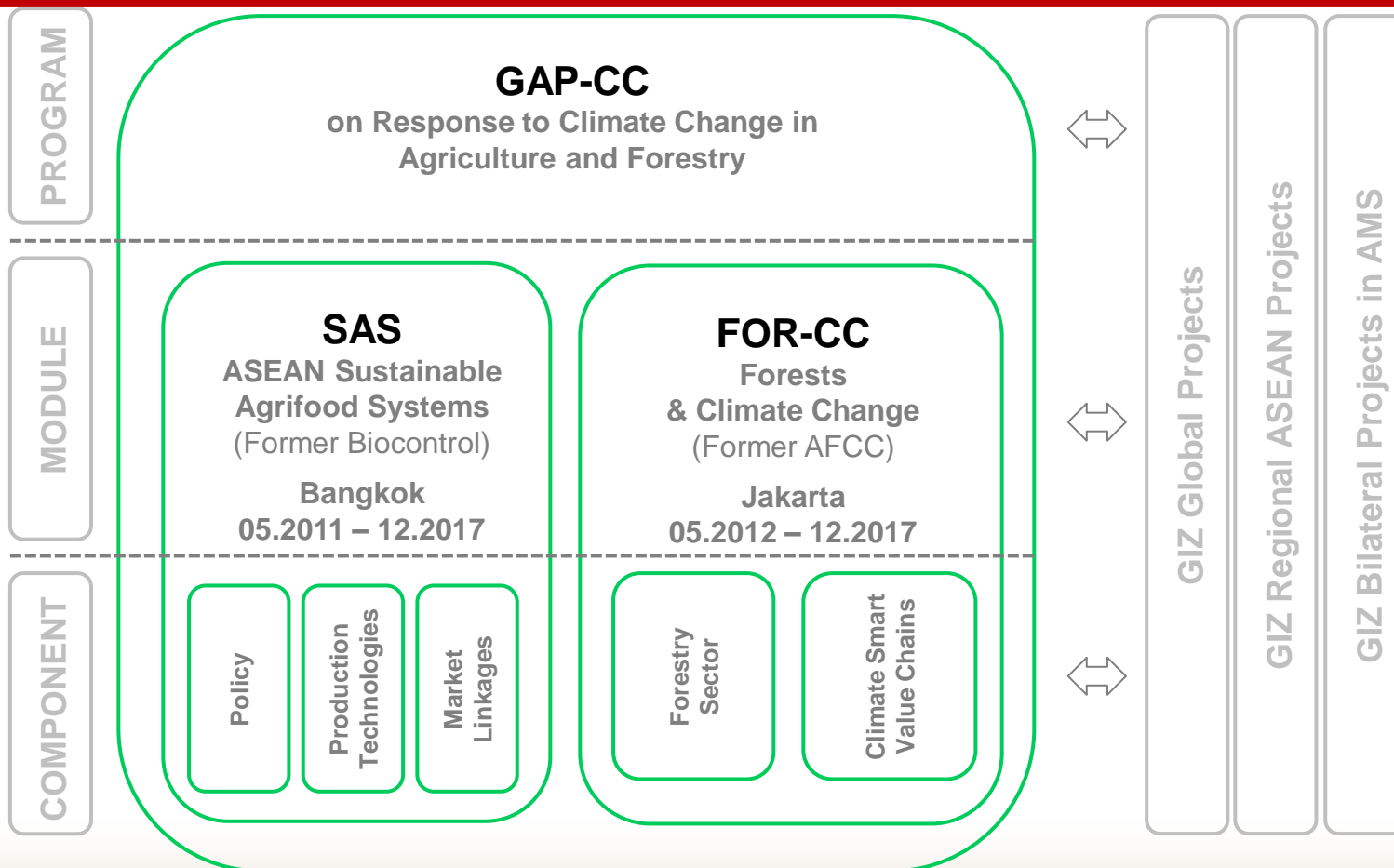
AIFS Framework and SPA-FS (2015-2020)

Goal: To ensure long-term food security and nutrition and to improve the livelihoods of farmers in the ASEAN region



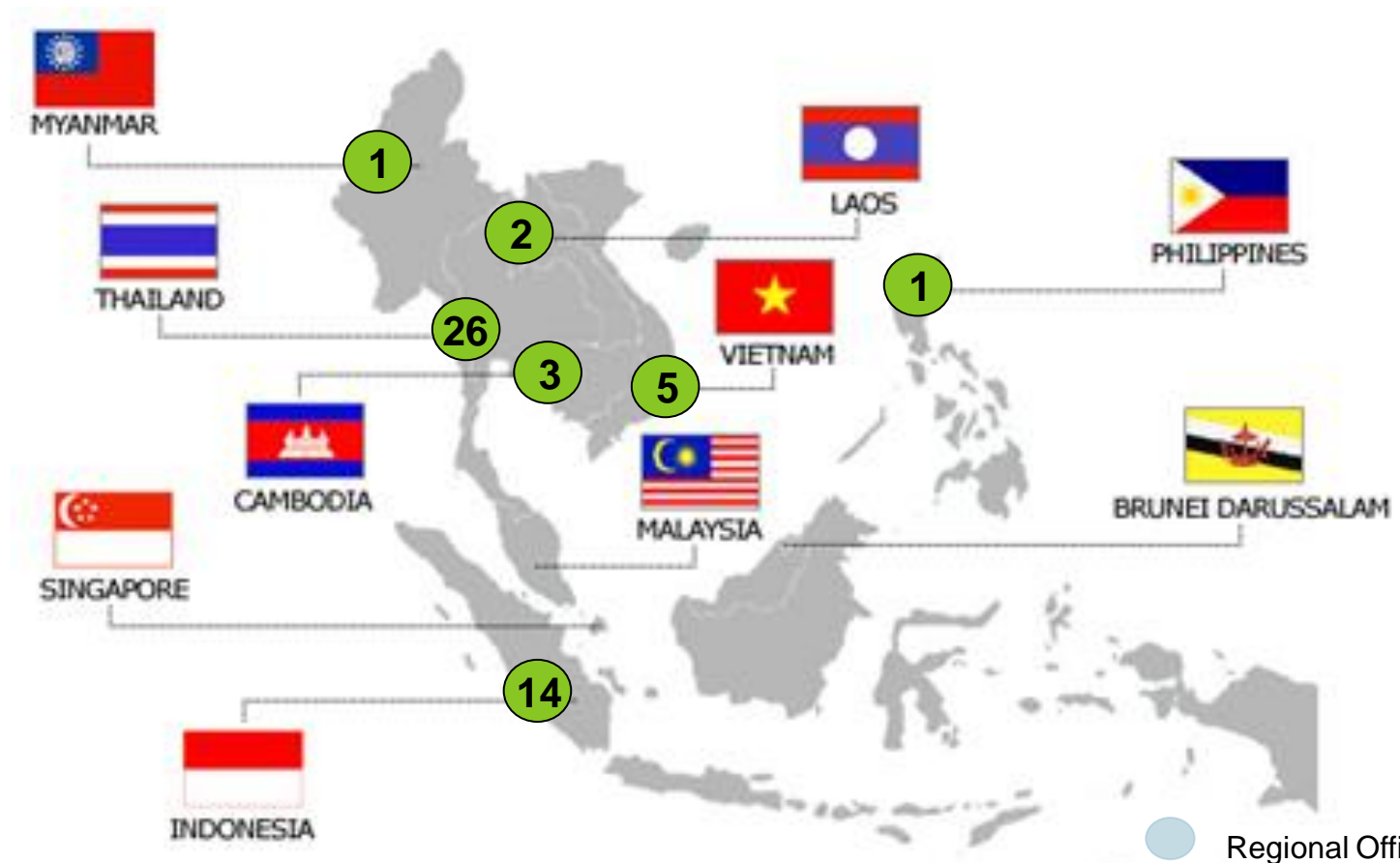


German-ASEAN Program (GAP-CC)





The Team: ASEAN-SAS and Associated Projects



2

Offices in
Eschborn & Bonn



1

Office in New Delhi

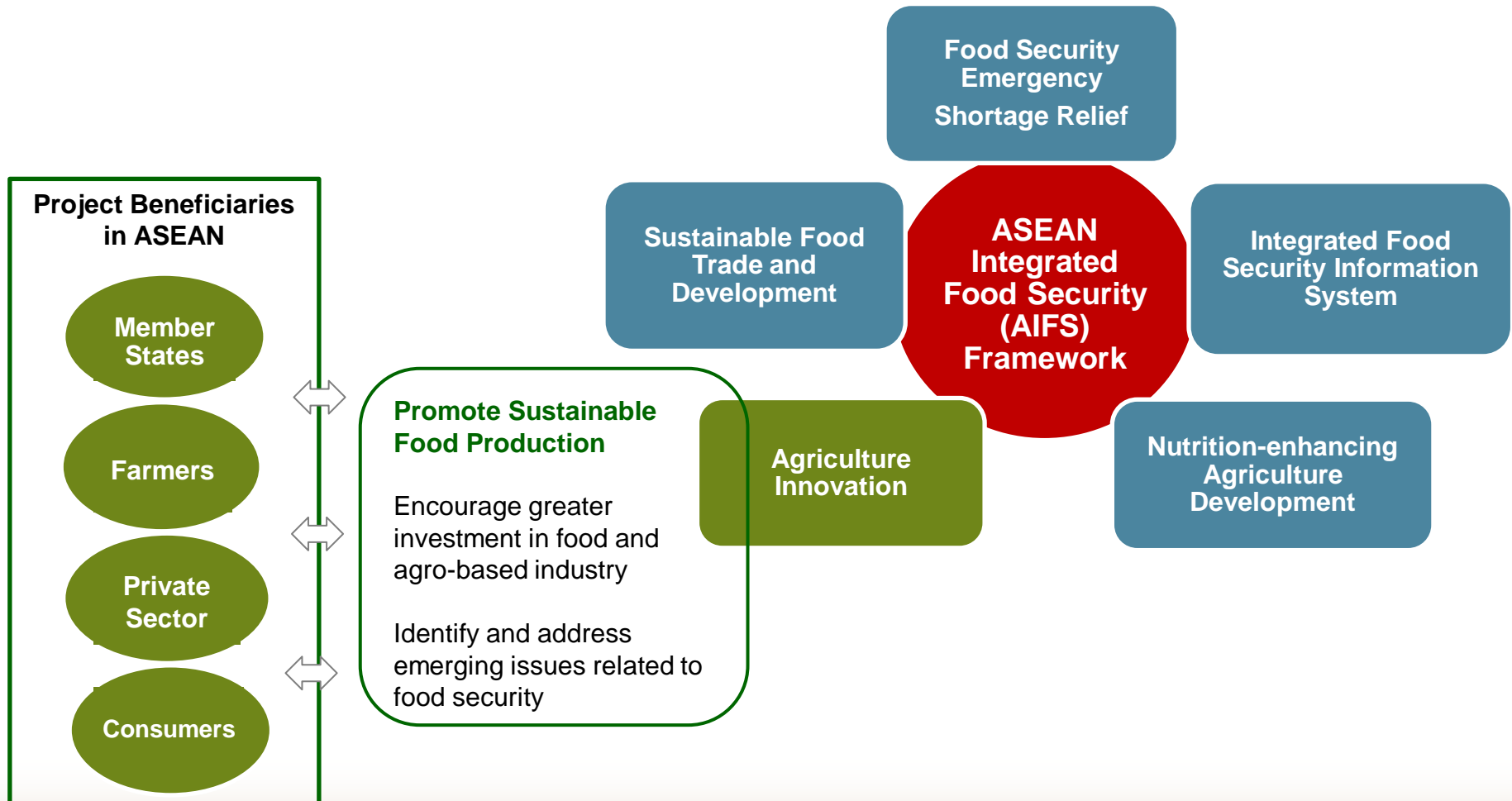
Regional Offices

GIZ Staff

"One Vision, One Identity, One Community"



Objective: Sustainable Food Production





Contribution of ASEAN SAS to Food and Nutrition Security in ASEAN and Global level



Overall Objective

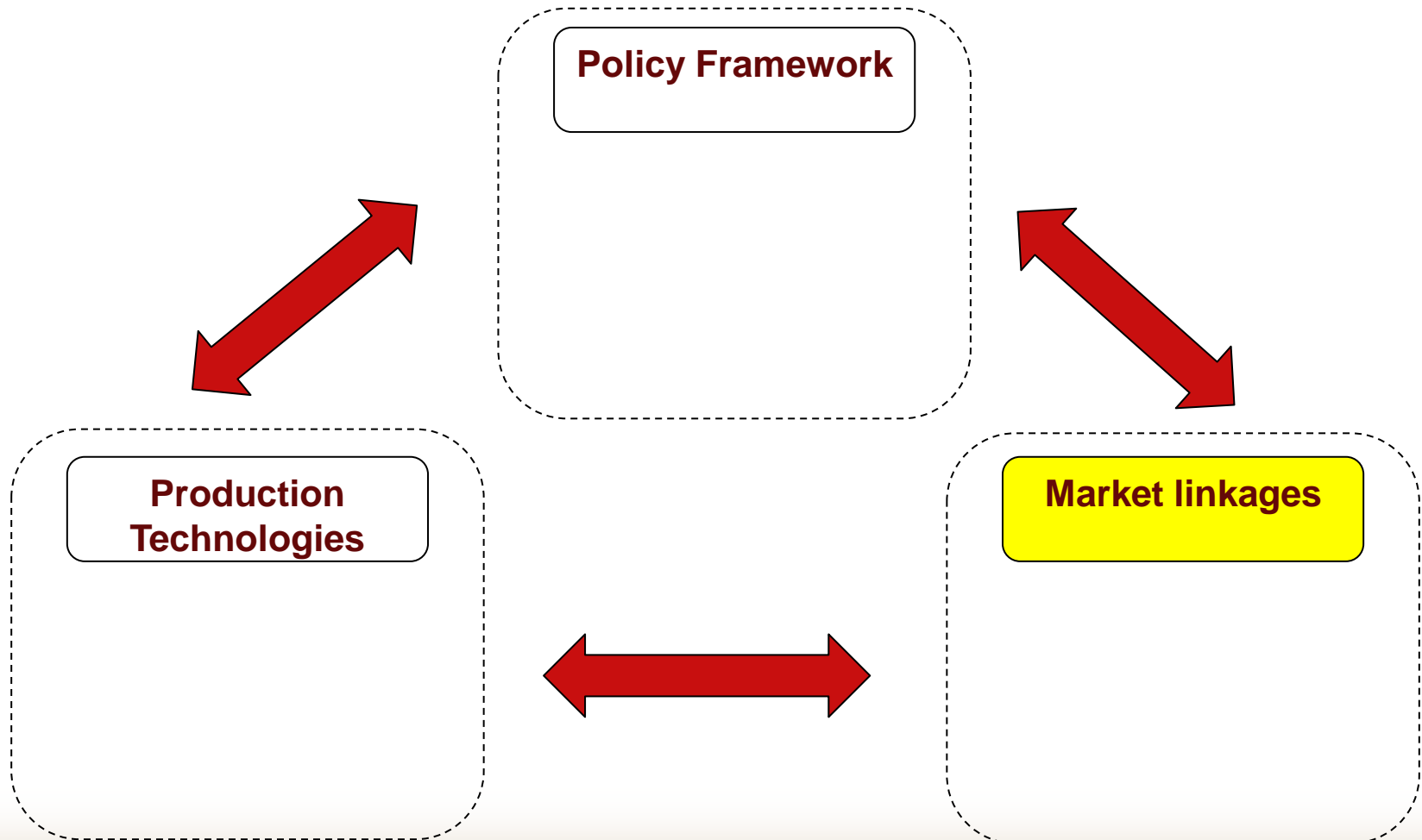
“To enable ASEAN Member States to implement the **ASEAN Integrated Food Security (AIFS) Framework and its Strategic Plan of Action (SPA-FS)**, Strategic Thrust 4: Promote Sustainable Food Production, at the national level”

Focus Areas

- 1) Policy Framework
- 2) Production Technologies
- 3) Market Linkages

SUSTAINABLE AGRIFOOD SYSTEMS:

Intervention Areas





Intervention Areas

Policy Framework

Established dialogue and national fora

ASEAN Guidelines integrated into national action plans

Regional Expert Groups established

Database on regional bio-input and regulation established

Production Technologies

Improved capacity of all member states

Human Capacity Development

- sustainable production methods
- Regulation, Use and Trade of Biocontrol Agents
- Integrated Soil and Nutrient Management

Market Linkages

Support bio-input producers

Capacity development of selected SMEs and small-scale farmers

Public-Private Partnerships

Policy Recommendations



Intervention Areas

Policy Framework

- Facilitates discussion and exchange on sustainable agrifood systems at ASEAN and national levels that contributes to the creation of enabling policy conditions:
 - ✓ Project primarily advises ASEAN on policy-making, particularly with regard to cross-border processes, and promotes policy dialogue in the context of exchange fora.
 - ✓ At the same time, national relevant ministries of ASEAN Member States (AMS) also receive advice in alignment and implementation of regional resolutions at the national level.



Intervention Areas

Production Technologies

- The Project identifies conditions that foster the dissemination of selected sustainable production approaches relating to plant protection, organic fertilisers, farm economics and agri-business development in the AMS.
- Capacity development is the key tool to enable AMS to achieve a long-term implementation of the new technologies.



Intervention Areas

Market Linkages

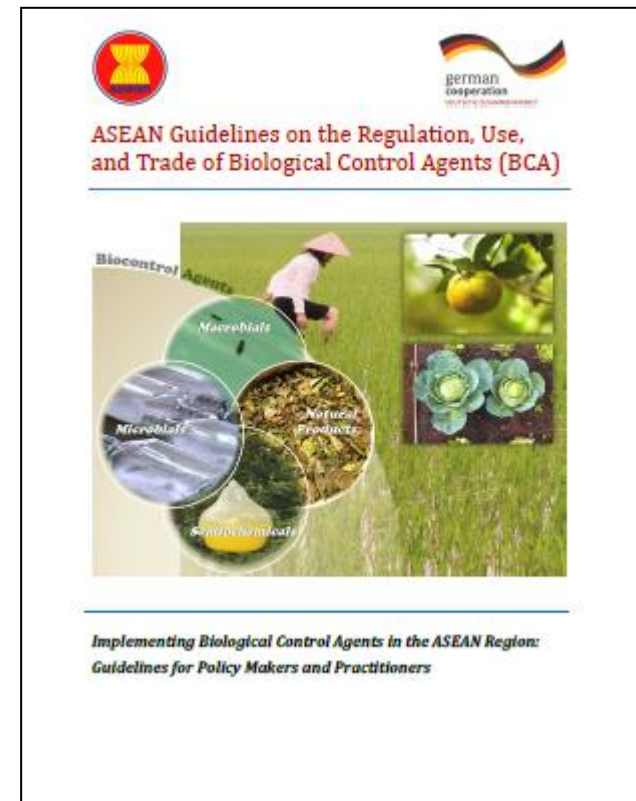
“Market Linkages and Value Chain”,

- The Project supports capacity building of decision-makers at all levels and promote cooperation between small farmers and the private sector in sustainable value chains.
- Pilot models of sustainable agrifood systems in various countries have been developed so that the lessons learned can be incorporated in the policy advisory process.
- This involves joining with relevant actors in the respective value chains to implement approach elaborated in the “Production Technologies”.
- In addition, the Project introduces crop insurance as a risk management approach so as to enable the value chain to be more resilient to extreme shocks.

Component 1: Policy Framework

Biological Control Agents

- Developed ‘**ASEAN Guidelines on the Regulation, Use and Trade of Biological Control Agents (BCA)**’ which have been endorsed by SOM-AMAF in 2014
- **National Action Plans and strategies of AMS** are available based on the ASEAN Guidelines on the Regulation, Use and Trade of Biocontrol Agents (BCA). These include Cambodia, Indonesia, Lao PDR, Myanmar, Vietnam, Thailand.
- **A Regional Database** on bio-input and regulatory database is extended to include bio-fertilizers and etc.



Component 1: Policy Framework

Food and Nutrition Security in ASEAN: Regional Training for Practitioners





Component 1: Policy Framework

Integrated Soil and Nutrient Management

- Established a **regional technical experts group on Integrated Soil and Nutrient Management** which includes experts from all 10 AMS.
- Organized regional technical expert group meetings to develop an **ASEAN Guidelines on Integrated Soil and Nutrient Management**



Component 1: Policy Framework

Development of Regional Guidelines on Soil and Nutrient Management



Component 2: Production Technologies

Capacity Development on Sustainable Food Production



Successful Trials on the Use of BCA to Control Flea Beetles in Chinese Cabbage in Thailand



Promoting green production, its regulation, use and trade in Cambodia

Component 2: Production Technologies

Training on Mass Production of Biological Control Agents



Where



When

September 2014

Who

Private partners from
Cambodia, Indonesia, Lao
PDR and Myanmar

By

Vocational Education
Development Center for
Agriculture (VEDCA), Ministry
of Education and Culture in
Indonesia

Component 2: Production Technologies

ASEAN SAS Training Guide on BCA Application



Biocontrol Using *Trichoderma*



What Hands-on guidance on implementing biocontrol and Integrated Pest Management

Web www.asean-agrifood.org

What is *Trichoderma*?

Trichoderma species are fungal organisms that can help farmers grow better crops and have higher income while protecting the soil environment. They are living freely in soil in agricultural and natural environments worldwide.

Commercial products have been developed for plant protection that contain special strains of living *Trichoderma* species, mostly *Trichoderma harzianum*. They have been formulated in a way that farmers and growers can easily apply them in the field. It is a safe and effective biocontrol

agent (BCA) that can control a variety of fungal (and bacterial) diseases, such as wilt, damping off, stem rot, and downy mildew.

But not only that! *Trichoderma* is a yield-booster that makes crops look healthier, grow bigger, and show better root development.

How is it doing this? *Trichoderma* works best in the soil. It is a biological degrader and competitor of fungal plant pathogens, which has evolved mechanisms for attacking other fungi in the root zone of a plant. Beyond

that it also improves nutrient uptake of plants.



Farmer in Kampong Chhng, Cambodia: She can harvest bigger eggplants because she applied *Trichoderma*.

How *Trichoderma* works

As a biocontrol agent, the three most important antagonistic processes of *Trichoderma* spp. include:

- **Antibiosis:** metabolites that inhibit or kill other microorganisms
- **Mycoparasitism:** direct interaction with other fungi through attachment and secretion of lytic enzymes
- **Competition:** with pathogens and other fungi for food

When *Trichoderma* spp. colonize plant roots they can stimulate plant growth and protect against infections

Inside this issue:

Why and When should I Use <i>Trichoderma</i> ?	2
How Effective is <i>Trichoderma</i> ?	3
How to Apply <i>Trichoderma</i> ?	4-5
Biocontrol/IPM and Farm Economics	6
Profitability of Crops	7
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HANDS-ON GUIDANCE ON IMPLEMENTING BIOCONTROL AND IPM



Component 3: Market Linkages





Component 3: Market Linkages

Improved Product Safety and Quality for the Thai Fruit Juice Industry

Where



When

April 2012 - April 2015

Who

5 semi-finished goods manufacturers, 1 bottler and 4 laboratories

What

Capacity building for improved conformity to SGF and European Fruit Juice Association (AIJN) standards

SGF Workshops on food safety as well as sustainable processing of fruits and vegetables





Component 3: Market Linkages

Remote sensing-based Information and Insurance for Crops in Emerging Economies (RIICE)

Where



When

May 2015 - April 2018

Who

Ministries of Agriculture and related technical partners

What

Rice production monitoring using synthetic aperture radar (SAR) technology

National Stakeholders Workshop in Thailand





Component 3: Market Linkages

Interventions along the Rice Value Chain



Where



When

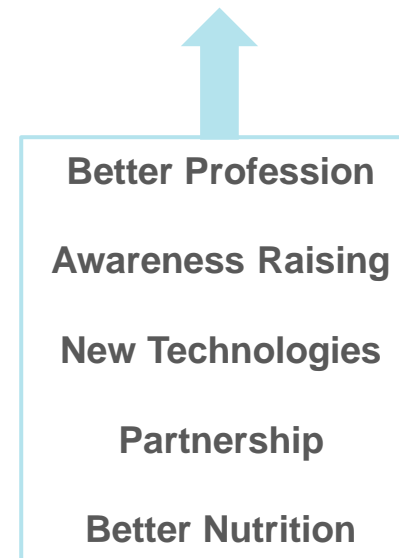
October 2013 - November 2017

Who

32 staff member, public and private partners

Web

www.better-rice-initiative-asia.org



Component 3: Market Linkages

Capacity Development to improve competitiveness and enhance the market of bio-input products



'Integrated Pest Management Training for Retailers' makes responsible pesticides business



Eco-Agri Center: From organic farmers to organic customers

Impacts of ASEAN SAS

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Impacts at a Glance (as of June 2016)

ASEAN Sustainable Agrifood Systems and Public-Private Partnerships (2011-2017) as part of ASEAN-German Programme on Response to Climate Change (GAP-CC)



39,000

Smallholder farmers directly engaged (24% are female)



+29 Million EUR

Additional income generated



10

Governments implementing regional policies



1,269

Partner staff trained



27

Partnerships with private sector



61

Total staff



+150,000 EUR

News coverage in newspaper equivalent to advertisement values



235.83%

Funds leverage
 • 140.14% from private
 • 95.69% from public



Co-Sponsors:



Contact:

Dr. Matthias Bickel
matthias.bickel@giz.de



Key Challenges for Future Perspective in Advancing Sustainable Agrifood Systems in ASEAN

1. Make sure that policy framework links into the ground (multi-level approach)

- ✓ policy frameworks at various levels should be interlinked and ensure that they foster concrete implementation on the ground

2. Foster Multi-stakeholder/Multi-sectoral Partnership (including Public-Private Partnership)

- ✓ allow each of the stakeholders/actors to focus on their comparative advantages/strengths and leverage other stakeholders/actors.



Key Challenges for Future Perspective in Advancing Sustainable Agrifood Systems in ASEAN

3. Ensure Inclusivity, Sustainable and Resilience of Value Chains

- ✓ Requires collaboration and support from other actors along the value chains to ensure that inclusivity and resilience of value chain of sustainably produced products is clearly targeted.
- ✓ Inclusivity embeds the concept of integrating smallholder farmers into the value chain through market linkages (i.e. adoptable sustainability standard, certification and labelling) with shared resources, risks and benefits.
- ✓ Resilience underlines the capability of the value chain to adapt and adjust against any extreme shocks, particularly extreme climate events.



Key Challenges for Future Perspective in Advancing Sustainable Agrifood Systems in ASEAN

4. Build Leadership and Capacity for Stakeholders

- ✓ Requires understanding of its concept and directions.
- ✓ Capacity building in agriculture is often times fragmented and does not lead to long-term competency, which is required for a change process.
- ✓ Solutions to sustainable agri-food systems do not exist within agriculture sector only but requires collaboration and partnership among stakeholders and sectors involved.

Media and Resources

ASEAN-SAS Website www.asean-agrifood.org



Media and Resources

ASEAN SAS Online Newsletter



When October 2015
(every 2 months)

Web <http://www.asean-agrifood.org/subscribe>



Contact

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ASEAN Sustainable Agrifood Systems (ASEAN Biocontrol)

50 Department of Agriculture, 4th Floor, Sitthiporn Building, Phaholyothin
Road, Ladyao, Chatuchak, Bangkok 10900

T +66 2 561 4980

F +66 2 561 4987

E pouchamarn.wongsanga@giz.de

W www.asean-agrifood.org

Thank you!

Responsible

Dr. Matthias Bickel

Project Director

Ms. Pouchamarn Wongsanga

Senior Regional Coordinator

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