



# German-Swiss cooperation

A Swiss contribution to the development projects  
and goals of GIZ in the ASEAN region

Swiss Society Bangkok, 20.08.2019 – Nathalie Wandel

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NADEL - Center for Development and Cooperation



**STUDIUM**  
Umweltnaturwissenschaften

Fachkurse für die Umwelt



## ABOUT ME

Environmental Sciences  
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@ GIZ Thailand



# AGENDA

- **Introduction and Background**
- **Did you know? – Warm up: Thai Agriculture Quiz**
- **What is GIZ?**
- **What are we doing in Thailand?**
- **GIZ Agriculture and Food Cluster Overview**
- **Project Example 1: RIICE**
- **Project Example 2: Thai Rice NAMA and Sustainable Rice Platform**
- **Your Questions?**



## Did you know?

**Test your knowledge about Rice Agriculture in Thailand!**

# ABOUT GIZ

*Building a future worth living around the world.*

- Germany's **leading provider of international cooperation services**
- As a **federal enterprise**, we support the German Government in achieving its objectives for **sustainable development**
- We operate in more than **120 countries** and employ around **20'000 staff** worldwide
- We provide **know-how, manage change** and develop **tailor-made solutions** to challenging problems for our clients, incl. **governments, private sector and the UN**
- Programs and projects span an extremely wide range of issues, from **agriculture, water, infrastructure and energy to health care, private sector promotion, education and governance**
- More information: [www.giz.de](http://www.giz.de)



# ABOUT GIZ THAILAND

- **Thai-German government Framework agreement**
- More than **300 projects** implemented since inception
- **Close cooperation** with ministries, private sector, academia and other partners in Thailand
- Team of national and international **experts**
- Focus on: **Climate Change** and **Private Sector Cooperation**
- **EUR 171m since 2009** - Main donors: BMU, BMZ, EU, GCF



**giz**

Deutsche Gesellschaft  
für Internationale  
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# AGRICULTURE & FOOD CLUSTER

GIZ THAILAND and ASEAN



Agriculture occupies almost 40% of the overall workforce in Southeast Asia, but the sector only contributes ca. 10% to the ASEAN GDP<sup>1</sup>.

Rice is an extremely important staple crop across the world and especially in Southeast Asia. Most of the world's rice is grown and consumed in Asia.<sup>2</sup>

Rice production has diverse environmental impacts (water, land and soil, air) and is a major contributor to agricultural greenhouse gases (methane, climate change)<sup>3</sup>

“ We want to change this and create farmers who produce sustainably and are competitive, inclusive and resilient.”

DR. MATTHIAS BICKEL  
Director Agriculture and Food, GIZ Thailand




- 1) ASEAN Food Security Information System: <http://www.apftsis.org>
- 2) FAO: <http://www.fao.org/3/x6905e/x6905e04.htm>
- 3) IRRI: [www.irri.org](http://www.irri.org)

## CLIMATE CHANGE

Prolonged droughts and unpredictable monsoon rain patterns will cost Thailand US\$300 – 420 million and a loss of 15% in yields of major crops by 2050 (CIAT).



## HIGH RISK, LOW GAINS

Farmers are among the lowest income earners in the region. Many smallholder farmers are confronted with fluctuating market prices, exploitation by middlemen and rising costs of inputs. 

## UNTAPPED POTENTIAL

Smallholder farmers generally have low access to technology, limited resources in terms of capital, skills, and risk management, depend on family labour, and have limited capacity in terms of storage, marketing, and processing.



## FRAGMENTED SUPPORT

Uncoordinated efforts among development stakeholders are undermining the effectiveness of interventions. Individual successes do not add up to the systemic transformation that is needed for a significant and lasting impact for farmers.



# OUR SOLUTIONS

 ECONOMIC

**Competitive**

Value creation and  
fair distribution in  
sustainable supply  
chains

 SOCIAL

**Inclusive**

Strengthen local  
communities and  
their livelihoods

 ENVIRONMENTAL

**Resilient**

Climate mitigation  
and adaptation  
actions

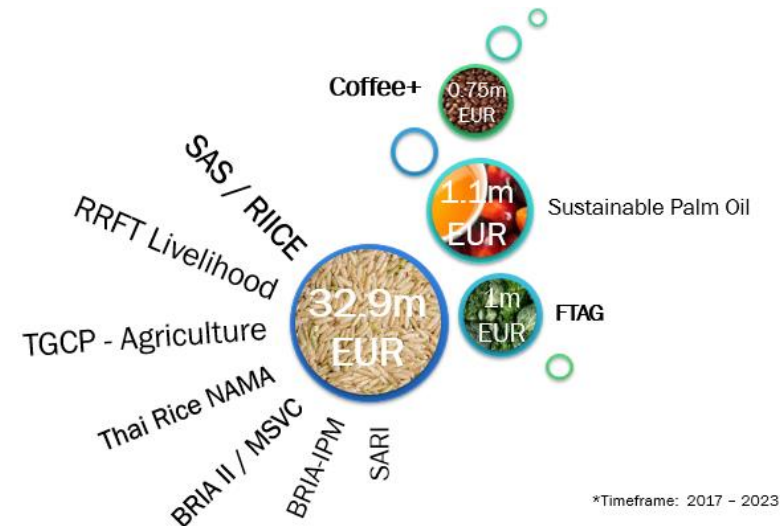
 PARTNERSHIPS

Meet needs on the ground, avoid inefficiency and  
achieve lasting outcomes

**Sustainable Agricultural Supply Chains**

## GOALS

- Food security and improved nutrition
- Promotion of sustainable, quality production and trade
- Improved income and protection of livelihoods
- Reducing vulnerabilities
- Climate change mitigation & adaptation

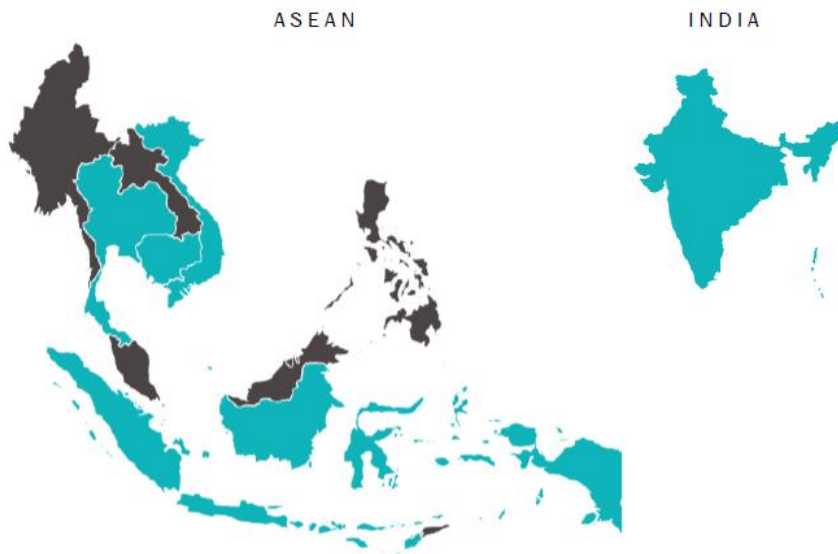
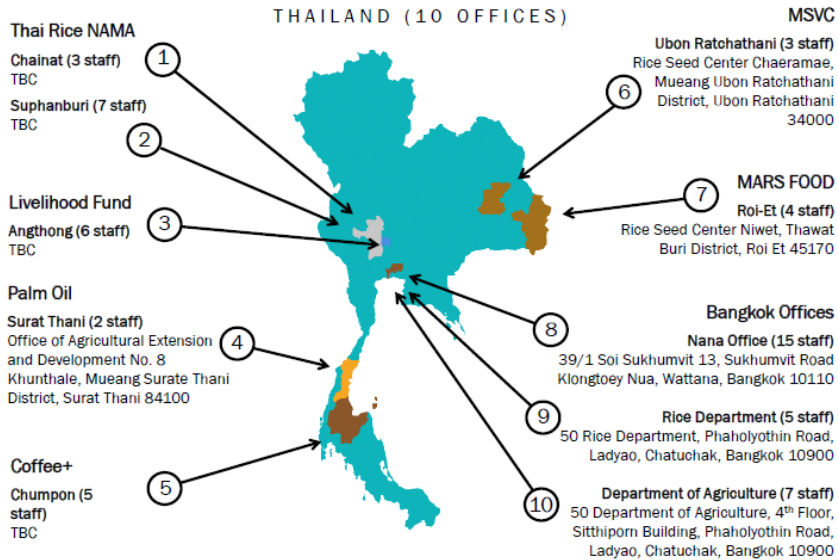


## APPROACH

- Policy framework and dialogue
- Market linkages
- Production technologies, optimization and better farm management
- Risk management and insurance
- Capacity building and community strengthening

## ACTIVITIES

- Training, workshops
- Stakeholder dialogues & round-tables
- Access to climate finance, cooperation and to services
- Assist in development of policies, standards, monitoring...
- Awareness raising & communication



## WITH WHOM WE COOPERATE\*



**PUBLIC PARTNERS**

**PRIVATE PARTNERS**

**OTHERS**

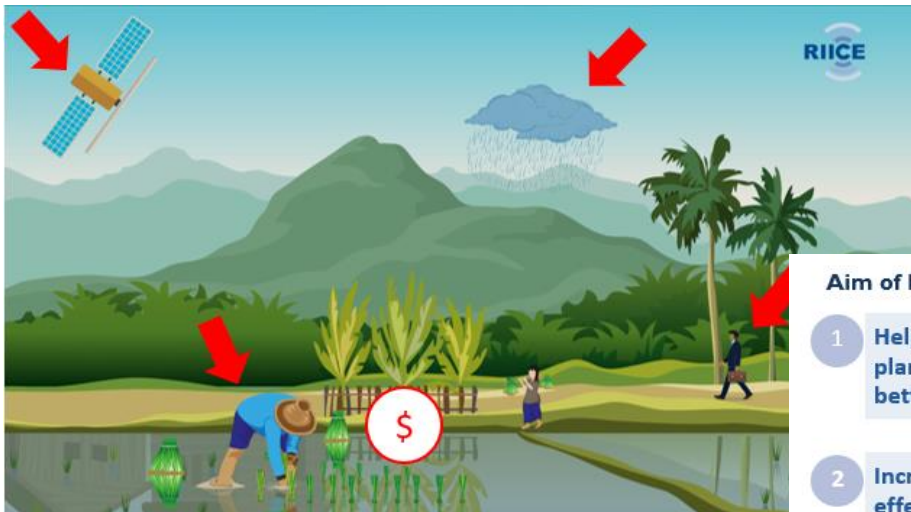
\*Eligible partners are those who have been contracted or have signed a MoU with GIZ



# REMOTE SENSING BASED INFORMATION & INSURANCE FOR CROPS IN EMERGING ECONOMIES

Examples from Tamil Nadu/India

## Our value proposition: Using digital crop information to enhance the national crop insurance programme for smallholder farmers



### Aim of Regional PPP Partnership

- 1 Help Governments to better plan for food crises through better crop monitoring.
- 2 Increase efficiency and effectiveness of crop insurance solutions.

### Timeline



### RIICE Partners in Tamil Nadu





# REMOTE SENSING BASED INFORMATION & INSURANCE FOR CROPS IN EMERGING ECONOMIES

Examples from Tamil Nadu/India

## Approach

- 1** How much area was planted this season in each village? 
- 2** When was start of season? 
- 3** How much is the yield? 
- 4** How did an adverse climatic condition affect the crop? 



Large scale, high resolution SAR-RS of rice areas



Crop models using RS info to predict yield



### Innovation:

- Development of **new methodology** on how to monitor rice using RS-data
- Allows to continuously **monitor 1.6 million ha** of rice with 90% accuracy.



### Risk Management and Insurance:

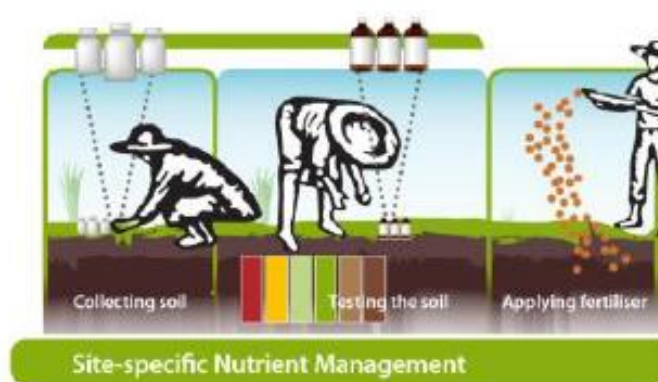
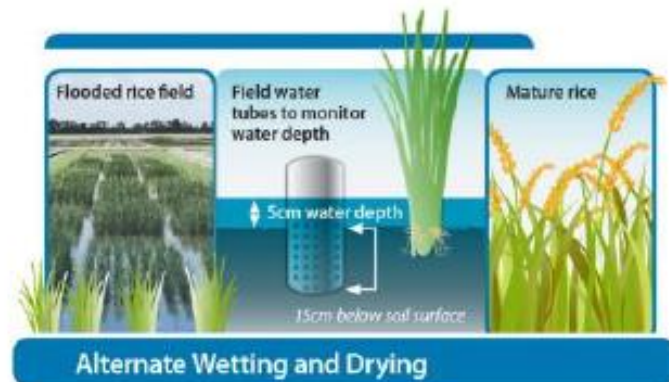
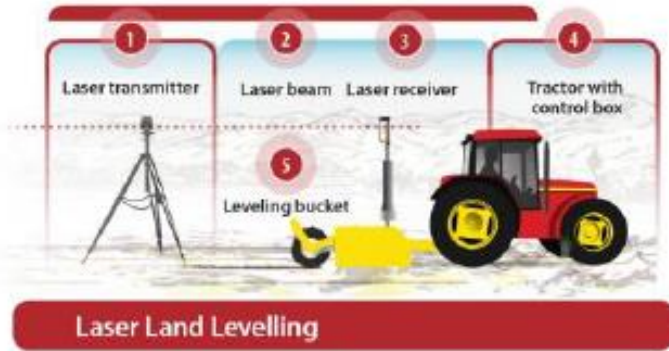
- Three insurance companies from 2016-2019 in the Indian state of Tamil Nadu use rice crop information for **assessment of crop losses** (“prevented/failed sowing”) to the benefit of around 1 million smallholders rice farmers.



### Impact:

- In 2015 Government of Tamil Nadu provided **disaster relief** distributing 50 tons of short duration paddy seeds.
- In 2017 local insurance partner paid approx. 255 EUR **compensation to 22,500 rice farmers** in Tamil Nadu after severe draught.

## Achievements



## Partners



Thai Rice Department



Bank for Agriculture and Agricultural Cooperatives (BAAC)

\*NAMA: Nationally Appropriate Mitigation Actions

**THANK YOU!**

**QUESTIONS?**



# REFERENCES AND LINKS

- GIZ global: <https://www.giz.de/en/html/index.html>
- GIZ Thailand: <https://www.giz.de/en/worldwide/354.html>
- Thai-German Cooperation: [https://www.thai-german-cooperation.info/en\\_US/](https://www.thai-german-cooperation.info/en_US/)
- ASEAN-SAS Project: <https://www.asean-agrifood.org/>
- RIICE: <http://www.riice.org/>
- Thai Rice NAMA: <https://www.asean-agrifood.org/thai-rice-nama/>
- NAMA Facility Thailand: <https://www.nama-facility.org/>
- Sustainable Development Goals: <https://www.un.org/sustainabledevelopment/sustainable-development-goals/>
- ASEAN: <https://asean.org/>
- DEZA: <https://www.eda.admin.ch/deza/de/home.html>
- NADEL, ETH: <https://nadel.ethz.ch/>

# THANK YOU!

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