



# Thailand's Contribution of STI in achieving SDGs 2030: The community well-being

Ministry of Science and Technology (MOST) - Thailand  
May 2018



## Outline

1. Overview of Sufficiency Economy Philosophy (SEP)
2. Science, Technology, and Innovation (STI) to support SEP
3. STI for SEP to achieve SDGs
4. MOST Thailand projects

## SUFFICIENCY ECONOMY PHILOSOPHY (SEP): Thailand's Home-Grown Approach to Sustainable Development

Sufficiency Economy Philosophy (SEP) was introduced in 1974 by His Majesty the late King Bhumibol Adulyadej. SEP is an approach for sustainable development which espouses moderation, reasonableness and prudence as development framework based on knowledge and virtue. The Philosophy attaches great importance to human development at all levels and emphasizes the need to strengthen community's capacity to ensure a balanced way of life and resilience, with full respect for the environment.

SEP shares ultimate common principles and objectives with SDGs, seeking to eradicate poverty and reduce inequality as a means to achieve sustainable development, and strike the right mindset towards the balance among three dimensions of sustainable development.

The concept of SEP aligns with many goals and targets across the 2030 Agenda for Sustainable Development, some of the more prominent applications of the SEP in our sustainable development endeavor include poverty eradication, food security, sustainable economic growth, sustainable industrialization and sustainable consumption and production. As an approach and mindset framework, SEP can be applied with all 17 SDGs and therefore could support and complement the successful implementation and realization of the 2030 Agenda on Sustainable Development.

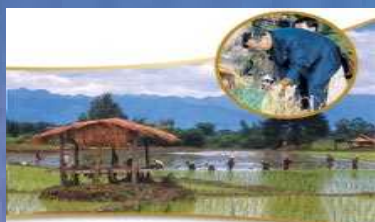
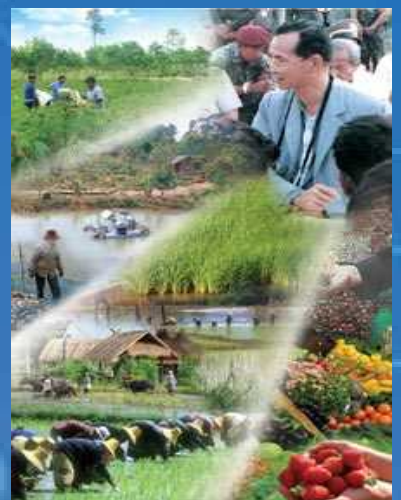


### Ways and Means of Sufficiency Economy Philosophy (SEP)



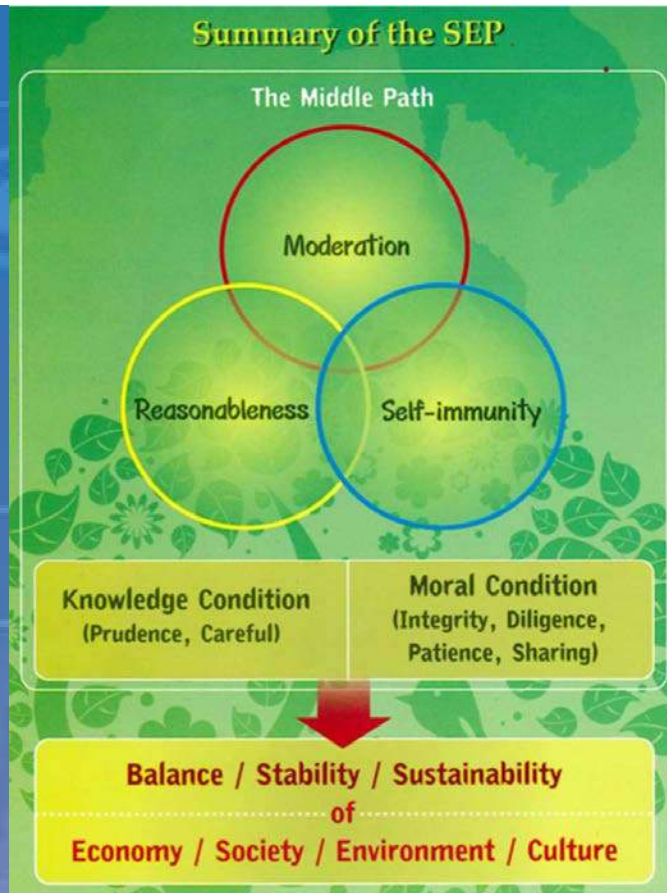
#### Simplify/Simplicity

Sufficiency means to live a reasonably comfortable life, without excess, or overindulgence in luxury, but enough.





# Sufficiency Economics Philosophy



## Path to Sustainable Development: Thailand's Experience



Sufficiency  
Economy  
Philosophy



SEP founded in **1974**



Since the **1997** economic crisis, SEP has become **guiding light** and Thailand's development compass

Thailand proves to be the least miserable economy, ranked by Bloomberg (**2015-2017**)



SEP has become a new rural development strategy in Thailand since the 9<sup>th</sup> Plan of Socio-economic Development since **2002**







## How SEP works (Diversify)

Land and Water

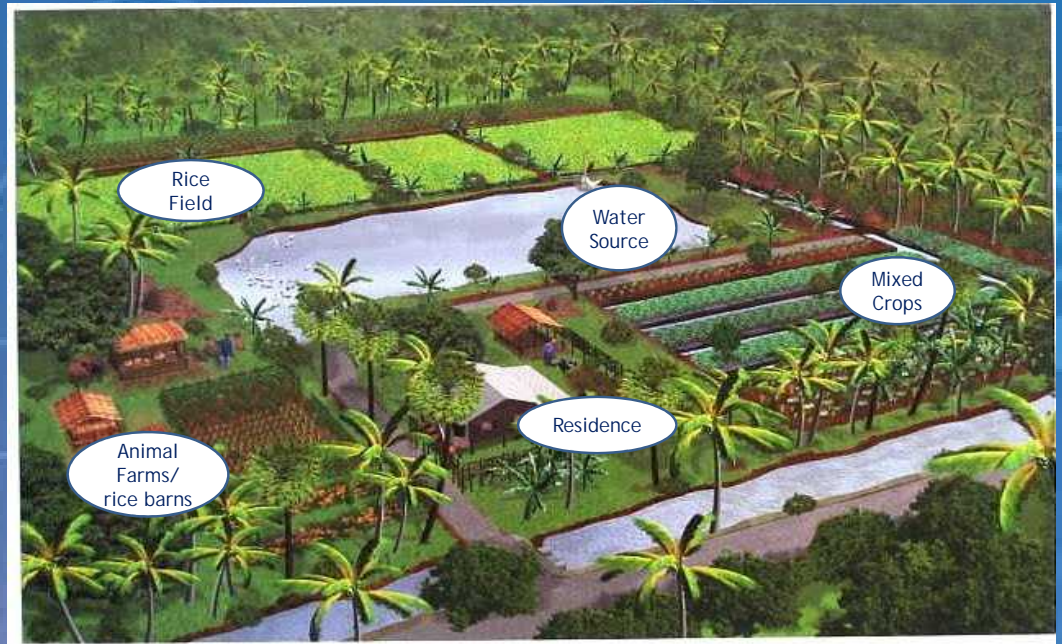
30-30-30-10

30= Mixed Crops

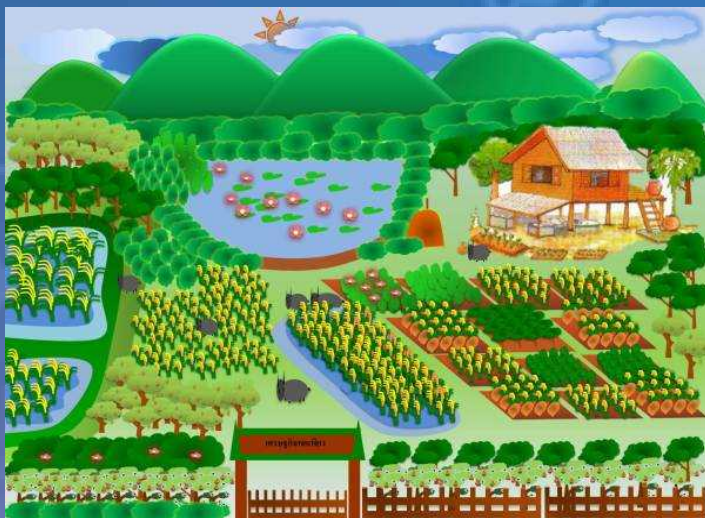
30= Water Source

30= Rice Field

10= Residence animal farms and  
rice barns



## SEP and the Modern World





# National Strategy



## THE TWELFTH NATIONAL ECONOMIC AND SOCIAL DEVELOPMENT PLAN

(2017-2021)

Office of the National Economic and Social Development Board  
Office of the Prime Minister  
Bangkok, Thailand

### Linkages of The 20-Year National Strategies (2017-2036) & The 12<sup>th</sup> National Economic and Social Development Plan (2017-2021)



# National Strategy Plan



## Stability – Prosperity - Sustainability

### ยุทธศาสตร์ชาติ กรอบการพัฒนาระยะยาว

เพื่อให้บรรลุวิสัยทัศน์  
“ประเทศมีความมั่นคง มั่งคั่ง ยั่งยืน  
เป็นประเทศพัฒนาแล้ว ด้วยการพัฒนา  
ตามปรัชญาของเศรษฐกิจพอเพียง”  
นำไปสู่การพัฒนาให้คนไทยมีความสุขและ  
ตอบสนองต่อการบรรลุซึ่งผลประโยชน์แห่งชาติใน  
การที่จะพัฒนาคุณภาพชีวิต  
สร้างรายได้ระดับสูง เป็นประเทศพัฒนาแล้ว  
และสร้างความสุขของคนไทย สังคมมีความมั่นคง  
เสมอภาค และเป็นธรรม  
ประเทศสามารถแข่งขันได้ในระบบเศรษฐกิจ

Prosperity

Competitiveness

Security

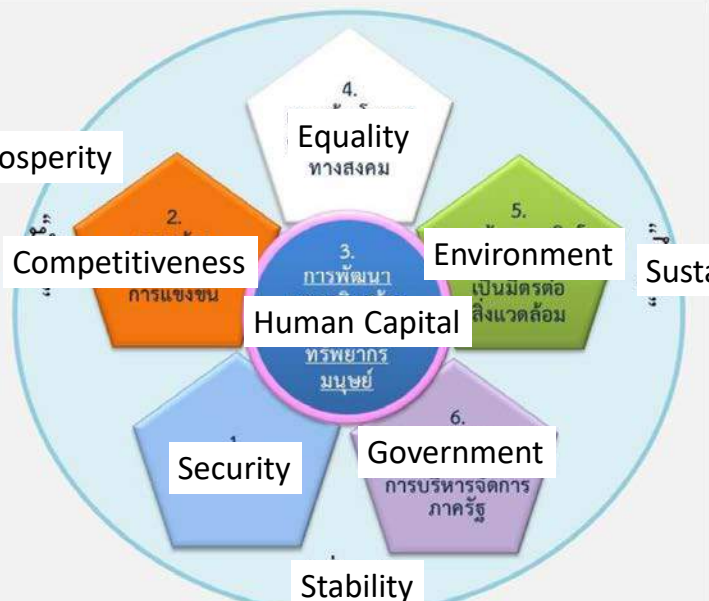
Stability

Human Capital

Government

Environment

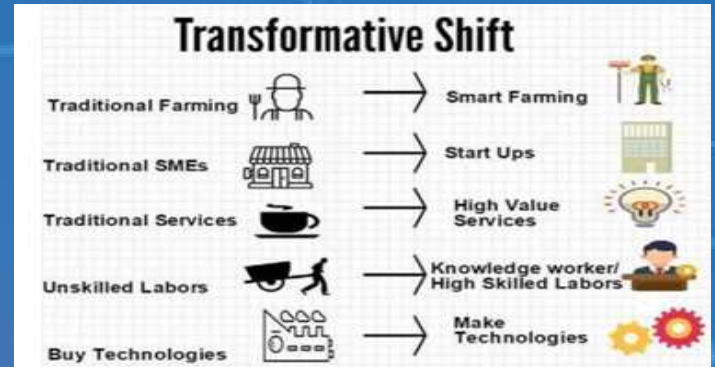
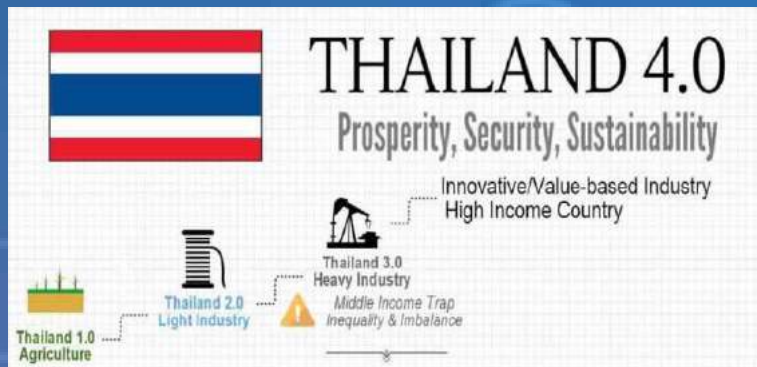
Sustainability





## Thailand 4.0

Thailand 4.0 is an economic model that aims to develop Thailand into a valued-based economy and unlock the country from several economic challenges, including "a middle income trap".



### Objectives of Thailand 4.0

#### Stability

#### Prosperity

#### Sustainability

#### Economic Prosperity

Positioning local companies for greater growth

#### Social Well-being

Create a society that moves forward through developing the potential of all members of society and smart farmers.

#### Raising Human Values

To shift

- Life expectancy
- Education
- Per capita income
- Human development

#### Environmental Protection

- Low carbon society
- Livable cities
- Etc.

## SEP for SDGs



**Agricultural sector:**  
**SEP** encourages a holistic farm management system



**Healthy communities:**  
**SEP** promotes well-being of people, environment, society and culture



**Human capacities and capabilities:**  
**SEP** fosters good business practices, good governance



**Water resources:**  
**SEP** highlights the importance of improving water quality, restoring water-related ecosystems



**Climate change:**  
**SEP** promotes green production and conserving ecosystems



**Economic stability:**  
**SEP** encourages risk management becoming resilient to uncertainties



**Strong government institutions:**  
**SEP** inspires enlightened leadership and encourages people-centred development



**Partnerships towards sustainable development:**  
**SEP** is a guiding light at TICA

# Mechanisms to promote SEP4SDGs



National



Regional



Global

National Committee for Sustainable Development (CSD) chaired by Prime Minister

The 20-Year National Strategies (2017-2036)

The 12<sup>th</sup> National Economic and Social Development Plan (2017-2021)



SEP for SDGs Partnership

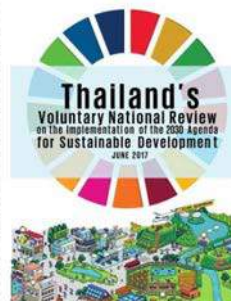


Thailand as ASEAN's coordinator on sustainable development



Thailand is Prime Mover in ACD and CICA to promote sustainable development

SUSTAINABLE DEVELOPMENT GOALS



Thailand presented Voluntary National Review (VNR) in June 2017

# Global Partnership for Sustainable Development – SDG 17





# TICA's Partners



## Thailand



## Partner Countries

including LDCs, landlocked and small island developing states



## Development Partners



# SEP for SDGs Partnership Projects





# Partners for SEP for SDGs Partnership



## Developing countries with SEP projects

- (1) Lesotho
- (2) Cambodia
- (3) Timor-Leste
- (4) Chile
- (5) Lao PDR
- (6) Tonga
- (7) Fiji
- (8) Sri Lanka
- (9) Mozambique
- (10) Mongolia

## Developing countries agreeing to cooperate with TICA for implementing SEP projects

- (1) Togo
- (2) Senegal
- (3) Kyrgyz
- (4) Madagascar
- (5) Benin
- (6) Niger
- (7) Costa Rica
- (8) Burkina Faso
- (9) Tajikistan
- (10) Paraguay
- (11) Vanuatu
- (12) Philippines
- (13) Bhutan

## Development Partners (developed countries and int'l organisations) implementing/to implement SEP projects under trilateral cooperation

- (1) Germany (GIZ)
- (2) South Korea (KOICA)
- (3) UN Volunteers (UNV)
- (4) UN Office for South-South Cooperation (UNOSSC)
- (5) PGTF Fund
- (6) USA (USAID)
- (7) Japan (JICA)
- (8) France (AFD)

## Science, Technology, and Innovation for SEP



1988 – 1997

### Science and Technology for Sustainability

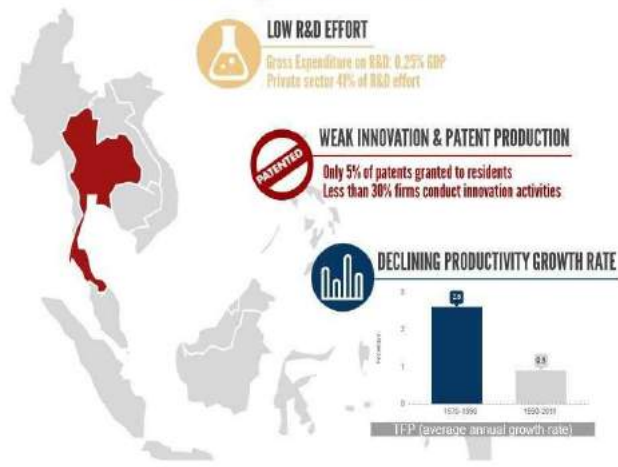
*"...Science and technology are important factors for development of a country. We should seriously support an invention of technology that is suitable for the needs and conditions of our country. The more we can invent, the more we can save, and the invented technology can be applied in a wide variety of works."*

*Royal Address by H. M. King Bhumibol Adulyadej, Given at the National Science and Technology Fair, 1 August 1988*

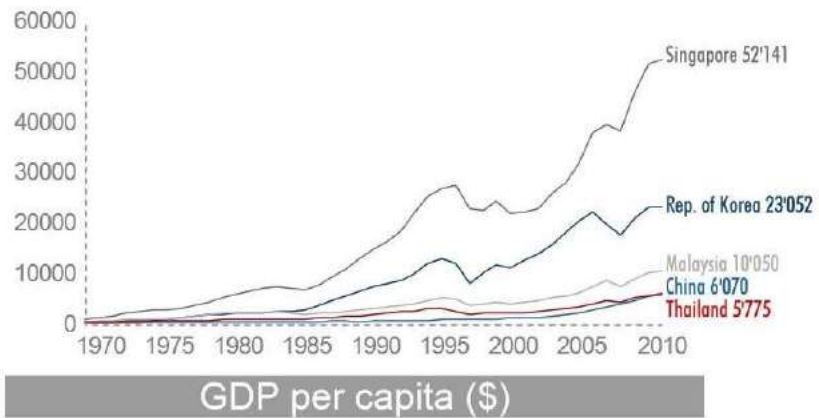


# UNCTAD Science, Technology and Innovation Policy Review THAILAND

## Moderate performance in STI



## ... difficulties to get out of the middle income trap



## POLICY SUGGESTIONS



## OPPORTUNITIES

### STRONG BASE FOR AN INNOVATION ECONOMY

SIGNIFICANT KNOWLEDGE INFRASTRUCTURE

GOOD BUSINESS CLIMATE







## STI policy to support SDG



### STI for People

#### People Centric วิทย์สร้างคน

- Create Science Culture
- STEM Learning
- Science Communication/awareness
- Talent Mobility

### STI for Prosperity

#### Technology reduce poverty วิทย์แก้จน

- Value Creation and Demand Driven/Productivity through STI Network
- Support One Tambon One Product (OTOP), SMEs
- Smart Farmer
- 3 informatics technology (Hydro/Bio/Geo)

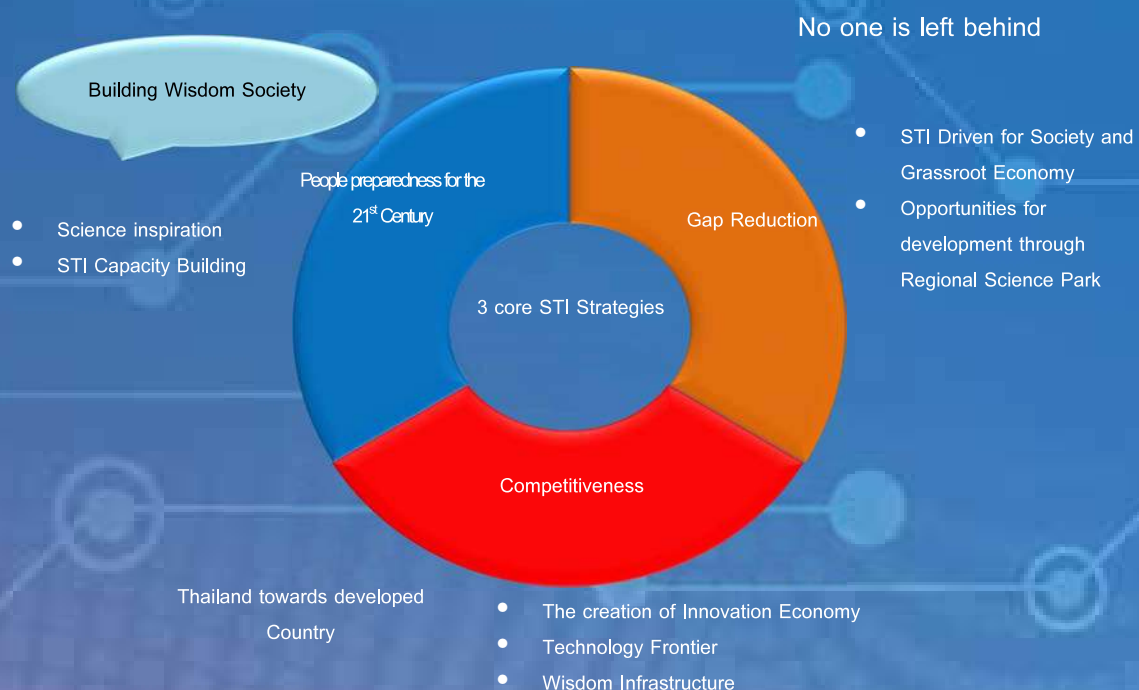
### STI for Power

#### Support Startups วิทย์เสริมแกร่ง

- STI Infrastructure Development
- STI to increase competitiveness
- Innovation-Driven Enterprises (IDE)
- Information Technology Service

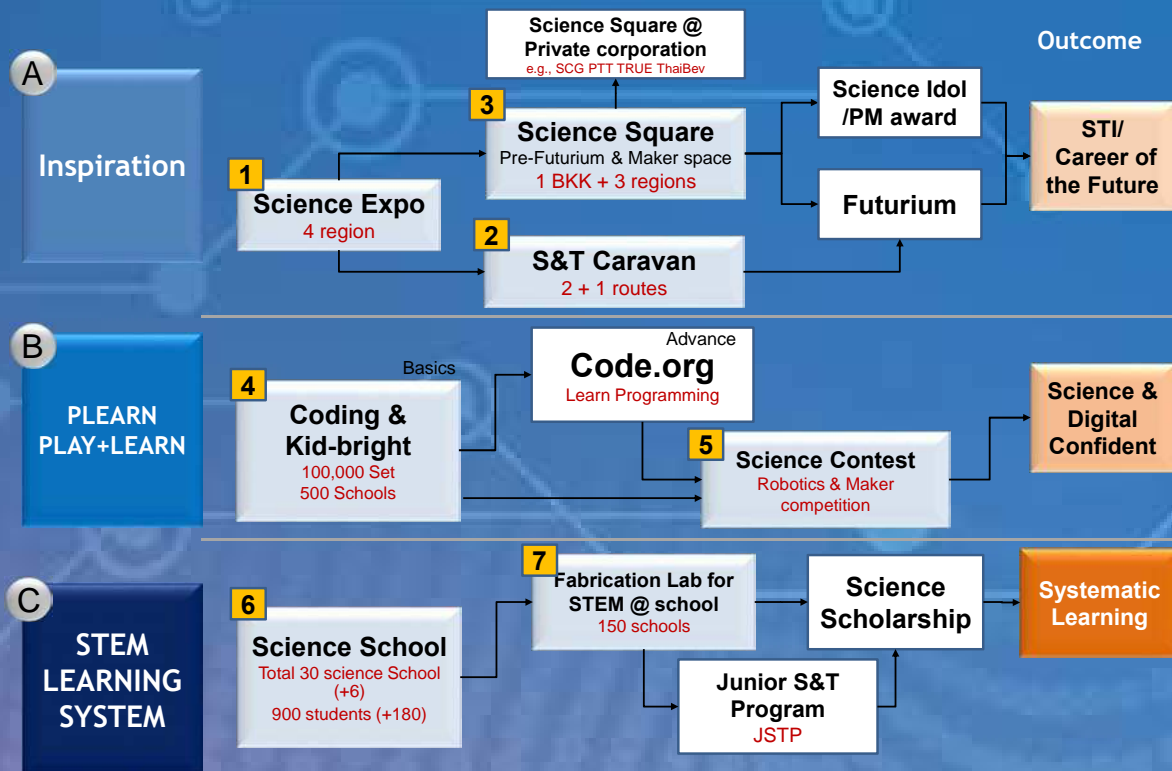


## Core STI Strategies





# People Preparedness for the 21<sup>st</sup> Century (Journey)



## Science Museum







National Science week



Science Camp



Science Show



Science Caravan



## National Astronomical Research Institute of Thailand



Infrastructure



หอดูดาวเฉลิมพระเกียรติ 7 รอบ พระชนมพรรษา  
(โครงการในพระราชดำริของสมเด็จพระเทพรัตนราชสุดาฯ สยามบรมราชกุมารี)

นครราชสีมา



จะเข้เชิงเทรา



เชียงใหม่



สงขลา

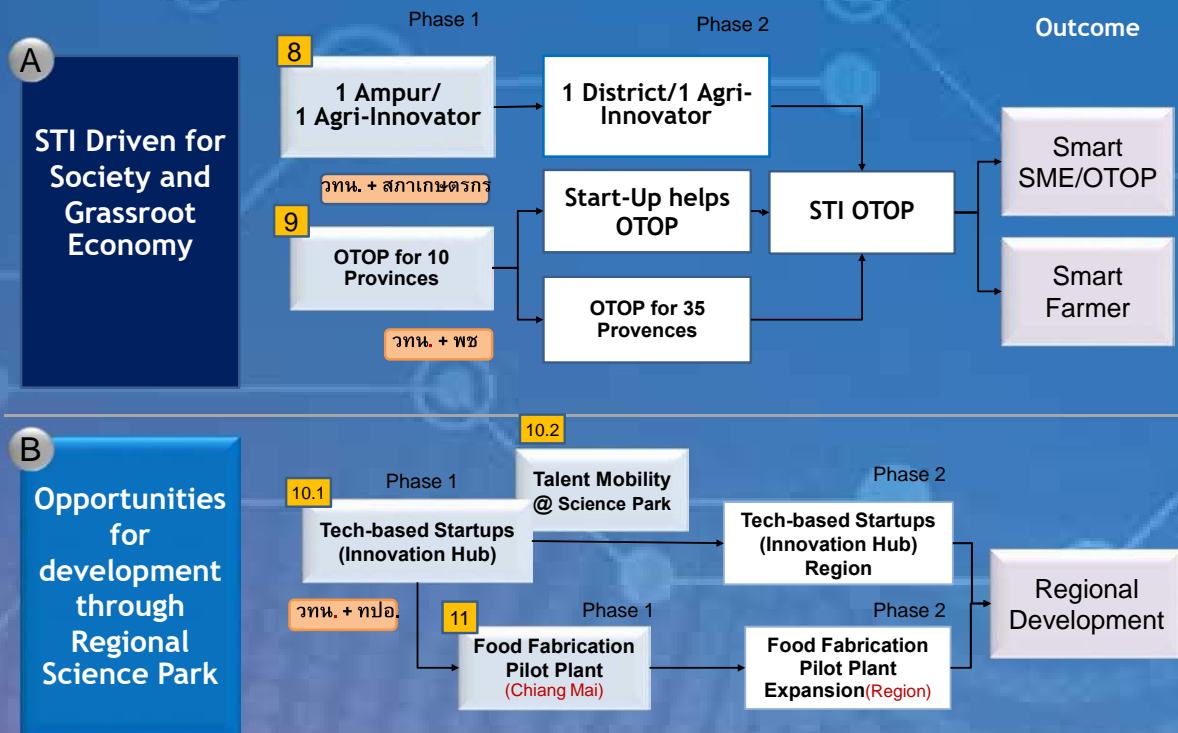


Chili, China, USA and Australia





## Gap Reduction (Journey)



## STI for Smart Agriculture



### Smart Farmer

“เทคโนโลยีชีวควบคุม (Biocontrol) แมลงศัตรูข้าวและไม้ผล”

วันที่ 18-19 กันยายน 2560 จ.ศรีสะเกษ  
มีเกษตรกรที่เข้าร่วม 191 ราย  
สามารถผลิตเชื้อได้ 250 ถุง ใช้ได้ครอบคลุม 250 ไร่  
ลดความเสียหายจากเพลี้ยกระโดดสีน้ำตาลร้อยละ 20



วันที่ 30 พฤศจิกายน 2560  
ณ สนง.เกษตร จ.น่าน  
เกษตรกรเข้าร่วม 70 ราย



### STI for SMART AGRICULTURE



### Smart Entrepreneur

วิสาหกิจชุมชนกลุ่มสตรีแม่บ้าน  
อสม.แปรรูปผลิตภัณฑ์หัว  
จ.สุพรรณบุรี

กลุ่มผู้เพาะเลี้ยงสัตว์น้ำเชิงใหม่-ลำพูน



กลุ่มแปรรูปเครื่องดื่มน้ำข้าวฟักใหม่ จ.ศรีสะเกษ



### Smart Village

กลุ่มพัฒนาอุตสาหกรรมสิ่งประดิษฐ์  
ตราสินค้า “ศรีสุวรรณ”

กลุ่มวิสาหกิจชุมชนกลุ่มเพาะเห็ดบ้าน  
ศรีนาชั้น จ.น่าน



จ.ศรีสะเกษ



เครื่องสำอางจากข้าว

