



**OPEN DEVELOPMENT INITIATIVE**  
A PROJECT BY EAST-WEST MANAGEMENT INSTITUTE, INC

# The critical role of communities in accelerating GMS innovation

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## Mission

To make data and objective information accessible and useful to all people in the Lower Mekong



# Open Development Mekong

The regional platform launched in 2016 is one of it's kind aggregating data and information from the Lower Mekong Countries.



# Open Development Mekong

Key contributions

- Webpage of ODI as a data / information clearing house
- Preparation of reference material for CSOs in policy-making dialogues
- Knowledge sharing of lessons learned through technical support to CSOs in the process of data collection, collation, & interpretation



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# Community innovation



## The problem

- Almost all problems are complicated, context-dependent & cross-boundary. No one individual or organization alone can solve most problems effectively.
- Solving problems without changes to underlying causes, often necessitating changes in human behavior is just a reaction to symptoms to the problem.

## The Solution

- When people change, social innovation emerges.
- Social innovation is not necessarily high cost or high technology, but often affordable involving locally responsive technology often based on local wisdom and participation.



# Community innovation

Can improve liveability and the environment in the GMS

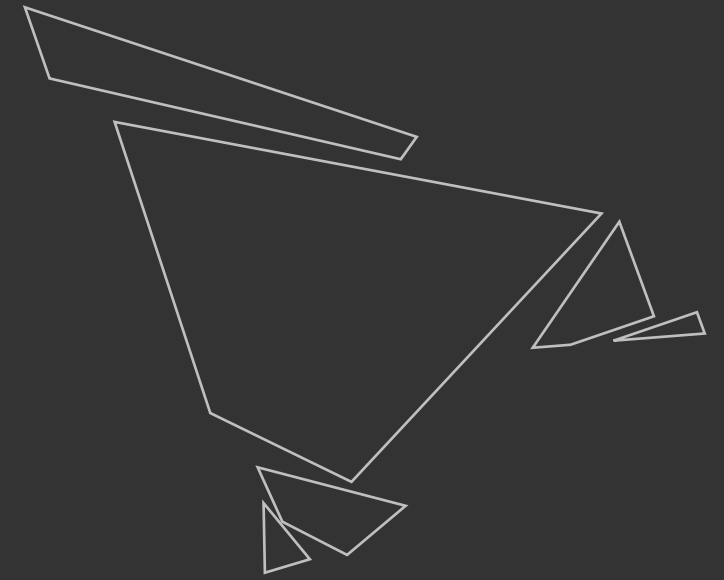


## Environmental quality

is critical to attracting investment, as firms become more selective, particularly in the case of the hospitality economy (including MICE, tourists, amenity migrants).

## Properly located, planned & managed investment

such as Economic Zones deliver benefits in terms of employment (particularly for lesser educated), environmental benefits, and attract higher-value manufacturing delivering higher economic output at less environmental & energy cost.



# Case Study 1

Reforestation in Northern Thailand



# Increasing Haze

due to forest fires decreased tourism by 40%

- Most farmers in Mae Chaem grow corn once yearly - clearing corn stalks from fields after farming was common practice of farmers;
- They also earn additional income through illegal logging & collecting herbs & mushrooms for sale;
- They believe forest fires increase yields;
- Between Feb. 15 - Mar. 19, 2015, in Mae Chaem district there were 319 forest fire hotspots, the highest number in Chiang Mai Province;
- Haze originating from Mae Chaem & other nearby districts, including neighboring countries, led to a 40% decrease in tourists visiting Chiang Mai Province, significantly negatively impacting the local economy;
- Haze also caused health impacts resulting from the higher average dust content in ambient air;



# Impact of Social Innovation

## Land Tenure

Illegal land tenure lead to communities agreeing to sign a social contract designed to curb forest fires.

## Economic Development

Communities have been enhanced by upstream CSR partnership activities based on an afforestation plan.

## Air Quality

Mae Chaem District changed from being a critical haze hotspot to one of the least haze generating areas in Chiang Mai during the 60 day danger period in 2016.



# มาตรการยั่งยืน (แม่แจ่มโมเดล)



# Impact of Social Innovation

## Reforestation

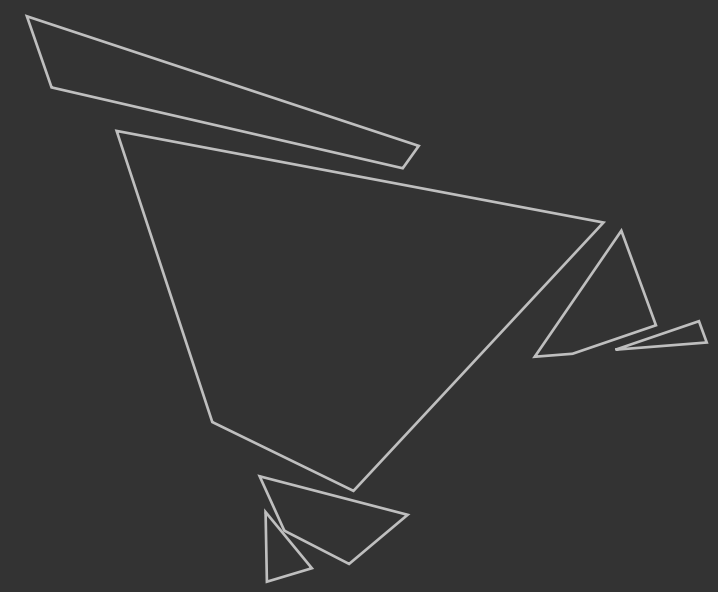
Co-management system of natural resources based on economic crops such as bamboo in forest plantations.

## Water Management

Water management improved based on "water ponds" and "waterbeds", based on the Late King's knowledge.

## Partnership

Demonstrated the effectiveness of an integrated development system based on adoption of an area-based development approach and multi-stakeholder collaboration among local communities, government sector, NGOs such as Sustainable Development Foundation, private sector with technical support of international donors such as EU



# Case Study 2

The KRABI Go Green Movement  
(opposition to coal-fired thermal plants)



# Case Study 2

## The KRABI Go Green Movement

### Energy Growth

Due to average Thai growth of energy consumption of 3 per cent per annum:

- Revised Power Development Plan (PDP) for Thailand for 2012-2030 indicates the need for 4,400 megawatts to be produced from high-grade coal power plants by 2030

### EGAT increases coal plants claiming

- Future supplies of natural gas from Myanmar are uncertain;
- Bottlenecks exist pertaining to renewable energy such as hydroelectric power plants & solar cells, including unstable production capacities, lack of commercial viable on an industrial scale, & high investment costs.

### Construction plans move forward

- EGAT plans to build the Krabi's Nua Khlong 870-megawatt coal-fired power plant.
- Ban Klong Rua coal port would be established to transport imported coal from Indonesia, Australia & Africa to fuel this coal-fired power plant.

# Case Study 2

Krabi at the Crossroads: Dirty Coal VS. Clean Renewable Energy



## **RAMSAR Site**

In 2001, Krabi is recognized as a global marine biodiversity hotspot, a RAMSAR site, & wetland of international importance with over 200 species of fish and 80 species of coral catalogued.



## **Tourist Destination**

The proposed Krabi coal plant would be built inside Thailand's largest seagrass ecosystem and near pristine beaches on the Andaman Sea, a world-famous tourist destination.

Unloading of coal from larger ships to smaller ones would take place at sea near Koh Lanta, a main tourist destination of the South.

About 2.3 million tourists annually visit Krabi province. The estimated revenue from recreation & tourism from the Ramsar Site in the Krabi River Estuary alone is \$9.7 million per annum.

The economic value of fishing benefits from the mangrove forest was \$758/ha.



# Thailand GO GREEN

☑️ มาจากผู้นำพลังงานทดแทน



# Renewable Energy

- Mr. Suphakit Nuntavorakarn,
- Healthy Public Policy Foundation

EU 11th Civil Society Organizations (CSOs) Forum on Implementation of Sustainable Development Goals (SDGs) – Communication Strategies on Sustainable Energy, June 26, 2018



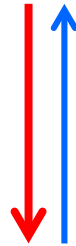


# Circular Economy

Of renewable energy in Krabi Province



Pay for national grid electricity



Electricity Authority



Pay for palm oil produce



Value added of palm oil produce 1.44 Baht per kg.

## Palm oil processing factories



Biogas capacity of 90 Megawatt

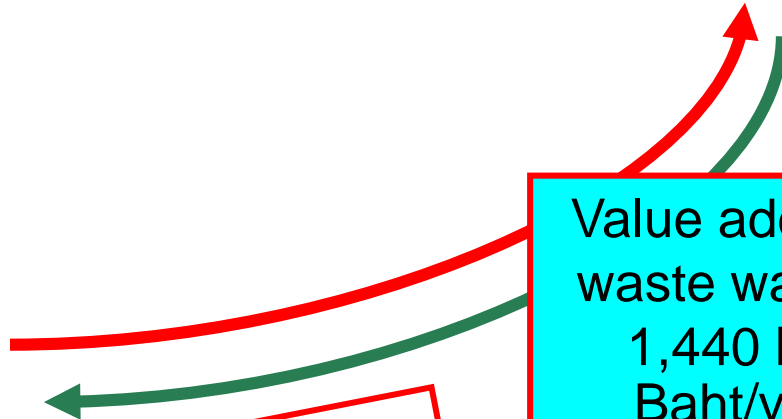


Biomass capacity of 223 Megawatt

Value added of waste water of 1,440 Mill. Baht/year

Value added of palm oil residue of 3,575 Mill. Baht/year

Pay for national grid electricity



# From user to producers

## Koh Nok Pao School, Surat Thani Province

- Solar cell: 900 watt and batteries
- Donation of \$1,818 US & labor cost of volunteer solar group
- Operated & Maintained by school teachers & students



## Thai-Indo Palm Oil, Krabi Province

- Biomass 1 mega watt and bio gas 3.2 mega watt
- Internal use in the factory + sell 1 mega watt to national
- Production capacity of 15 mega watt
- Do not produce to capacity because of regulations





# Cost recovery of renewable energy in enterprises

## Chana Hospital, Songkha Province

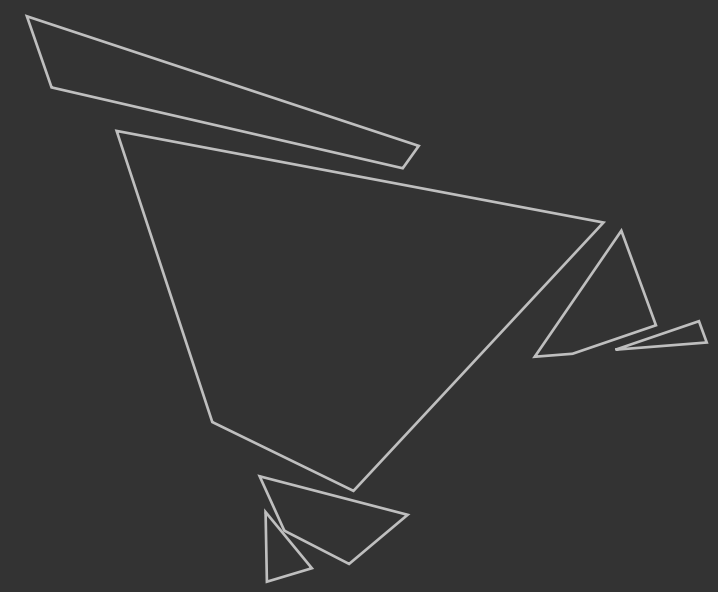
- Solar cell: 20,000 watt
- Electricity cost reduction: \$364-455 USD per month
- Cost recovery period: 6 months



## Supermart on Lanta Island, Krabi Province

- Solar cell : 48,000 watt
- Electricity cost reduction: From \$3,636 USD to \$2,121
- Cost recovery period : 5 - 6 years





# Case Study 3

Trans- Border Industrial Zones



# Case Study 3

## Trans-boarder Industrial Zones

### Planning and Development

Need to more thoroughly plan involving of all stakeholders based on evidence based information (e.g. Strategic Environment Impact Assessment, Regulatory Impact Assessment)

### Economic Business and Management

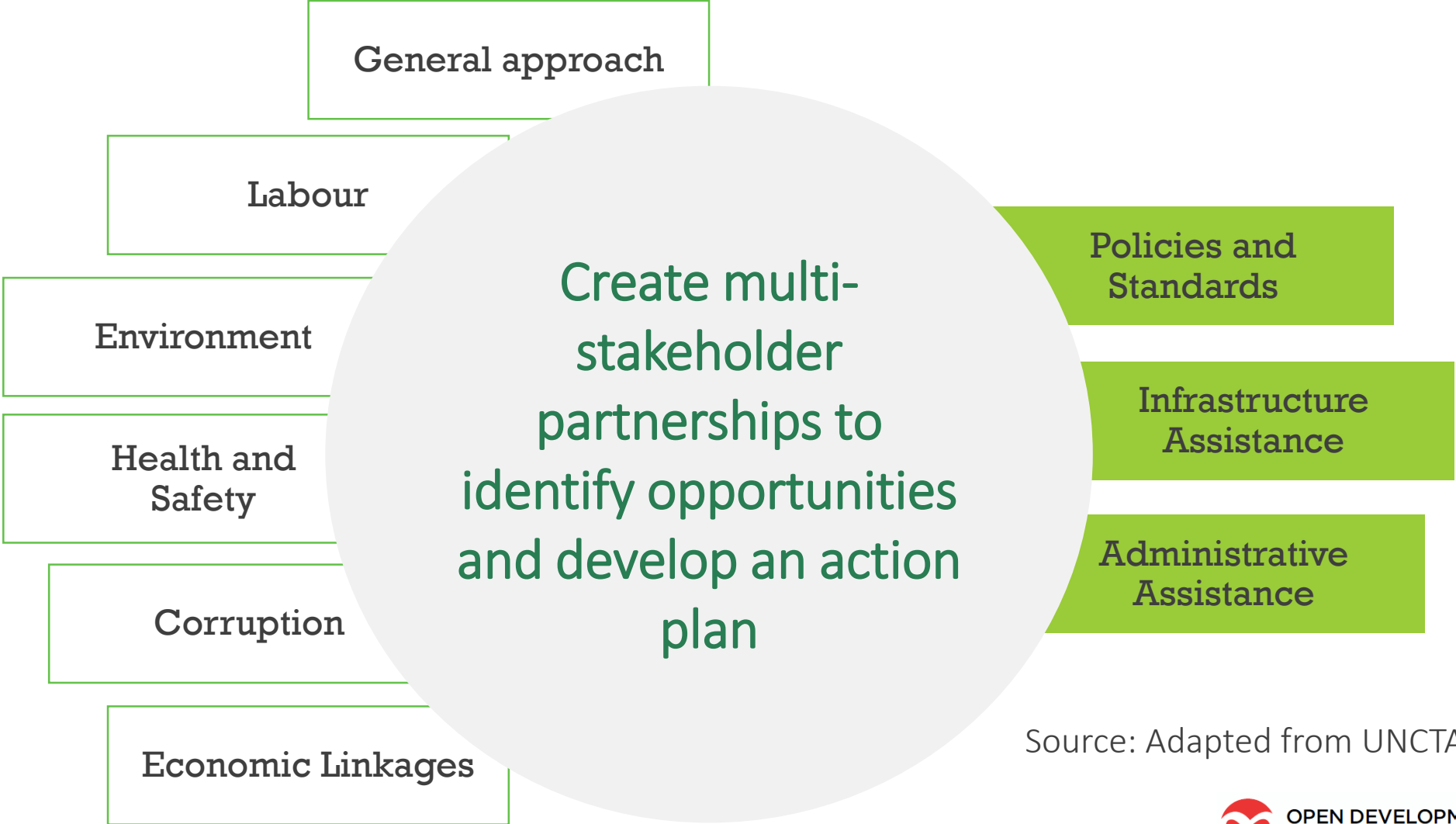
SEZs should switch from focusing on cost advantages based on lower standards to become champions of sustainable business based on social & environmental ethics/practices following international environmental, social, trade & investment bodies such as ISO, SA 8000

### Linkages with Local Economies Delivering Local Benefits

- Support SMEs through supply chains
- Utilizing local vocational education to enable locals to gain benefits from the emerging economic base

# Framework for Sustainable Economic Zones

Key elements for promoting sustainable EPZs



Source: Adapted from UNCTAD



# Special Economic Zones in GMS



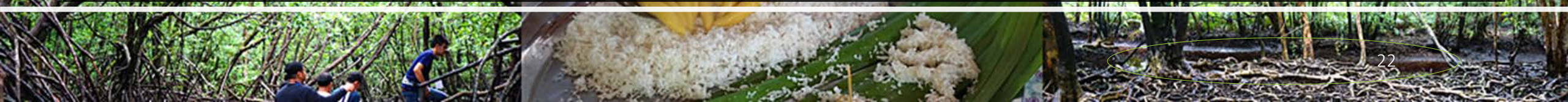
Open Development Mekong | <https://opendevloppmentmekong.net/map-explorer/>

Created date: 2 Aug 2018





Utilizing resource endowments to benefit the local economy





# Innovation drastically increases local benefits

**รูปแบบการบริโภคทุเรียนของคนจีน**

**ราคาทุเรียนที่ขายในประเทศจีน**

ปี	ราคา 300 หยวน ต่อ 18 กิโลกรัม หรือ 1,500 บาท ต่อ 18 กิโลกรัม	ปี	ราคา 500 หยวน ต่อ 18 กิโลกรัม หรือ 2,500 บาท ต่อ 18 กิโลกรัม	ปี	ราคา 800-900 หยวน ต่อ 18 กิโลกรัม หรือ 4,000-4,500 บาท ต่อ 18 กิโลกรัม
2559		2560		2561	

ที่มา : โพสต์ทูเดย์รวบรวม  
บางกอกโพสต์ กราฟฟิก


Search results for 'durian' on Alibaba.com:


- Product 1:** US \$13.00-\$15.00 / Kilogram. Cultivation Type: Common. Type: Durian, MUSANG KING D197. Style: Fresh. Product Type: Tropical & Sub-Tropical Fr... Grade: A. Certification: GAP. Supplier: Malaysia. Transaction Level: 1 Transaction(6 months). Response Rate: 95.5%.
- Product 2:** hot sale high quality durian. US \$2.00-\$7.00 / Kilogram. Cultivation Type: Common. Type: Durian. Style: Fresh. Product Type: Tropical & Sub-Tropical Fr... Grade: Grade AAA. Certification: ISO. Supplier: Dalian Holy Trading Co., Ltd. China (Mainland). Transaction Level: 3 hearts. Response Rate: 2.4%.
- Product 3:** Fresh Durian. US \$2.50-\$3.50 / Kilogram. Cultivation Type: Organic. Type: Durian, MONTHONG. Style: Fresh. Supplier: PK. TRADING (THAILAND) CO.,LTD. Thailand. Response Rate: 44.0%.




# Thank You



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