

Overview of our project

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Faculty of Engineering

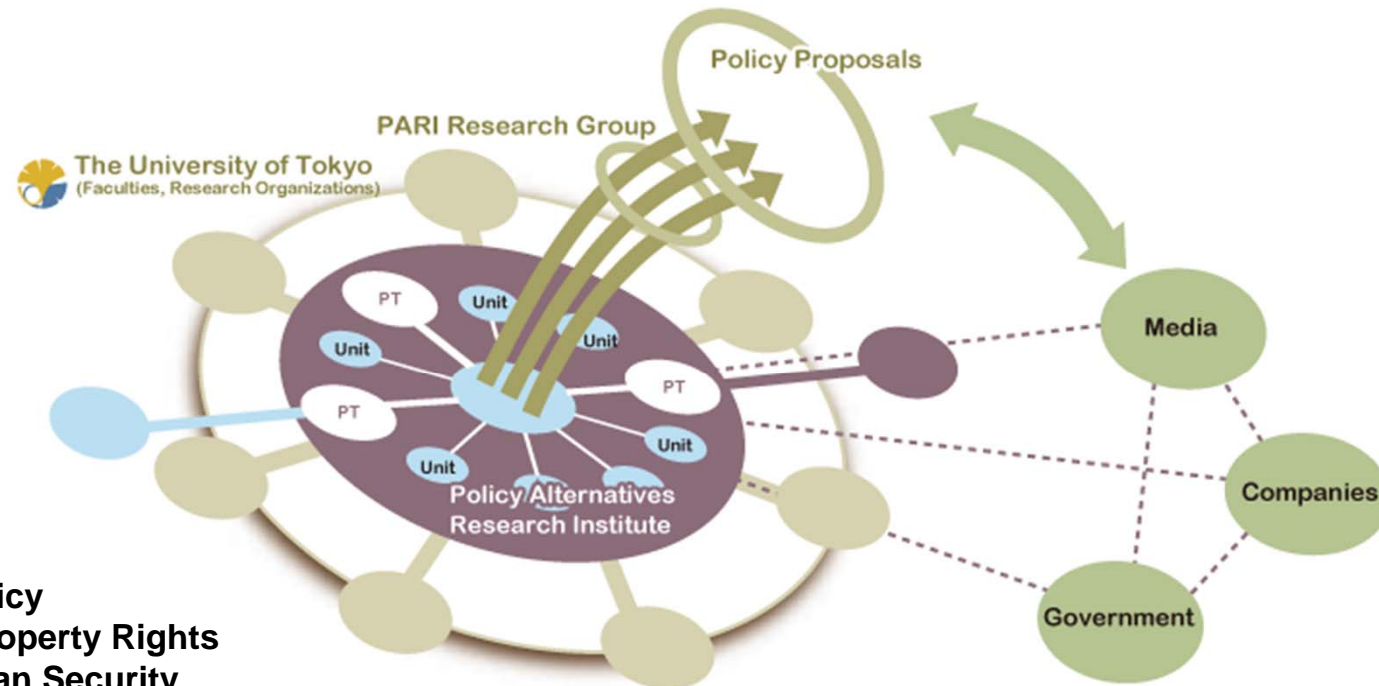
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The University of Tokyo



UTokyo PARI



Research Unit

1. Clinical IT Policy
2. Intellectual Property Rights
3. Northeast Asian Security
4. Medical Device Innovation and Development
5. Technology Governance
6. Aviation Policy
7. Bioethics and Medical Ethics Policy
8. Regenerative Medicine Policy
9. Future Society and University
10. Public Policy Consensus Building Practice
11. Policies and Institutions for the Aging Society
12. Complex Risk Governance

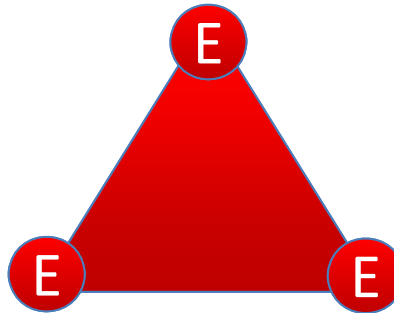
Research Demonstration Project

1. Technology Governance Project
2. Regional Medical Information Project
3. Social Inclusion through Guardianship and Trust Project

Structural Changes in GMS

Economy

- ASEAN Economic Community (**AEC**) in 2015
- Mekong river connects the **GMS** region
- Uneven economic development in the region, equally promising



Energy

- Deepening energy market integration
- Improving grid connectivity
- **Regional energy security**
- Need for further **energy efficiency**

Environment

- Growing environmental concerns
- Sustainable resource use
- Need to **share best practices internationally**

Why Myanmar and Lao PDR in particular?

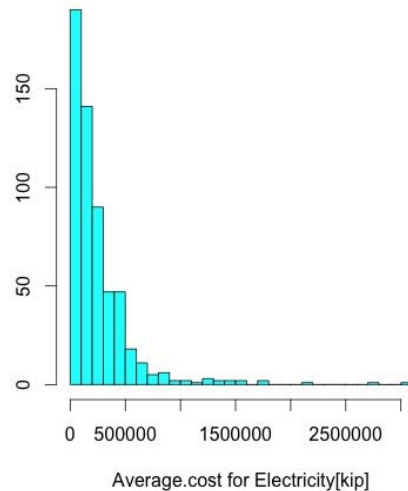
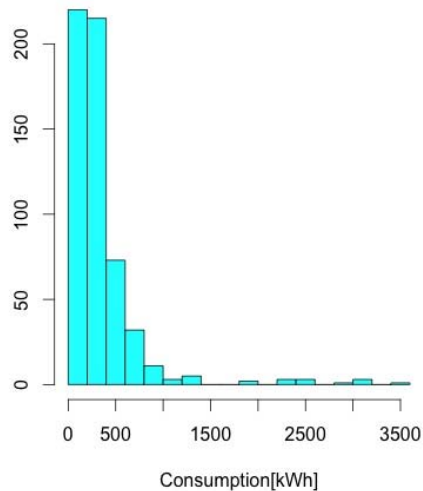
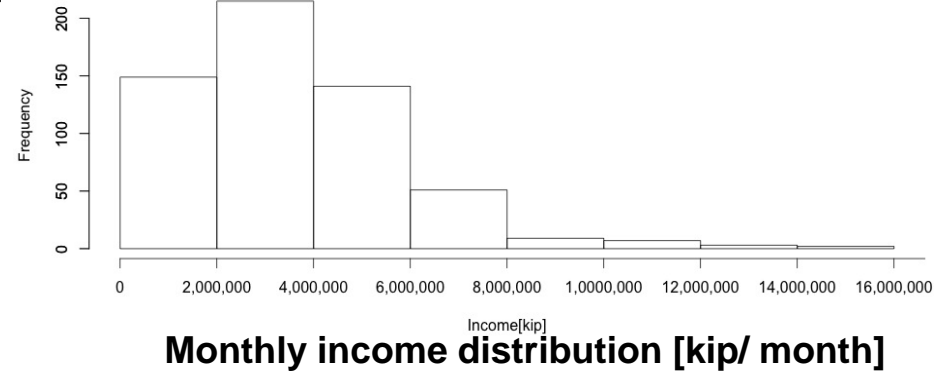
- Large growing economy of Thailand in the center
- Regional energy suppliers supporting the growth
- Geopolitically important location bordering on China and India



Residential survey in Lao PDR

Household data focused on the possession of appliances for S&L policy.

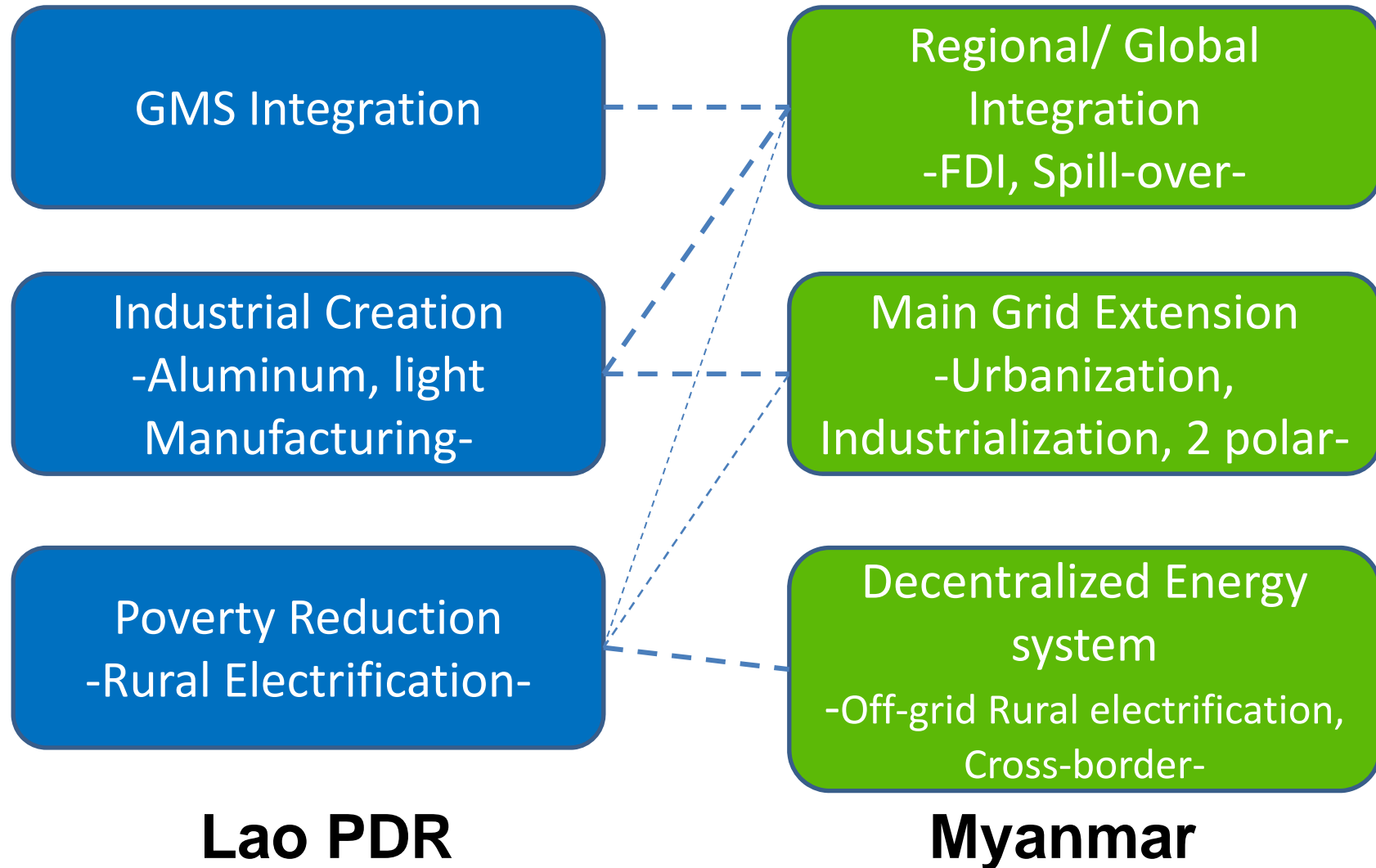
- Vientiane city
 - 5 districts, 31 villeges
 - 588 households data
- Standards and Labeling



Monthly consumption of electricity [kWh/month] (left)
Monthly average electricity cost [kip/month] (right)

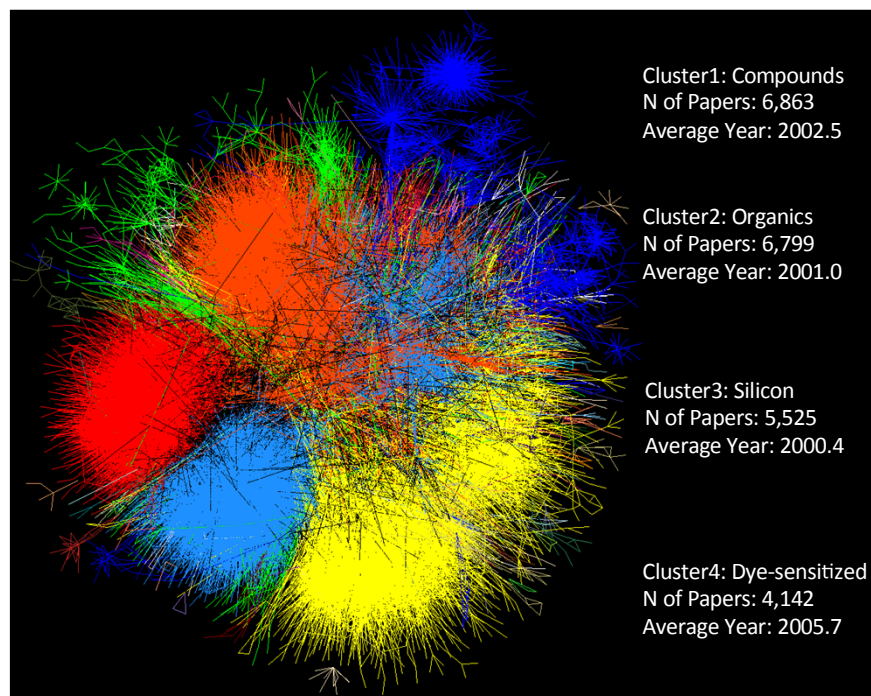
The number of possessors [households]

Difference in policy targets



Technological Changes

Rapid technological accumulation



Scientific catch-up in Asia

Cluster1: Compounds			Cluster2: Organics		
COUNTRY	N of PAPERS	SHARE	COUNTRY	N of PAPERS	SHARE
USA	2442	23%	USA	2435	21%
GERMANY	1421	13%	CHINA	1136	10%
JAPAN	1073	10%	JAPAN	1073	9%
INDIA	570	5%	GERMANY	942	8%
CHINA	504	5%	NETHERLANDS	593	5%
ENGLAND	468	4%	ENGLAND	545	5%
FRANCE	438	4%	SOUTH KOREA	522	4%
SPAIN	393	4%	FRANCE	512	4%
SOUTH KOREA	304	3%	TAIWAN	443	4%
MEXICO	260	2%	INDIA	370	3%

Cluster3: Silicon			Cluster4: Dye-sensitized		
COUNTRY	N of PAPERS	SHARE	COUNTRY	N of PAPERS	SHARE
USA	1344	19%	CHINA	1383	18%
JAPAN	980	14%	JAPAN	1277	16%
GERMANY	940	13%	USA	957	12%
FRANCE	381	5%	SOUTH KOREA	642	8%
PEOPLES R CHINA	368	5%	GERMANY	499	6%
NETHERLANDS	332	5%	SWITZERLAND	310	4%
INDIA	315	4%	TAIWAN	305	4%
AUSTRALIA	271	4%	SWEDEN	268	3%
ITALY	252	4%	ENGLAND	265	3%
SOUTH KOREA	234	3%	SPAIN	219	3%

ERIA-UT-ERI Project in Myanmar

Grid Extension

To improve energy/power access through the national grid expansion

Regional Integration

To improve energy access through cross-border power trade / FDI with neighboring countries

Off-grid

To diminish energy poverty through decentralized local resource use

Further Research (2013-)

Tech survey / forecast

Fieldwork

Energy demand in urban regions

Grid Simulation

Decentralized power network systems

Myanmar's interests in FDI from neighbors

Neighboring Perspectives

Neighbor's interests in energy/power in Myanmar

Possible options for off-grid energy systems
Energy demand in rural regions
Cost analysis of off-grid power systems

Integrated Energy Strategy

Synario Planning

HRD/Capacity Building

“National Energy Management Committee” has already been formed under the Vice President. Following up the success of Lao PDR, we will conduct “scenario-making” and prepare policy recommendations that will lead to an “integrated longer-term energy strategy” of Myanmar.