

Research Capacity Framework: Thailand and National Institute of Development Administration Perspective

Erasmus+ Capacity Building in Higher Education
The Mapping Study Workshop, 7th – 9th of August, 2017, Kuala Lumpur
Assessing and Improving Research Performance at South East Asian Universities

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Co-funded by the
Erasmus+ Programme
of the European Union

This project has been funded with support from the European Commission.
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1. Framework of Thailand National Research and Development

- Thailand R&D system is rather unique. It is different countries within the region.
- A late adopter for the policy framework on R&D from the first establishment of Thailand's first university, Chulalongkorn University in **1917**.
- The national policy in higher education focused on teaching undergraduate students
- **1956** established the Bureau of National Research
- **1959**, National Research Council of Thailand (NRCT) was created, a main organization responsible for national research related policy. The NRCT was under the Prime Minister's Office which centralized its policy making process. To
 - Strengthen the **coordination** and the **corporation** of the different Thai research agencies.
 - Provide funding to both public sector and universities' research on science (including social science).

2. The move to reform Thailand National Research and Development

- There are two main research-related laws:
 - National Research Council Act B.E 2502 (1959)
 - National Science, Technology and Innovation, B.E. 2551 (2008).
- The **Office of the National Research Council of Thailand** is responsible for
 - formulating research policies and
 - as the central organization to collect and integrate budgetary plans from research organizations.
- Its performance outcomes indicate that the **existing laws does not conform to the research system development for the country.**
 - Legal instruments need amendments and harmonization for adoption as the primary law in research-related organizations.
- As a result of the said problem,
 - the **Standing Committee on Science, Technology, Information and Mass Communication of the National Legislative Assembly**, in collaboration with
 - the **National Reform Committee on Education of the National Reform Steering Assembly**,
- organized the **Brainstorming Dialogue on “Legal Instruments for the Research and Development System Reform to Support the Country Development”**, on **Monday 6 June 2016**

Main points of the Brainstorming Dialogue

- **Structural and systematic problems.**
 - national policy-formulation organizations that **cannot play their roles independently**
 - existing policies are **short terms** with **annual budget allocation** do not support a large-scale and long-term research project.
 - Researches are conducted **in contrary to the demands** of the country and industrial sectors, **but only satisfy the interest of researchers.**
 - **lack of quality research network** which obstructs the breakthrough of researches,
 - **inefficient connectivity** among the research administrative organizations,
- **fail at the national goal** of investments in research and development, **decreasing private investments** in research and development and **unconformity** with existing researches with the demands of industrial and service sectors.
- **Problem of mechanism** for strengthening the national research capacity,
 - researchers lack motivation of clear career paths
 - no enough mechanism for encouraging the public researchers to work for the private sector,
 - not many researches utilized by the public sector,
 - no law enacted to support the private sector to utilize researches
 - the large-scale investment projects in the country cannot facilitate the national industrial development.



Main points of the Brainstorming Dialogue

- **Points of the national reform and guidelines for steering the integrated research system include**
 - Rearranging the policy structure, organizational structure and human resource management for achieving the unity of the national policy on research system by setting up the National Research System and Innovation Board to be uniquely in charge of policy-related duties, to review the roles of relevant organizations for reducing the overlap, to properly improve the system and organizational management of the research-related organizations at all levels in conformity with the national research strategies, to develop national and international research networks, to promote the human resource development in different aspects such as skill development, career path development, senior researcher promotion, younger researcher development and arrangement of suitable motivation system.

Main points of the Brainstorming Dialogue

- **Points of the national reform and guidelines for steering the integrated research system include**
 - Management of other resources by adjusting the budgetary and funding system,
 - allocate the budget in line with the national research strategies
 - allocate the budget for the specific organization on project implementation at the amount of grant prescribed in the action plans,
 - allocate budget for research funding organizations dealing with clear and practical research programs to fulfill the large demand of the nation.

Main points of the Brainstorming Dialogue

- **Points of the national reform and guidelines for steering the integrated research system include**
- **For the research, science, technology and innovation management**, it is stipulated to formulate the research strategy for 20-year term of investment in conformity with the country's goal.
- **For the information and body of language management**, the civil state should be promoted as the mechanism for urging the utilization of domestic research works. Laws, disciplines, regulations and **rules that obstruct the investment or joint venture activities should be amended** and, the intellectual property registration service should be revised to protect the copyright infringement in research works.

Main points of the Brainstorming Dialogue

- The Research and Development System Reform Bill will have the relevant disciplines, regulations and rules amended and two key laws will be also amended as follows
- **The National Research Council Act B.E 2502 (1959)**, it will be **replaced** by the **National Research Bill** which prescribes that the **National Research Council** shall act as
 - the **policy-related center** with the responsibility **to implement comprehensive research projects** on various aspects including science and technology, medical science, agricultural science, social science, humanities and arts,
 - to utilize researches in knowledge enhancement and knowledge management to bring benefits to the economy and communities.
- **The National Science, Technology and Innovation, B.E. 2551 (2008)** will be initially **amended in principle**, for example to emphasize the importance of science, technology and innovation for more concrete economic and social development by promoting the participation of the private sector in moving science, technology and innovation forwards the development ranging from the formulation of policies to the adjustment of the budgetary system, as well as to improve the policy making and management system for higher efficiency.

Research grants

- Thailand's R&D expenditure was around 3.6 Billion USD in 2011 (0.39 %) of the country's GDP.
- The organization for the national research grants is Thailand Research Fund (TRF) established in (1992?).
- Thailand Research Fund is part of the government system, it lies **outside** the government administrative bureaucracy. This **freedom** allows **great efficiency** in research support.
 - TRF's main duty: **supporting at both local and national levels, the creation of a knowledge-base to help those tackling societal problems.** TRF assists the development of researchers and research-based knowledge through research grants and assists research management.
 - TRF does not itself conduct and research.
- TRF has developed techniques and strategies in research granting and management to tackle the dynamic and multifaceted problems Thailand faces. Multidimensional of the problem is a major challenge of TRF.

Strategic Research Issue (SRI)

- TRF has published “Strategic Research Issue” aims at enhancing national capabilities for coping with crucial issues by building up core knowledge in key areas including:
 1. ASEAN Community and the East Asian Region
 2. Food Security and Safety
 3. Climate Change, Water, Land and Environmental Management
 4. Inequality Reduction
 5. Creative Learning and Educational Reform
 6. Good Governance and Corruption Reduction
 7. National Interests on Marine Resources and Maritime Security
 8. Ethics, Culture, and Discipline of Thais
 9. Health and Demographic Transition
 10. New Knowledge and Innovation on Sciences, Social Sciences and Humanities
 11. Energy and Alternative Energy
 12. Overcoming the Middle Income Trap

3.2 The development of Thai-Journal Citation Index (TCI)

- Journals are one of the key media for both national and international scholars to communicate and exchange their academic research discoveries,
- The Thai-Journal Citation Index Centre, or TCI, was first introduced publicly via **a research project** in 2001, financially supported by King Mongkut's Institute of Technology Thonburi (KMUTT).
- Thailand Research Fund (TRF) in cooperation with KMUTT **officially established**, the first Thai-Journal Citation Index Centre on July 1, 2004,

3.3 Contributions and Impacts of TCI in the Improvement of Journal Quality and Research in Thailand

- The numbers of journals in the TCI database have increased, from 100 in 2002 to 480 in 2012 (as of March 24, 2012).
- The TCI database can easily be searched at <http://tci.trf.or.th>.
- TCI database is widely recognized in domestic academic journals

Contributions and impacts of the TCI database: the benefits

- Thailand would have its own online database, government offices and public companies could use the TCI database to evaluate quality and calculate weights of academic articles in Thai journals; for example:
 - a) The Office for National Education Standards and Quality Assessment (Public Organization) (ONESQA) has developed indexes and criteria of external quality assessment at a tertiary level (B.E. 2544–2558) for the quality of published research articles. The quality level of research articles indexed in the TCI database has been given more weight than those outside the database.** For example, articles published in journals indexed in the TCI will have a weight of 0.75 (compared to a weight of 1.0 for articles published in international journals indexed in Thomson Reuters and Scopus) (The Office for National Education Standards and Quality Assessment 2011).
 - b) Research quality assessment of Thai higher education institutions has used quality assessment criteria to evaluate research articles** published in journals, with an average T-JIF value for the past 3 years (from the TCI database) of no less than 0.025, to be equivalent to a weight of 0.50 (compared to a weight of 1.0 for articles published in international journals indexed in Thomson Reuters and Scopus). Journals with lower T-JIF than 0.025, or those outside the TCI database, have lower weights (The Thailand Research Fund 2010).
 - c) Higher education institutes** have extensively used TCI database **to set up funding and honorarium policies** based on publication in international and TCI databases. Those universities include Thammasat University, **Walailak** University, **Chulalongkorn** University, and **Thaksin** University.



Thank you for your attention!