Thailand Research Fund: 
International Collaboration

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Thailand Research Fund
For International Research Network

TRF-IRN May 2014
RESEARCH Funding in Thailand…The BIG Picture

0.37 % of country’s GDP (400,000 Million US $) = 1480 Million US $
Granting agencies in Thailand

Government research funding agencies

1. National Research Council of Thailand (NRCT)
2. Thailand Research Fund (TRF)
3. Office of Higher Education Commission (OHEC)
5. National Science and Technology Development Agency (NSTDA)
6. Agricultural Research Development Agency (Public organization) (ARDA)
7. Health Systems Research Institute (HSRI)

Research dissemination & Innovation development

1. National Innovation Agency (NIA)
   • Providing technology advice and financial support to private enterprises
Who We Are:
A Catalyst for Changes

• Established in 1992 by the Research Endowment Act of 1992 as an organization under the Prime Minister’s Office

• Main duty:
  – Supporting the creation of knowledge to help tackling societal problems at both local and national levels
Top Fund Award

Top Fund Award for 4 consecutive years 2012, 13, 14, 15

: in Best Management
Thailand Research Fund

- No intramural research activities.
- Coverage All area of the country;
  - All disciplines of Sciences, humanities and social science
  - All dimensions of research: basic, apply, translation, community
    - 50% of all budget go to basic research
    - 40% of proposals are granted
Annual Budget

• 1992 (first year)
  ● 200 million Baht (7 million USD)
  ● 1,000 million Bath (40 million USD) for the endowment fund

• 2015
  ● Estimated 2,200 million Baht (74 million USD; 5% of Thailand R&D budget) (not include endowment)
Research Grants

• 2014

- Have granted 1,577 grants
- Published 1,640 papers in WoS
  - Thailand ranks as 3rd among ASEAN country
- 200 PhD Students graduated and 1,000 PhD students are studying.
- 10,000 researchers working under TRF support.
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
TRF Administrative Structure

TRF Policy Board

TRF Evaluation Board

Director

Deputy Director

Division 1
Program on National Policy and Transnational Relations

Division 2
Program on Agriculture

Division 3
Program on Public Welfare

Division 4
Program on Community

Division 5
Program on Industry

Division on Local Community Research

Division on Academic Research

Royal Golden Jubilee Ph.D. Program

Research and Researchers for Industries

Administrative Division

- Clerical
- Personnel
- Public Relations
- Information
- Meeting
- Accounting
- Finance
- Procurement and facilities
- International Relations

11 Granting divisions/program
Research funding landscape:
Research & Development Funding Management

1. **Division 1: National Policies and International Relations;** improve economic efficiency, social justice, international collaboration through cross discipline R&D

2. **Division 2: Agriculture**

3. **Division 3: Public Well-being;** Environment social welfare

4. **Division 4: Community and Social Development;** natural resource & environment management

5. **Division 5: Industry;** rubber, value-added agriculture food products, SME, tourism, logistic, defense

6. **Community-Based Research Division (CBR)** empower local community

7. **Area-Based Collaborative Research (ABC);** research & knowledge management from all sectors in each area (25 provinces)
Research funding landscape:
Researcher-Based Funding Management

Career development for qualified researchers through research funding

8. Academic Research Division (ARD)

- Young researcher 20,000 US$
- Early mid-career researcher 50,000 US$
- Late mid-career researcher 70,000 US$
- Senior researcher 400,000 US$
- Distinguished senior researcher 500,000 US$
Human resource development schemes supported by TRF through mobility funding of graduate students and researchers

9. The Royal Golden Jubilee Ph.D. Programme (RGJ) - established in 1996
   ● Ph.D. fellowships (overseas research collaboration)
     - Study course work in Thailand (2-2.5 years)
     - Research abroad in Foreign Laboratory (6 months- 1 year)

10. Research and Researcher Development for Industry Programme (RRi) - established in 2012
    ● Ph.D. fellowships (overseas research collaboration)
    ● Master degree fellowships
    ● Research questions must come from industries
Collaboration with International Agencies through RGJ Ph.D. programme: Bilateral collaboration

- The Biotechnology and Biological Sciences Research Council (BBSRC)
- The Science and Innovation Network, British High Commission, Singapore
- The British Council, Thailand
- The French Embassy in Thailand
- Le Centre de Coopération Internationale en Recherche Agronomique pour le Développement (CIRAD)
- The National Science Foundation (NSF)
- The Netherlands Organization for Scientific Research (NWO)
- The German Academic Exchange Service (DAAD)
RGJ - Ph.D. MANAGEMENT SYSTEM

Quality Measures: (1) Highly qualified Ph.D. advisors (2) High quality Ph.D. students (3) Requirement to produce international publications

More than 1,850 Thai advisors from 27 leading universities

Financial support from government

More than 2,850 Foreign advisors from 1,150 institutions in 45 countries

Management and inputs from the program’s staff (16 persons)

RGJ-Ph.D. Program
3,958 students

Quality enhancing activities (Organized by RGJ-Ph.D. Network Coordinators):
- RGJ-Ph.D. Congress
- RGJ-Ph.D. Seminar Series
- RGJ-Ph.D. Electronic Network
- RGJ-Ph.D. Newsletters
- Site Visits

Outputs:
- Ph.D. graduates (2,271)
- International publications (5,621), Patents (74)
- Strengthened graduate programs and research units
- International research interactions and collaborations

Impact:
Strengthening of research capability and improvement in competitiveness

Data: July 2014
Human resource development schemes supported by TRF through *mobility funding* of graduate students and researchers

**11. International Research Network Programme (IRN) - established in 2013**

- Thais (3 institutions) & Foreign Researchers
- Thai Ph.D. students *(overseas research collaboration)*
- Post Docs. *(Thai and overseas post-doc working in Thailand)*
- Joint Research conference, workshop,
- Joint research fund
- Joint Publications, patents
- Joint Research Center of Excellence *(in Thailand)*
International Research Network Program (IRN)
Thai-Foreign Research Collaboration

Mobility Fund
Joint Ph.D. Students & Post doc exchange programs

Joint Research Fund
Joint Conference, Workshop
Joint Publications, Patents

Joint Research Center of Excellent (COE)
Development of International Research Networks to Achieve Goals of National Research Policy

- To achieve goals of national research policy
  - Sustainable research networks
  - Sustainable country’s growth in global arena
  - To enhance research & increase Thailand competitiveness

TRF Director 3/10/13
1. Southeast Asia Climate Change Research Network
   PI: Assoc.Prof.Dr. Amnat Chidthaisong [KMUTT]
   Budget: 600,000 US$ / 3 years
2. Food security Research Network
   PI: Prof.Dr. Metha Wanapat [KKU]
   Budget: 600,000 US$ / 3 years
3. Energy Research Network
   PI: Prof.Dr. Surapong Chirarattananon [KMUTT]
   Budget: 600,000 US$ / 3 years
1. **Cancer Immunotherapy Network**  
   PI: Prof. Dr. Pa-thai Yenchitsomanus [MU]  
   Budget: 600,000 US$ / 3 years

2. **Stem-cells for Infectious Diseases**  
   PI: Prof. Dr. Duncan Richard Smith [MU]  
   Budget: 400,000 US$ / 3 years

3. **Natural product-based drug discovery**  
   PI: Prof. Dr. Pawinee Piya Chaturawat [MU]  
   Budget: 300,000 US$ / 3 years

4. **Pest Insects and Arthropods in the Urban Settings**  
   PI: Prof. Dr. Theeraphap Charoenviriyaphap [KU]  
   Budget: 500,000 US$ / 3 years

5. **Innovation Chemistry of Natural Products (collaboration with France and Sweden)**  
   PI: Prof. Dr. Vichai Reutrakul [MU]  
   Budget: 300,000 US$ / 3 years
<table>
<thead>
<tr>
<th>Research Cluster</th>
<th>Thai PI / University</th>
<th>Budget / years</th>
<th>French collaborator / University</th>
<th>supports</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 Innovation in Chemistry of Natural Products</td>
<td>1. Prof. Vichai Reutrakul, Mahidol U. 2. Chiangmai U. 3. Naresuan U.</td>
<td>300,000 US$ / 3 years</td>
<td>Dr. Fabien Gagosz - Directeur de Recherche CNRS Laboratoire de Syntheses Organique, Ecole POLYTECHNIQUE UNIVERSITE PARIS-SACLAY - Dr. Philippe Humbert [University of Franche-Comte (UFC)]</td>
<td>Host for Ph.D. Students Research collaboration -Student -Mobility grant 7,000 Euro / Year</td>
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Joint Fellowship Programme for Doctoral Studies

Cooperation between the Thailand Research Fund (TRF) and the Thailand International Development Cooperation Agency (TICA)

TRF - Research Expenses
- Education Fees
- Travelling Expenses for Thai Advisor

"Cambodia, Laos, Myanmar, Vietnam (CLMV)" and "Bangladesh, Nepal, Sri-lanka"

TICA - Accommodation
Monthly Allowance

Other Donor Countries (France, Sweden)

2 years study in Thai University

1 year research study in France, Sweden
Newton UK - Thailand Research and Innovation Partnership Matching Fund
<table>
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<tr>
<th>Programme</th>
<th>UK Lead Delivery Partners</th>
<th>UK Budget (£)</th>
<th>TRF Budget (THB)</th>
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<tbody>
<tr>
<td>1. Newton Ph.D. Program: RGJ-Newton PhD scholarships</td>
<td>British Council</td>
<td>306,000</td>
<td>13,500,000</td>
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<td>2. Researcher links – workshop and travel grant</td>
<td>British Council</td>
<td>200,000</td>
<td>7,000,000</td>
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<td>3. Professional development and Engagement</td>
<td>British Council</td>
<td>50,000</td>
<td>2,500,000</td>
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<tr>
<td>4. Collaborative Research Fund, Joint Centres &amp; Innovation in Infrastructure Programme: Research co-funding in specific research area (Regional diseases in Thailand)</td>
<td>Medical Research Council</td>
<td>1,000,000/3 years</td>
<td>18,000,000/3 years</td>
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<tr>
<td>5. Leadership in Innovation Programme: Leadership in</td>
<td>RAEngineering</td>
<td>TBC</td>
<td>1,000,000</td>
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National Natural Science Foundation of China (NSFC)
NSFC-TRF meeting 26/11/2014

NSFC agree to matching fund with TRF;

Joint Research project (3 years) 10 million RMB (53.4 M THB)

Natural Products 2015  Biodiversity 2016
Medical Sciences

Climate Change

2 Network research projects; 3 million RMB (16.02 M THB) / project
• Biodiversity

• CAS has established Biodiversity center in Myanmar

• TRF also interest to collaborate;
  - Climate change effect to biodiversity
  - Drug discovery from biodiversity

• CAS-MOS-TRF Joint workshop on Biodiversity in Bangkok, 20/8/2015
Thank you for your attention
IRN 2016

1. Food safety
2. Healthy Aging
3. ASEAN community & East Asian
4. Escape from middle income trap
5. Non communicable diseases
6. Rubber production