Building capacity for science funding agencies and fostering international collaboration in developing countries: experience and perspectives from Laos

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Part 1: Overview of the Science and Technology Development Fund

Lao STDF is a state organization. It was established in 2014

Mobilize capital from national and international sources aiming to accumulate fund for supporting the research and development science, technology and innovation effectively and sustainability;

Source of fund:

1) 1% from state investment
2) fee and academic services for science and technology,
3) contribution, individual support, internal and international organization,
4) interest from bank deposit of STDF and other revenue

STDF supports the natural and social sciences such as basic research, applied research and research for development and building capacity in sciences, technology and innovation

Part 2: The Importance of the Fund's Regulatory Framework in Supporting Research

1: Research and apply the achievements in science, technology, and innovation—developed both domestically and internationally—to the nation's socio-economic development.

2: Basic and applied scientific research conducted by researchers, research centers, or research institutes for the purpose of producing goods and services.

3: Conduct research in science, technology, and innovation through agricultural research centers or institutes to support and promote commercial agricultural production—specifically, research into varieties of rice, livestock, crops, and trees.

4. Research and develop modern, highly efficient production tools and methods.

5: Research on improving water and soil quality for production purposes, including research on pesticides and insecticides.

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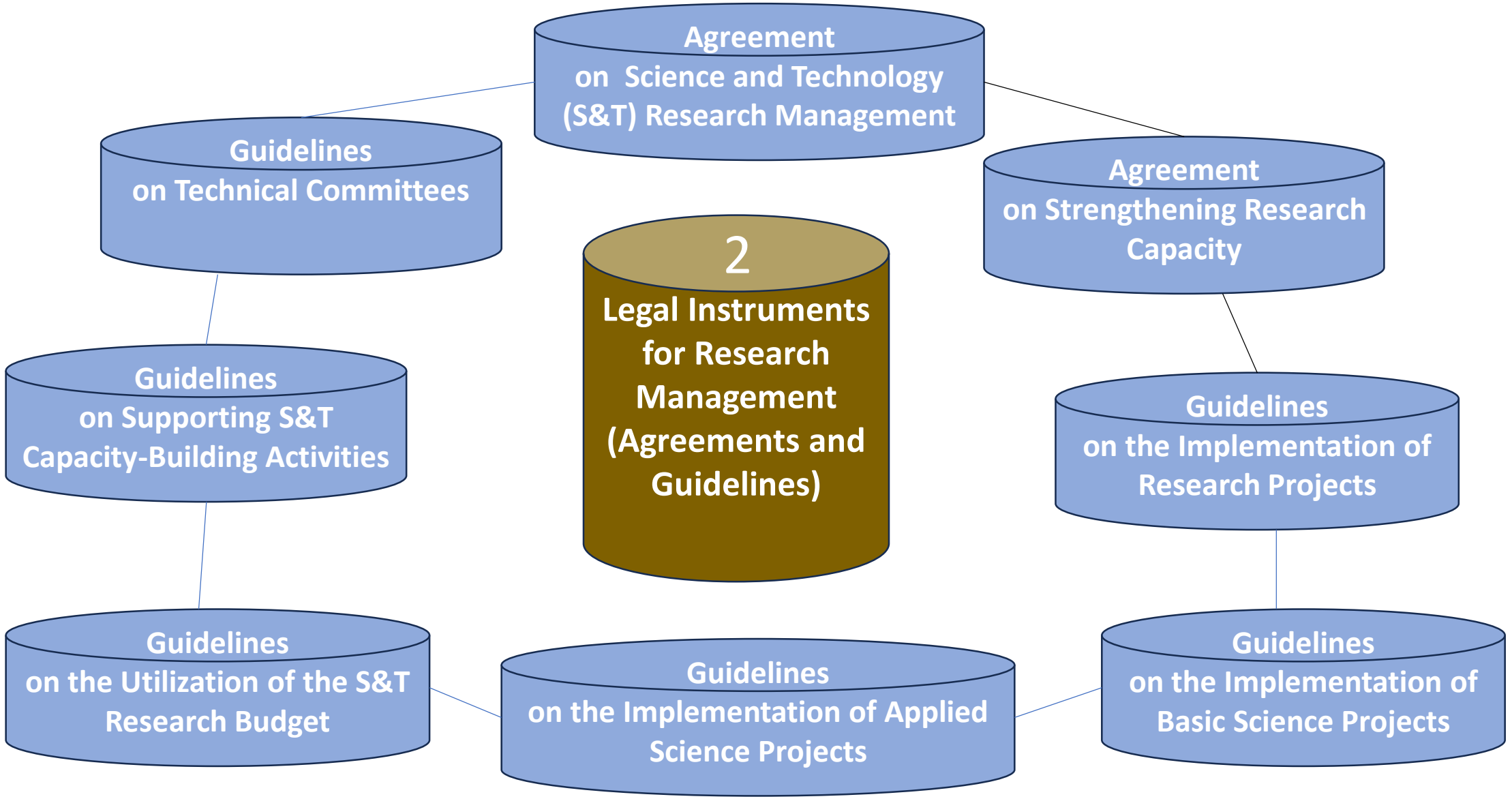
Primary goals for the use of the fund

6: Research on medicinal products, plant-based products, and other items derived from natural materials..

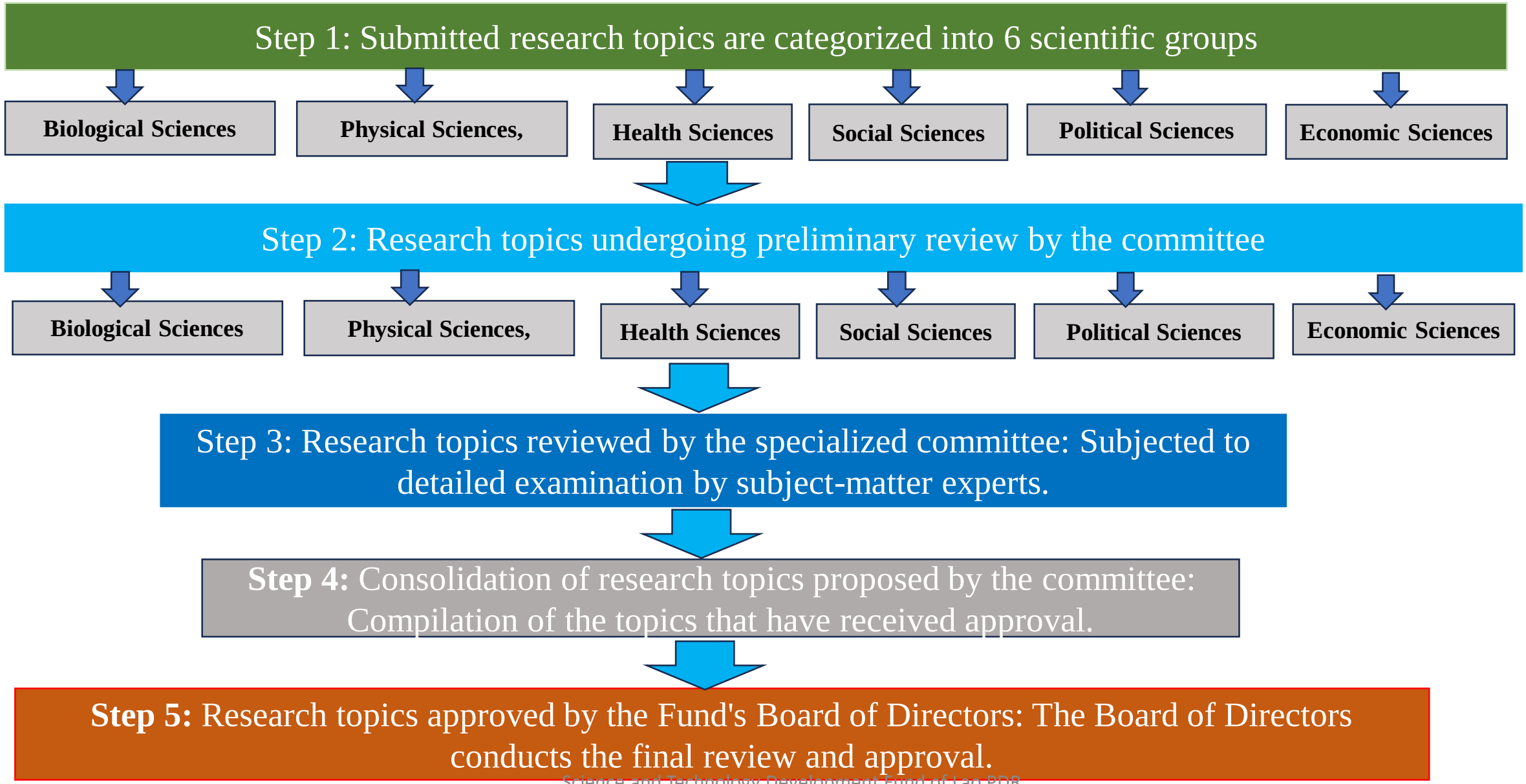
7: Co-financing scientific and technological research conducted by individuals, legal entities, and organizations engaged in the research and development of science, technology, and innovation.

8: Monitoring, inspection, and evaluation of research projects and the operational activities of the Fund.

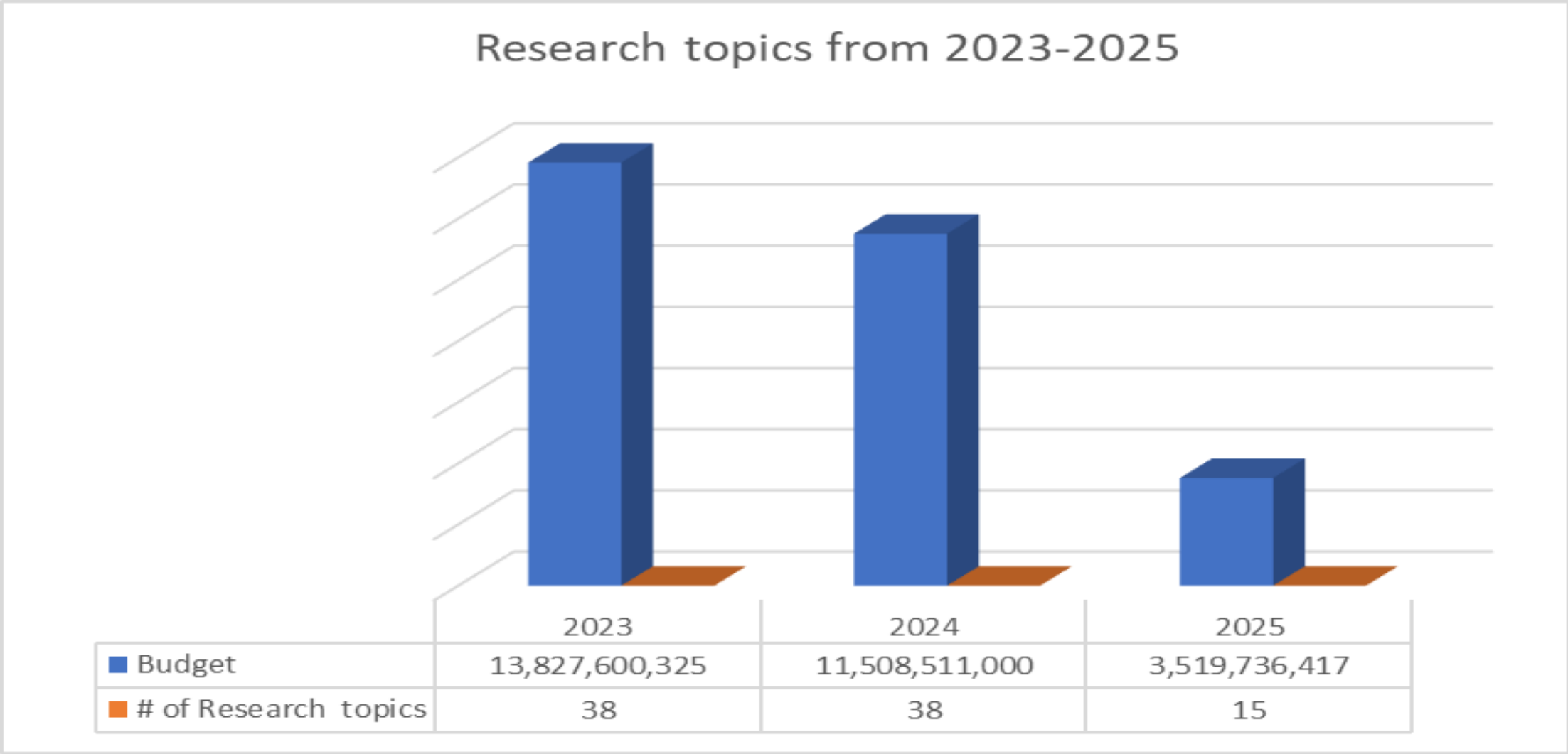
9: Promote students who possess talent in the research and development of science, technology, and innovation.


Agreement
on Science and Technology
(S&T) Research Management
Guidelines
on Technical Committees
Agreement
on Strengthening Research
Capacity
2
Legal Instruments
for Research
Management
(Agreements and
Guidelines)
Guidelines
on Supporting S&T
Capacity-Building Activities
Guidelines
on the Implementation of
Research Projects
Guidelines
on the Utilization of the S&T
Research Budget
Guidelines
on the Implementation of Applied
Science Projects
Guidelines
on the Implementation of
Basic Science Projects

Part 3: The Process for Reviewing Research Topics



Promotion of researches in 2023-2025



	2023	2024	2025
Budget	13,827,600,325	11,508,511,000	3,519,736,417
# of Research topics	38	38	15

Part 4: Focus and Goals for Promoting Research to Foster Further Development and Innovation

- Defining priority scientific research topics in alignment with the 10th National Socio-Economic Development Plan (2026–2030), serving as a mechanism to drive “rapid, green, and sustainable” development.

Goal 1: A set of projects to build an independent economy and quality growth

- Research and Development Project for the Key Agro-processing Industry: Focuses on adding value to products with export potential—such as cassava, coffee, and food crops—to shift from exporting raw materials to finished products
- Digital Economy Transformation and Cybersecurity Strategy Project: Explore the application of ICT in public administration (e-Government) and e-commerce to reduce procedural delays and enhance the efficiency of revenue collection
- Project for the development of construction materials and industrial products to substitute imports: Focuses on utilizing domestic resources—such as minerals and local materials—to reduce the outflow of foreign currency

Goal 2: Human Resource Development and Advanced Technology Project Group

- STEM Education Curriculum Research and Reform Project: To develop highly skilled personnel, scientists, and foresight specialists in alignment with the demands of the labor market in the Industry 4.0 era
- Research Project on Innovation in Traditional Medicine and Pharmaceuticals: Enhancing the application of local wisdom combined with modern technology for the production of medicines and the provision of quality public health services
- National Labor Database Development Project: Research and analyze the labor structure to plan skills training that aligns with the requirements of both public and private sector investments

Goal 3: Livelihood Improvement and Food Security Project Group

Research Project on Sustainable and Safe Agricultural Techniques: Focuses on the application of modern cultivation and livestock-rearing methods to ensure domestic food security and improve the nutritional status of people in remote areas.

Study Project on Poverty Alleviation Models: Explores the establishment of “New Rural Development Hubs” that integrate production, marketing, and infrastructure to reduce the disparity between urban and rural areas

Goal 4: Environmental Protection and Green Growth Project Group

- Clean Energy and Net-Zero Technology Research Project: Studying the potential of solar, wind, and biomass energy to achieve the goal of net-zero greenhouse gas emissions by 2050
- Natural Resource Management and Biodiversity Research Project: Developing a digital forest and land-use monitoring system to support sustainable management and access to the carbon credit market
- Early Warning System Development and Climate Change Adaptation Project: Utilizing modern meteorological and hydrological technology to reduce damage from natural disasters

Goal 5: Connectivity and Logistics Project Cluster

- Research project on strategies for utilizing economic corridors to transform Laos into a connectivity hub: A study on optimizing the use of the Laos-China Railway and expressways to attract investment and promote cultural and nature-based tourism

- Research topic specifically designated by the Board of Directors of the Science and Technology Development Fund: Research aimed at addressing a specific social issue


Khop jai!