




MINISTRY OF SCIENCE,
TECHNOLOGY AND INNOVATION

National Survey of Research and Development (R&D) in Malaysia

15 - 17 January 2025 | Bangkok, Thailand

Malaysian Science and Technology Information Centre (MASTIC)
Ministry of Science, Technology and Innovation (MOSTI)



More Information
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..... Presentation Outline

01 Malaysian Science and Technology Information Centre (MASTIC) Background

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03 Agriculture Data in National R&D Survey

04 Way Forward



01

MASTIC Background



Data Strategic and Competitiveness

- **Coordinate and report national STI indicators**
 - National R&D, National Innovation Survey, Public Awareness of STI, etc.
- **Monitor, analyze and report the country's competitiveness in the field of STI**, e.g. GII and WCY
- **Collect and update information on STI human capital, incentives, facilities & equipment, products/technologies and organization**
- **Conduct analysis on R&D Fund investments** to identify the needs of the R&D funding areas for investment purposes.



Policy and Foresight STI

- **Enhance the development and capacity of foresight** by aligning the application of foresight tools with the relevant Ministries/Agencies
- **Coordinate the formulation of STI legislation**



National primary reference centre for strategic science, technology and innovation (STI) information

GLOBAL INNOVATION INDEX (GII)
The Malaysia Chapter

krste.my



02

Overview National R&D Survey in Malaysia

Ministry-In-Charge

Ministry of Science, Technology and Innovation (MOSTI) through Malaysian Science and Technology Information Centre (MASTIC)

Scope

- Higher Learning Institutions (HLI);
- Government Research Institute and Agency (GRI);
- Business Enterprise (BE); and
- Non-Governmental Organisations (NGO)

Data Reporting

- UNESCO Institute for Statistics (UIS)
- Sustainable Development Goals (SDG)
- World Competitiveness Yearbook (WCY)



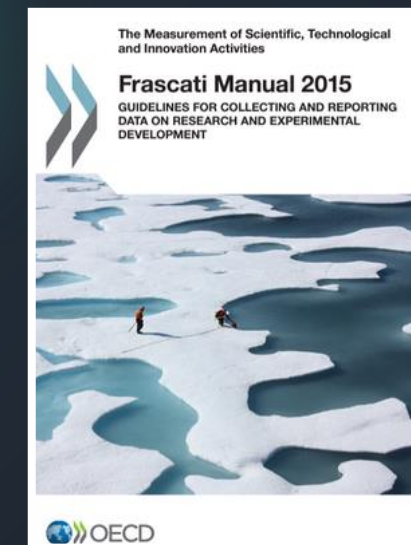
Objective Survey

To measure and study the status and progress of R&D activities in Malaysia

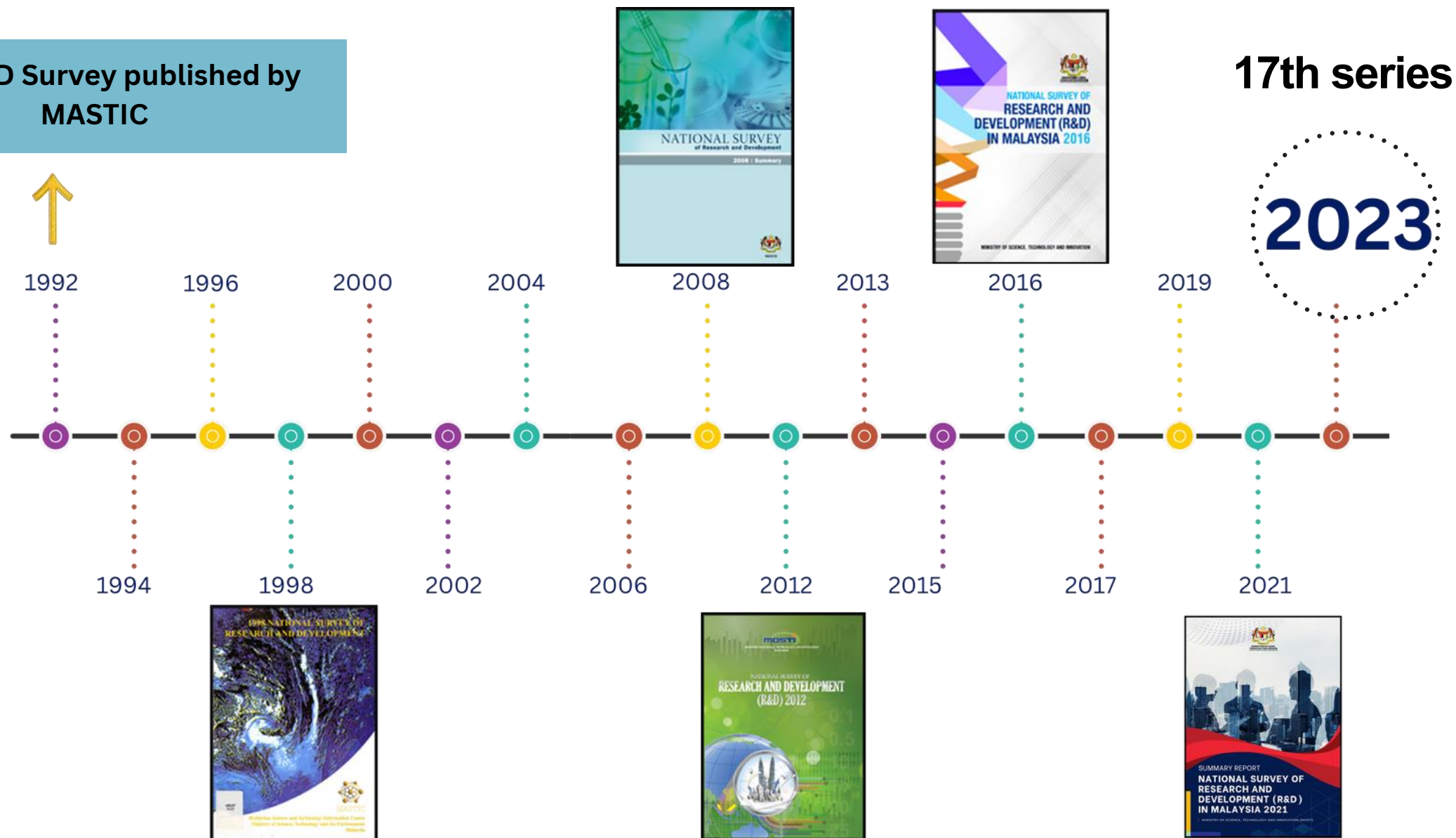


Reference

Frascati Manual (OECD, 2015)



First R&D Survey published by MASTIC



DATA COLLECTION METHODOLOGY



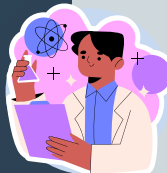


1992 - 2021

- MASTIC conducted the National R&D Survey in collaboration with various parties
- The Department of Statistics Malaysia (DOSM) provided the sampling frame for the BE sector




WORK IN PROGRESS 2023

- MASTIC collaborated with DOSM for data collection activities
- MASTIC collected for three (3) sectors: HLI, GRI and NGO
- DOSM collected data for the BE sector through the Economic Census 2023
- MASTIC completed data collection in September 2024 and finalized data validation in November 2024 **UPDATE**
- DOSM completed data collection in November 2024 and is currently in the data validation process **UPDATE**

INDICATOR	TYPE OF DATA	INDICATOR	TYPE OF DATA
 R&D Expenditure	<ol style="list-style-type: none"> 1. Current cost 2. Capital Cost 3. Field of Research (FOR) 4. Socio-Economic Objective (SEO) 5. 10-10 MySTIE 6. Type of R&D activity 	 R&D Outsourced	<ol style="list-style-type: none"> 1. Reason for outsourcing the R&D project 2. Number of project outsourced 3. Number of collaboration project
 R&D Personnel	<ol style="list-style-type: none"> 1. Headcount of personnel (researcher, technician and support staff) 2. Full-time equivalent (FTE) personnel (researcher, technician and support staff) 	 R&D Output	<ol style="list-style-type: none"> 1. Publication 2. Intellectual property 3. Revenue 4. Human resources
 Sources of Funds	<ol style="list-style-type: none"> 1. Identify sources of funds for R&D 2. Identity R&D project location 		

Data submitted to UIS

Field of Research (FOR)

INDICATOR	TYPE OF DATA
 R&D Expenditure	1. Current cost 2. Capital Cost 3. Field of Research (FOR) 4. Socio-Economic Objective (SEO) 5. 10-10 MySTIE 6. Type of R&D activity

- ✓ FOR based on Malaysian Classification Research and Development System (MRDCS) 7th Edition published by MASTIC
- ✓ The objective of MRDCS is to **classify and describe research areas** in Malaysia, providing a basis for measuring the performance of R&D activities

Agriculture data can be found in:

Division

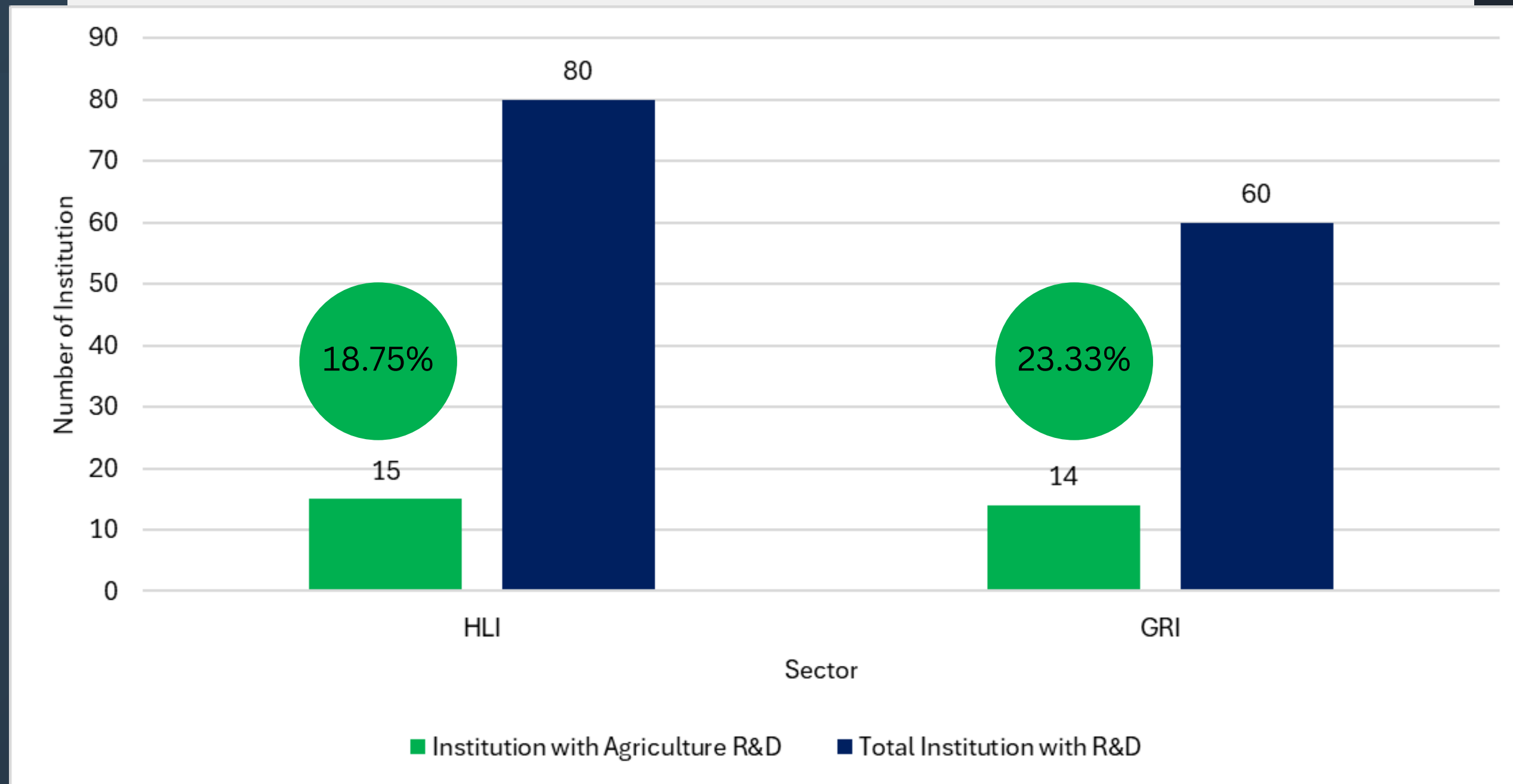
Category

Life Sciences

Agriculture Science

- ✓ Only **percentage data on R&D expenditure spent for the agricultural area** is available in National R&D Survey

Percentage of Institutions with R&D and Agriculture R&D by Sector, 2020





Adopt and implement the new data collection methodology introduced by FAO for gathering R&D agriculture data in Malaysia, and potentially apply it to other relevant surveys conducted by MASTIC



Foster potential collaboration with relevant agencies in agricultural R&D in Malaysia



**KEMENTERIAN SAINS,
TEKNOLOGI DAN INOVASI**
MINISTRY OF SCIENCE, TECHNOLOGY AND INNOVATION

THANK YOU

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