

**MINISTRY OF PLANTATION AND
COMMODITIES
MALAYSIAN RUBBER BOARD
MALAYSIAN RUBBER BOARD RESEARCH AND
DEVELOPMENT MANAGEMENT**

Main Points

**What we
examined?**

- The primary objective of Malaysian Rubber Board (MRB) is to promote and develop the Malaysian rubber industry and give priority to the Malaysian rubber industry. Based on the Malaysian Rubber Board (Corporation) Act 1966 (Act 551), the rubber industry includes the production of rubber and hevea wood, processing and use of rubber, manufacturing of rubber products and related services.
- MRB's main activity are to carrying out Research and Development (R&D) and transfer of technology. Based on Act 551, LGM's function is to implement industrial development policies and projects, carry out research activities for the advancement of rubber, provide technical services and rubber industry consultants as well as plan, coordinate, and advance research activities.
- This audit covers two main areas which is Activity Performance and R&D Activity Management. Activity performance is evaluated through the output achievement and outcome. The evaluation of output achievement is evaluated based on the achievement of R&D projects and transfer of technology. The outcome based on the National's natural rubber production, the National's production of rubber-based products, the National's export and import of rubber, the contribution of the rubber industry to the Gross Domestic Product (GDP) as well as the income from rubber products to industrialists and MRB. The Management of R&D activity covers R&D project planning, technology transfer and monitoring by MPIC. A total of 26 R&D projects have been selected as Audit samples from a total of 72 projects that have been completed between 2019 and 2022 and one ongoing project related Pestalotiopsis Disease. The basis of selection for audit

sampling is for projects with the highest cost and priority for projects in the upstream sector.

Why is it important to audit?

- To assess whether the management of the rubber industry R&D is done efficiently and effectively in line with the MRB objectives of promoting, advancing and giving priority to the development of the Malaysian rubber industry.

Conclusion

Overall, MRB has implemented R&D activities which is covering three sectors in line with their functions. However, the success of the R&D project by MRB has not yet been fully achieved because the R&D activities carried out are not directly contribute to the development of the Malaysian rubber industry, in line with MRB's objective which is to advance and give priority to the development of the country's rubber industry.

The implementation of R&D projects that emphasize the downstream sector rather than the upstream sector does not help the unstable rubber industry. In addition, other factors such as land holding size, the Covid-19 pandemic, the age of smallholders, old rubber trees, labour shortages and low rubber prices also affect the National's natural rubber production. In order to meet the needs of the industry, imports exceed exports of natural rubber starting from 2019 to 2022.

Transfer of technology via social contribution have less significant impact on the stakeholders in the rubber industry. In addition, lack attention towards the upstream sector's need will cause R&D carried out by LGM to place less emphasis on the real needs of industrialists, especially smallholders.

NO.	AUDIT ISSUES	IMPACT	RECOMMENDATION FOR SOLUTIONS
1.	Only 44 out of 72 projects (61.1%) have transferred technology to the rubber industry while no transfer of technology by 28 projects due to project being terminated and project is a basic study for use of the next R&D project. 41 (93.2%) out of 44 projects have transferred technology via social contribution.	Technology transfer as a social contribution is implemented more, but from the perspective of stakeholders involved in the development of the rubber industry, especially the upstream sector, it cannot have a significant impact.	Ensure that the technology developed is transferred and adapted by stakeholders in the rubber industry
2.	R&D in the upstream sector has been implemented but has been less successful in contributing to the development and improvement of the upstream sector of the rubber industry.	Natural rubber production is unstable and decreasing. The GDP contribution from the upstream sector is only 12.9% to 27.4% of the total annual GDP of rubber.	Identify the needs of the industry and stakeholders in determining the R&D project to be implemented.
3.	R&D projects carried out by MRB do not take into account the needs of stakeholders in the rubber industry.	The R&D carried out by LGM does not emphasize the real needs of industrialists, especially smallholders.	
4.	The LGM Quality Manual does not specify the requirement for a risk assessment to be carried out before an R&D project is approved.	There are projects that fail and are terminated.	Carry out a risk assessment/preliminary study to reduce the risk of failure of a project that will lead to Government loss.
5.	There is no monitoring carried out by the MPIC towards R&D done by MRB to ensure the new technology transferred to the stakeholders of the rubber industry.	Technology transfer by MRB is less implemented to stakeholders.	MPIC needs to intensify the monitoring of technology transfer activities by MRB to stakeholders to ensure that the objective of advancing the Malaysian rubber industry is achieved.

