PERUTUSAN YB DATO' SRI HUANG TIONG SII

TIMBALAN MENTERI SUMBER ASLI DAN KELESTARIAN ALAM

SEMPENA

SIMPOSIUM BIOKESELAMATAN 2025

21 Ogos 2025 (Khamis)
Hotel DoubleTree by Hilton Shah Alam, Selangor

YBhg. Dato'/Dr./Tuan-tuan dan Puan-puan yang dihormati sekalian

Salam Malaysia MADANI.

1. Opening Remarks:

Ladies and gentlemen,

Let me begin by **commending the Department of Biosafety and the Ministry of Natural Resources and Environmental Sustainability** for their success in bringing together biosafety thought leaders, researchers, policymakers, and stakeholders at this pivotal gathering — **the Biosafety Symposium 2025.** This event is made even more significant as it coincides with **Malaysia's Chairmanship of ASEAN**.

Today, biosafety is no longer the exclusive domain of scientists or regulatory experts. It has evolved **into a matter of national and regional priority — intersecting with public health, environmental sustainability, food security, and even the geopolitical dynamics that shape ASEAN's future.**

2. Biosafety Regulation – Between Progress and Precautionary Approach

With the rapid advancements in modern biotechnology, we are witnessing an increasing presence of **Living Modified Organisms (LMOs) and Genetically Modified Organisms (GMOs) including products of GMO** — particularly in agriculture and healthcare.

On one hand, these technologies hold immense promise: improving crop yields, enhancing disease resistance, reducing pesticide use, and even helping us adapt to climate change. On the other, legitimate concerns remain about potential impacts on **human, plant, and animal health, biodiversity, and environmental integrity.**

It is with this very reason that Malaysia has **established a biosafety regulatory framework that is efficient, transparent, and firmly rooted in science.** In line with our commitment to sustainable development, Malaysia enacted the Biosafety Act 2007 and established the National Biosafety Board, supported by the Department of Biosafety under the Ministry of Natural Resources and Environmental Sustainability, as the regulatory authority.

Under this Act, **no GMO activity is permitted without rigorous risk assessment — safeguarding five core protection goals: human health, plant health, animal health, the environment, and biological diversity.** This is fully aligned with the Cartagena Protocol on Biosafety, to which Malaysia has been a Party since 2003.

I am proud to highlight that the scope of our legislation is comprehensive — **covering activities conducted in contained use in laboratories and production facilities involving LMOs, field trials, import and export of LMOs, release of products to be placed in the market** as well as **monitoring and evaluation of these activities throughout Malaysia.** The majority of applications we receive relate to GMOs for food, feed, and processing — all subject to strict oversight by the Department of Biosafety in collaboration with other relevant agencies.

3. Key Constraints – Human Capital and Enforcement Capacity

However, I must acknowledge the pressing challenges we face. Foremost is **the shortage of highly skilled experts in biosafety risk assessment and regulatory enforcement** — a task that must span our vast territory, from **Johor to Sabah and Sarawak, and across borders shared with Singapore, Thailand, Brunei, the Philippines, and Indonesia**.

Currently, only **a small number of qualified technical officers and scientists within the Department possess the expertise to evaluate GMO risks**. The growing awareness of our biosafety legislation has led to a surge in applications from universities and research institutions. While this reflects healthy compliance, it also places **tremendous pressure on our limited pool of technical officers and scientists**.

The challenge is compounded by the need to assess GMO products intended for food, feed, and processing — where delays could have

serious implications for food security and service delivery to stakeholders.

Similarly, **monitoring and enforcement must keep pace with the expansion of biotechnology activities across the nation**. With limited manpower, the Department of Biosafety must cover a wide and increasingly complex field of operations.

To address this, the Government is intensifying capacity-building initiatives and forging stronger partnerships. The Department has long worked with the Department of Chemistry, the Ministry of Health's Food Safety and Quality Division, and other key agencies. Today, I am pleased to announce that we are inviting the **Malaysian Border Control and Protection Agency (AKPS)** to join our mission — **strengthening biosafety enforcement, especially at our borders and points of entry**.

4. Preparedness for Emerging Challenges – Novel Products, Regulatory Grey Areas, and Leakages

Globally, gene-editing technologies like **CRISPR-Cas9** have given rise to products that **blur traditional GMO definitions** – creating regulatory grey areas.

For example, gene-edited crops that contain **no foreign DNA** are impossible to detect using conventional methods. This poses a major challenge for developing countries like Malaysia, which often rely on

traditional surveillance methods and are already constrained by **limited laboratory capacity**.

Adding to this complexity is the ease with which GMO products — including seeds and food — can now move **through informal trade routes and e-commerce platforms**, bypassing conventional monitoring channels. These realities require us to adapt our enforcement strategies and invest in next-generation detection capabilities.

5. Strategic Measures Moving Forward

In light of these challenges, the Government is advancing several strategic measures:

- **Reviewing the Biosafety Act 2007** to ensure it is responsive to emerging technologies and provide regulatory preparedness.
- **Addressing issue liability and redress** as a new section in the Biosafety Act 2007.
- **Investing in cutting-edge screening and detection technologies**, and enhancing laboratory capabilities and further collaboration with organizations that have the capacity and competence.
- **Strengthening inter-agency coordination** – particularly between the for integrated surveillance, intelligence and data sharing.
- **Restructuring the Department of Biosafety** – with a focus on bolstering regulatory effectiveness through human capital development.

- Most importantly, we are working to **foster public awareness on GMO-related issues**, ensuring that Malaysians are informed, empowered, and capable of making sound choices as consumers.

6. Conclusion

Science and technology are reshaping the global landscape at unprecedented speed. Malaysia — and indeed ASEAN — must not only keep pace but lead in harnessing these innovations responsibly. Our path forward must be guided by **the twin pillars of innovation and safety** — ensuring that the promise of biotechnology is realised without compromising our health, environment, or biodiversity.

This symposium is more than a platform for dialogue — **it is a call to action**. Let us work together to strengthen our **regulatory frameworks, deepen collaboration, and build an ecosystem** where **safe, ethical, and forward-looking biotechnology** can thrive.

Once again, I commend the organisers, participants, and partners of the Biosafety Symposium 2025. May the deliberations here translate into meaningful policies and impactful actions — for the benefit of Malaysia, ASEAN, and the global community.

Thank you
