



COUNTRY REPORT: MALAYSIA

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on behalf of

**Minister of Energy, Science, Technology, Environment & Climate Change
(MESTECC) of Malaysia**

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OUTLINE

1. Introduction
2. Status of Nuclear Energy for Electricity Generation
3. Status of Nuclear Science & Technology Applications in Agriculture
3. Summary

NUCLEAR ENERGY FOR ELECTRICITY GENERATION

Malaysia will continue to build human capacity and to keep updated with the current technological advancements and keep readiness for potential future applications.

The focus at the moment is to pursue other options for electricity generation.

**STATUS OF NUCLEAR SCIENCE & TECHNOLOGY
APPLICATIONS IN AGRICULTURE**

CONTRIBUTION OF NUCLEAR TECHNOLOGY TO SUSTAINABLE DEVELOPMENT GOALS

Nuclear and isotopic techniques contribute directly to attaining nine of the 17 Sustainable Development Goals (SDGs) of the United Nation.



Goal No. 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture

Nuclear technology contribute to improving food security and agriculture by using nuclear and isotopic techniques to protect plants from insect pests and to breed new plant varieties that show, for example, improved crop yields, disease resistance or drought tolerance.

Malaysia is committed towards achieving this goal by active participation in IAEA's and FNCA's activities.

MID-TERM REVIEW OF THE ELEVENTH MALAYSIA PLAN (2016-2020): NEW PRIORITIES AND EMPHASES, 2018-2020

Pillar V: Enhancing Environmental Sustainability through Green Growth

Green growth initiatives will be enhanced to ensure sustainability of natural resources and increase resilience against climate change and disasters while achieving higher economic growth.

Priority Areas and Strategies:

Increasing resilience of the nation against climate change impacts and natural disasters, the mitigation and adaptation as well as risk reduction measures will continue to be undertaken in vulnerable **sectors such as water, energy, agriculture**, public health, cities and settlements.

Nuclear and isotopic techniques has great potentials for achieving these priorities as it helps to provide information which will be useful for mitigating climate change and sustainable development through Green Growth.

MID-TERM REVIEW OF THE ELEVENTH MALAYSIA PLAN (2016-2020): NEW PRIORITIES AND EMPHASES, 2018-2020

Pillar VI: Strengthening Economic Growth

Efforts will be undertaken to strengthen economic growth by enhancing productivity and increasing competitiveness of the industries.

Priority Areas and Strategies:

The strategies to strengthen sectoral growth and implement structural reforms include enhancing sectoral growth, increasing export capacity and improving market efficiency as well as facilitating ease of doing business.

In the agriculture sector, strategies will be implemented to ensure food security and safety.

CURRENT ACTIVITIES IN FNCA COOPERATION AREA

MUTATION BREEDING OF RICE FOR SUSTAINABLE AGRICULTURE



Rice industry is priority based on strategic importance of rice as a staple food commodity.

Mutation breeding technology is needed to improve local variety of rice.

Salinity and drought tests conducted on the varieties on trial plots located in Peninsular Malaysia.

BIOFERTILIZER

- ✓ Supports Nuclear Malaysia Agronomic Package for High Yield Rice Production to increase 25% paddy rice yields. Increased crop yield and reduction on the use of chemical fertilizers

SUMMARY

- Nuclear science and technology has been progressing well in Malaysia and positively contributed to socio-economic development of the country.
- The project on mutation breeding of rice has addressed the national agenda and policy in generating new rice variety that is resistant to biotic and abiotic stress for sustainable production and thus, increase the well-being and livelihood of the farmers.
- Malaysia believes that FNCA is a good platform to further discuss on strengthening the stakeholder involvement in respond to relevant developmental priorities in nuclear energy and nuclear science applications.

THANK YOU