

## **Thailand Activates the BCG Model for a Sustainable Recovery from COVID-19**

Thailand has opted for the Bio-Circular-Green Economy Model (BCG) that aims to use natural assets more efficiently with as least impact on the environment as possible. BCG applies a whole of society approach—where the government, private sector, academia, and society, collectively implement this principle, eventually putting Thailand on track to building back a healthier, greener and more inclusive economy as the pandemic subsides.

### **BCG Roadmap**

Efforts to promote BCG at the policy level have been underway since last October with the establishment of two BCG committees. These are the BCG Policy Board of Directors, chaired by the Prime Minister; and the BCG Model Implementation Committee, chaired by the Minister of Higher Education, Science, Research and Innovation, and tasked with designing action plans to implement the BCG model. BCG was subsequently adopted as part of Thailand's national agenda since January this year.

Thailand's four strategic areas for the BCG model are based on her economic foundation and strengths namely, (1) food and agriculture; (2) medical and wellness; (3) energy, material, and biochemicals; and (4) tourism and creative economy. Focussing on the said areas, Thailand hopes to achieve comprehensive security in key areas of food, health, energy, employment and sustainable natural resources and environment.

Kitipong Promwong, President of the Office of National Higher Education, Science, Research and Innovation Policy Council, elaborated that each area of the BCG model is like a pyramid that resembles the supply chain in that sector. Production employing basic know-how that involves the largest group of producers forms the base of the pyramid while the higher levels of the pyramid require more sophisticated technology that less manufacturers have the capacity. The goal is to enable the base to move up the pyramid by adding value to their products. For example, in the medical and wellness sector, the base of the pyramid is traditional knowledge of herbs while the top of the supply chain is cutting-edge medicine that is a result of research and technology. Upgrading the four areas of BCG will benefit around 17 million people working in these sectors.

BCG seeks to capitalize on Thailand's biodiversity throughout the supply chain, by strengthening the capacity of local communities and optimizing the use of new technologies. At the same time, higher up the supply chain, science agencies are transforming the manufacturing and services sectors through modern scientific methods and technology, as well as home-grown innovation. The vision is to simultaneously drive forward the bio-, circular-, and green economy. In short, Thailand plans to be innovative and go greener for better gains.

While these concepts have been present in Thailand for some time, it is their combined implementation in a synergised manner that is novel. Thailand has been advocating several development concepts and models, which actually have interconnected ideas to strike a balance between the conservation of natural resources and value creation. BCG is the latest model that was sketched out from analyses of our current situation and our preferred destination in this journey of development.

## **Boosting the Basics**

BCG builds on the principles of His Majesty King Bhumibol Adulyadej The Great's Sufficiency Economy Philosophy (SEP), whose notion of moderation is particularly relevant. Economic development should begin with producing from existing resources and strengthening local foundations towards creating a balanced, stable growth, and a self-sufficient economy.

Agriculture is a fundamental component in Thailand's BCG model, particularly bioeconomy. The OECD defines bioeconomy as "the economic activities relating to the invention, development, production and use of biological products and processes." Modern biotechnology will be applied to boost agricultural and industrial productivity, while reducing the negative impact on public health. Thailand plans to achieve this by supporting innovative agricultural products and methods to enhance productivity.

Professor Dr. Iris Lewandowski unveiled in her book on "Shaping the Transition to a Sustainable Biobased Economy" that agriculture is a subset of a bioeconomy, which in turn is a subset of a green economy that is "low carbon, resource efficient and socially inclusive," as defined by the UNEP. The link to sustaining a green economy and maintaining a feedback loop, or input, into the foundation bioeconomy, is to keep products circulating in use for as long as possible.

This is why a circular economy is the crucial link between a bioeconomy and a green economy. It focuses on the principles of designing out waste and pollution, keeping products and materials in use, and regenerating natural systems. Put together, the BCG model would improve the manufacturing and use of products, while creating value at all levels of the production and consumption process, where everything can be used, and nothing goes to waste.

A concrete example is the Thai Eastern Industrial Zone in Chonburi, set up in October 2020, the first bio-industrial zone that can generate an annual economic value of over USD 3.2 billion. Part of the Eastern Economic Corridor (EEC), it has been helping farmers develop quality products to feed the bio industry, and creating stable incomes and jobs for 8,000 locals over three years.

The EEC supports industries that correspond with BCG, such as food for the future, medicine, and agriculture and biotechnology. BCG investments in the EEC will enjoy revised regulations to their favour. For instance, with regard to circular economy, regulations have been revised so that industrial waste can be transported directly to processing plants across provinces, thereby minimizing the environmental risk on localities.

## **Towards Balanced and Sustainable Development**

Don Pramudwinai, Deputy Prime Minister and Minister of Foreign Affairs of Thailand opined that BCG is a comprehensive approach towards sustainable development that does not leave our environment behind. The paradigm aims to maintain balance between man and nature to avoid any disruption that may befall in the form of natural disasters or pandemics like COVID-19.

By promoting balanced development that does not exceed environmental capacity, the BCG model can reduce risks of infectious diseases from humans, plants and animals, as well as climate change. It hopes to reduce the consumption of natural resources by two-thirds, and to reduce pollution and environmental impact from development.

Thailand has expressed its commitment to these causes on numerous occasions. For example, during Thailand's Chairmanship of ASEAN in 2019, ASEAN Leaders adopted the Bangkok Declaration on Combating Marine Debris to promote the sustainable use of the marine environment. This aligns with Thailand's policy to reduce and recycle more plastic. In addition, Thailand is committed to reduce food waste from 30 per cent down to 10 per cent by 2030. Thailand also intends to reduce its greenhouse gas emissions by 20 – 25 per cent by 2030 to become a low carbon society.

Thailand recognises the benefits of the BCG model on the global economy, and will encourage international partners to exchange technological and scientific resources to activate the BCG model for post COVID-19 recovery. Thailand advocates joint efforts to ensure that the world's natural assets continue to yield resources and environmental services for future generations. This will certainly be included in the agendas when Thailand chairs BIMSTEC in 2021 - 2022 and assumes the role of APEC Host Economy next year.

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