SEP INSPIRATION

EXPLORING SUSTAINABLE DEVELOPMENT PRACTICES FROM AROUND THE WORLD

The Sufficiency Economy Philosophy or SEP is not merely a concept but a practical approach guiding us toward sustainability. It emphasizes balance in every aspect-our way of life, economic development, and the responsible use of resources. This exhibition zone showcases successful initiatives from leading organizations in Thailand and around the globe, offering a glimpse into the world of sustainable development. From projects enhancing quality of life in various areas, to innovations for environmental conservation, efficient resource use, and creative ideas that inspire collective action, this space invites everyone to shift their perspectives and work together toward a sustainable future for all.

Similar to previous years, SX PROLOGUE invited everyone to the expo through an immersive experience exhibition. This year's theme was "SX PROLOGUE PEOPLE & PLANET." At the start of the journey, a tunnel of mirrors, titled "REFLECTION OF IMPACT," highlighted the alarming effects of natural changes driven by rising global temperatures

and shifting seasons. This section encouraged reflection on the various challenges we faced before moving into the second part of the exhibition, "POINT OF NO RETURN." This large room presented a narrative of the four industrial revolutions, which developed alongside a growing global population, contrasting with the depletion of natural resources and social conflicts that led to wars and displacement. Together, these events brought the world to a state of imbalance that could not be reversed.

Upon entering the final room, "HOPE AND HELP," visitors discovered a sense of hope and a path forward through the inspiring stories of those who had taken meaningful action. Surrounded by a backdrop of natural beauty, the room featured a sculpture titled "Story from Plateau" by Mr. Bounpaul Phothyzan from Laos, crafted from the shells and remnants of explosives. Standing prominently in the center, the sculpture invited visitors to reflect on the sorrow, vulnerability, and harsh realities of war, as well as its profound and lasting impact on people's lives.

SUSTAINABLE DEVELOPMENT INITIATIVES IN THAILAND ENHANCING QUALITY OF LIFE

As an agency established to support projects initiated by royal directives, the **Chaipattana Foundation** operates based on the Sufficiency Economy Philosophy. This approach serves as the foundation for achieving "victories in development" and delivering rapid benefits to the public, free from various constraints. This year, the Chaipattana Foundation presented nine successful development stories spanning health, environment, and society, which were adapted and extended to other regions across the country.

Prominent health-focused initiatives included the royally-initiated animal development center in Dan Sai district, Loei province, and the royally-initiated animal development center in Nong Chalarb district, Tak province. These initiatives focused on Happy Chicken farming, allowing chickens the freedom to roam outside the coops and using locally-sourced feed to produce high-quality, antibiotic- and chemical-free meat. In terms of environmental efforts, the Lham Phak Bia Environmental Research and Development Project in Ban Laem district, Phetchaburi province, addressed wastewater and community waste management. By adopting a "Nature Helps Nature" approach, the

project successfully expanded mangrove areas by 546 rai with sediment carried by the Phetchaburi River and coastal currents. This transformation established the area as one of Thailand's premier bird-watching destinations and a key environmental research center of national importance.

In the social dimension, the "Chaipattana-Thai Red Cross Village Project (Baan Tung Rak)" was initiated by the royal command of Her Royal Highness Princess Maha Chakri Sirindhorn. It was established to provide new homes for villagers affected by the 2004 tsunami in Kuraburi district, Phang Nga province. The project focused on rebuilding community life through the principle of "geosocial," enabling villagers to live sustainably and independently.

In addition to the Chaipattana Foundation, there were notable examples of success from **the Office of the Royal Development Projects Board (ORDPB)**, which embodied His Majesty King Rama X's philosophy of "Continue, Preserve, and Build Upon" to further enhance projects initiated under royal patronage for the greater

benefit of the people. The booth showcased various approaches to natural resource management, including concepts like "Philosopher of the Land" (nurturing the soil to sustain crops), "Philosopher of Water" (rainmaking and water management techniques), "Philosopher of Forest" (the concept of "Three Benefits, Four Uses"), and " Philosopher of Renewable Energy" (palm oil extraction, diesohol, and biodiesel production).

The Utokapat Foundation under Royal Patronage and the Hydro-Informatics Institute were established under the royal initiative of His Majesty King Bhumibol Adulyadej the Great, dedicated to advancing water resource management through science and technology. Their booth presented a range of technologies for water management, including small-scale survey boats for reservoir data collection, terrain survey vehicles equipped with MMS systems to create detailed 3D terrain models, and automated telemetric systems for monitoring weather conditions and rainfall. These tools supported efficient water management planning and disaster prevention on platforms such as www.thaiwater.net and the ThaiWater mobile application.

With the principle of "Cultivate Land, Cultivate People," **the Mae Fah Luang Foundation under Royal Patronage** incorporates the royal philosophy of breaking the cycle of hardship into its integrated development efforts. The foundation empowers individuals through various projects. Notable efforts include the development of the Doi Tung Development Project, which has revitalized over 100,000 rai of forest land. These projects establish conserved forests, economic forests, and forests for habitation and livelihoods, fostering a balanced coexistence between communities and nature. Additionally, the Carbon Credit Management Project promotes sustainable development by encouraging communities to both care for forests and support their well-being.

As the primary agency responsible for "Alleviating Suffering, Promoting Happiness" for Thai citizens, **the Ministry of Interior** showcased innovative socio-environmental approaches for a sustainable future. Visitors had the opportunity to learn directly from local

practitioners across the country, sharing successes based on the principles of sufficiency economy and various royal initiatives. The ministry highlighted its efforts in driving sustainable development through the MOI SDGs Tracker and the MOI War Room system, ensuring progress towards national and global goals.

Since humans are at the core of any development, religion can serve as a vital driver of sustainable growth. This year's **Religion for Sustainable Development booth** highlighted the connection between religious values and the United Nations' Sustainable Development Goals across five key areas: People, Planet, Prosperity, Peace, and Partnership. The booth showcased Buddhism's role in environmental restoration on the global stage, such as the Bangkok Declaration 2023 from the 18th United Nations Day of Vesak Celebration. This emphasized addressing ecological crises and climate challenges through teachings of compassion and non-violence, while integrating local wisdom and technology to reduce carbon emissions.

APPROACHES TO SUSTAINABLE DEVELOPMENT FROM AROUND THE GLOBE

In addition to showcasing sustainable development by agencies in Thailand, the SEP INSPIRATION zone featured examples from various international organizations, embassies, and agencies around the world. This year, **the United Nations Country Team in Thailand** gathered more than 10 key UN agencies, along with networks of private sector organizations and students from leading universities through the MUN Network Thailand project, to share experiences in advancing the 17 Sustainable Development Goals (SDGs) at the United Nations Experience Pavilion. The exhibition highlighted a comprehensive approach encompassing environmental, social, and governance dimensions through engaging activities. These include initiatives like the International Labour Organization (ILO) presenting immersive VR experiences of working on Thai fishing vessels, the United Nations High Commissioner for Refugees (UNHCR) offering interactive activities that provide insights to refugee experiences, and the United Nations Development Programme (UNDP) leading a game-based approach to teach waste separation and explore sustainable development pathways.

In addressing regional environmental issues, the ASEAN Centre for Biodiversity, affiliated with the ASEAN Secretariat, highlighted advancements in leveraging innovation and technology to manage biodiversity data. Over the past 20 years, ASEAN has entered the "Age of Discovery," with the identification of more than 2,200 new plant and animal species in the region. These discoveries play a crucial role in shaping conservation strategies and promoting the sustainable use of natural resources among ASEAN member states. The booth utilized state-of-the-art technology to offer visitors an enhanced experience through interactive games and a variety of activities.

The World Bank presented the vision of "A World Free of Poverty on a Livable Planet," highlighting innovative financial approaches for sustainability that drive meaningful change. These initiatives include Green Finance, which promotes investments to reduce greenhouse gas emissions, build climate resilience, and protect biodiversity. Blue Finance focuses on expanding investments to restore marine ecosystems, prevent coastal erosion, and support sustainable, environmentally-friendly tourism. Additionally, Carbon Finance supports the creation and sale of high-quality carbon credits that contribute positively to both society and local communities.

The Joint Foreign Chambers of Commerce in Thailand (JFCCT) is dedicated to promoting sustainability through trade and investment across various dimensions, such as supporting a circular economy and encouraging transparent and measurable ESG reporting. Throughout the expo, JFCCT members shared and exchanged sustainable business practices, reinforcing that sustainable development is a key focus for businesses from all its member countries.

The Government of Japan, through the Cabinet Office, the National Space Policy Secretariat, and the Embassy of Japan in Thailand, in collaboration with the Geo-Informatics and Space Technology Development Agency (GISTDA), showcased space technology for environmental conservation. This included a satellite-based fire alert system used to manage wildfires in Sri Lanna National Park in Chiang Mai province, which is currently operational in Mae Taeng, Chiang Dao, and Prao districts. Additionally, the QZSS satellite system sends short messages containing hotspot data, allowing officials to assess wildfire situations in remote areas. These cutting-edge technologies were presented in a simple and intuitive format, embodying the essence of Japanese refinement.

The Swedish Government, through the Embassy of Sweden in Thailand, in collaboration with the Thai-Swedish Chamber of Commerce (SweCham), presented the concept "Unlocking Solutions for the Future, Today" to showcase Sweden's leadership in green innovation and research. The showcase included initiatives from the private sector committed to sustainable development, such as Alfa Laval, which presented technology aimed at reducing emissions by reusing excess heat, enabling industries to responsibly manage resources, improve energy efficiency, and minimize environmental impact. Hitachi Technology, a leader in various technological fields, highlighted innovations for reducing carbon emissions across sectors including information technology, infrastructure, energy, and construction. Saab introduced the Digital Tower concept, revolutionizing air traffic management to improve efficiency, reduce costs, and decrease carbon emissions. Additionally, SKF showcased RecondOil technology, which allows used oil to be reused while maintaining its original quality, thus reducing environmental impact and lowering disposal costs.

The Swiss Government, through the Embassy of Switzerland, in collaboration with the Swiss Thai Chamber of Commerce, presented the concept "Connecting People, Cultures, and Economies in a Sustainable Way." The booth showcased Switzerland's commitment to clean air for everyone, through both national goals and active participation in international cooperation forums, such as the partnership between Switzerland and Thailand under the Paris Agreement, Article 6, in the "Bangkok E-Bus" project to reduce greenhouse gas emissions and improve air quality in Bangkok. Additionally, innovations in transportation and aviation were highlighted, with "AeroSHARK," a bio-inspired film developed by Lufthansa Group that mimics shark skin to optimize airflow, reduce friction around aircraft, and enhance lift, resulting in fuel savings and lower carbon dioxide emissions. This film has been installed on several aircraft, including SWISS Airlines' Boeing 777 fleet, totaling 12 aircraft used for long-haul flights.

The New Zealand Government is actively developing technologies to drive the nation toward carbon neutrality. **New Zealand Trade & Enterprise (NZTE)**, the government agency responsible for promoting international business, presented the concept "See Tomorrow First" - focusing on integrating innovative thinking with

effective solutions. This includes technologies like CarbonClick, which tracks and offsets carbon emissions in industries such as MICE, aviation, and hospitality, enabling businesses to manage and assess their environmental impact more efficiently. Additionally, Hiringa Energy introduced a network of hydrogen refueling stations for large vehicles in both New Zealand and Australia, aimed at reducing carbon emissions in the transportation sector. DSH Systems innovations were also highlighted, designed to reduce dust in industrial material handling while protecting the health of workers in the logistics industry, emphasizing both operational efficiency and safety.

The Italian Government, through the Embassy of Italy in Thailand and the Italian Trade Agency, has partnered with two prominent companies specializing in technology and innovation for sustainable solutions under the concept "Italian Innovative Solutions for a Sustainable Ecosystem." Blue Engineering & Design demonstrated its collaborations with global industry leaders in designing vehicles, trains, ships, aviation, space technologies, as well as information and communication technologies. Additionally, MOIWUS, the owner of the innovative patent "RiPura," showcased its advanced treatment of industrial wastewater across various sectors, ensuring exceptional efficiency.

The Australian Government, through the Australian Embassy in Thailand, presented its booth with the theme "A Greener Future Together – From Sustainable Agriculture to Climate-Resilient Cities." The country is leading the adoption of innovative technologies and practices to mitigate environmental impacts and address climate challenges, guided by the Australian Agricultural Sustainability Framework. This framework integrates data and scientific research to establish best practices in agriculture, focusing

on environmental stewardship, community and animal welfare, and sustainable development. The presentation also highlighted initiatives like Resilient Urban Centres and Surrounds (RUCaS), which aim to create adaptable and sustainable urban areas to address issues such as flooding, wastewater management, and air pollution.

With over one-third of its land below sea level, the Netherlands has pioneered the monumental "Delta Works" flood control project. Highlighted by **the Dutch Government, through the Embassy of the Netherlands in Thailand and the Netherlands Thai Chamber of Commerce (NTCC)**, the exhibition showcased an iconic image of the Eastern Scheldt Storm Surge Barrier-a world-renowned triumph of civil engineering. The display also presented cutting-edge innovations tackling global challenges, including an immersive VR experience that connected attendees to advanced technologies. Key features included a high-efficiency water pump model already deployed in Bangkok, a project converting urban spaces into resilient ecosystems for sustainable food production, and the Philips' smart lighting control system, which allows users to optimize energy consumption by adjusting light temperature and scheduling operations via mobile devices.

The Hungarian Government, through the Embassy of Hungary in Thailand, presented its vision for advancing global sustainability, focusing on innovation to drive the economy, promote water and sanitation management, foster peace, and protect the climate and environment. The exhibition featured notable innovations, such as the KUUBE Smart Bench, which harnesses solar energy to charge mobile devices, provide Wi-Fi, and monitor environmental factors like air quality and noise levels. It showcased the PEEK TO POWER™, which enables remote monitoring of energy supply and their operational data. Additionally, ACS Hungary KFT's waterless cleaning technology for the automotive industry highlighted the country's commitment to sustainable solutions.

The French Government, through the Embassy of France in Thailand and the Franco-Thai Chamber of Commerce, brought together ten leading government research agencies and private companies to showcase policies and practices for sustainable development. Highlights included Ecocert, a global certification body operating in over 80 countries, which verifies the environmental and sustainability practices of organizations and businesses. Another key feature was Schneider Electric's EcoStruxure™ platform, designed to help companies efficiently and automatically collect and analyze data to achieve their sustainability goals.