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Mekong Forum 2024 is a multi-dimensional event centered around a unifying theme, featuring a variety of topics. In its 10th edition, the forum offers seven breakout sessions, called Terrains, focusing on different aspects of digitalization, innovation, and technology. These discussions are tied to MI's core and cross-cutting programs and themes: agricultural development and commercialization, trade and investment facilitation, sustainable energy and environment, and women and youth inclusion.

Resource speakers and participants in each Terrain will not only engage in dialogue and learn from one another but also contribute to the formulation of actionable recommendations for a subregional innovation strategy. This strategy will align with GMS-2030 and ASEAN's digital and connectivity agendas, tailored to the diverse needs and ambitions of the GMS.

With some sessions co-hosted by MI's development partners, the Terrains will delve deeper into the forum's key thematic areas and explore the diverse landscapes of digital horizons through speakers' presentations. Supplementary to the Mekong Forum 2024 Handbook, this digest summarizes the presentations, serving as guide for participants while attending the Terrain where they can gain the most insights and contribute to the discussions effectively and meaningfully.

KEYNOTE DIGESTS

Digitalization by Design: Challenges for GMS development and cooperation by Dr. Narongchai Akrasanee

This keynote examines how digitalization transforms sectors by enhancing efficiency and innovation. It highlights the rise of AI and its impact on industries, emphasizes the importance of digital literacy, and addresses global challenges like cybersecurity and the digital divide. Covered in the discussion are digitalization's role in cost-saving and efficiency, opportunities created, and cybercrime prevention. Key topics include generative AI, democratization, and the evolving educational needs to prepare the workforce for a digital future.

The State of DIT in the GMS: Opportunities and Challenges by Dr. Aladdin Rillo

The keynote addresses the rapid yet incomplete digital transformation within ASEAN. Despite the progress, significant challenges and risks persist, and sustainability remains a critical issue. The discussion focuses on digital technologies as sustainable solutions, highlighting their role in driving the circular economy, enhancing supply chain resilience, and accelerating the low-carbon transition. The presentation also introduces ERIA's Digital Innovation and Sustainable Economy Centre (E-DISC) and its efforts in research and capacity building to support a digital and sustainable future. Furthermore, ERIA's role as a knowledge partner for the ASEAN Digital Economy Framework Agreement (DEFA) negotiations is emphasized.

Bridging the Digital Divide: Strategies for Inclusive Digital Transformation by Mr. Lidong Bing

This keynote explores the widespread adoption of Generative AI and its implications for global digital transformation. It examines the inclusivity of Large Language Models (LLMs) and assesses their current state in Southeast Asia. The focus will be on SeaLLMs, a tailored solution for Southeast Asian languages, detailing its development, performance, and impact. Gain insights into how SeaLLMs can bridge the digital divide and drive more inclusive technological progress in the region through this keynote.



Terrain 1: Revolutionizing Food Systems: Digital Transformations in Mekong's Agriculture Sector

Agriculture in the GMS faces challenges like climate change and digital technology adoption. While digital tools offer benefits like precision farming and market access, barriers include infrastructure access and digital literacy. The GMS-2030 and ASEAN frameworks aim to boost digital adoption in agriculture for productivity and resilience. This session puts a spotlight on current digital adoption, efforts to address barriers, and leveraging digital tech for climate resilience and market access in the agricultural sector.

PRESENTATION DIGESTS

Harnessing Digital Technologies for Climate-Resilient Agriculture in the GMS by Ms. Dada Bacudo

The presentation explores climate resilience within the GMS agriculture sector, emphasizing the role of digital technologies in bolstering resilience against climate impacts. It highlights successful case studies where digital technologies have been effectively implemented for climate adaptation. It also outlines strategies and provide actionable recommendations for integrating climate resilience into digital transformation initiatives, aiming to enhance the sustainability and adaptability of agricultural practices in the GMS.

Digital
Transformation for
Food Security:
ASEAN Guidelines
and
Best Practices
by Dr. Nur Azura
Binti Adam

The presentation introduces the ASEAN Guidelines for Digital Technologies in Food and Agriculture, outlining how these guidelines aim to transform the agri-food sector. It delves into the pivotal role of digital technologies in enhancing the efficiency and resilience of the agri-food supply chain. It also highlight SEARCA's initiatives and contributions to advancing digital transformation in agriculture. Through case studies, it showcases successful applications of digital technologies within the ASEAN food and agricultural sector. The presentation will offer strategies and actionable recommendations for driving effective digital transformation in the agri-food sector.

Government
Initiatives in
Promoting Digital
Agriculture
by Dr. Preesan
Rakwatin

The Digital Economy Promotion Agency (DEPA) of Thailand is leading digital transformation in agriculture. This presentation will highlight DEPA's role in promoting digital technologies among farmers and agribusinesses through funding, capacity building, and support programs. It will showcase success stories and case studies of DEPA-supported projects that enhance productivity, sustainability, and market access. Additionally, we will address challenges and opportunities for scaling digital agriculture solutions in the GMS, offering strategies for overcoming barriers and fostering regional collaboration.



The Role of
International
Organizations in
Advancing Digital
Agriculture
by Ms. Pouchamarn
Wongsanga

Look into the crucial role of international organizations in fostering regional collaboration for digital agriculture. This presentation zeroes in on GIZ's initiatives aimed at promoting sustainable agriculture through digital technologies within the GMS. Highlighting successful collaborations, the presentation will discuss their impact on advancing digital agriculture in the GMS. It will also address the challenges and opportunities associated with scaling digital agriculture solutions across the region, offering strategies for overcoming obstacles and maximizing the benefits of digital transformation in agriculture.

Mr. William Sparks

The Thailand Regional Agriculture Innovation Network (RAIN) project, funded by the USDA and implemented by Winrock International, aims to promote climate-smart innovations among smallholder farmers in Thailand and Southeast Asia. The project utilizes a 5S-Framework: Source, Support, Scale, Sell, Share. RAIN ensures new innovations are technically impactful and market-viable, develops market-based business models for sustainable adoption, coordinates with the AgTech Supply Chain, aligns market incentives, and shares successful innovations and implementation guidance for scaling technologies. The project's goal is to establish a Regional Agri-Food Hub to support digital transformation in the Mekong's agricultural sector.



Terrain 2: Harnessing DIT for Inclusive and Secure Trade and Finance in the GMS

The GMS is experiencing digital transformation in trade and finance sectors. Increased cross-border trade is driven by connectivity and economic integration, while digital technologies enhance financial access and innovation. Challenges like infrastructure disparities persist. The focus is on leveraging digitalization for efficiency, inclusivity, and sustainability in line with GMS-2030 and ASEAN frameworks. Goals include discussing digital impact on finance and trade, identifying innovations, and promoting digital solutions for faster, more inclusive trade and financial access to achieve sustainable development.

PRESENTATION DIGESTS

Accelerating Green
Transformation to
Co-create Sustainable
Supply Chain in
Mekong Region
by Mr. Ryosuke Fujioka

This presentation explores how Japanese manufacturing firms have historically invested in the ASEAN and Mekong Subregions to enhance regional supply chains in partnership with local businesses. It highlights the urgent need for green transformation (GX) to maintain global competitiveness due to external pressures. The focus will be on how AMEICC's new program addresses the challenges faced by SMEs—such as limited knowledge and financial resources—by offering capacity-building and facilitating connections between SMEs, solution providers, and financial institutions to advance GX and develop sustainable supply chains in the region.

The Future of Finance in the GMS: How Fintech is Transforming Trade and Building a Sustainable Economy by Ms. Khanit Phatong

The evolving landscape of fintech in the GMS is reshaping trade and promoting economic sustainability. Rising mobile and internet penetration, a large unbanked population, supportive government policies, and increased fintech investment are driving this transformation. Key trends include digital payments, remittances, lending, and insurtech, all contributing to financial inclusion, economic development, and the transition to a green economy. However, challenges such as limited internet connectivity, inadequate electricity, outdated telecommunications infrastructure, regulatory uncertainty, limited financial literacy, and cultural attitudes toward technology remain. Despite these hurdles, real cases of fintech solutions are facilitating trade and enhancing economic prospects in the GMS.

Digital Transformation Framework for Advancements on Regional Finance and Trade by Mr. Tanapat Vattanapakanchai This presentation explores key drivers of digital transformation, including a framework for implementing digital change and an organizational model illustrated through a case study. It will focus on the impact of digital transformation on e-commerce development in the Greater Mekong Subregion (GMS) and address the main challenges businesses face, including both hard and soft infrastructure issues.



The GMS energy sector aims for a just transition to renewables to combat climate change. The GMS-2030 emphasizes innovation and cooperation in energy, promoting advanced technologies for efficiency and reliability. The ASEAN frameworks highlight digital innovation for energy optimization and cross-border trade. Objectives include showcasing emerging technologies, scaling up successful practices, and encouraging regional cooperation for tech-driven energy solutions.

PRESENTATION DIGESTS

Terrain Keynote by Ms. Yejin Ha

The keynote delves into how digitally driven innovation is reshaping the energy sector in the Asia-Pacific region, facilitating energy transitions. It addresses how this transformation can help tackle some of the most urgent priorities outlined in the 2030 Agenda for Sustainable Development, particularly SDG7 - Affordable and Clean Energy. It also highlight the Asia-Pacific region's potential as a hub for developing cutting-edge energy sector technologies. It offers ideas and recommendations for policy options aimed at leveraging digitalization to accelerate the achievement of the 2030 Agenda and the Paris Agreement through regional cooperation in the GMS.

Mr. Beni Suryadi

This presentation will examine the current state and future outlook of energy demand and supply in ASEAN. It will highlight emerging innovations in energy technology and present case studies showcasing successful implementations in the region. Additionally, it will address the challenges and barriers to advancing energy technology and propose strategies for moving towards a low-carbon economy through innovation.

Mr. Andy Chun

The presentation will explore VERYWORDS' innovative project on techdriven energy solutions in Cambodia. VERYWORDS focuses on manufacturing and distributing electric motorcycles, establishing battery swapping stations (BSS), and developing a waste battery recycling business within the E-Mobility ecosystem. The project aims to reduce emissions from the transportation sector, aligning with the carbon neutrality goals set by both the Cambodian and Korean governments and private sectors. Through these initiatives, VERYWORDS seeks to advance sustainable transportation and contribute to broader environmental objectives.



Dr. Liu Chen

The presentation covers the topic of variable renewable energy (VRE) planning and integration. Key points will include an overview of VRE development in China, technical solutions for VRE planning and integration, and several application experiences. This presentation will provide valuable insights into the advancements and practical implementations of VRE in China, highlighting technical strategies and real-world applications.

Ms. Thanawadee Deetae By 2037, EGAT aims for over 50% renewable energy integration, necessitating increased system flexibility in generation and transmission. This involves amending power and fuel purchase agreements, improving firm power purchase guidelines, implementing VRE curtailment rules, and managing fuel procurement. Key strategies include installing fast-response power plants, FACTS devices, HVDC/HVAC systems, and enhancing substation communication. Energy Storage Systems (ESS) will be used for energy arbitrage, balancing, and frequency control. New business models for distributed energy resources will manage load, renewable energy, and EVs, utilizing demand response control centers and virtual power plants to reduce system uncertainties.

Inclusive digital societies ensure equitable access to technology, benefiting all individuals regardless of gender or age. Strategies align with DIT and ASEAN frameworks, promoting inclusivity, innovation, and connectivity for sustainable development. The session aims to empower underrepresented groups like women and youth in the digital economy, fostering leadership and innovation for socio-economic progress in the GMS.

PRESENTATION DIGESTS

Integrating Gender equality, disability and social inclusion in research and policy: sharing experiences from the SUMERNET and MTT Programs by Dr. Sizwile Khoza

Explore the integration of Gender Equality, Disability, and Social Inclusion (GEDSI) in research and policy through this presentation. It highlights successful case studies where GEDSI principles have been effectively incorporated, demonstrating the positive impacts on research outcomes and policy development. The presentation addresses the challenges faced in implementing GEDSI, offering insights into overcoming these obstacles. By sharing both success stories and lessons learned, the session aims to provide actionable strategies for enhancing GEDSI in various research and policy contexts.

Inclusive digital societies:
Empowering women and youth through ICT by Ms. Rury Demsey

Look into the role of ICT in fostering inclusive digital societies by empowering women and youth. It will review ITU's regional initiatives for 2023-2025 in Asia and the Pacific and outline the ITU strategic work plan for 2024-2027. Key data from ITU's flagship Facts and Figures report will be presented, highlighting ongoing global connectivity disparities, including the persistent gender digital divide where women are underrepresented online compared to men. The session will also discuss growing internet usage among youth and the 2.6 billion people who remain offline. Highlighted initiatives include the handbook on gender in digital policies, Girls in ICT Day 2024, and digital inclusion programs for youth like Generation Connect and its podcast.

Inclusion for ALL:
Promoting Inclusion,
Innovation, and
Entrepreneurship
for Women, Youth
and Persons in
Disabilities in GMS
by Ms. Lina Maulidina
Sabrina

The presentation provides insights into developing gender-conscious tech solutions addressing entrepreneurship, innovation, women's economic empowerment, and disability inclusion. It will also cover strategic development programs and capacity-building initiatives implemented across the Greater Mekong Subregion (GMS) and beyond, highlighting key approaches and success factors for fostering inclusive tech solutions and driving sustainable development.



From Knowledge to Actions: Empowering Youth in Green Entrepreneurship and Leadership by Mr. Senjaya Mulia This presentation explores the journey from understanding to action in digital societies, focusing on the effective transition from theoretical knowledge to practical implementation. It highlights tools and strategies designed to empower youth in green entrepreneurship and leadership. By examining successful approaches and practical solutions, the presentation aims to provide actionable insights and resources to drive meaningful engagement and innovation among young leaders in the realm of sustainable development.

Mekong for the Future: Empowering Digital Communities in the GMS by Mr. Veerawit

Tianchainan

Examine the future of the GMS through this presentation that focuses on the region's transformative potential and impact. It emphasizes the critical role of digital literacy and skills training in empowering local communities, with a special focus on women and youth. The discussion highlights how enhancing digital capabilities can drive community development and foster inclusive growth, underscoring the importance of equipping individuals with the skills needed to thrive in a digital future.

Way Forward:
Flaming Actions for
a Women and Youth
in Accelerating DIT
Adoption in the GMS
by Ms. Than Tha
Aung

Summarizing key points from previous sessions, this presentation provides a consolidated view of the discussions and insights shared. It will then shift focus to an in-depth discussion on both ongoing and potential solutions for empowering women and youth, highlighting current initiatives and exploring new strategies. The presentation also outlines actionable steps to facilitate greater engagement and participation in digital societies, aiming to drive practical and effective involvement.



Tourism in the GMS faces challenges like sustainable management and recovering from global disruptions. A focus on Digital Integration in Tourism (DIT) aligns with regional objectives to digitally transform the tourism sector, promoting sustainability and economic development. DIT aims to enhance tourism services, resilience, and competitiveness through digital tools. Key areas include sustainable management, regional connectivity, crisis management, and economic opportunities for local communities and marginalized groups.

PRESENTATION DIGESTS

Leveraging Digital
Tools to Enhance
Community
Engagement in
Sustainable Tourism
by Ms. Pattamon
Rungchavalnont

Explore the transformative role of digital innovations in empowering communities engaged in sustainable tourism. Examine how collaborative digital solutions can support sustainable tourism development, offering practical strategies for fostering economic growth. By showcasing insights from successful case studies and innovative approaches, this presentation highlights the effective use of digital technologies to enhance sustainable tourism initiatives, promote responsible travel behaviors, and improve resource management.

Enabling Smart
Tourism
Ecosystems:
Opportunities and
Challenges
by Mr. Steven
Schipani

Explore how digital technologies can enhance tourism competitiveness in the Greater Mekong Subregion (GMS) while promoting inclusivity and sustainability. Key discussion topics include solutions for boosting digital infrastructure investments, bridging digital divides, and connecting GMS tourism destinations to global markets.

Sustainable Mobility and Digital Payment for Tourism Ecosystem by Mr. Souliyo

Vongdala

LOCA is a ride-hailing and digital payment application designed for tourists in Lao PDR, offering a solution for sustainable and green transportation. It provides access to insightful and tailor-made content about the city, allowing users to book rides, tours, and learn about their surroundings. LOCA ensures a safe and reliable taxi service, express delivery, and car and van rentals. Focusing on urban mobility for sustainable transportation, LOCA aims to build a sustainable and green mobility ecosystem, achieve net-zero emissions, establish fully self-sustained EV stations, promote local SME inclusion, and develop an EV financing model for drivers.

PRESENTATION SUMMARIES



TERRAIN 6 - Digitizing the Path to Environmental Stewardship: Digital Technologies and Innovations for the Environment

The Greater Mekong Subregion (GMS) faces challenges from economic development, urbanization, and climate change. Initiatives like GMS-2030 and ASEAN frameworks focus on sustainable development and digital innovations for environmental conservation. Efforts aim to integrate digital solutions for waste management, water conservation, and pollution control to reduce ecological footprints in the region.

PRESENTATION DIGESTS

Transport and mobility solutionsby Dr. Hua Wang

Explore sustainable transport and mobility solutions, focusing on practical strategies for tackling social and environmental issues. The discussion highlights innovative approaches to combat traffic congestion and air pollution while emphasizing the development of green infrastructure in energy and transportation. The presentation aims to offer actionable solutions that contribute to sustainable development and improve urban mobility.

JICA's DX Initiatives for the Environment by Mr. Ryosuke Miyashita This presentation explores JICA's Digital Transformation (DX) vision and its integration into development projects. It highlights the role of the DX Office in facilitating digital transformation for JICA departments and external clients. Key case studies from India will be presented, including the Transport Stack and Forest Stack proof-of-concept projects. Launched in March 2022, JICA's 5-year DX roadmap aims to align its operations with the digital age, emphasizing digital public infrastructure and data-driven innovation to support private sector-led growth and government intervention.

Mr. Suradech Taweesaengsakulthai The presentation discusses the integration of digital solutions in creating smart cities, focusing on how these technologies can reduce carbon footprints, enhance livability, and promote sustainability. It shares insights into digital innovations that support urban development and environmental conservation, highlighting how these solutions can be adopted or scaled across the GMS to foster sustainable growth and improved quality of life.

PRESENTATION SUMMARIES



PRESENTATION DIGESTS

Dr. Thanapon Piman

The Sustainable Mekong Research Network (SUMERNET) shares its ongoing projects that tackle development challenges through digital solutions. The presentation showcases various initiatives aimed at leveraging technology to address pressing issues in the Mekong region, demonstrating how innovative digital approaches are being employed to drive sustainable development. It provides insights into the impact of these projects and offer a platform for discussing best practices and future opportunities in digital solutions for regional development.

STI for Integrated
Green Development
through SouthSouth and Triangular
Cooperation
by Dr. Dong Un Park
and Ms. Yejin Kim

The presentation covers the "STI for Integrated Green Development" through South-South and Triangular Cooperation" project, highlighting the collaboration between UNOSSC (United Nations Office for South-South Cooperation) and STEPI (Science and Technology Institute). It will provide an overview of the project, including technical applications and key initiatives. Phase 3 of the ROK-UNOSSC Facility features the P-LINK (People's Livelihoods Initiative through the Water-Energy-Food Nexus in the Mekong Region) project. This triangular cooperation project aims for sustainable development in the lower Mekong basin, with technical pilots in Cambodia, Lao PDR, Thailand, and Vietnam. Thailand's application focuses on smart water management and Al-based intelligent water loss management systems. In Lao PDR, the project enhances the centralized data center and situation room for water management, and establishes flood forecasting and early warning systems with Al-based forecasting and digitalized FFEWS.



The thematic area explores DIT's role in transforming the region's education sector to adapt to technological advancements and labor market changes. It focuses on innovative educational frameworks to enhance delivery, improve access, and equip learners with 21st-century skills. The session discusses integrating digital tools in education, showcasing successful e-learning, mobile learning, and blended learning models that increase engagement and bridge the digital divide.

PRESENTATION DIGESTS

Session 1: Unpacking DIT Integration in the GMS

Transforming
Education Agenda:
The Common Space
in Southeast Asian
Higher Education
by Dr. Romyen
Kosaikanont

This presentation addresses key challenges in contemporary learning and the concept of transformative learning. It explores the role of technology and innovation in shaping education, examining whether technology assists or drives learning. The focus includes collective efforts towards a Common Space in Southeast Asian higher education, regional transformation strategies, and the integration of technology to offer flexible learning pathways and promote sustainable living and learning in the region.

Digital Campus: DITdriven Approaches from Formal to Lifelong Education by Dr. Denpong Soodphakdee The presentation highlights the role of higher education in utilizing DIT from formal education to lifelong learning. Discussions will include innovations in remote learning technologies and initiatives that bridge formal and informal learning spaces. There will be focus on how Khon Kaen University is using digital technologies in advancing education.

Shaping Futures:
Utilizing DIT for
Demand-Driven
Non-Degree
Programs and
Capacity Building
by Ms. Lilian Tan

This presentation explores the ADBI E-Learning platform as a case study in online capacity building for the Asia-Pacific region. It traces the evolution of ADBI E-Learning from its inception to its current multi-modal operation, highlighting the challenges and opportunities encountered along the way. The discussion also covers key technological considerations essential for effective capacity building in the region, offering insights into how digital solutions can enhance learning and development across diverse contexts.

Session 1: Unpacking DIT Integration in the GMS

Bridging Divides:
Extending
Educational
Opportunities
through Technology
by Ms. Rika Yorozu

The presentation covers innovative projects by UNESCO Bangkok that promote reading habits among children and young people in alternative education settings in Thailand and neighboring countries. The Learning Coin Project helps disadvantaged children and youth develop lifelong reading habits while providing monthly scholarships to their families based on the children's reading efforts. Utilizing digital technologies, the Learning Coin platform offers digital libraries in English, Myanmar, Malay, and Thai. It tracks reading hours, consistency, and quiz responses, calculating monthly scholarships for parents. Students receive between \$25 and \$38 each month, which can constitute up to 10 percent of average family income. Lessons from the open digital library LearnBig and other digital learning initiatives will also be discussed, along with recommendations.

Leading
Infrastructure to
Accelerate
Education
Intelligence
by Mr. Prayuth
Tugnsangob

Look into the critical need for digital skills in Thailand and the transformative power of empowering individuals from users to creators. This presentation discusses the smart transformation and evolution of universities through Huawei's intelligent education solutions, which accelerate digital transformation via next-gen scientific research, campus networks, and learning platforms. Emphasizing Huawei's commitment to Thailand, the presentation will highlight the company's efforts to foster digital talent and support industry growth through initiatives like the Thailand Huawei ICT Academy, a partnership with universities that promotes digital inclusion.

Session 2: Integrating AI into GMS Educational Systems

Al Tools in Education (Talk and Hands on Demo)

by Dr. Wanida Kanarkard, Dr. Parama Kwangmuang, and Dr. Pornpisut Duangngern This session, led by faculty members from Khon Kaen University (KKU), offers an immersive exploration into the integration of Artificial Intelligence (AI) within the educational systems. Designed as a combination of lecture and hands-on demonstration, the session aims to illustrate both theoretical concepts and practical applications of AI technologies in modernizing education and enhancing learning outcomes.

