



# REGIONAL HIGHER EDUCATION FORUM

## Higher Education of the Future: Leading Digital and Green Transformations through Collaboration



10–12 May 2023, Knowledge Exchange Center, Bangkok, Thailand

### PROGRAM

#### DAY 1: WEDNESDAY, 10 MAY 2023

Time	Agenda	Speaker / Presenter / Panelist / Facilitator
8:30–9:00	<b>Registration</b>	
9:00–9:20	<b>Welcome Remarks</b>	<p><b>Anouj Mehta</b> Country Director, Thailand Resident Mission, Asian Development Bank (ADB)</p> <p><b>Dr. Kitipong Promwong</b> President, Office of National Higher Education Science Research and Innovation Policy Council (NXPO) Thailand</p> <p><b>Dr. Kanyawim Kirtikara</b> Senior Vice President for Research and Innovation King Mongkut’s University of Technology Thonburi (KMUTT)</p>
	<b>Group photo</b>	
9:20–10:00	<b>Keynote Messages</b>	
	<p>Keynote 1 How can higher education support digital transformation and how does digital transformation change higher education?</p> <p>Keynote 2 How can higher education contribute to green transition?</p>	<p><b>Ms. Stephanie King Chung Hung</b> Director General, Information Technology Department, ADB</p> <p><b>Prof. Elias Towe</b> Engineering Professor, Carnegie Mellon University; and Founder of next generation solar energy and scientist in energy transitions and education/research</p>

Time	Agenda	Speaker / Presenter / Panelist / Facilitator
10:00 – 10:10	<b>COFFEE/TEA BREAK</b>	
10:10–11:10	<p><b>Opening Panel: Discussion about the Keynote</b></p> <p>Panel Members:</p> <ul style="list-style-type: none"> <li>• Multi-lateral Development Bank</li> <li>• Government</li> <li>• Private Sector</li> <li>• University</li> </ul>	<p><b>Facilitator: Ayako Inagaki</b> Senior Director, Human and Social Development, Sectors Group, ADB</p> <p>Panel members:</p> <p><b>Ms. Rafaelita Aldaba</b> Undersecretary, Department of Trade and Industry, Philippines</p> <p><b>Ms. Stephanie King Chung Hung</b> Director General, Information Technology Department, ADB</p> <p><b>Prof. Elias Towe</b> Engineering Professor, Carnegie Mellon University</p> <p><b>Lerwen Liu</b> Associate Professor, NTU Entrepreneurship Academy (NTUpreneur)</p>
11:10–11:30	<b>Q&amp;A with Participants</b>	<b>Facilitator: Ayako Inagaki</b>
11:30–12:00	<b>Announcement for mechanics of group presentation</b>	<p><b>Vinh Ngo</b> Social Sector Officer, Viet Nam Resident Mission, ADB</p> <p>Mechanics for Country Group Presentation: <i>Topic: Higher Education's role in Digital Transformation and Green Transition in the Context of Each Developing Member Country, each country group will present for 8 minutes each.</i></p> <p>Walk through country presentation template</p>
12:00–13:30	<b>NETWORKING LUNCH and GUIDED TOUR OF KX Center</b>	
13:30–14:30	<p><b>Session 1: Building Research Ecosystem</b></p> <ul style="list-style-type: none"> <li>• Government Policies for Quality Research (Autonomy and Financing Mechanisms)</li> <li>• Public–Private Partnership in Research</li> <li>• Collaborative and Interdisciplinary</li> </ul>	<p><b>Facilitator: Lynnette Perez</b> Principal Education Specialist, Southeast Asia Department, ADB</p> <p><b>Dr. Ma. Cynthia Rose Bautista</b> Second Congressional Committee on Education Reform of the Philippines, Advisory Council (Higher Education)</p> <p><b>Dr. Kitipong Promwong</b> President, NXPO</p> <p><b>Andrew Khaw</b> Regional Director, Government Affairs, Samsung Asia</p>

Time	Agenda	Speaker / Presenter / Panelist / Facilitator
	Research in Digital Transformation and Green Transition	<b>Prof. Elias Towe</b> Carnegie Mellon University, Founder of next generation solar energy and scientist in energy transitions and education/research, Role of higher education
14:30–14:50	<b>Q&amp;A</b>	<b>Facilitator: Lynnette Perez</b>
14:50–15:30	<b>Session 2: Good Examples of Start-Up Incubation and University–Industry Cooperation in Digital Transformation and Green Transition</b> <ul style="list-style-type: none"> <li>• Startup Nurturing Program, Startup Incubator</li> <li>• Commercialization of Research Output</li> <li>• Work-Based Training and Work Immersion</li> <li>• Small and Medium-Sized Enterprises Support</li> </ul>	<b>Facilitator: Shanti Jagannathan</b> Principal Education Specialist concurrently Officer-in-Charge of Education Sector Group Sustainable Development and Climate Change Department, ADB  <b>Dr. Kitiya Vongkamjan Aurand</b> Associate Professor Biotechnology Department, Faculty of Agro-Industry, Kasetsart University  <b>Rohan McDougall</b> Director, Commercialization, Curtin University  <b>Dr. Supachai Vongbunyong</b> Deputy Director for Academic Affairs, Institute of Field RoBOTics (FIBO)  <b>Lerwen Liu</b> Associate Professor, NTU Entrepreneurship Academy (NTUpreneur)
15:30–16:00	<b>Q&amp;A with participants</b>	<b>Facilitator: Shanti Jagannathan</b>
16:00–16:15	<b>COFFEE/TEA BREAK</b>	
16:15–16:50	<b>Open Reflection from Participants by Country</b> <ul style="list-style-type: none"> <li>• Country Challenges and Strategies</li> <li>• Presentation for the Last Session</li> </ul>	ADB Country focals will facilitate.  Country Group Breakout Session discussion
16:50–17:00	<b>Day 1 Wrap-Up and Feedback</b>	Reminders for Day 2
17:00–18:30	<b>Networking and Socials</b>	Venue: KX Center

**DAY 2: THURSDAY, 11 MAY 2023**

<b>Time</b>	<b>Agenda</b>	<b>Speaker / Presenter / Panelist / Facilitator</b>
8:15–8:30	<b>Registration</b>	
8:30–8:45	<b>Day 2 Keynote:</b> Digital transformation, digital industry for higher education	<b>Dr. Joseph Hage</b> ((Virtual) Senior Digital Transformation Adviser, Global Consultant Topic of presentation: “ <i>Evaluating and Implementing Emerging Technologies to Improve the Quality of Learning and Student Outcomes in Higher Education.</i> ”
8:45–9:35	<b>Session 3:</b> New Teaching and Learning Methodologies and Student Support <ul style="list-style-type: none"> <li>• Online higher education</li> <li>• Micro credentials, Digital Badges</li> <li>• Student Support (Career Guidance), Financial Support for Equity Using Digital Transformation for New Ways of Learning</li> <li>• Prepare for the future of jobs, job demand from the job market.</li> <li>• Use technology to do teaching and research.</li> </ul>	<b>Facilitator: Jian (Jeffrey) Xu</b> Senior Education Specialist Sustainable Development and Climate Change Department, ADB  <b>Dr. Paulina Pannen</b> Chairman, Board of Trustees, Terbuka University And former Director, Indonesia Cyber Education Institute  <b>Dr. Bundit Thipakorn</b> Senior Vice President for Academic Affairs, KMUTT  <b>Dr. Shang Gao</b> Asia Pacific Regional Director, AWS (Education)  <b>Prof. Elias Towe</b> Engineering Professor, Carnegie Mellon University
9:35–9:55	<b>Q&amp;A</b>	<b>Facilitator: Jian (Jeffrey) Xu</b>
9:55–10:15	<b>COFFEE/TEA BREAK</b>	
10:15–10:45	<b>Session 4 (3 groups)</b>  <b>Collaborative Curriculum Development in DT and GT</b>  <b>Parallel session 4.1: Computer Science</b>	<b>Parallel sessions</b>  <b>Parallel session 4.1 Facilitator: Jian (Jeffrey) Xu</b> Senior Education Specialist Sustainable Development and Climate Change Department, ADB  <b>Dr. Sohel Rahman</b> Bangladesh University of Engineering and Technology  <b>Dr. Marong Phadoongsidhi</b> Assistant to the President for Property and Finance, KMUTT

Time	Agenda	Speaker / Presenter / Panelist / Facilitator
	<p><b>Parallel session 4.2: Climate Technology</b></p> <p><b>Parallel session 4.3: DT and GT Practices in Private Universities</b></p>	<p><b>Parallel session 4.2 Facilitator: Jukka Tulivuori</b> Social Sector Specialist, Sustainable Development and Climate Change Department, ADB</p> <p><b>Dr. Shabbir Gheewala</b> Professor, Joint Graduate School of Energy and Environment (JGSEE), KMUTT</p> <p><b>Lerwen Liu</b> Associate Professor, NTU Entrepreneurship Academy (NTUpreneur)</p> <p><b>Parallel session 4.3 Facilitator: Thi Thanh Van Nguyen</b> Senior Investment Officer, Private Sector Operations Department</p> <p><b>Dr. Nguyen Trung Kien</b> Vice President HUTECH Senior lecturer and professor of mechanics of CIRTech Institute of the University</p> <p><b>Dr. Ly Thien Trang</b> Vice President Ho Chi Minh City University of Economics and Finances (UEF)</p>
10:45–11:00	<b>Q&amp;A</b>	<b>Facilitators</b>
11:00–11:50	<p><b>Session 5: Transformative Partnerships in Higher Education for Innovation and Internationalization</b></p> <ul style="list-style-type: none"> <li>• Government policy support</li> <li>• University Networks and Partnerships</li> <li>• Qualification Recognition</li> </ul>	<p><b>Facilitator: Meekyung Shin</b> Education Specialist Sustainable Development and Climate Change Department, ADB</p> <p><b>Ms. Bui Thanh Hang</b> Officer in charge, International Cooperation, National Agency for Technology Entrepreneurship and Commercialization Development (NATEC)</p> <p><b>Dr. Shaun Wellbourne-Wood</b> Dean (ASEAN), Curtin University</p> <p><b>Dr. Reynaldo Vea</b> President and CEO, Mapua University, Philippines</p> <p><b>Prof. Ha Wei</b> Associate Professor/ Associate Dean, Graduate School of Education and Institute of Economics of Education, Peking University, UIL</p>
11:50–12:10	<b>Q&amp;A</b>	<b>Facilitator: Meekyung Shin</b>

Time	Agenda	Speaker / Presenter / Panelist / Facilitator
12:10–13:30	<b>NETWORKING LUNCH</b>	
13:30–14:30	<b>Group Discussion (to prepare for Group Presentation)</b> Country Challenges and Strategy	Grouping by country
14:30–15:00	<b>WORKING BREAK</b>	
15:00–16:30	<b>Group Presentation</b> <i>Topic: Higher Education's role in Digital Transformation and Green Transition in the Context of each Developing Member Country</i>	<b>Facilitator: Fook Yen Chong</b> Senior Social Sector Specialist (Skills Development) Southeast Asia Department, ADB  8 mins for each country presentation
16:30–16:50	<b>Policy guidance on the group presentations</b>	<b>ADB Country Focals</b>
16:50–17:00	<b>Day 2 Wrap-Up and Feedback</b>	Reminders for Day 3: Field Visits

**DAY 3: FRIDAY, 12 MAY 2023**

<b>Time</b>	<b>Agenda</b>	<b>Speaker / Presenter / Panelist / Facilitator</b>
8:00	Assemble at Hotel Lobby	ADB to record attendance
8:00–9:00	Travel to KMUTT Bangkhunthien Campus	
9:00-9:05	Welcome Remarks <b>[BRI 224]</b>	<b>Dr. Chawin Chantharasenawong</b> Vice President for Internationalization, KMUTT
9:05-9:20	Overview of KMUTT Bangkhunthien Campus (KMUTT Science Technology & Education Park) <b>[BRI 224]</b>	<b>Dr. Sansanalak Rachdawong</b> Director of the National Biopharmaceutical Facility, KMUTT
9:20-10:00	KMUTT Bangkhunthien Campus - Living Lab for Sustainability: Highlights & Success Cases + International Collaboration (3F + 1P) <b>[BRI 224]</b>	<ul style="list-style-type: none"> <li>• 3F (Food, Feed, and Bio fuel) <b>Dr. Annop Nopharatana</b></li> <li>• 1P (Bio Pharma+ Microbiome) <b>Dr. Sansanalak Rachdawong</b></li> <li>• Renewable Energy and Environment <b>Dr. Annop Nopharatana</b></li> <li>• Community and Resource Management and Conservation Ecology (Community Resource Management + Royal Project Foundation and Kings Recommended Project Supporting Center + Conservation Ecology Group) <b>Mr. Surain Thapanangkul</b></li> </ul>
10:00-11:15	Breakout session for site visit (4 parallel groups)	<p><b>Group 1</b></p> <ul style="list-style-type: none"> <li>• Algae Biotechnology (AGB)</li> <li>• Clean Energy System Integration (CESi)</li> <li>• Remediation Laboratory (RMT)</li> </ul> <p><b>Group 2</b></p> <ul style="list-style-type: none"> <li>• National Biopharmaceutical Facility (NBF)</li> <li>• Biopharmaceutical Characterization Laboratory (BPCL)</li> <li>• Bioprocess Research and Innovation Center (BRIC)</li> </ul> <p><b>Group 3</b></p> <ul style="list-style-type: none"> <li>• Clean Energy System Solar Cells Testing Center (CSSC)</li> <li>• Food Pilot Plant Facility @BRI</li> </ul> <p><b>Group 4</b> (School of Bioresources and Technology)</p> <ul style="list-style-type: none"> <li>• Lipid Laboratory (LIPID)</li> <li>• Yeast Innovation</li> <li>• Enzyme Technology (ENZ)</li> <li>• Pilot Plant for Fresh Cut Produce</li> </ul>

Time	Agenda	Speaker / Presenter / Panelist / Facilitator
11:15-12:00	Travel to KMUTT Main Campus (Bangmod)	
<b>12:00–13:00</b>	<b>LUNCH</b>	
13:00-13:15	Introduction to KMUTT Bangmod Campus & <ul style="list-style-type: none"> <li>• Site visit program</li> </ul>	<ul style="list-style-type: none"> <li>• KMUTT4life: Micro-credentials<sup>1</sup></li> <li>• SDG policy: Carbon Neutrality 2040<sup>2</sup></li> <li>• OBE in practice: Institute of Field Robotics<sup>3</sup></li> </ul>
13:15-14:00	Breakout session for site visit 1	Group 1, 3 - KMUTT4life Group 2 - OBE in practice Group 4 - SDG policy
14:00-14:15	Switch groups / Transit time	
14:15-15:00	Breakout session for site visit 2	Group 2, 4 - KMUTT4life Group 1 - OBE in practice Group 3 - SDG policy
<b>15:00-15:15</b>	<b>COFFEE BREAK</b>	
15:15-16:00	Brief reflections on field visits overall program & Final Feedback Survey	DMCs to share
16:00-16:10	Closing Remarks	<b>Shanti Jagannathan</b> Principal Education Specialist concurrently Officer-in-Charge of Education Sector Group Sustainable Development and Climate Change Department, ADB <b>Dr. Bundit Thipakorn</b> Senior Vice President for Academic Affairs, KMUTT
16:10-17:00	Travel by bus from KMUTT Bangmod campus to Hotel/ Airport	
<b>END of 3-day Regional Higher Education Forum</b>		

<sup>1</sup> KMUTT4life: Micro-credentials: is a new business model to offer a flexible, bite-sized, and targeted approach to learning which can be customized to suit the needs of learners and for life-long learning. It is also used to transform education at KMUTT.

<sup>2</sup> SDG policy: Carbon Neutrality 2040: To be a smart and sustainable university and meet the energy and climate challenge by 2040 which are related to SDG 3, SDG 6, SDG 7, SDG 9, SDG 11, SDG 12, SDG 13, SDG 14, SDG 15 and SDG 17, KMUTT actively works on energy reduction, implementation of energy efficient appliances, renewable energy usage, climate change, and green area expansion. KMUTT's Pathway to Carbon Neutrality by 2040 will be shown together with research and innovation themes and other support to industry and society.

<sup>3</sup> Outcome-based education (OBE) has been implemented to ensure quality of education offered at KMUTT. FIBO has adopted a full scale of OBE in their program. They offer a holistic approach to help students develop the knowledge and skills of robotics and automation at the undergraduate level and how to create an ecosystem to help the students develop desirable competences.