

REGIONAL SANITATION EXPO SUMMARY REPORT

EXPLORE, LEARN, AND DEVELOP INNOVATIVE
SOLUTIONS

23-25 JUNE 2021



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FINAL REPORT

REGIONAL SANITATION EXPO 2021

“We need a radical shift in our systems, services and in business models – bringing together the public and the private sectors to reimagine how we deliver safe sanitation for everyone, including the most vulnerable.”

- **Ms. Karin Hulshof**, UNICEF East Asia and Pacific Regional Director



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Summary

This report summarizes the Regional Sanitation Expo held from 23-25 June 2021. The event brought together 200 participants from sanitation practitioners, business, government, NGOs and academic to share innovative sanitation solutions and exchange progress in Thailand and other country experiences in engaging businesses towards achieving safe sanitation for all.

The Regional Sanitation Expo was convened by UNICEF in collaboration with the Asian Institute of Technology, SCG and Thai Chamber of Commerce.

Key recommendations arising from the event to UNICEF and collaborating agencies were:

- Document case studies of technologies and products that were introduced during the expo, including costs, benefits, operational requirements to contribute to regional knowledge sharing.
- Establish an online community where participants and other sanitation practitioners in Thailand and the region can continue share information, and exchange ideas, and connect with each other.
- Continue to advocate for attention to sanitation through events such as the World Toilet Day in November, in support of national governments and actors.

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23 – 25 June 2021

1. BACKGROUND

The Sustainable Development Goal (SDG) 6 sets the ambition of safe sanitation and hygiene for all by 2030. But today, despite tremendous gains, progress is too slow in many countries and subregions in East Asia and the Pacific. Expanding access to markets and innovations through partnerships will play a critical role in achieving the safely managed sanitation services for all. In support of the achievement of SDG target 6.2, UNICEF's Strategic Plan (2018-2021) aims to support 250 million people to abandon open defecation and 60 million people to gain access to at least basic sanitation services.



1.3 AIMS AND OBJECTIVES

The Regional Sanitation Expo aimed to explore, learn and develop innovative solutions with participants in the region. The focus was on opportunities to strengthen sanitation markets through with government, non-government, community and private sector engagement in WASH.

The event aimed to share and exchange progress in Thailand and other country experiences in engaging businesses towards achieving safe sanitation for all. It was organized by UNICEF in collaboration with the Asian Institute of Technology (AIT), SCG and Thai Chamber of Commerce.

1.1 EXPECTED OUTCOMES

The desired outcomes were:

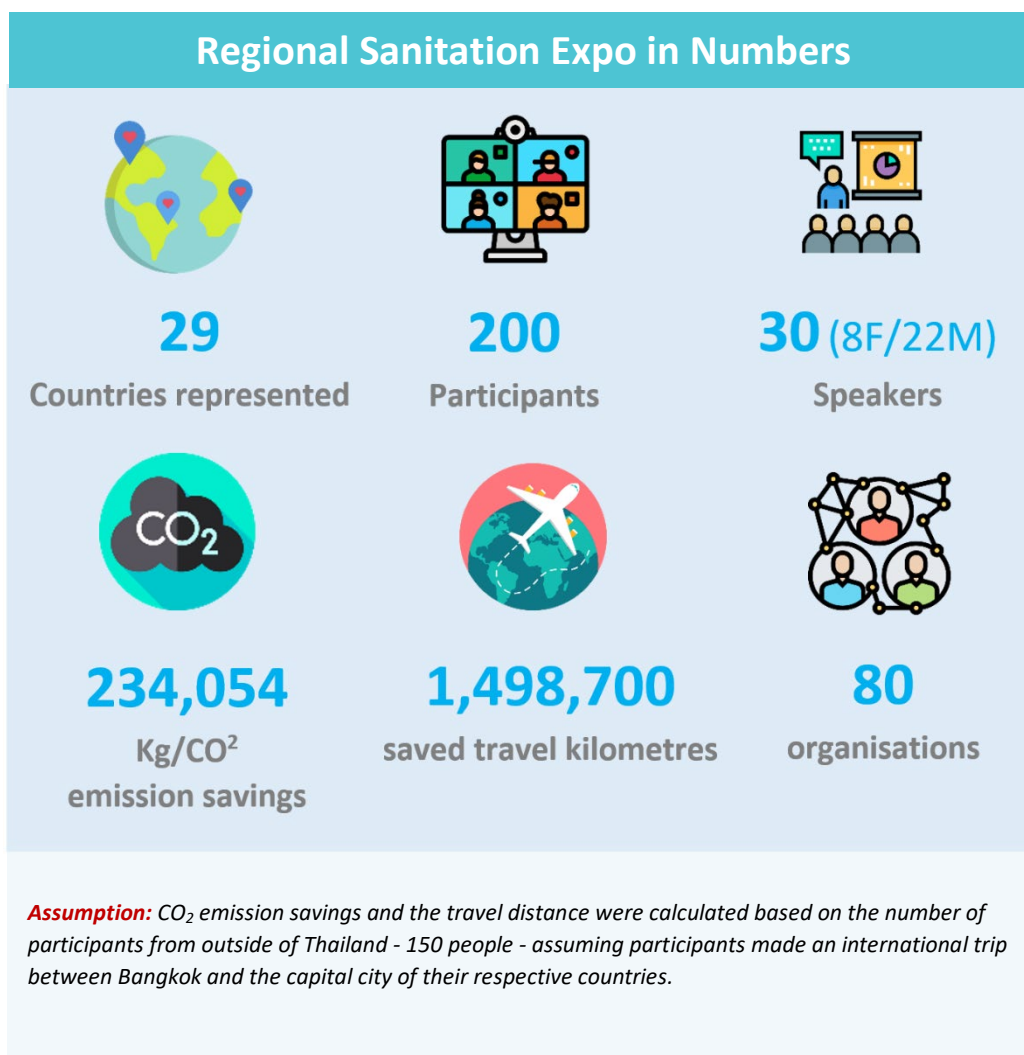
- Participants gain exposure to innovative sanitation solutions in Thailand and exploration of feasibility in other countries in the regions.
- Expert consultation on emerging knowledge and programming on safely managed sanitation in the regions.

1.3 PARTICIPANTS

The meeting brought together 200 unique participants from 80 organizations in 29 countries over three days. This included representatives of the Royal Thai Government and other governments of countries in the region, private companies, business platforms, UNICEF, NGOs and civil society.




EAP countries represented included China, Cambodia, Indonesia, Lao PDR, Malaysia, Mongolia, Myanmar, Papua New Guinea, Philippines, Singapore, Thailand, Timor-Leste, Vietnam, and Vanuatu. There were also many participants joining from outside the region for example from Australia, Ghana, Ethiopia, Germany, UK, USA, Sweden, Nepal, and India.

By meeting virtually instead of face-to-face, the meeting achieved the below impact.



2. SUMMARY OF THE SESSIONS

The event was held over three days, for three hours per day. The agenda was structured as below.

Day 1	Day 2	Day 3
 <ul style="list-style-type: none"> • Opening session • Keynote speech • Virtual exposition 	 <ul style="list-style-type: none"> • Virtual field visits: SCG, DOS, Asian Institute of Technology, Nonthaburi Municipality • Reflection & learning 	 <ul style="list-style-type: none"> • Innovations and technologies from other countries • Panel discussion: Addressing inequalities • Final reflections from the region

2.1. DAY 1 – WEDNESDAY, 23 JUNE 2021

2.1.1 EXPO OPENING

The session was facilitated by Evariste Kouassi-Komlan, Regional WASH Adviser, UNICEF East Asia & Pacific Regional Office (EAPRO).

Opening remarks were provided by:



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Mr Sanat Angubolkul, Chairman of the Thai Chamber of Commerce, highlighted the opportunity for businesses in sanitation, and the contribution of good sanitation to a prosperous society.



.....

Dr Eden Woon, President, Asian Institute of Technology, spoke to the critical role of innovation and technology in achieving safe sanitation for all, and the way that research institutions support this goal.



Dr. Suracha Udomsak
Vice President-Chemicals Business and CTO-Innovation and Technology, Chemicals Business, SCG

Dr **Suracha Udomsak**, Vice President-Chemicals Business and CTO-Innovation and Technology, Chemicals Business at SCG, highlighted SCG's collaboration with AIT through the BMGF-funded 'Reinvent the Toilet' challenge to develop new technologies for on-site, non-sewered sanitation.



Ms. Karin Hulshof
UNICEF Regional Director

Ms **Karin Hulshof**, UNICEF Regional Director, drew attention to opportunities for private sector engagement, equity and inclusion and youth skills and employment through sanitation.

2.1.2 KEYNOTE SPEECH:

PRIVATE SECTOR ENGAGEMENT AND INNOVATION FOR SAFELY MANAGED SANITATION



Kelly Ann Naylor, Associate Director, WASH, UNICEF Headquarters

In this session, Ms Kelly Ann Naylor, Global WASH Chief at UNICEF, provided a keynote speech on progress on sanitation and opportunities for private sector engagement.

With only 10 years left until 2030, the rate at which sanitation coverage is increasing will need to quadruple if the world is to achieve the SDG sanitation targets.

Despite progress, 2 billion people still lack even a basic level of sanitation service. The consequences of poor sanitation are stark: illness, disease, indignity, violence, pollution and costs to society. As a result, the world is not claiming the myriad benefits that come from safe sanitation.

The SDG 6 Global Acceleration Framework, coordinated by UN-Water in 2020, identified five accelerators to support the achievement of SDG 6: governance, financing, capacity development, data and information, and innovation.

The accelerators can be a pathway towards countries' achievement of safe sanitation for all. Businesses can support innovation, data, financing, and capacity development, and contribute to improvements in governance.

Sanitation in turn creates business opportunities, such as provision of toilet products, emptying services and household financing. For example, in Indonesia alone, a 2020 study commissioned by UNICEF found that the market size may exceed USD 5.3 billion over the next five years. UNICEF is seeking private sector partners to strengthen markets for sanitation and develop new public-private partnership models.

2.1.3 VIRTUAL EXPOSITION

The sanitation industry is expanding, and many companies are expanding their product line to meet market demands. The expo was an opportunity for business to showcase appropriate technology and gain additional exposure to the wider public.

The session was co-facilitated by Dr Thammarat Koottatep, Professor, Asian Institute of Technology (AIT), Thailand, and Evariste Kouassi-Komlan, Regional WASH Adviser, UNICEF East Asia & Pacific Regional Office (EAPRO). Four companies presented their featured product for sanitation with a focus on low-resource settings, and further explained innovative aspects of the product and how it is different from what is already available on the market.

- **Mr Nicholas Stafford, Open Innovation Specialist, SCG**, shared the SCG 'Zyclone Cube,' a non-sewered on-site compact treatment system. The project was originally initiated by the AIT with SCG as a commercial partner. The system takes mixed solid liquid waste from a flush toilet, treats it, and produces pathogen-free water and soil conditioner.

The first demonstration project in Bangkok used by-products to grow vegetables while solar panels and rain collection roofing were added to make the system off grid. In collaboration with AIT, the system became modular with the option to use the liquid treatment tank separately to treat black or greywater. In Thailand, the system has been tested in seven locations with a variety of different setups showing ideal use for a small community restroom, a single household or a small restaurant or industrial facility. The technologies are now modular to tailor the system to the different needs, culture, and scenarios.

- **Mr Tanawat Jamikorn, Deputy Managing Director, DOS (Thammasorn Group)**, provided an overview of the company's background and a wide range of products. DOS is focusing on environmental business and mainly producing water tanks and wastewater treatment system. Examples industrial wastewater treatment and recycling systems in Thailand were shared. The main innovation was DOS Pore Control Fiber technology which has been used in parks and factories for wastewater treatment with the capacity up to 160,000 m³ per day, requiring only 30% of the space compared to the conventional system and reduce 50% of the operational costs. In addition, a small-scale DOS Pore Control Fiber system is available in a prefabricated container and can be transported anywhere required for treatment.
- **Aqua Nishihara** Thailand shared a recorded video of products developed: i) septic tanks for residential houses and small buildings, ii) collective treatment pumps for projects that have undergone initial treatment, iii) large building blocks, and iv) water reuse group. Their residential system is an aerobic system designed for use in areas requiring direct water discharge to natural water reservoir. This system is accessible to general users it can be used to mitigate environmental degradation and requires less space for installation.
- **Mr David Dietz, Country Director Indonesia, BORDA**, presented their use of decentralized wastewater treatment systems (DEWATS) in Indonesia: development of the technology, piloting, mainstreaming the technology and upscaling. He shared the needs for

standardization, benchmarking of technology, from the perspective from the development partners in low- and middle-income settings. The DEWATS treat up to 1,000 m³ of organic wastewater per day, and reducing pollution by up to 90% and producing water suitable for irrigation. The DEWATS have three main modules; i) a settler comparative to a septic tank for separation of solids and liquid, ii) an anaerobic buffer reactor and anaerobic filter for COD and BOD₂ removal, iii) and horizontal gravel filter for aerobic treatment process through plants to remove nutrients. BORDA is looking at upscaling and mainstreaming these DEWATS while reducing costs. The design can be adjusted to make it more affordable and cheaper according to the needs and the discharge standards. No external energy is required and no chemicals added. In partnership with AIT, the system is being lab tested for materials behaviour and performance consistency to provide a declaration of performance.

Closing Appreciation: Evariste Kouassi-Komlan, Regional WASH Adviser, UNICEF East Asia & Pacific Regional Office

2.2. DAY 2 – THURSDAY, 24 JUNE 2021

2.2.1 VIRTUAL FIELD VISITS

Day 2 began with the virtual field visit with four concurrent breakout groups for two hours. The main presenters were:

1**SCG**

Mr Nicholas Stafford, Open Innovation Specialist
Ms Supathida Ratanaswasd, Medical and Well-being Business Manager

2**DOS**

Mr Tanawat Jamikorn, Deputy Managing Director, DOS (Thammasorn Group)

3**Asian Institute of Technology**

Dr Thammarat Koottatep, Professor of Environmental Engineering Management

4**Nonthaburi Municipality**

Mr Permpong Pumwiset, Director of Environmental Health Promotion Division

The summaries of the groups were provided in the final feedback session.

2.2.2 REFLECTION AND LEARNING

Following the virtual field visits, a short feedback session was convened, facilitated by Brooke Yamakoshi, WASH Specialist, UNICEF East Asia & Pacific Regional Office. The key points from each field visit are summarized below.

Nonthaburi Municipality

Mr Permpong Pumwiset, Director of Environmental Health Promotion Division, presented fecal sludge management and the bio-fertilizer plant under the guidelines of the Royal Development project. Nonthaburi city's plant uses anaerobic digesters as the main treatment technology, and treated sludge is used as a soil supplement. Dried sludge from the fecal sludge treatment plant is mixed with organic waste to produce fertilizer, with an amount of 40 cubic meters per day and 40 tons per month. The bio-fertilizer plant, by-product of the fecal sludge treatment system, can be used as a model for other organizations and research institutes as a learning center to observe the anaerobic digester treatment system which is simple, hygienic and in accordance with sustainable development goals.

Asian Institute of Technology

Mr Suraj Pradhan, research associate, gave an overview of the field visit which was divided into two sessions: i) Introduction of Asian Institute of Technology (AIT) and ii) AIT's Flagship Innovation, Products and Services. The Asian Institute of Technology is an international English-speaking postgraduate institution, focusing on engineering, environment, and management studies. It started as a water engineering and later on the focus shifted to include sanitation such as current work on decentralized wastewater. AIT recently launched 1-Year Master's program Regenerative Sanitation focuses on the delivery of non-sewered sanitation services in the context of the SDG 6. Some of the participants showed great interest in this program.

AIT focuses on regional needs, following the principle that technology should not be too advanced for the context of lower- and middle-income communities. The flagship innovations made were Zyclone non-sewered sanitation, 'Cess-to-Fit', and solar septic tank. Cess-to-Fit is a retro-fitting system for existing cesspools to provide primary treatment as a septic tank would before discharge. The innovations received a lot of attention from the participants for applicability in various settings and availability in the market. Finally, AIT introduced their testing laboratory, and faecal sludge management toolbox - one stop online database system, which provide like a step-by-step guide for faecal sludge management practitioners (senior city planners, donors and consultants).

SCG

Mr Nicholas Mark Stafford, Open Innovation Specialist, presented an overview of the field visit which focused first on personal health and protection items and moved on to sanitation. Ms Supathida Ratanaswasd, Medical and Well-being Business Manager shared Varogard, a new face mask and alcohol-free hand sanitizer line was developed in conjunction with local hospitals within Thailand and university partners and has been lab tested, and certified. The second focus was on Zyclonic, the non-sewered sanitation system which was commercialized by SCG following development by AIT. Following the presentation

of the technology during Day 1, the field visit explored various demonstration sites in Thailand and new sites in South Africa. SCG's motivation for engaging with the 'Reinvented Toilet' project was also discussed, and SCG shared their desire to apply the knowledge in chemicals and materials to new business lines such as sanitation that fill a market need.

DOS (Thammasorn Group)

Mr Tanawat Jamikorn, Deputy Managing Director, began with the introduction of the water and wastewater treatment products from large to small scale. DOS manufactures septic tanks and primary treatment technologies suitable for small households up to large scale commercial industries. The field visit provided an overview of their technologies and showed the installation process in more details. They also shared their 'floating solar solutions' (solar farms that float on reservoirs and dams) that are manufactured in collaboration with SCG. DOS is interested in upscaling and commercializing the pilot stage model, like the Zyclonic case that originally initiated from research institutions and expressed a strong willingness to establish additional partnerships.

After the reflection session, **Brooke Yamakoshi, WASH Specialist, UNICEF East Asia & Pacific Regional Office**, highlighted key summary points.

The field visits helped us a better understanding of the challenges that are facing institutions, households, and communities as well as the technical solutions that will support safe sanitation. With 369 million people across the Asia Pacific region lacking basic sanitation facilities in 2017, the field visit demonstrated various promising on-site sanitation solutions. Social and institutional factors guide and influence the adoption of innovations.

The field visit showed how organizations like AIT and BORDA can provide feedback to product developers and regulators to have through lab research and product testing. It also demonstrated partnerships, between businesses, researchers, NGOs, communities and policymakers. Collaboration between SCG, DOS, and AIT showed how business and research partnerships can lead to new technologies and markets suitable for unserved communities. The field visit of the faecal sludge treatment plant at Nonthaburi Municipality showed how political will can enable the extension of services, while both the Nonthaburi Municipality and SCG field visits showcased the safe reuse of faecal by-products for productive uses in partnership with communities.

Closing Appreciation: **Mr Evariste Kouassi-Komlan**, Regional WASH Adviser, UNICEF East Asia & Pacific Regional Office

2.3. DAY 3 – FRIDAY, 25 JUNE 2021

2.3.1 INTRODUCTION

Mr Evariste Kouassi-Komlan, Regional WASH Adviser, UNICEF EAPRO, welcomed the participants to the final day of the sanitation expo. While the first two days were focused on Thailand, the third day brought in experiences from across the region.

2.3.2 OTHER COUNTRIES INNOVATIONS AND TECHNOLOGIES

Mr Attawut Kumkrong, Reinvented Toilet Business Head, SCG Thailand, facilitated the session. The session focused on technologies and innovations from the region and beyond, as well as the social and institutional factors that affect the uptake of these better products and services, with particular focus on low-income communities. The session had four presentations followed by questions and answer.

- **Mr Stephen Gong, General Manager, Qingdao ALIJE Intelligent Technology Co, China**, presented their negative pressure self-priming toilet system, which was developed as part of the government led rural toilet revolution. He highlighted that the product advantages: portable, cold-weather resistance, water and energy saving due to negative pressure self-priming technology, odour-free, and human waste can be recyclable. During the past two years, more than 80,000 people across China have used this innovative toilet and rapidly adopted in household and public places.
- **Ms Ursula Braun, Business development manager, Loowatt, UK**, introduced a container-based sanitation solution, currently used in the UK, Philippines and Madagascar. The system is focused on the urban poor, usually in informal settlements where hard ground or close proximity to waterways makes traditional options like septic tanks impossible. The Loowatt toilet seals human waste and liquid using a polymer film flush, which creates a barrier to prevent smell and contact with the faeces. The used film is stored in a container which is collected regularly, requiring that Loowatt establish a service model for the collection and treatment of waste. This creates opportunities for local jobs. The project in the Philippines is a multi-stakeholder collaboration with Manila municipality, the utility, department of environment, Gates Foundations, and the local community.
- **Ms Refilwe Lesufi, Managing Director, Prana Consulting, South Africa**, began with the pain points and challenges that face South Africa sanitation sector. Infrastructure is aging and on-site sanitation systems prevail in rural areas, but many are not well-designed. This leads to health and safety risks. In urban areas, untreated wastewater is discharged in rivers. To address these issues, Prana Consulting has partnered with SCG to test the Aquanic on site wastewater treatment tank in South Africa, retrofitting them onto existing septic tanks and urinals both in industrial and residential setting. Prana is examining user acceptance, robustness and efficiency and local conditions. Once testing is completed, they plan to pilot on a larger scale and commercialize. Implementation challenges remain such as policy barriers for non-sewered sanitation, a culture of low willingness to pay for sanitation, and changing user behaviours.

- **Mr Batnasan Nyamsuren, WASH Specialist, UNICEF Mongolia**, presented WASH facilities made from shipping containers for schools in Mongolia. Extremely cold temperatures, which can drop to -40 °C, prevent children from walking the full distance to use outdoor latrines, contributing to open defecation and poor health and dignity. UNICEF supported developing a low-cost, high-quality WASH facilities, using discarded shipping container equipped with flushing toilets, urinals and basins for handwashing. The facilities can be attached to a building without major renovation work. It has an integrated ventilation system, electric connections and insulated walls and ceilings to protect the facilities from freezing temperatures and heat loss.

2.3.3 YOUNG PEOPLE IN THE SANITATION ECONOMY

Ms Brooke Yamakoshi, WASH Specialist, UNICEF East Asia & Pacific Regional Office presented an overview of how the sanitation economy creates opportunities for youth skills and employment in the recovery from the COVID-19 pandemic. The East Asia and Pacific region is home to a diverse and dynamic demographic of young people – approximately 329 million adolescents reside in the East Asia and Pacific region and constitute a quarter of the world’s adolescent population – who are growing up with different aspirations than their parents and a different outlook for their future. Yet young people in the region face higher levels of unemployment than adults, a situation worsened by the COVID-19 pandemic. When paid jobs are difficult to get, young workers in the region turn to self-employment. ILO estimated that 35 per cent in South-Eastern Asia and the Pacific were self-employed. For many, self-employment is a means of gaining independence and of earning a higher income than in other options.

Meanwhile a report by the International Water Association in 2014 found that there were not enough appropriately skilled sanitation professionals to support the attainment of universal access. A changing sanitation sector – new innovations and technologies – will bring more opportunities beyond the traditional, such as technology development and data science, as well as opportunities for young people to become involved in commercialization of new technologies. Initiatives like UNICEF’s WASH Young Changemakers programme, which aims to develop youth innovation and entrepreneurship skills, can support young people to identify and capitalize on opportunities of a changing sanitation economy.

2.3.4 PANEL DISCUSSION: EXPANDING SANITATION SERVICES TO THE ‘LAST MILE’: REACHING MARGINALIZED AND VULNERABLE GROUPS

Moderator: Brooke Yamakoshi, WASH Specialist, UNICEF East Asia & Pacific Regional Office
The overall story of sanitation in the East Asia region and many Pacific Island Countries has been one of rapid progress representing the improvement of living conditions, health, and dignity for millions of people. For example, regionally the use of safely managed sanitation services doubled from 32 per cent to 63 per cent between 2000 and 2017, representing 800

million new users. Yet despite this strong progress in the region, many inequalities remain, impacting access to services and the quality of those services, as well as the cost of services. Thailand is an example of a country with high coverage of basic sanitation services and relatively high equality between income quintiles.

This session aimed to share lessons from Thailand and the region with participants. Four speakers addressed these issues:

- **Mr Suchai Janepojanat**, Deputy Director General for Technical and Planning, Wastewater Management Authority Thailand
- **Dr Chayawee Wangcharoenrung**, Director of Industrial Wastewater Division, Pollution Control Department
- **Ms Wipa Rujijanukul**, Public Health Technical Officer, Department of Health
- **Mr Mike White**, Senior Urban Development Specialist (Water Supply and Sanitation), Southeast Asia Department, Asian Development Bank

With three panellists from the Royal Thai Government, the first part of the discussion focused on lessons from expanding access to household toilets and wastewater treatment across Thailand and plans to incentivize household investment in better containment through the 'green sticker' programme for septic tanks. The Asian Development Bank provided a regional perspective, sharing their focus on 'city-wide inclusive sanitation' approaches to reach the urban poor as well as examples of reaching rural and even floating villages in Cambodia with sanitation.

2.3.5 REFLECTION FROM OTHER COUNTRIES

Moderator: Evariste Kouassi-Komlan, Regional WASH Adviser, UNICEF East Asia & Pacific Regional Office

The final session drew conclusions and reflections from sanitation professionals around the East Asia and Pacific Region on what it will take for the region to meet the ambition of SDG target 6.2, and the role that innovation can play.

Ms Shen Yujun, Director, Institute of Rural Energy and Environmental Protection, Academy of Agricultural Planning and Engineering, Ministry of Agriculture and Rural Affairs, People's Republic of China presented the situation of sanitation in rural China, where strong political support and policy measures enabled rapid progress. Sanitation technologies used in China are context specific and have pros and cons that underscore the biggest obstacles to reach the 'last mile', including unbalanced regional development, poor quality products, and lack of long-term operation and maintenance. Key success factors that contributed to rapidly increasing the sanitation coverage in China were: national strategy with action plan, special funds for rural toilets, clear standards, and training and capacity building across all levels of the government officials. However, challenges remain particularly in dry and cold areas, which will be their next priority areas of support.

Mr Sasidharan Velayutham, Director of Strategy and Planning, Indah Water Konsortium Malaysia shared Malaysia's experience in making rapid progress towards safely managed sanitation for all. The government had set a vision in 1991 to become the high-income nation by 2020 and realized the importance of water and sanitation in achieving this goal. To

strengthen sewerage management, Indah Water Konsortium (IWK) was established as a national sewerage service company in 1994. IWK took over sewerage systems from the local government and local municipalities, responsible for operational and maintenance as well as upgrade and refurbish the existing facilities. Seven years later, IWK became a government owned company. Thanks to this strong political support and enabling environment, almost 100% of Malaysians have access to basic sanitation, improving health. However, although 89% of the population have access to safely managed sanitation services, only 10% of septic tanks are being desludged. With new regulations in 2021, IWK is implementing a public campaign with a goal of 1.3 million people every year desludging their septic tanks.

Mr Jack Sim, Founder of the World Toilet Organization, a well-known passionate and global advocate of better sanitation, made an inspirational presentation on the importance of breaking the taboo on sanitation, and how humour can be used to convey important public health messages and leverage media as partner. The World Toilet Organization is an advocacy organization that convenes a World Toilet Summit annually. Advocacy at the United Nations led to a unanimous vote of 193 governments in 2013 to designate World Toilet Day as official United Nations international observance day on 19 November. He concluded with tips on creating a global movement, beginning with powerful storytelling and humour and media engagement, attracting politicians and attention of decision makers to allocate funds, and involvement of academia to generate evidence.

2.3.6 CLOSING

Evariste Kouassi-Komlan, Regional WASH Adviser, UNICEF East Asia & Pacific Regional Office In closing, Evariste Kouassi-Komlan thanked for all the participants and organisers and highlighted that the sanitation expo event was a very interesting space for learning and exchange in terms of the innovative solutions, technologies and approaches initiated by the business partners, government and academia, and encouraged everyone to continue engaging in further dialogue to deal with the sanitation challenges.

3. CONCLUSION AND NEXT STEPS

The Regional Sanitation Expo highlighted the momentum and potential for further business engagement to achieve safely managed sanitation for all, particularly the most vulnerable and lowest-resource communities. Through the three-day event, participants connected with each other through an active chat box and were able to exchange ideas and opportunities for follow up.

UNICEF and collaborating organizations agreed key recommendations and actions to follow up after the conference:

- Document case studies of technologies and products that were introduced during the expo, including costs, benefits, operational requirements to contribute to regional knowledge sharing.
- Establish an online community where participants and other sanitation practitioners in Thailand and the region can continue share information, and exchange ideas, and connect with each other.
- Continue to advocate for attention to sanitation through events such as the World Toilet Day in November, in support of national governments and actors.

