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ABSTRACTS

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ABOUT THE ABSTRACTS

The Asia-Pacific Forum on Sustainable Development (APFSD) is an annual, inclusive, intergovernmental forum that supports the follow-up and review of progress on the 2030 Agenda for Sustainable Development and the Sustainable Development Goals (SDGs) at the regional level.

The 12th APFSD was organised from 24 to 27 February 2026 under the theme: Transformative, equitable, innovative and coordinated actions for the 2030 Agenda and its SDGs for a sustainable future for all at the United Nations Conference Center (UNCC) in Bangkok, Thailand.

The APFSD Youth Forum 2026, APFSD's preceding event, served as a platform for young people across Asia and the Pacific to engage, collaborate, and drive action towards achieving the Sustainable Development Goals (SDGs). This Forum brought together 705 passionate youth leaders, activists, and changemakers from 38 countries to discuss pressing regional challenges, shared innovative solutions, and strengthened their commitment to sustainable development. Through collaborative workshops, panel discussions, and advocacy sessions, the Youth Forum set the stage for youth-led action on gender equality, climate change, social inclusion, and other key issues.

Pre-APFSD Youth Forum 2026, 466 abstracts were received of which 23 were presented by the participants on the first and second day of the forum. The presentations enriched the discussions on the relevant SDG goals. The abstracts were not limited to research but also included programme implementation on the ground, initiatives focused on young people and initiatives led by young people. The abstracts allowed the presenters to share evidence-based initiatives from local, national, and regional contexts, deliberate on challenges and gaps affecting SDG implementation, and develop actionable recommendations, directly informing the APFSD Youth Call to Action 2026.

The APFSD Youth Forum 2026 was organised ahead of the 13th APFSD by co-conveners: the Asian-Pacific Resource and Research Centre for Women (ARROW), Youth LEAD, the Y-PEER Asia Pacific Centre, and the Major Group for Children and Youth (MGCY), in collaboration with the Asia Pacific Regional CSOs Engagement Mechanism (APRCEM), the United Nations Development Programme (UNDP), the Youth Empowerment in Climate Action Platform (YECAP), and the United Nations Economic and Social Commission for Asia and the Pacific (UN ESCAP), with partnership from the Children and Youth Major Group to UNEP.

PRESENTER

Bryan Akthur Alexander

BUMI Health Catalyst (BHC)

Aligned with SDG

Lingkar Sehat Jakarta: Co-Designing Healthy and Climate-Resilient Cities Through Youth Participation

Jakarta faces a pressing urban health crisis, exacerbated by hazardous air pollution, childhood stunting, and rising mental health burdens. “Lingkar Sehat Jakarta” is a strategic blueprint designed for 2026 to address these challenges by leveraging youth as co-designers of urban policy. The project aims to: 1) formalize youth-led innovation in health governance; 2) integrate climate resilience into public health planning; and 3) establish a demonstrable model for metropolitan health in the Asia-Pacific. This proposal aligns with SDG 3 (Good Health), SDG 11 (Sustainable Cities), and SDG 13 (Climate Action).

Methodology

The initiative will employ a multi-stakeholder co-design framework scheduled for 2026. The proposed methodology includes pre-summit policy labs, youth “brain trust” meetings, and community dialogue workshops to ensure evidence-driven design. Urban health and climate-resilience indicators will be synthesized from academic data and city-level sources. The framework utilizes scenario-modeling involving young people, the public sector, and academics to draft policy recommendations. Digital channels will be integrated to maximize reach and capture real-time feedback from Jakarta’s diverse population.

Outcome

The projected outcome is the “Jakarta Healthy City Blueprint,” to be submitted to the provincial government. Expected impacts include the incubation of five pilot projects in circular health and the development of a digital community aiming for wide-scale engagement. By transforming the narrative from health as a cost to health as a climate-resilient investment, this framework provides a template for other Asia-Pacific cities. This model will demonstrate how youth leadership can bridge the gap between urban sustainability and practical climate action.

PRESENTER

Timothy Joseph G. Henares

Alvin Li

Kira Matus

Division of Public Policy, Academy of Interdisciplinary Studies, The Hong Kong University of Science and Technology

Aligned with SDG

Towards 1.5C Lifestyles: What motivates sustainable consumption choices in Hong Kong?

Rising carbon emissions necessitate transformative changes not only in critical areas such as agriculture, transportation, real estate, and financial services but also in individual behaviors. This study – marking the first of its kind in Asia – explores how to mainstream "sustainable lifestyles," enabling individuals to live happy, healthy lives within the 1.5°C ecological limits, in the context of smart cities and sustainable urban development. The research investigates the question: What motivations drive urban residents to adopt sustainable behaviors, and how can these motivations inform policies for smarter, more sustainable cities? The research extends previous studies in Finland and Canada (Vancouver and Guelph-Wellington), emphasizing the examination of motivational profiles and revealing the underlying drivers influencing individual choices and behaviors. This study aligns with SDGs 3 (Health and Well-being), 7 (Affordable and Clean Energy), 9 (Industry, Innovation, and Infrastructure), 11 (Sustainable Cities and Communities), and 13 (Climate Change).

Methodology

Using a mixed-methods approach, the study combines 30 in-depth qualitative interviews with a quantitative survey of 1,000 residents in Hong Kong to examine sustainable choices across housing, food, transportation, energy use, consumption, and leisure. Analysis employed thematic coding for qualitative data and statistical modeling for survey results, identifying distinct lifestyle profiles based on situational drivers rather than fixed demographic groups. The analysis identifies several distinct lifestyles reflecting situational drivers.

Outcome

A key finding is that sustainable actions are taken by a broader population than just those who identify as "green," highlighting opportunities to engage diverse urban residents. Expected outcomes provide recommendations for designing smart city policies and interventions that align with these motivations, enabling faster and more inclusive adoption. By integrating these insights into urban planning, policymakers can foster cities that prioritize ecological sustainability and human well-being, offering actionable strategies for Hong Kong and other Asian cities.

PRESENTER

Nirmal Singh

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Aligned with SDG

Youth-Led Community Learning for Sustainable Communities: Lessons from the Tohoku Future Research in post-disaster communities in Japan Jharkhand, India

The Sustainable Development Goals (SDGs) seek to reduce poverty, improve health, promote environmental sustainability, and ensure inclusive development. However, achieving these goals remains difficult in coal-mining regions where economic growth often coexists with social and ecological stress. Jharkhand, despite its mineral wealth and contribution to India's energy security, continues to experience persistent poverty, poor health outcomes, and environmental degradation. Communities residing around the Kathautia open-cast coal mine in Palamu district face livelihood insecurity, declining agricultural viability, and limited access to basic services. This study examines how local realities in mining-affected villages align with SDGs related to poverty (SDG 1), health (SDG 3), clean energy (SDG 7), and reduced inequalities (SDG 10).

Methodology

This study uses primary data from a household survey of 362 households across six villages affected by the Kathautia open-cast coal mining project. A structured questionnaire collected information on demographics, livelihoods, migration, housing conditions, sanitation, energy use, food security, and healthcare access. Descriptive statistics were employed to assess socio-economic and health indicators. Logistic regression models were used to examine determinants of migration and healthcare access, while linear regression assessed factors associated with food insecurity. This analytical approach enabled identification of both patterns and structural drivers of vulnerability in mining-affected communities.

Outcome

The findings reveal widespread multidimensional vulnerability among mining-affected households. Environmental degradation from mining has reduced agricultural land and groundwater availability, weakening livelihoods and increasing dependence on insecure wage labour and distress-driven migration. Healthcare utilisation remains limited, particularly for preventive services, due to

distance, affordability constraints, and reliance on informal providers. Vulnerabilities are disproportionately concentrated among women, Scheduled Tribe households, low-income groups, and individuals with lower education. The study highlights a substantial gap between SDG aspirations and local realities, underscoring the need for targeted policies focusing on livelihood diversification, strengthened healthcare systems, clean energy transition, and environmental restoration.

PRESENTER

Harumi Endo

Soka Gakkai International

Aligned with SDG

Youth-Led Community Learning for Sustainable Communities: Lessons from the Tohoku Future Research in post-disaster communities in Japan

The Tohoku Future Research initiative is a community-based, youth-led project launched by the Youth Division of Soka Gakkai in Japan's Tohoku region, which was severely affected by the 2011 Great East Japan Earthquake. While recovery has progressed, the region continues to face population decline, aging, and weakening community ties. In response, young local members launched the initiative in 2023 to rediscover the value of their communities and foster intergenerational dialogue. By foregrounding social relationships and local trust, the initiative advances SDG 11.3 by strengthening inclusive, participatory approaches, while complementing SDG 11's broader focus on physical and institutional development.

Methodology

The initiative follows a three-stage methodology: fieldwork, community surveys, and public dialogue meetings. Youth members begin by researching local history and culture, then co-design surveys in consultation with local governments. They conduct street interviews and one-on-one conversations, including visits to elderly residents for deeper, trust-based exchanges. Findings are shared through intergenerational dialogue meetings, where participants discuss local challenges, share hopes for the future, and identify concrete, community-led actions. Traditional songs and dances are often incorporated, reinforcing local identity while strengthening social ties and collective reflection on community revitalization.

Outcome

As of May 2025, the initiative has been implemented in nine municipalities across six prefectures, gathering over 2,500 survey responses. In each community, 5–10% of residents participated, sharing hopes for vibrant towns where youth energy and local traditions coexist. Voices were shared with local governments, prompting renewed attention to community needs. Post-meeting feedback shows that residents developed a sense of ownership over their community and its future. As population decline and rapid aging increasingly affect parts of the Asia-Pacific region, the initiative suggests that sustainable communities are strengthened through individual agency and shared learning through intergenerational dialogue.

Child and Youth Participation in Policy Dialogue for the Fulfillment of Child Rights: Contributing to Sustainable Cities and Communities in East Nusa Tenggara (Go Hotel Maumere)

PRESENTER

Mario Anthony Labina

Youth Voice Now Sikka

Aligned with SDG

Child and youth participation in public policy-making is a crucial component of fulfilling child rights and achieving the Sustainable Development Goals (SDGs), particularly those related to sustainable cities and communities. However, in many regions, including East Nusa Tenggara (NTT), opportunities for meaningful engagement of children and young people in policy dialogue remain limited and often symbolic. This activity was initiated in response to the urgent need to strengthen awareness, knowledge, and capacity of children and youth to actively participate in decision-making processes that affect their lives. By promoting inclusive and rights-based participation, the initiative seeks to ensure that development policies are more responsive to children's voices.

Methodology

A participatory approach was employed by engaging children and youth from ChildFund-supported areas in East Nusa Tenggara. The methodology included interactive training sessions on children's participation rights based on the Convention on the Rights of the Child (CRC) and their linkage to the Sustainable Development Goals. Multi-stakeholder dialogues were conducted with relevant government institutions, including the Health Office, DPMD, and Baperida, to foster shared understanding, coordination, and

accountability. In addition, a field visit to Kopong Village was carried out to directly capture children's aspirations, lived experiences, and challenges at the community level through open discussions and participatory learning activities.

Outcome

The activity resulted in increased understanding among children and youth regarding their participation rights and key SDG-related issues within their local context. Participants demonstrated improved confidence in expressing their views during dialogues with stakeholders. Discussions with government representatives identified potential solutions, including improving educational facilities and developing child-friendly public infrastructure. Insights gathered from Kopong Village provide an important evidence base for formulating context-specific policy recommendations to be submitted to local authorities. Overall, this initiative contributes to more inclusive and participatory policy processes, strengthens the recognition of children's voices in development planning, and supports the advancement of sustainable, resilient, and child-friendly cities and communities.

PRESENTER

Jimrex 'Mitch' Teofilo Calatan

Indigenous Navigator and
Tebtebba Foundation Inc

Aligned with SDG

Indigenous Navigator: Data by and for Indigenous Peoples in the Asia-Pacific

Indigenous Peoples in the Asia-Pacific region remain underrepresented in official statistics and often excluded from policy processes that directly affect their lives. The Indigenous Navigator initiative addresses this gap by empowering communities to generate and use their own data, ensuring visibility and recognition of Indigenous realities. Its objectives are to strengthen evidence-based advocacy, enhance community ownership of development monitoring, and align local priorities with the 2030 Agenda for Sustainable Development. The initiative directly contributes to all global goals.

Methodology

The Indigenous Navigator applies a participatory, community-led approach to data collection and analysis. Standardized tools, co-created with Indigenous organizations, are adapted to local contexts and administered through surveys, workshops, and focus group discussions. Local facilitators are trained to lead processes, ensuring cultural relevance, gender sensitivity, and respect for traditional knowledge systems. Data is aggregated at community and national levels, enabling comparative analysis while safeguarding Indigenous autonomy. This methodology bridges grassroots realities with

national policies and global frameworks, reinforcing transparency and inclusivity. By centering Indigenous perspectives, the Indigenous Navigator strengthens both local capacity and regional accountability in monitoring SDG progress.

Outcome

Findings highlight persistent inequalities in access to education, healthcare, and land rights, alongside strong resilience rooted in Indigenous governance and cultural practices. Outcomes include enhanced community capacity to use data for advocacy, improved dialogue with governments, and increased recognition of Indigenous contributions to sustainable development. The implications are transformative: Indigenous-led data challenges invisibility, informs policy reforms, and shifts power toward communities. By embedding Indigenous perspectives in SDG monitoring, the Indigenous Navigator advances equity, resilience, and rights-based development. This model offers replicable pathways for inclusive governance and sustainable futures across the Asia-Pacific region.

PRESENTER

Naw Gay Gay

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Aligned with SDG

Learning, Equality, and Hope: A Youth-Led Storytelling Campaign for Inclusive Communities

Many girls and young people in refugee and border communities face barriers to education and participation. From December to January, this youth-led project used storytelling to share real experiences from these communities. The goal was to highlight the importance of gender equality and inclusive communities through education. The campaign focused on students, girls, teachers, parents, and youth leaders who support learning despite difficult conditions. By sharing real stories, the project supports SDG 5 (Gender Equality) by promoting girls' education and equal opportunities, and SDG 11 (Sustainable Cities and Communities) by showing how education helps build inclusive and supportive communities.

Methodology

The project was carried out as a social media campaign with eight short videos, each about 3 to 5 minutes long. The videos were created and shared between December and January. Each video showed a different perspective, such as students learning in difficult conditions, girls with dreams for their future, committed teachers, supportive families, youth leadership, and access to digital learning. The videos used interviews, voiceovers, and real scenes from schools and communities. Simple language and storytelling were used so the

message could be easily understood by a wide audience.

Outcome

The campaign showed that simple storytelling can help people better understand the challenges faced by refugee communities. The videos highlighted the strength of girls who continue learning, as well as the important role of families, teachers, and youth in supporting education. Viewers were encouraged to see education as a shared responsibility within communities. The project helped raise awareness of gender equality and inclusion in education. These outcomes support SDG 5 by giving more visibility to girls' voices and SDG 11 by showing how education strengthens inclusive and resilient communities.

PRESENTER

Nguyen Ngo Phuong Thao

Lawrence S. Ting Foundation, Viet Nam

Aligned with SDG

One Place One Story: A Youth-Led Social Infrastructure Model Strengthening Aspirations, Equity, and Local Participation for Rural Youth in Vietnam (SDG 9 & 11)

Rural adolescents in Viet Nam face limited exposure, constrained opportunities for self-expression, and heightened vulnerability to NEET pathways, particularly among girls. Simultaneously, youth engagement with local cultural practices continues to decline. One Place One Story (OPOS) brings a first-ever youth-led, international-style camp directly into underserved communities in Vietnam, enabling disadvantaged students to build confidence, creativity, and aspiration through cultural community–based learning. OPOS advances SDG 9.1 by establishing an innovative youth-led social infrastructure, and contributes to SDG 11.4 by strengthening cultural identity and inclusive community participation. Cross-cutting results support SDG 5.5 and SDG 17.17 through equitable access and coordinated multi-level partnerships.

Methodology

OPOS applies a structured youth-led model co-implemented with provincial Departments of Education and Training, local schools, and community partners. Adults provide technical, facilitation, and safeguarding training for youth volunteers, who then design and lead the 10-day camp. Across three seasons in Soc Trang and Bac Ninh, 126 trained youth volunteers supported 327 disadvantaged students through: (1) cultural-immersion field visits, (2) tutoring

and soft-skill workshops, (3) creative storytelling labs using performance arts, and (4) campwide activities enhancing confidence and belonging. Training content and facilitation methods are adapted annually and across provinces. Volunteers conduct daily monitoring, reflection loops, and qualitative M&E to track engagement, communication, and behavioural change.

Outcome

OPOS generated multi-level impact: students developed greater confidence, public voice, and pride in local identity; youth volunteers strengthened leadership capacities; and communities experienced renewed cultural engagement. Heritage recognition alone does not ensure youth participation. Confidence requires structured facilitation. And social infrastructure is relational — participatory platforms are necessary to activate meaningful engagement. Cultural immersion strengthens action-oriented aspiration. Through a youth-led rurban approach, connecting urban and international volunteers with rural adolescents, OPOS bridged access gaps in cultural participation and opportunity exposure.

To advance SDG 11, we recommend embedding participatory cultural learning within education systems, recognising youth as active cultural stakeholders, expanding measurement beyond preservation to youth engagement, and integrating cultural identity into youth development strategies. Although OPOS concluded as a pilot, its methodology now informs scholarship-driven community initiatives supporting inclusive local development.

Resilience through Women's Reproductive Justice: Youth-Led Climate Health Framework from Bangladesh's Haor

PRESENTER

Chowdhury Anika Farah

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In Bangladesh's haor wetlands, floods are not just natural disasters; they are lived intersections of ecological vulnerability and gendered inequality. Each monsoon season, women's bodies become the frontline of crisis: unsafe deliveries and the silent exhaustion of caregiving in flooded homes. These overlapping risks form a syndemic where climate shocks, gendered inequality, and reproductive health injustice reinforce one another. This youth-led research responds by co-creating the Gender-Inclusive Climate-Induced Health Risk Reduction (GCH^2R) framework, which transforms women's everyday resilience into structured climate action. By linking intersectional vulnerability to reproductive justice, it advances SDGs 3, 5, 13, and 17 toward equitable futures.

Methodology

This study employed a Qualitative Community-Based Participatory Research (CBPR) approach in two flood-prone villages of Sunamganj District, Bangladesh, engaging local people throughout the process. The main research team worked with trained youth peer researchers from the same communities to understand local perceptions and ensure authenticity and trust. The study conducted four Participatory Rural Appraisal (PRA) sessions, 15 In-Depth Interviews (IDI) with women (pregnant, lactating, and reproductive age 15–49), and six Key Informant Interviews (KII) with local officials, health officers, and NGO staff. Resource mapping, disease mapping, situation analysis, and cause-and-effect analysis were also carried out.

Outcome

The study reveals that floods in Sunamganj intensify a syndemic of ecological fragility, gendered inequality, and reproductive injustice. As formal systems fail, women mobilize kinship networks, informal care, and social solidarities to navigate unsafe deliveries, menstrual insecurity, and loss of sanitation dignity. These practices, rooted in everyday survival, reveal resilience as a deeply relational and embodied process rather than a technical outcome. The participatory GCH^{2}R framework redefines disaster risk management through the lens of reproductive justice, linking health, dignity, and adaptation within one structure. Beyond Bangladesh, this model offers a replicable pathway for low- and middle- income, disaster-prone regions to protect women's rights and agency.

PRESENTER

Santhiya M

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Aligned with SDG

Water Wives and Climate Inequity: Gendered Adaptation to Water Scarcity in Rural India

Marathwada region of Maharashtra faces severe drought, groundwater depletion, and erratic monsoons, which have forced families into desperate coping mechanisms, most notably the phenomenon of "water wives." These women are informally married into households primarily to secure domestic water from distant sources. This shows how climate change exacerbates pre-existing patriarchal norms. This reduction of women to mere water carriers violates their dignity, bodily autonomy, and well-being. This study investigates the intersection of environmental stress and gendered exploitation. It aligns with SDG 5 (Gender Equality), SDG 6 (Clean Water and Sanitation), and SDG 13 (Climate Action), advocating for gender-just adaptation strategies that dismantle harmful survival practices.

Methodology

This qualitative research utilises secondary data from peer-reviewed

studies, media investigations, and NGO documentation, specifically focusing on the work of Pani Panchayats and Jal Sahelis. The analysis applies a gender-climate lens to examine the drivers of water-related shared marriage arrangements. Data is synthesised from NITI Aayog's Composite Water Index, Central Ground Water Board drought reports, and case narratives from the Beed and Osmanabad districts. By evaluating existing community interventions alongside government assessments, the methodology identifies evidence-based adaptation practices.

Outcome

The study reveals that "water wives" emerge where climate scarcity meets unequal gender norms that increase women's physical labour and health risks. However, evidence shows that gender-responsive governance can mitigate these practices. Successful interventions include women-led Pani Samitis, decentralised rainwater harvesting, and integrated partnerships with the Jal Jeevan Mission. The study concludes that climate finance must be specifically targeted toward women-led adaptation in drought-prone regions. Strengthening data systems to account for unpaid water labour is essential. These implications advocate for resilient, participatory water systems that move beyond mere survival to actively centre women's rights within global climate action.

PRESENTER

Quazi Rokaiya Haque

BRAC

Aligned with SDG

Community Water Supply Through School in Barendra Region of Bangladesh- A Unified WASH Model

The Community Water Supply Through School initiative in Bangladesh's water-stressed region responds to groundwater depletion and inequitable access to safe drinking water, where surrounding households, particularly women and girls, often rely on unsafe and distant sources. To address this, schools are transformed into hubs of safe and sustainable water access by integrating climate-hotspot specific technologies, like Managed Aquifer Recharge (MAR), and extending piped water networks to nearby communities. The initiative also strengthens gender-responsive WASH by establishing improved sanitation and menstrual hygiene management (MHM) facilities in schools, reducing girls' school absenteeism and the daily water burden on women. By promoting hygiene awareness, community ownership, and climate resilience, the model advances equitable water security and aligns with SDGs 3, 4, 5, 6, and 13.

Methodology

The initiative adopted a participatory, school-centered approach integrating infrastructure, technology, and behavioural change.

It began with identifying the Barendra region's water scarcity and selecting a school as the central hub for intervention. Managed Aquifer Recharge (MAR) technology was installed to restore groundwater and ensure a sustainable water source. Piped water networks were then extended from the school to surrounding households. Simultaneously, proper sanitary latrines and menstrual hygiene facilities were established. Students, teachers, and parents participated in hygiene and Menstrual Hygiene Management (MHM) awareness sessions to foster inclusivity and ownership. Continuous monitoring and community engagement is ensured for long-term sustainability.

Outcome

1. The initiative significantly improved access to safe and reliable drinking water benefiting both students and surrounding households.
2. The installation of MAR technology contributed to replenishing depleted groundwater and is giving back to the nature.
3. Households reduced reliance on unsafe and distant sources, easing the water collection burden, particularly for women and girls.
4. Improved gender-sensitive sanitation and menstrual hygiene management (MHM) facilities in schools enhanced dignity, hygiene practices, and girls' school attendance.
5. Strong community engagement fostered ownership and sustainability, demonstrating a scalable WASH model for water-scarce regions of Bangladesh.

PRESENTER

Nguyen Hoàng Viet

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Research Trends in Microplastic Contamination of Bivalves across Southeast Asia: A Comprehensive Review on Patterns, Challenges and Future Directions

Microplastics (MPs < 5 mm) have become a pervasive pollutant in marine ecosystems, with Southeast Asia (SEA) facing acute challenges as one of the world's largest plastic producers and consumers. Ineffective waste management and high coastal anthropogenic activity drive MP inputs into coastal waters and sediments. Bivalves, as filter-feeders, efficiently accumulate MPs and serve as reliable bioindicators of marine pollution. This review synthesizes current research on MP contamination in bivalves from Brunei, Indonesia, Malaysia, the Philippines, Thailand, and Vietnam. The objectives are to identify spatial patterns, dominant MP types/

polymers, methodological gaps, and ecological/human health implications. The work directly supports SDG 14 (Life Below Water), SDG 3 (Good Health and Well-being), and SDG 12 (Responsible Consumption and Production) by addressing marine plastic pollution, food safety, and sustainable resource management.

Methodology:

This study is a systematic literature review covering peer-reviewed articles published up to mid-2025. Searches were conducted in Scopus, Web of Science, and Google Scholar using combinations of keywords: "microplastic", "bivalve", "mussel", "clam", "oyster", and the six target SEA countries. Inclusion criteria required quantitative data on MP abundance (particles/g wet weight or particles/individual), shape, color, polymer type, and sampling location in marine/coastal bivalves. After screening titles, abstracts, and full texts, relevant studies were extracted for MP concentration, dominant morphotypes (fiber/fragment), polymer composition (PE, PP, PET, etc.), analytical methods (digestion, FTIR/Raman), and reporting units. Data were tabulated by country and species, enabling comparative analysis of contamination patterns, methodological consistency, and identified research gaps.

Outcome:

MP concentrations in SEA bivalves varied widely (0.06–70.7 particles/individual or 0.014–5.36 particles/g ww), with fibers (often >60 %) and fragments dominant and polyethylene, polypropylene, and polyethylene terephthalate the most common polymers. Hotspots occurred near urban, industrial, and aquaculture areas; lower levels were recorded in relatively pristine sites (e.g., Brunei open coast). Methodological inconsistencies in digestion protocols, polymer identification, and reporting units severely limit cross-study comparability. Ecologically, MPs pose risks of trophic transfer and physiological stress to bivalves; for humans, regular consumption of whole bivalves represents a direct exposure pathway to MPs and associated chemicals. Implications include urgent needs for standardized protocols, depuration practices, improved waste management, and policy interventions to reduce plastic leakage, thereby protecting marine ecosystems and public health in the region.

AquaSense: Real-Time Water Quality Monitoring and the Impact of Irrigation Water Salinity on Rice Growth in Thailand's Chao Phraya Basin

PRESENTER

Rochana Sirivadhanabhakdi (Thames)

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Aligned with SDG

Rice farming in Thailand's Central Plain depends on canal irrigation from the Chao Phraya River. During dry seasons, saltwater intrusion silently degrades water quality—yet the water appears clear and soil looks healthy. In 2020–2021, saltwater intruded 98 km upstream to Bangkok's main water intake, affecting over 14 million people (Pokavanich & Guo, 2024). Farmers in Wang Noi District, Ayutthaya, report yield declines of approximately 20%. This project investigates how elevated Total Dissolved Solids (TDS) in irrigation water affects rice growth and develops a low-cost community monitoring system, aligning with SDG 6 (Clean Water and Sanitation), SDG 2 (Zero Hunger), and SDG 13 (Climate Action).

Methodology

A controlled field experiment was conducted in Wang Noi District, Ayutthaya. Six plots (5 m^2 each) were established in a Completely Randomized Design with three TDS treatments and two replicates: (1) normal canal water (250–400 ppm), (2) high TDS (400–550 ppm, the upper "safe" limit), and (3) simulated seawater intrusion (2,000–2,200 ppm). Germination was monitored daily for 14 days; plant height, leaf count, tillers, greenness, and survivability were measured through Day 35. Separately, AquaSense—a solar-powered IoT station using an ESP32 microcontroller with TDS and temperature probes—was deployed along the local irrigation canal for continuous real-time monitoring.

Outcome

Even the moderate TDS treatment—classified as "safe"—significantly reduced plant height by 13%, leaf count by 18%, and tillers by 16% at Day 35 (all $p < 0.05$, $n^2 > 0.90$). Seawater treatment caused visible chlorosis and 7% stand loss. AquaSense has operated continuously since November 2025, and the participating farmer now uses real-time alerts for irrigation decisions. These findings reveal that current water quality thresholds may systematically underestimate salinity damage to crops, suggesting a need to revise irrigation standards for

sub-threshold impacts on food security. Low-cost real-time monitoring with community participation offers a replicable model for evidence-based water governance in climate-vulnerable agricultural regions.

PRESENTER

Hino Samuel Jose

Thematic Focal Point of Green Economy and Resources at the Children and Youth Major Group to UNEP

Aligned with SDG

Moving Beyond GDP: Rethinking Alternative Pathways for Just and People-Centered Energy Transition

Lessons from Indonesia

This qualitative research enriched with practical insights, group discussions, and past engagements explores alternative, people-centered pathways for a just energy transition in Southeast Asia, drawing lessons from Indonesia. Moving beyond GDP-centric growth, it highlights the need to integrate social equity, environmental sustainability, and intergenerational justice into energy transition strategies. Based on comprehensive literature study, practical insights from moderated group discussions, and advocacy experiences of the author, the study examines how overreliance on critical minerals and extractive industries reinforces inequality and environmental degradation. It underscores the urgency of embedding human rights safeguards, community participation, and fair benefit-sharing into energy policies.

The paper proposes a roadmap grounded in reality to realign development priorities with sufficiency and resilience principles. It calls for visionary regional leadership to ensure that Southeast Asia's energy transition supports human well-being, protects ecosystems, and advances inclusive, sustainable development beyond GDP growth metrics that should be integrated to the United Nations SDGs High-level Political Forum in 2026 and the Asia Pacific Forum on Sustainable Development 2026. The research emphasizes that genuine progress must be measured through the well-being of people and ecosystems rather than economic expansion. This includes ensuring that mining projects provide direct, long-term social benefits through investments in education, healthcare, and capacity building. Strengthening transparency and accountable governance in mineral supply chains and securing Free, Prior, and Informed Consent (FPIC) from Indigenous Peoples are essential to achieving justice in the transition.

The paper also advocates centering sufficiency principles, focusing on

responsible production and consumption within planetary boundaries to reduce dependence on extractive models. By reframing energy-transition success beyond GDP, this research advances sufficiency-oriented pathways that reduce material demand, center well-being and equity outcomes, and prevent worker and ecosystem harms, envisioning transitions that deliver energy services without reproducing extractive injustices or local environmental burdens.

Outcome

Finding 1: The pathway to just and inclusive energy transition must formalize the artisanal and small-scale mining in Indonesia and embrace the informal community within the critical minerals and renewable energy value chain. Indonesia's lacking policy instruments to facilitate formalization of ASMs and tendency of a criminalization of the ASMs based on the Presidential high-level attention and the Ministerial actions (2019-2025) challenged necessary people-centered measures to formalize ASM. Poor governance needs reform.

Finding 2: Indonesia as a critical raw materials and minerals rich resource producing country must be able to determine the floor and ceiling of its critical minerals extraction for downstreaming/ value-addition use. Based on the analysis of the current EV market in Southeast Asia, necessary shifts are needed to tackle overconsumption of extractives. It is proven by the current slowing demand of EVs due to weakened market appetite driven by unemployment.

Finding 3: Energy-transition pathways centered on expanding mineral extraction risk worker harm and ecosystem damage while appearing successful in GDP terms. A sufficiency-aligned, Beyond-GDP approach reframes success around well-being, equity, and environmental integrity, emphasizing demand reduction, efficient public systems, and low-resource provisioning to deliver energy services without escalating material throughput or unjust local burdens.

PRESENTER

Md Tanjid Hasan

Climate Connects, Bangladesh

Aligned with SDG

From Awareness to Action: Youth-Led Rooftop Solar Mapping in Bangladesh

A just energy transition requires accessible data, inclusive participation, and practical pathways for action. Despite strong rooftop solar potential, many households and institutions in Bangladesh lack clear, building-level information to support informed renewable energy decisions. Climate Connects aims to bridge this gap by combining community engagement, youth leadership, data-driven advocacy, and digital innovation to advance renewable energy adoption. The objective of this initiative is to transform awareness into action by enabling communities to assess rooftop solar feasibility and engage with renewable energy planning. The initiative aligns with SDG 7, SDG 9, SDG 11, SDG 13, and SDG 17.

Methodology

Climate Connects combines community engagement with data-driven digital tools to improve rooftop solar adoption. Unlike approaches that focus only on awareness or only on digital tools, this initiative integrates both. Youth-led workshops, campaigns, and advocacy dialogues are held across multiple districts to build knowledge, trust, and motivation. The Solar Suitability Mapper uses satellite imagery and PVGIS data for interactive rooftop assessment. Users mark their buildings, draw usable roof areas, and receive estimates of solar potential, system size, energy generation, installation costs, financial return, and carbon emissions reductions. Real-time tracking records each assessment as verified action.

Outcome

The initiative demonstrates that combining community engagement with practical, data-driven digital tools helps reduce information barriers to rooftop solar adoption. Climate Connects trained over 500 young people across 10 districts, held 5 policy dialogues, and reached more than 20,000 people through awareness campaigns. During the pilot phase, the Solar Suitability Mapper generated over 1000 rooftop assessments, providing households and businesses with detailed information on solar potential, costs, savings, and carbon reductions. This approach helps people make informed decisions, increases readiness for decentralized solar adoption, strengthens youth-led climate initiatives, and encourages collaboration among households, institutions, and policymakers.

PRESENTER

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Diplomatic Academy of Vietnam

Aligned with SDG

Biomass Energy within the Framework of ASEAN Regional Energy Cooperation from 2015 to Present

Globally, about three-quarters of the world's renewable energy use involves bioenergy, underscoring its importance for the energy transition and the implementation of the 2030 Agenda for Sustainable Development. In ASEAN, this importance was reflected in the adoption of the ASEAN Plan of Action for Energy Cooperation (APAEC) 2016-2025, which prioritizes renewable energy development. Within this framework, bioenergy has emerged as a potential contributor to ASEAN's energy transition and sustainable energy future, while aligning with SDG 7, SDG 13, and SDG 17. This research examines whether biomass energy can become a driving force in ASEAN's energy cooperation.

Methodology

The study employs qualitative analysis from a political-economic perspective to examine the current state of ASEAN energy cooperation and to assess the opportunities and constraints shaping the role of biomass energy within the region.

Outcome

First, biomass energy holds significant potential in many ASEAN countries due to favourable natural conditions and agricultural structures. ASEAN member states can broadly be divided into two groups. The first group includes Thailand, Indonesia, Malaysia, Vietnam, and the Philippines, which have shown strong interest and made notable progress in bioenergy and installed capacity over the past decade. The second group comprises countries where bioenergy has received more limited investment.

Second, despite this potential, bioenergy has not yet become a central driver of regional energy cooperation. Existing arrangements remain largely non-binding and weakly implemented, with most efforts driven at the national level and limited cross-border linkages or technology sharing. Development gaps, infrastructure constraints, and divergent policy priorities among member states continue to hinder region-wide coordination. Moreover, increasing reliance on extra-regional partners risks undermining ASEAN cohesion and

exacerbating great-power competition in Southeast Asia, further complicating collective action within the region.

Third, bilateral and sub-regional cooperation arrangements demonstrate greater potential for developing more substantive and effective models of collaboration. Overall, biomass energy remains a viable component of the region's long-term energy transition. Advancing its role will require clearer shared targets, stronger regional coordination mechanisms, and enhanced technology and financing support, particularly for less developed member states.

PRESENTER

Mega Maskey

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Feminist Just Energy Transition in Nepal

The concept of a Just Energy Transition (JET), introduced in the Paris Agreement, has gained global momentum as countries seek to phase out fossil fuels while building pathways for social, economic, and ecological resilience. Yet, in Nepal, where electricity is largely sourced from hydropower, the narrative of "clean" energy obscures the lived realities of women, Indigenous Peoples, and local communities whose rights and livelihoods are often compromised by energy projects. In alignment with the SDG 7 (Affordable and clean energy); SDG 5 (Gender equality); SDG 13 (Climate Change), the paper reveals how energy transitions could reproduce hierarchies of power, marginalize voices, and perpetuate inequities, underscoring the need for context specific approaches that diversify energy sources, decentralize governance, and center those most affected. This paper was conceptualized to challenge dominant perspectives of energy systems and foreground women as stewards, resistors, and innovators in Nepal's energy transition. Its objectives are twofold: 1) To document the stories, struggles, and leadership of women living in and around energy project sites; and 2) To provide actionable recommendations for policymakers and practitioners to ensure that Nepal's transition is just, inclusive, and responsive to marginalized communities.

Methodology

The paper combines participatory approaches with secondary research, including literature and policy reviews, focus group discussions with professionals and Indigenous activists, and direct conversations with women impacted by hydropower and other energy projects. Collaboration with civil society organizations,

designated as 'Solidarity Partners' was central to the process, ensuring co ownership, collective validation, and grassroots perspectives in shaping the advocacy paper.

Outcome

The outcome calls for a feminist, justice centered energy transition in Nepal that is locally owned, diversified, and rights based. It emphasizes small scale, community run infrastructures, gender transformative policies, and economic justice through retraining, compensation, and integration of women into renewable and circular economy sectors. Protecting Indigenous and community rights, fostering grassroots engagement, adopting gender responsive budgeting, and strengthening local government capacity with transparent monitoring are essential. Ultimately, structural reforms that dismantle extractive systems and build decentralized, inclusive, and feminist energy governance are necessary to achieve a truly equitable and sustainable future.

PRESENTER

Bodh Maathura

Chairperson, Commonwealth Asia Youth Alliance

Aligned with SDG

Youth Inclusion and Intergenerational Justice in South Asia's NDCs Revision Processes

Children and youth are among the most climate-vulnerable populations in South Asia, one of the highest-risk regions according to UNICEF's Children's Climate Risk Index. As countries submitted their third-generation Nationally Determined Contributions (NDCs) under the Paris Agreement, the meaningful inclusion of youth is essential for intergenerational justice and sustainable climate policymaking. This research paper examines how youth participation and perspectives were integrated into the NDC revision processes across South Asia, aligning directly with SDGs 13, 16 and 17. It also highlights cross-cutting relevance to SDGs 3, 5, 6, and 11, as key areas strengthened to ensure child- and youth-sensitive NDCs.

Methodology

This research employed a qualitative design combining desk-based policy analysis with Key Informant Interviews (KIIs) and a review of youth case studies on their experiences. Interviews were conducted with government representatives, UN agencies, INGOs, civil society organizations, and youth leaders from Sri Lanka, Bangladesh, Pakistan and the Maldives. Policy documents and official NDC submissions were examined to identify mechanisms for youth participation. Thematic analysis was applied to assess the extent of youth engagement, the integration of feedback, and institutional

support for intergenerational inclusion during the NDC update cycle, providing comparative insights into national approaches and regional trends.

Outcome

Findings reveal growing momentum toward youth inclusion in national climate policy processes across South Asia, with all countries adopting distinct approaches to engage young people in developing their NDC 3.0. From youth-led advocacy in Maldives & Bangladesh to structured technical working groups in Pakistan and institutional collaborations in Sri Lanka, youth voices are shaping national priorities. However, engagement remains largely ad hoc, with limited mechanisms for accountability, policy integration, and long-term participation. Strengthening institutional frameworks and creating permanent youth advisory structures are essential to ensure intergenerational inclusion throughout NDC implementation and monitoring.

PRESENTER

Megha

Program Coordinator, Flow at Work (India)

Aligned with SDG

Bloody Crisis at Work: Assessing Menstrual Equity in the Modern Indian Workplace

Despite India's expanding female workforce, menstrual health remains an overlooked workplace equity issue. This study assesses the "period-friendly" of Indian workplaces by examining infrastructure, support systems, cultural norms, and employee expectations. Anchored in SDGs 3, 5, 6, 9, 11, and 17, the research identifies critical gaps that directly affect well-being, gender equality, access to sanitation, workplace innovation, and inclusive urban work environments. By generating evidence on lived experiences and systemic barriers, this study aims to inform comprehensive menstrual wellness frameworks that advance dignified, stigma-free, and equitable working conditions for menstruators in India.

Methodology

A mixed-methods design was employed to capture both depth and scale. Ethnographic interviews and participant observations documented personal narratives and coping strategies of menstruators across diverse workplaces. Focus group discussions with corporate staff, frontline workers, and field-based employees provided sectoral comparisons. A structured online survey collected quantitative data on policies, products, hygiene facilities, and perceived workplace support. Secondary data review contextualised findings within national and global research. Together, these methods

present a holistic assessment of menstrual equity in Indian workplaces.

Outcome

Findings reveal significant gaps: over 75% of respondents do not consider their workplace period-friendly, with 35% rating it "not at all." Sixty-five percent report no access to menstrual products, and sustainable options are nearly absent. Policy awareness is low (~70%), only 15% have menstrual leave, and stigma persists, with most feeling unsupported. Poor hygiene and reluctance to seek help further affect well-being. Critically, 85% report productivity impacts and express strong demand for menstrual leave, free products, and improved sanitation. These insights highlight urgent opportunities for policy reform, gender-inclusive infrastructure, and SDG-aligned workplace practices.

PRESENTER

James Shrestha

Open Knowledge Nepal

Aligned with SDG

Building Open and Accountable Local Governments through Youth-Led Co-Creation and Data Innovation: Lessons from Nepal's IDMS Initiative

Local governments in Nepal often face fragmented data ecosystems that limit evidence-based planning, budgeting, and service delivery, particularly in health, sanitation, and infrastructure sectors. Youth, despite having digital and civic skills, are frequently excluded from governance processes. To address these gaps closely aligned with SDGs 9, 11, and 17, Open Knowledge Nepal (OKN), a youth-led organization, researched local government data practices and co-created the Integrated Data Management System (IDMS). Initially piloted in Tulsipur Sub-Metropolitan City, the initiative later scaled to five municipalities. Through the Local Government (LG) Data Fellowship, youth fellows embedded in municipal offices helped institutionalize IDMS, enabling evidence-based decisions and fostering innovative, accountable governance.

Methodology

The LG Data Fellowship placed trained youth within municipal offices to operationalize the IDMS, digitize datasets, facilitate community consultations, and translate insights into actionable policies and local budgets. Municipal staff and civil society collaborated with fellows to enhance data workflows, strengthen institutional capacity, and promote data-driven advocacy. Continuous knowledge exchange,

iterative system design, and collaborative learning during implementation helped integrate both technology and human capacity into everyday municipal practices. Over 18 months, this approach cultivated sustainable, youth-led partnerships, building a model for evidence-based, inclusive, and transparent local governance.

Outcome

Across five municipalities, the initiative processed over 500+ datasets, improved municipal planning and budgeting, and increased staff confidence in using data for governance. Youth fellows bridged technical and institutional gaps, fostering trust, accountability, and collaboration among stakeholders. The initiative was endorsed by the government and recognized as a winner in the UNDP Regional Civic Tech Challenge (Governance Impact), validating its innovative potential and regional applicability. This model demonstrates how youth, government, and civil society can come together to institutionalize data-driven governance, offering a replicable pathway for sustainable, inclusive, and accountable local development across the Asia-Pacific region.

PRESENTER

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The Role of AI in Student Metacognition: Insights from the Philippine Academic Crisis

The Philippine educational system is in crisis, with the majority of young students struggling with literacy and numeracy, especially in science. Grade 4 students are measured to have literacy and numeracy akin to those of Grade 1 students (Torralba, 2016; OECD, 2018). This gap in education pre-dates the Covid pandemic and has only worsened ever since (Cariaso, 2025). This research aims to explore the effectiveness of Language Learning Models (LLMs) such as ChatGPT in enhancing Filipino grade-6 science students' metacognitive learning which is known to boost basic literacy. This research aligns with the SDG 4 (Quality Education) and SDG 9 (Industry, Innovation, and Infrastructure) as it pertains to how the advancement of AI affects the current education system in the Philippines.

Methodology

A quasi-experiment was set up for these students and they were divided into two groups; AI-assisted and Non-AI groups. The participants underwent think-alouds, think afters, and answered a short Metacognitive Assessment Inventory (MAI) inspired survey. A systematic random assignment was implored to further subdivide the two classes into two groups. This is done by counting each student

by twos and grouping them accordingly. The two groups were further subdivided into three groups, by counting each student by threes, for control and ease of data collection.

Outcome

Results showed that Non-AI groups self-monitor more frequently than AI groups, with = 0.02 yielded from ANOVA test and from Levene's test. Initially, this contradicts the initial = 0.15 hypothesis of this research that ChatGPT will bolster students' self-monitoring capabilities. Students seem to display a decrease in self-monitoring when using AI. This posits that implementing AI, in its current form, into Filipino local public schools would not be effective in improving students' self-monitoring skills, without honing children's and educators' AI literacy, or developing AI tools to optimize self-monitoring and other metacognitive aspects.

PRESENTER

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EpiGuard: A Proposed AI-Based Disease Outbreak Early Warning System for Pakistan

Pakistan faces a critical gap in disease outbreak detection. The 2019 Lahore dengue outbreak infected over 15,000 people before it was officially confirmed, and the 2017 Ratodero hepatitis crisis affected more than 900 individuals, discovered only through international media. These cases expose a clear pattern: hospitals report monthly, not daily, and no system connects information across facilities. Pakistan also lacks the digital infrastructure needed for real time monitoring. This proposal presents EpiGuard, a conceptual framework for an AI driven early warning system designed to address these gaps through integrated data analysis, aligned with SDG 3, SDG 9, SDG 11, and SDG 17.

Methodology

A literature review of global disease surveillance systems was conducted to establish benchmarks for detection timelines and system architecture. The proposed EpiGuard framework would integrate hospital emergency records, environmental data from the Pakistan Meteorological Department, and geographic clustering patterns, using machine learning techniques including Random Forest algorithms and time series analysis for anomaly detection. The concept was shared with healthcare professionals in Pakistan for feedback. Their input highlighted key barriers including data sharing policies, privacy regulations, and the need for stronger digital infrastructure before deployment.

Outcome

Feedback from Pakistani healthcare professionals confirmed that while some hospitals maintain structured digital records, data sharing remains limited by policy and privacy constraints. Government health departments are already running disease awareness programmes, meaning EpiGuard would complement existing efforts rather than replace them, enabling government health authorities to direct resources and response efforts to specific high-risk areas. These findings shaped the proposal into a phased approach, starting with a feasibility study before any broader rollout. If implemented, such a system could reduce outbreak detection time by weeks and offer a replicable model for other developing countries with similar infrastructure challenges.