UNITED NATIONS OFFICE FOR SUSTAINABLE DEVELOPMENT
Incheon, Republic of Korea

SUBSTANTIVE REPORT

by

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UNITED NATIONS OFFICE FOR SUSTAINABLE DEVELOPMENT
Incheon, Republic of Korea

**2023 EXECUTIVE TRAINING COURSE FOR POLICYMAKERS
ON THE 2030 AGENDA AND THE SDGS (5-8 September 2023)**

SUBSTANTIVE REPORT
submitted by Lichia Saner-Yiu, 1.10.2023, Geneva

> **"Change will not come if we wait for some other person or some other time. We are the ones we are waiting for. We are the change that we seek"**
>
> **(Barack Obama)**

Introduction

This year, the ETC for Policymakers on the 2030 Agenda and the SDGs took place while the 2030 Agenda was in its eighth year of implementation and is witnessing significant gaps and challenges in achieving most of the SDGs. A preliminary assessment of approximately 140 targets with available data shows nearly half of the targets are considered moderately or severely off track and approximately 30% of targets have shown no movement or have regressed below the 2015 baseline (Report of the Secretary General, Special Edition on "Progress towards the Sustainable Development Goals: Towards a Rescue Plan for People and Planet)[1] Among the five major recommendations to rescue the SDGs, the report calls for urgent action on *strengthening public sector capacity* (italic added) to make SDG delivery a central focus for national planning, oversight mechanisms and domestic budgets.

With an aim to build capacity of public servants in developing countries to achieve the SDGs, the 2023 Executive Training Course for Policymakers on the 2030 Agenda for Sustainable Development took place in Incheon, Republic of Korea on the 5-8 September 2023. The 2023 Edition of the ETC focused on providing a rich context for critical reflection and peer to peer exchanges regarding the voluntary national SDGs review process and to ensure quality of the national reporting and the relevance of the VNR process to the national development strategy and planning.

Policy Context

In the United Nations Resolution, A/RES/70/1, "Transforming Our World: The 2030 Agenda for Sustainable Development"[2], stipulations were made on monitoring and reviewing progress in addition to highlighting the important linkages between data, monitoring and accountability. The

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[1] https://hlpf.un.org/sites/default/files/2023-04/SDG%20Progress%20Report%20Special%20Edition.pdf

[2] https://sdgs.un.org/2030agenda

latter is captured in targets 17.18 to 17.19 as parts of the SDG 17 Partnerships for Means of Implementation. The exact wording is quoted here (bold added):

"Data, monitoring and accountability

17.18 By 2020, enhance **capacity-building support** to developing countries, including for least developed countries and small island developing States, to increase significantly the availability of high-quality, timely and reliable data disaggregated by income, gender, age, race, ethnicity, migratory status, disability, geographic location and other characteristics relevant in national contexts

17.19 By 2030, build on existing initiatives to **develop measurements of progress** on sustainable development that complement gross domestic product, and support statistical capacity-building in developing countries" (A/RES/70/1, p. 27-28)

Section "Follow-up and Review" of the 2015 UN Resolution 70 clearly articulated the how and why to conduct a review of the implementation of the 2030 Agenda. It was hypothesized that,

"A robust, voluntary, effective, participatory, transparent and integrated follow-up and review framework will make a vital contribution to implementation and will help countries to maximize and track progress in implementing this Agenda in order to ensure that no one is left behind." (Para. 72, page 31)

Building on six years of VNRs and for some countries three rounds of self-review, the VNR review process is maturing and has started to help countries to make better use of the VNR review process in advancing their progress toward the inclusive development agenda. Nine Guiding Principles on how to conduct the progress review in an effective manner were recommended in the Para. 74 of Resolution 70. Practical lessons and helpful adaptations have been captured in the VNR Handbook (2023) prepared by the UN DESA.[3]

VNR report needs to address the six essential transformations as pre-conditions to achieve the SDGs and the vision of "Leaving No One Behind" through a green, sustainable and fairer economy. Below are the six transformations with corresponding SDG Goals. Some transformations need to take place across multiple SDGs.

1) education, gender and inequality (SDGs 1, 5, 7-10, 12-15, 17);

2) health, wellbeing and demography (SDGs 1, 2, 3, 4, 5 ,8, 10);

3) energy, decarbonisation, and sustainable industry (SDGs 1-16);

4) sustainable food, land, water, and oceans (SDGs 1-3, 5, 6, 8, 10-15)

5) sustainable cities and communities (SDGs 1-16)

6) digital revolution for sustainable development (SDGs 1-4, 7-13, 17)

(Source: Sachs, Schmidt-Traub, Mazzucato, Messner, Nakicenovic & Rockström, "Six Transformations to Achieve the Sustainable Development Goals (SDGs), 2019)[4]

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[3] UN DESA, October 2022, Handbook for the Preparation of Voluntary National Review. Http:// www.hlpf.un.org/sites > Defaults > files > vnrs

[4] https://sdsn.eu/six-transformations-to-achieve-the-sustainable-development-goals-sdgs/ & Nature Sustainability. doi: DOI 10.1038/s41893-019-0352-9

The Secretary General proposed three levels of action, i.e., global, local and people, to mobilise leadership, resources and citizen action to generate an "unstoppable movement pushing for the required transformations"[5]

The SDG review process is intended to take place at multi-levels, i.e., at international, nation, subnational and local. Periodical reviews on the SDG implementation at the global scale are also taking place. The Intergovernmental Panel on Climate Change (IPCC) currently has 195 members and is the leading international body for the assessment of climate change. It is a key source of scientific information and technical guidance to the United Nations Framework Convention on Climate Change (UNFCCC) and the Paris Agreement. The IPCC provides governments at all levels with scientific information they can use to develop climate policies.

Besides IPCC's comprehensive assessment of the global climate ecosystem, two other reports also lay down policy frameworks for policy makers to take into account, i.e., Global Sustainable Development Report (GSDR) since 2014 and the Sustainable Development Goals Progress Report.

The GSDR is a United Nations publication aiming to strengthen the science-policy interface at the High-Level Political Forum.[6] On the social economic front, two scientific bodies also conduct their own periodical review and provide their comprehensive assessment of the current state of sustainability of the global system.

The 2023 ETC took place also ahead of the SDG Summit on 18-19 September 2023 during the General Assembly high-level week. The 2030 Agenda for Sustainable Development at the halfway point is in deep peril. For the first time in decades, development progress is reversing under the combined impacts of climate disasters, conflict, economic downturn, and lingering COVID-19 effects. The 2023 SDG Summit serves as a rallying cry to recharge momentum amongst the world leaders and to respond to the multiple and interlocking crisis with renewed commitment and innovative ideas. The same spirit prevailed during the 2023 ETC at the policy making and implementation level in order to find ways of getting back on track to ending poverty, realising just societies and reset a balanced relationship with the natural world.

Major Themes of 2022 HLPF Review

The overarching themes of the SDGs under in-depth review in 2024 during the High-Level Political Forum (HLPF) formed the central pillars of the course design, presentations and discussion during the 4-day ETC hosted by the UNOSD.

The HLPF 2024 has an overarching theme, "Reinforcing the 2030 Agenda for Sustainable Development and eradicating poverty in times of multiple crises: The effective delivery of sustainable, resilient and innovative solutions". During the training, participants will delve into the five SDGs that will receive special attention at the 2024 HLPF: Goal 1 (End poverty in all its forms everywhere), Goal 2 (End hunger, achieve food security and improved nutrition, and promote sustainable agriculture), Goal 13 (Take urgent action to combat climate change and its impacts), Goal 16 (Promote peaceful and inclusive societies for sustainable development, provide access to justice for all, and build effective, accountable, and inclusive institutions at all levels), and Goal 17 (Strengthen the means of implementation and revitalize the Global Partnership for Sustainable Development).

The 2023 ETC was designed to complement the overarching theme of the 2024 HLPF and aims to stimulate out of the box thinking and entrepreneurial initiatives.

Countries' Voluntary National Reviews (VNRs), presented during HLPFs, represent a golden opportunity to assess the progress made in their countries regarding their capacities for sustainable

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[5] https://www.swissuniversities.ch/fileadmin/swissuniversities/import/11_Peter_Messerli.pdf

[6] https://sdgs.un.org/gsdr

development despite the lingering effect of the COVID-19 pandemic in many countries and the large growing negative impact of polycrises at global scale also known as "grand challenges" which have threatened the livelihoods, food security and minimum wellbeing of a large growing number of people, particularly amongst the children facing extreme poverty and who may suffer from long term consequences of malnutrition and insecurity. VNR as a systemic review process provides opportunities for countries to identify "holistic" practices and integrated ideas. Policy makers who lead and partake in the planning and preparing of the VNRs need to go beyond silo thinking and hierarchical oriented governance system and instead adopt a "partnership" approach to unblock fragmentation in the policy making process. In this regard, SDGs as roadmap can better support the process of upgrading and transforming public institutions for delivering greater public goods.

Greater partnership and stakeholder engagements may help break down the silos and bring greater transparency and relevance to the decision-making process. Public consultation and social dialogue may enhance trust and legitimacy of public institutions when populations are increasingly losing confidence in their leaders and the public services.

Solidarity must underpin the ethics of "Leaving No One Behind". The spirit of solidarity and sharing needs to form the backbone of a new social contract and inclusive governance, but also manifest itself through economic relations. Therefore, the social and solidarity economy (SSE) was highlighted during the 2023 ETC for its potential in achieving inclusive economic development, a needed first step toward poverty eradication. SSE was adopted by the United Nations General Assembly as a form of economy that will promote the 2030 agenda and leave no one behind. Upscaling and modernizing the operation of SSEs could help accelerate the inclusive access to economic opportunities and achieve poverty eradication. Developing countries are often familiar with this form of organizing production in the likes of cooperatives or credit schemes, however the significance of this sub-sector has often been overlooked.

Objectives of the Course

The overall objective of the 2023 Executive Training Course aimed to enhance the knowledge, skills, mindsets, and overall capacities of member states in implementing sustainable development planning, policymaking, and policy shaping through an integrated "whole of government" and "whole of society" approach with special emphasis on the selected thematic SDG goals. Concretely, the following key objectives were addressed:

- Strengthen practical knowledge and skills for implementing the 2030 Agenda and SDGs with a specific focus on SDGs 1, 2, 13, 16, and 17.

- Facilitate networking and the exchange of proven practices and case studies among public policymakers.

- Foster peer-to-peer collaboration and enhance partnership-building capacities across sectors, government entities, and Member States.

Specific Training Objectives

These key course objectives of the ETC mentioned above were further broken down into the following four training objectives to guide the design and implementation of each session of the ETC 2023.

1. Raising awareness on core issues within each SDG thematic areas under review at the HLPF and current situation;

2. Sharing knowledge and experience in tackling some of the critical linking issues within each SDGs under HLPF review;

3. Addressing the vulnerability and risks within each SDG thematic areas under HLPF review particularly due to severe resource constraint;

4. Supporting the effective use of VNR and policy review process for institutional innovations by a peer learning and co-creating process through a role play simulation.

Process Objectives

The process objectives were identified earlier on as:

1. to ensure deeper learning through experiential means;

2. to ensure high involvement of all participants for reflection;

3. to ensure knowledge exchange through resolving shared problem situation.

Focus was experiential learning through hands on practices in policy making based on a whole of government and whole of society process. Participants were engaged in a role play simulation of a fictious country, "Equatoria". Their task was to agree on a shared framework to review and report on the SDG implementation in Equatoria during the 2024 HLPF.

Structure of the Course

There were three tracks of learning activities that took place throughout the whole process of the ETC.

Track One consisted of seven interrelated modules, structured around the thematic focus of the 2024 HLPF. The impetus of the modules was to identify the more difficult aspects of the individual SDG Goals and to share tried practices in ensuring accelerated actions.

While each module was designed as a stand-alone training component, the first and last sessions made room for an introduction and conclusion session of the whole training course. By applying a blended design, i.e., in person and online, this year's ETC was able to simultaneously benefit from speakers who were physically present and who participated remotely.

Each module covered critical concepts and issues of the 2030 Agenda and the SDGs, complemented by concrete policy practices and country cases. It consisted of presentations by international experts, scholars, and practitioners followed by Q&A and group discussions. Within the time allocation of three and half hours to four hours for each module, specific targets of each focused SDG were chosen to allow for more in-depth unpacking by the speakers. Barriers and challenges could then be presented in a fuller context for analysis and assessment. A framing statement for each module was included in the annotated agenda.

Track two was designed around six rounds of coordination and consultation across the key ministries of Equatoria and with societal stakeholders. Participants were given specific roles and interacted to bridge divergent interests and objectives. Throughout the six rounds of communication and negotiations, stakeholders were asked to reach consensus on how to move forward in terms of tracking and reviewing the SDG implementation of Equatoria. Through personal actions, participants were induced to recognize the importance and relevance in managing stakeholder engagement.

Track three was structured around a half-day site visit. Various sustainability related projects in the Songdo area of Incheon were visited as demonstration sites. These visits gave helpful illustrations of the Korean experience in implementing specific SDG goals with the 2030 Agenda, i.e., Waste to Clean Water (SDG 6), smart cities and traffic control (SDG 11) and adoption of ICT technology to ensure efficient and effective monitoring of the public areas for crime prevention and pollution reduction.

Methodology

Experiential learning is about learning by doing. David Kolb (1984) considers that "Learning is the process whereby knowledge is created through the transformation of experience" (Kolb, 1984, p. 38)."[7] Effective learning is seen when a person progresses through a cycle of four stages: of (1) having a concrete experience followed by (2) observation of and reflection on that experience which leads to (3) the formation of abstract concepts (analysis) and generalizations (conclusions) which are then (4) used to test a hypothesis in future situations, resulting in new experiences. The ETC of this year incorporated Kolb's experiential learning theory in its methodology. Concretely, such a learning strategy was operationalized through the role play simulation, "Equatoria".

Participants were asked to enact different roles in the simulation exercise to come up with a consensus-based review framework and to publish it as a government communiqué. By mixing country representatives in a dyad to play the same role, facilitators were able to team up the most experienced participants with the least experienced ones in regard to VNR preparation for informal sharing and one-to-one dialogue.

Later, different deliberations were conducted within individual stakeholder groups to identify policy priorities and national interests. The process ended with inter-sectoral discussion and consultation. Within this learning context, explicit and tacit knowledge was shared more freely amongst the participants which could not be done in a more traditional classroom setting. Reflection and abstraction were also made possible to allow new insights to emerge.

Training Content of the Seven Modules

What follows are titles of the modules, the speakers who contributed to the delivery of the presentations and a description of the pertinent reflection of the modules. They are presented in key points, challenges and results of the discussions that were relevant for the understanding the module's learning impact. Opening Statements given by the Acting Director of Division of Sustainable Development Goals and the Head of the UN office for Sustainable Development were also summarized to set the stage of the subsequent seven training modules.

Day 1, 5th September 2023

Opening Ceremony

Statements by Mr. Juwang Zhu, Acting Director, Division of Sustainable Development Goals (DSDG), UN Department of Economic and Social Affairs

Mr Zhu reminded the participants that 2023 marked the halfway point for the Sustainable Development Goals. Yet, without a surge in commitment, solidarity, and transformative action, the world would miss the headline targets of the 2030 Agenda to end poverty, reduce inequality and protect the environment.

He went on to say that many member states demonstrated their great commitment to enhancing their knowledge and working together to achieve the Sustainable Development Goals. Mr Zhu exhorted the participants to apply their acquired knowledge after completion of the ETC 2023 and to build on the partnerships begun in Incheon to achieve the Sustainable Development Goals by 2030. Mr Zhu also urged the participants to work together in peace and in a spirit of global solidarity to address inequalities both between and within countries and ensure that no one is left behind.

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[7] Kolb, D. A. (1984). Experiential learning: Experience as the source of learning and development (Vol. 1). Englewood Cliffs, NJ: Prentice-Hall.

Statements by Mr. Chun Kyoo Park, Head of Office, UNOSD

Mr. Park highlighted the fact that ETC 2023 was the first in-person course after the COVID pandemic started in 2020. In addition to presentations, country reports and group discussions, a new learning activity was added to the ETC course design by running a policy development simulation. This innovative learning activity would provide the opportunity to further deepen knowledge around systems thinking and the interlinkages between the sustainable development goals.

Social deficits, inequality, environmental crises, and economic struggles impeded SDG progress and wellbeing. Sustainable poverty reduction requires inclusive growth, quality jobs, and equitable opportunities but COVID-19 and conflicts have worsened vulnerabilities. Prioritizing people, inclusivity, and sustainability was vital to put back on track regarding SDGs. However, such policy prioritization needed to be coupled with countering discrimination and unequal access while addressing inadequate resources, weak public administration and partnerships gaps. These would be the themes of the ETC.

Mr. Park concluded by saying, "Although the obstacles are considerable, our combined capacities hold immense potential if we come together. UNOSD continues to facilitate knowledge sharing and capacity-building platforms, exemplified by this year's Executive Training Course…. I eagerly anticipate the insightful discussions that lie ahead."

Introduction by Ms. Yujeong Kim, Senior Sustainable Development Officer, UNOSD

Ms. Yujeong Kim opened the workshop by welcoming the participants and reiterated that the focus of this year's Executive Training for Policymakers was placed on the 2030 Agenda for Sustainable Development and the main theme of the High-Level Political Forum (HLPF). The purpose of the training was to help participants understand and actively take part in the implementation and review process of SDGs in their own countries.

Keynote on Korea's Development History to Carbon Neutrality and Green Growth

Following the Opening Speeches given by Mr. Juwang Zhu, Mr. Chun Kyoo Park, Head of Office, UNOSD, Mr. Sang-hyup Kim, Chair of the Presidential Commission on Carbon Neutrality and Green Growth, Republic of Korea, gave an inspiring keynote on "Development history and paths to carbon neutrality and green growth: Reflections from South Korea".

D.1.1 "Development history and paths to carbon neutrality and green growth: Reflections from South Korea".
Presented by Mr. Sang-hyup Kim, Chair of the Presidential Commission on Carbon Neutrality and Green Growth, Republic of Korea

The core message of Mr. Kim was that the risk of breaching all planetary boundaries is high and that there is no time to lose for mankind to mobilize for change in view of maintaining a sustainable future. In this regard, Mr. Kim also presented the political commitment of the Republic of Korea in transitioning to a net zero green growth strategy by 2050.

Planetary boundaries (Note 1) are *thresholds* within which humanity can survive, develop and thrive for generations to come (Azote for Stockholm Resilience Centre, based on analysis in Richardson et al 2023). Together, nine planetary boundaries created a safe operating limit for survival.[8] "Four of the nine boundaries have been surly transgressed including: Climate change, biosphere integrity, land-system change, biogeochemical flows and novel entities (Note 2). The Global Boiling era has appeared.

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[8] https://www.stockholmresilience.org/research/planetary-boundaries.html

(Note 1: Boundaries are interrelated processes within the complex biophysical Earth system. This means that a global focus on climate change alone is not sufficient for increased sustainability. Instead, understanding the interplay of boundaries, especially climate change and loss of biodiversity, is key in science and practice (Stockholm Resilience Centre, 2023). Crossing these boundaries increases the risk of generating large-scale abrupt or irreversible environmental changes. Drastic changes will not necessarily happen overnight, but together the risk of crossing boundaries marks a critical threshold for increasing risks to people and the ecosystems that all lives inhibit.

(Note 2: To date six boundaries have been breached, according to the newest measure reported by Stockholm Resilience Centre (see Figure 1). For an update, visit https://www.stockholmresilience.org/research/planetary-boundaries.html)

Tackling SDG 13 can achieve not just one, but serving most of the goals as this may directly affect changes in other boundary areas, such as biosphere integrity, land system change and freshwater change (Note 3). As the former UN Secretary General, Ban Ki Moon, said, "Climate Action is not just one goal of the SDGs. It would serve most of the goals."

(Note 3: Interrelatedness within the earth ecosystem demands an integrated and holistic approach toward SDGs implementation by seeking synergies amongst such as environmental goals like SDG 13, SDG 14 and SDG15 with social goals as SDG 1, SDG2, SDG 6 and economic goals such as SDG 8 and SDG 9.)

Figure 1: Current state of the planetary boundaries for Safe Operating Space
(Source: Stockholm Resilience Centre, 2023)
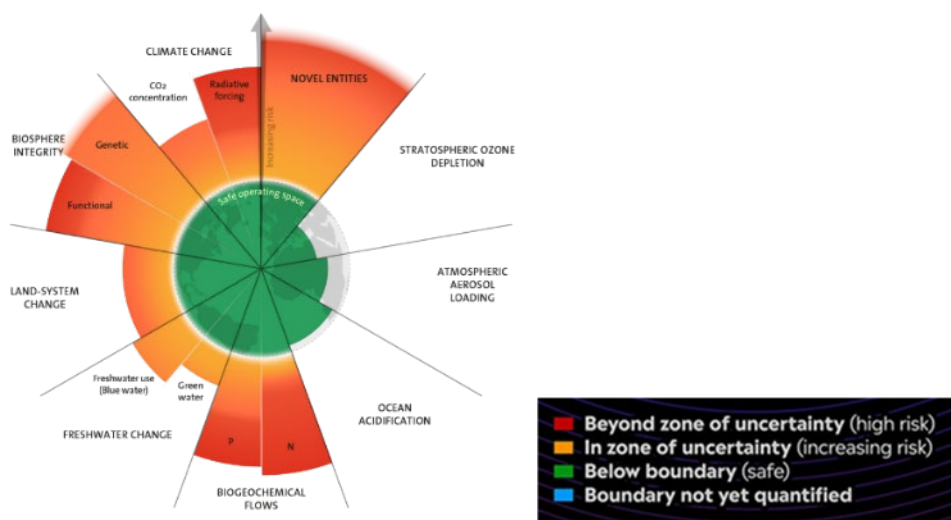
The Republic of Korea is committed to pursuing a Carbon-Neutral Green Growth Policy which has become part of the global policy trend (see Figure 2). Yet, this industrial policy also results in subsidy competition by the US and the EU for stimulating the development of transformative green technology. Krugman estimates that future subsidies could grow to trillions of dollars (May 2023, New York Times, Opinion)[9] – This kind of industrial policies aiming to reshape the economy into the era of carbon neutrality, thus garners positive feedback, and might have greater impact on the carbon emission reduction, according to some researchers[10].

This national policy of the Republic of Korea envisages an ambitious goal of 40% GHG Reduction by 2050. Principles of guiding this policy stress the following: responsible practice, orderly transition, innovative progress (see Figure 3).

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[9] Paul Krugman, 2023, "How to Think About Green Industrial Policy", New York Times, 09.05.2023. https://www.nytimes.com/2023/05/09/opinion/climate-inflation-reduction-act-biden.html

[10] Tarr et. al. (2023) "Why carbon border adjustment mechanisms will not save the planet but a climate club and subsidies for transformative green technologies may", *Energy Economics*. Vol. 122, June 2023, 106695

Bloomberg New Energy Finance (BNEF) in its New Energy Outlook 2022 estimated this CNGG policy will lead an accumulative investment of USD 194 trillion worldwide compared with the USD 119.5 trillion investment of the economic transition scenario[11].
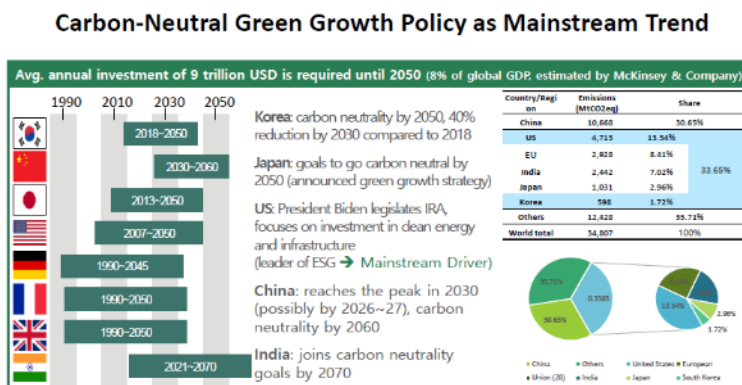
Figure 2: Carbon-Neutral Green Growth Policy as global policy trend

Figure 3: Basic Directions of Korea's Carbon Neutrality and Green Growth Policy

5 key Strategies for achieving Carbon-Neutral Green Growth Policy have been adopted:

1. Establish a sustainable energy mix based upon science, not ideology

2. Focus on key green technologies and foster global talent

3. Expand green finance and green investment

4. Strengthen International cooperation and activate Green Club Diplomacy

5. Improve national and local governance, reinforce private-public partnership

While the USA has the lead in green energy technologies, Korea has also 100 green technologies in its arsenal against carbon emission ranging from solar energy to wind energy, from petrochemistry to carbon free vessels, and from zero energy buildings to environment friendly automobiles. These green technologies are captured in Figure 4 below.

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[11] https://about.bnef.com/new-energy-outlook/

Figure 4: Green Technologies mastered by Korea (Source: Sang-hyup Kim, ETC 2023 Presentation)

A total additional investment of 69 billion USD will be needed in the next five years (2023-2027). USD 9.2 billion will go toward green growth, human resource development and inclusive policies. This would mean a 40% reduction of GHG emissions from 2018 level by 2030 (727.6 →436.6 mn ton CO 2 eq) (see Figure 5, planned reduction by sector by 2030).
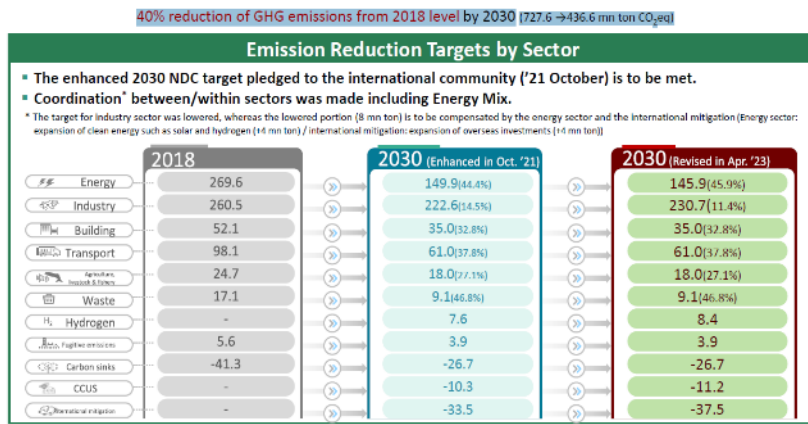
Figure 5: Basic Emission Reduction Plan by Sector by 2030

Mr. Kim concluded by saying, "To ensure future security prosperity amid the complex climate crisis, geopolitical conflicts, competition for technological dominance, and restructuring of the global supply chain, the world needs the following:

- A reliable and solid partnership with like-minded countries

- Indispensable capacity equipped with technologies and innovation

- Enabling leadership that encompasses patient capital, long term entrepreneurial mindset, and forward-thinking future talents

With these words, the 2023 ETC for policy makers was opened for more in-depth exploration and elaboration along the lines of major themes for the HLPF review in 2024 in the ongoing process of implementing the 2030 Agenda and SDGs.

Module 1:

Stocktaking of Agenda 2030 and the SDGs implementation (Ms. Lichia Saner-Yiu, UNOSD Consultant)

Framing – Implementing SDGs in an uncertain future with greater efficiency and effectiveness

COVID 19 and other crises have set back progress made since the adoption of 2030 Agenda in 2015 (Figure 6). With the remaining 7 years left, countries need to redouble their efforts in order to advance and accelerate the needed transformations to enable the attainment of SDGs even when resources remain restricted and stretched. Without such rapid advancement, science has already forecasted dire consequences in many parts of the world and in the marginalized and poor segments of societies. The catastrophes of 2023 induced by the intensification and frequency of extreme weather alone in the US has so far caused $57 billion in damage and killed at least 253 people to date, according the National Oceanic and Atmospheric Administration (NOAA) of the USA[12]. NOAA reported that the damage caused by each climate catastrophe is running into 1 billion US dollars on average in the US. So far, the US is the country suffering the most disasters in a single year due to fires, floor, strong wind, etc. that are turbo charged by the climate crisis.
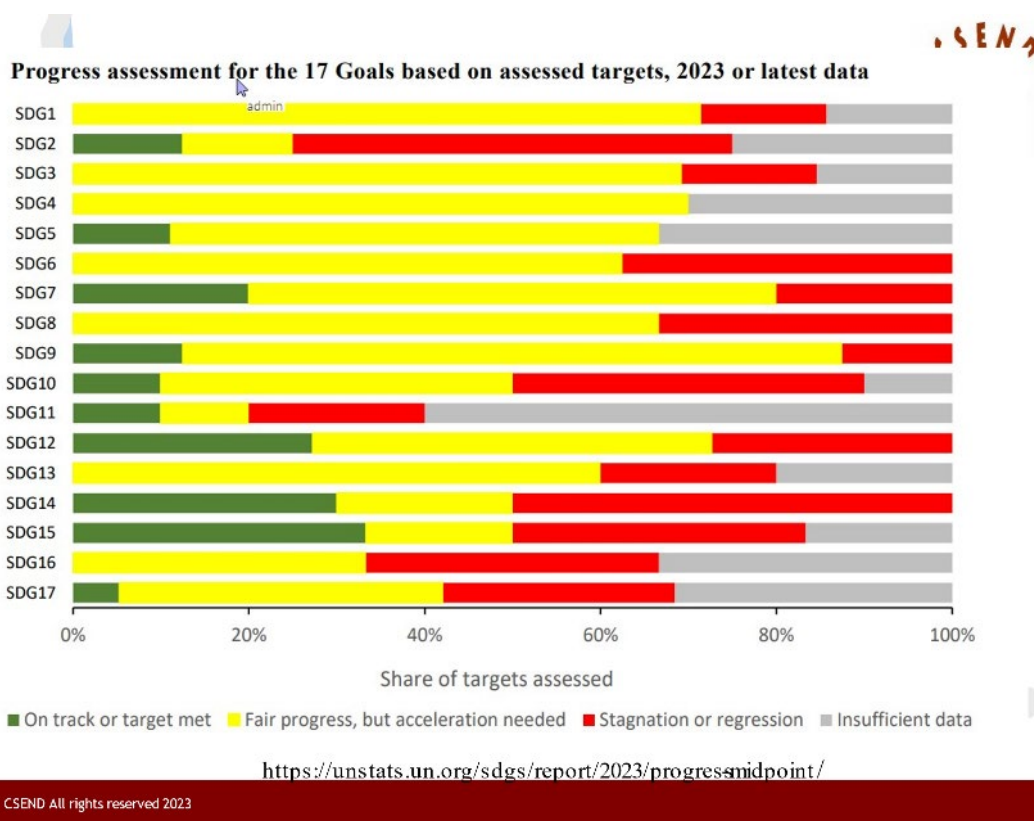
Figure 6: Progress Assessed based on Available Data for 143 Targets in 2023
or Latest Data Available (Source: UN DESA Statistic Division, 2023)

In addition to the COVID-19 pandemic since 2020, the climate crisis underpins to a great extent much of the lack of progress and many of the regressive trends in the implementation of the SDGs such as SDG 1, SDG 2, SDG 3, SDG 4, SDG 6, SDG 8, and SDG 11 to name just a few. In many of the developing countries and the least developed countries, climate catastrophes often destroy development gains that took years to accumulate. Table 1 ranked the most affected countries in 2019. Of the ten most affected countries, eight countries have a human development ranking below 100 out of the 193 countries.

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[12] https://www.cnbc.com/2023/09/11/2023-severe-weather-57-billion-in-damage-and-253-people-dead-so-far.html

Ranking 2019 (2018)	Country	CRI score	Fatalities	Fatalities per 100 000 inhabitants	Absolute losses (in million US$ PPP)	Losses per unit GDP in %	Human Development Index 2020 Ranking[14]
1 (54)	Mozambique	2.67	700	2.25	4 930.08	12.16	181
2 (132)	Zimbabwe	6.17	347	2.33	1 836.82	4.26	150
3 (135)	The Bahamas	6.50	56	14.70	4 758.21	31.59	58
4 (1)	Japan	14.50	290	0.23	28 899.79	0.53	19
5 (93)	Malawi	15.17	95	0.47	452.14	2.22	174
6 (24)	Islamic Republic of Afghanistan	16.00	191	0.51	548.73	0.67	169
7 (5)	India	16.67	2 267	0.17	68 812.35	0.72	131
8 (133)	South Sudan	17.33	185	1.38	85.86	0.74	185
9 (27)	Niger	18.17	117	0.50	219.58	0.74	189
10 (59)	Bolivia	19.67	33	0.29	798.91	0.76	107

PPP = Purchasing Power Parities. GDP = Gross Domestic Product.

The 10 most affected countries in 2019

Table 1: The most affected countries by climate disasters in 2019 (Source: German Watch, 2021)[13]

This low level of human development coupled with the climate change catastrophe make recovery and advancement of the SDGs more challenging.

According to the WorldRiskIndex 2022[14] that assessed the natural disaster risk for 192 countries based on a total of 100 indicators, the top ten countries most vulnerable to natural disaster worldwide were: The Philippines, India, Indonesia, Columbia, Mexico, Myanmar, Mozambique, China, Bangladesh, Pakistan, and Russia (see Figure 7 below).

Countries with the highest disaster risk worldwide in 2022

Country	Value
Philippines	46.82
India	42.31
Indonesia	41.46
Colombia	38.37
Mexico	37.55
Myanmar	35.49
Mozambique	34.37
China	28.7
Bangladesh	27.9
Pakistan	26.75
Russia	26.54
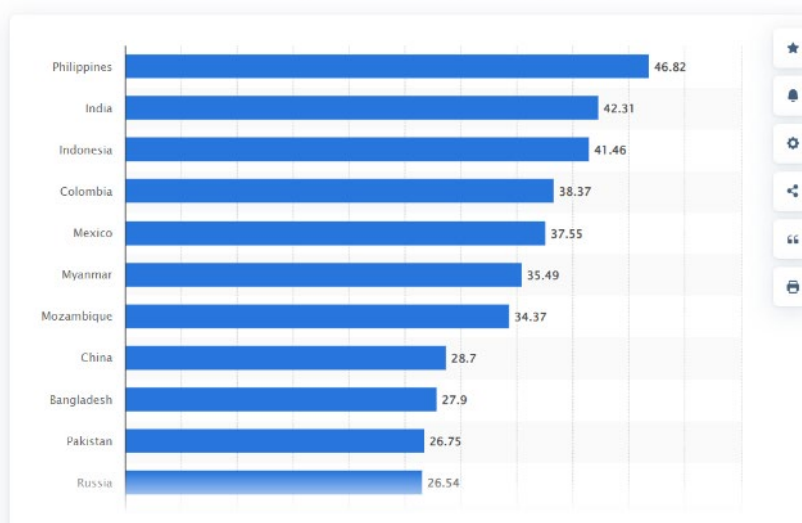
Figure 7: Countries with the highest disaster risk (Source: World Statista, accessed 26.09.2023)[15]

Manmade disasters also cause regressive effects on the attainment of the SDGs. The Global Conflict Risk Index (GCRI), commissioned by the European Commission, uses six systemic dimensions to assess likelihood of conflicts at different levels (see Table 2).

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[13] https://www.germanwatch.org/sites/germanwatch.org/files/2021-01/cri-2021_table_10_most_affected_countries_in_2019.jpg

[14] https://reliefweb.int/report/world/worldriskreport-2022-focus-digitalization

[15] https://www.statista.com/statistics/1270469/disaster-risk-index-most-affected-countries/#:~:text=Global%20disaster%20risk%20index%202022%2C%20by%20select%20country&text=Philippines%20is%20the%20country%20with,index%20(WRI)%20of%2046.82.

Dimension	Component	Variable	Source
Political	Regime type	Democracy	V-DEM
	Regime performance	State capacity	V-DEM
		Repression	V-DEM
		Corruption	V-DEM
Security	History of conflict	Recent internal conflict	UCDP
		Years since last conflict	UCDP
	Current conflict situation	Neighboring conflict	UCDP
		Homicide rate	IHME
Social	Social cohesion and diversity	Female empowerment	V-DEM
		Ethnic exclusion	EPR
		Transnational ethnic ties	EPR
Economy	Development and distribution	GDP per capita, log	World Bank
		Income inequality	WID
		Trade openness	World Bank
		Oil exports	World Bank
	Provisions and employment	Food security	FAO
		Unemployment	World Bank
Geography - Environment	Environment	Droughts	SPEI/CSIC
		Temperature change	FAO
Demographics	Demographics	Population, log	UN
		Youth bulge	UN
		Child mortality	World Bank

Table 2: GCRI Variables and Data Sources (Source: Joint Research Centre (JRC), the European Commission's science and knowledge service)[16]

These dimensions are encapsuled in the 17 SDGs and require a smart policy mix and efficient use of resources to move the 2030 Agenda forward. It goes without saying that development partnerships remain central for the world need to tackle many of these systemic characteristics in diverse contexts and an interdependent global world.

The emphasis of the HLPF 2024 rests with "Reinforcing the 2030 Agenda for Sustainable Development and eradicating poverty in times of multiple crises: the effective delivery of sustainable, resilient, and innovative solutions." In this context, to review the experiences gained to date regarding system integration, synergies, and reduction of fragmentation, overlapping efforts and internal policy inconsistencies can all be helpful in assisting countries to reconsider their own policies and regulatory practices when planning for the SDGs' implementation. On the other hand, diplomacy to promote mutually beneficial partnerships is more urgently needed than ever before to ensure adequate financing of the SDGs in particular and of development in general to ensure effective implementation of the SDGs.

D.1.2 "Areas for urgent actions in advancing the 2030 Agenda: Ways leading to our common future and creating synergies in implementing SDGs"
Presented by Irena Zubcevic, Executive Director of Stakeholder Forum (online)

"The definition of insanity is doing the same thing over

and over again and expecting different results."

(Albert Einstein, unknown)

The speaker encouraged all of us to think the impossible and to go beyond the typical silo approach and to embrace instead the whole ecosystem of the planet and to demand effective policies as well as operational responses that were not known before. The work of David Le Blanc and his colleagues was quoted thus, "SDGs must be understood as an interdependent and interconnected network of targets. In this network of targets, one target could be interlinked with different SDG goals and bring out the synergies and trade-offs amongst policy objectives (See Figure 8).

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[16] JRC_TR_GCRI_2022_Final%20(3).pdf
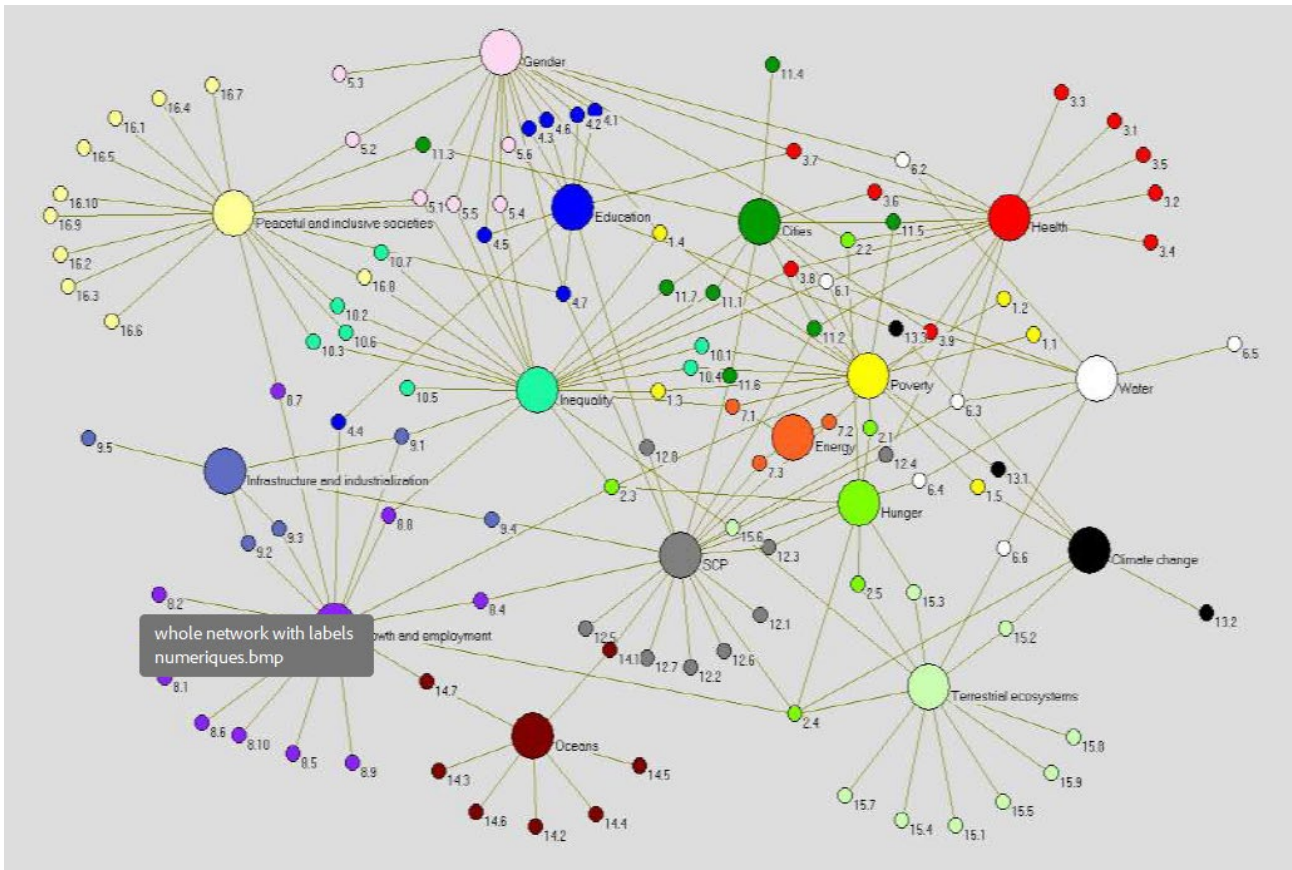
Figure 8: SDGs as Network of Targets (Source: D. Le Blanc, 2015, "Towards integration at last? The sustainable development goals as a network of targets, *Sustainable Development*, 23.3)[17]

As a whole, progress on some targets of the sustainable development goals have been made, but the speed and scale of the progress in view of the remaining time horizon are far from sufficient to avert the pending climate disasters and consequent social and economic rapture. A quick overview of the data presented by the Statistics Division of the UNDESA showed that SDG 7 on Affordable and Clean Energy is on track to achieve universal access.

Fair progress has been made but acceleration is needed concerning SDG 3 (Health and Wellbeing) in coverage of births attended by skilled health personnel to reduce under 5 mortality rate; SDG 4 (education) to ensure all girls and boys complete primary education; SDG 5 (gender) to eliminate child marriage and to ensure women's full participation in national parliaments; SDG 16 (peaceful and inclusive societies) related to increase the proportion of countries with independent national human rights institutions; and SDG 17 (means of implementation) to ensure full implementation of the net official development assistance disbursements by donor countries (Note. 4)

(Note. 4. Official development assistance (ODA) is defined as government aid designed to promote the economic development and welfare of developing countries. Loans and credits for military purposes are excluded. Aid may be provided bilaterally, from donor to recipient, or channeled through a multilateral development agency such as the United Nations or the World Bank. Aid includes grants, "soft" loans and the provision of technical assistance. The OECD maintains a list of developing countries and territories; only aid to these countries counts as ODA. The list is periodically updated and currently contains over 150 countries or territories (see DAC List of ODA Recipients: https://oe.cd/dac-list).

A long-standing United Nations target is that developed countries should devote 0.7% of their gross national income to ODA. Prior to 2018, the ODA flows basis methodology covered loans expressed on a "cash basis", meaning their full face value was included, then repayments were subtracted as they came in. From 2018, the ODA grant-equivalent methodology is used whereby only the "grant portion" of the loan, i.e. the amount "given" by lending below market

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[17] https://www.un.org/esa/desa/papers/2015/wp141_2015.pdf

rates, counts as ODA. This indicator is measured as a percentage of gross national income and million USD constant prices, using 2021 as the base year). In 2022, the average level of ODA stood at 0.36% of the Gross National Income.) [18]

Areas for urgent actions, according to the Secretary General, include the following:

- International cooperation and solidarity;

- Transformation through strategic direction and foresight innovation, generation of new alternatives, orchestration, engagement, identifying and overcoming impediments and building resilience;

- Working across sectors horizontally and vertically;

- Building strategic partnerships for sustainable future;

- Ensuring nature positive economy and nature-based solutions and no artificial divide between development and climate;

- Reforming the international financial architecture by financing the essentials (IMF drawing rights, debt vulnerabilities, investment in sustainable solutions)

Lastly, the speaker concluded by suggesting ways to maximize synergies and minimize tradeoffs which include:

- Breaking silos and making integrated and holistic decisions across sectors and different levels of government including by defining SDG implementation road map;

- Grounding trade-offs and synergies in a science-based analysis of interactions across SDGs;

- Assessing distributional and social impacts of policy reforms on various social groups before, during and after implementation of policies and mitigating negative effects through social protection policies;

- Linking SDGs to budget planning processes;

- Regularly review and monitor progress and make correction in SDG implementation roadmap.

Module 2

SDG 1– End poverty in all its forms everywhere (Ms. Lichia Saner-Yiu, UNOSD Consultant)
Framing – Paradigm Shift: Beyond GDP, Wellbeing, Solidarity for Development and Dignity for All

The combined negative impact of social deficit, growing inequalities, massive environmental challenges, and a general lack of adequate economic development is preventing the attainment of collective wellbeing and of the Sustainable Development Goals (SDGs) in many countries. Most of all, the negative system conditions are causing continued human suffering and hardship. Poverty reduction under these circumstances will depend on a minimum level of sustained economic growth, creation of higher value employment, sustainable livelihoods, and inclusive enabling conditions.

These implementation problems have been exacerbated by the destructive impact of the COVID-19 pandemic and ongoing wars, which have exposed the pre-existing fragilities of our societies and economies. Development measured by GDP leaves many societies behind. Single minded endeavors in striving toward economic growth without concurrent attention to social inclusion, environmental viability and ecological security has led the world to today's crossroads marked by high level of vulnerability. Countries need to put people's well-being, inclusiveness, and sustainability at the centre of public policy in order to achieve sustained poverty reduction. Poverty, often multi-dimensional and structural, needs to be mitigated through the promotion of equitable access to

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[18] https://data.oecd.org/oda/net-oda.htm

development opportunity. Therefore, poverty reduction policies need to address vulnerabilities, marginalization and deprivation caused by discrimination and neglect.

Shortages and unequal distribution of public goods exasperate structural poverty and negatively impact individual dignity and wellbeing. Many of the world's poor who suffered from intergenerational poverty have not been able to gain social-economic mobility needed to help them move to better livelihoods.

Additional Introduction by Ms. Lichia Saner-Yiu, UNOSD consultant)

After the 1992 Rio Conference, poverty became the greatest challenge in every country in terms of development. Poverty leads to undernourishment, poor health, and lack of access to education. Even though each country has achieved significant progress, the understanding that poverty is rooted in structure. Because of that, attention to the lack of structure is needed.
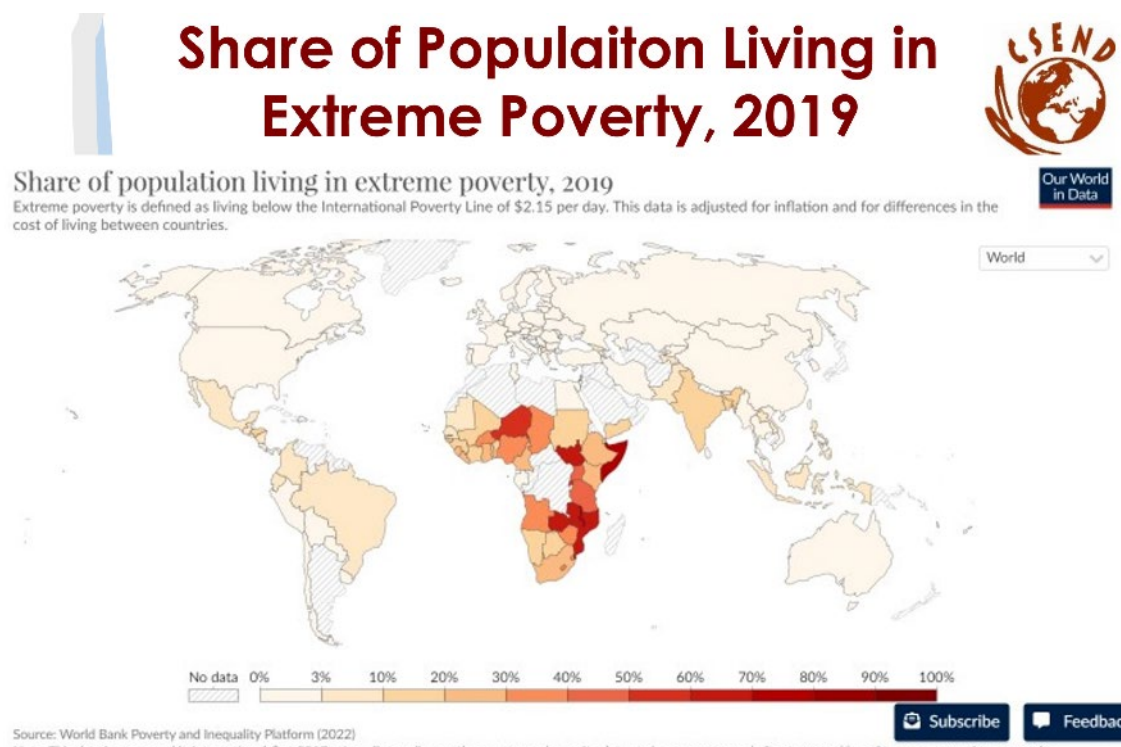
Figure 9: Map of Extreme Poverty(Source: World Bank Poverty and Inequality Platform, 2022)

To understand poverty and extreme poverty deeply, there are various dimensions of poverty when looking at deprivation of opportunity for human development. This broader definition of poverty underpin the 2030 Agenda for Sustainable Development and its Leaving No One Behind philosophy. Figure 9 mapped the geographic distribution of people faced with extreme poverty around the world.

D.1.3 "Living Lab in College Education: A New Approach to Poverty Alleviation"
Presented by Sangbum Shin, Director, Institute for Poverty Alleviation and International Development (IPAID), Professor, Yonsei University

The Institute for Poverty Alleviation and International Development (IPAID) was established in 2010 at Yonsei University Mirae Campus (in Wonju, Gangwon Province) with the mission to alleviate global poverty and to promote international development cooperation through partnerships across disciplines, societies, and countries for a more inclusive and sustainable world. The pathway to

achieve the stated mission is to help communities to empower themselves and to find ways for local innovation and value creation.[19]

Presently, IPAID conducts research on poverty alleviation, sustainable development, and international cooperation while implementing ODA projects in Ghana, Rwanda, East Timor, and Vietnam.

"Living Lab" is a type of project that IPAID is carrying out, which is international educational cooperation focused on problem-solving activities. Living Lab focuses on 5 elements, namely, user-driven innovation, problem solving by co-creation, politics of experiment (compared to planning), citizen science, and value creation (through business opportunities). Design of Living Lab between different partnership universities aims to solve global problems within local conditions (see Figure 10).
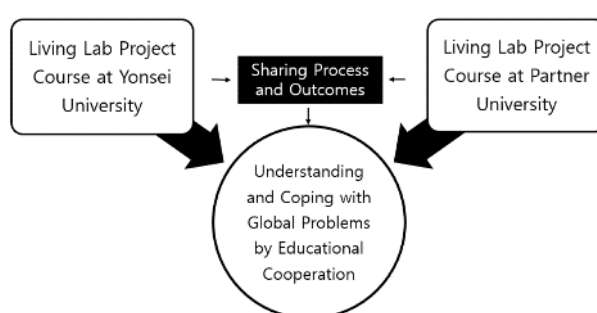
Figure 10: Collaborative Model for Living Lab Activities
(Source: Sangbum Shin, ETC 2023, UNOSD)

Several case studies of applying the Living Lab methodology were briefly mentioned, such as CINDERELA and rainbow plate. CINDERELA is a demonstration plant that transforms urine into nutrient-rich fertilizer. The plant is located at Marineterrein Amsterdam Living Lab (MALL), and consists of a refurbished shipping container – containing a laboratory and two urine-diverting toilets – and an adjacent greenhouse which also serves as a meeting space.[20]

Rainbow plate is also a project based in Europe which helps to reduce food waste through giving clear instructions on how much they would like to eat.[21, 22, 23] (Note 5)

(Note 5. This initiative is important given the fact that one third of the food that were bought went to waste in the UK.[24] "Most of the food we throw away (4.1 million tons or 61%) is avoidable and could have been eaten if it had been managed better. The type of avoidable food we waste in the largest quantity is potato; 359,000 tons of potato goes uneaten every year, including 177,400 tons of potatoes thrown away whole and untouched (49%). Other commonly wasted types of food are slices of bread (328,000 tons a year), apples (190,000 tons including 178,800 tons thrown away whole and untouched), and meat and fish meals (161,000 tons)" (Food Waste Report, page 4).

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[19] https://ipaid.yonsei.ac.kr/ipaid/intro/vision.do

[20] https://amsterdamsmartcity.com/updates/project/cinderela-living-lab

[21] https://www.rainbowplate.com/about-us This reference might not be correct since it is originated from Canada. However, it is very relevant to the SDG 2 by reducing food waste through behaviour change, especially that of children.

[22] From Rubbish to Rainbow - Zero Waste Life, https://www.youtube.com/watch?v=4Cnj8ic1oDI

[23] Mirosa, M., Munro, H. and Mangan-Walker, E. and Pearson, D. (2015). "Reducing waste of food left on plates" British Food Journal, 118,9: 2326-43. https://www.academia.edu/67698239/Reducing_waste_of_food_left_on_plates

[24] Food Waste Report: The food we waste (2008).

Rainbow plate is a movement that signals the appropriate amount of food to take by the varying the size of the plate especially when food is served at different public institutions. This way it effectively reduces "plate waste".

Living Labs can be organised through two models of educational cooperation. One is brokering cooperation between a university and local community with the support of ODA, the other is organizing educational programmes with field work in the community. A more detailed example of the Living Lab project in Vietnam was described to show the mechanism and methods applied through educational cooperation that contributed to solving the problem of underage marriage of girls through creating opportunities to work.

Summing up, the Living Lab approach offered a participatory methodology to identify with a community together new business models and to promote economic development by tackling existing socio-economic problems.

Questions from the participants:

- Could you explain how to reduce or manage early marriage through finding organizations or jobs?

- Could you explain how this problem could escalate into public policy in the future?

Since underaged marriage is a multidimensional problem, a survey was done first to connect others (stakeholders). After that, various solutions were generated from different creative and innovative ideas who turned these innovations into policies and business opportunities. Universities are now given opportunities and time to engage in various projects to develop entrepreneurship. Through the selection process, the idea that is sustainable and feasible will be chosen. Partner universities help to find some new ways to help institutionalize these change projects in the community. Through such engagement a lot of discussions result in choosing the best solutions. In the case of preventing underaged marriage, we find out that giving the opportunities to have a job is the best solution.

- Q: Regarding the threshold of poverty, it seems that the data from this presentation is different. Since the threshold is different, how can the project help people to get out of poverty?

Regarding the measures and the threshold of poverty, it is important to understand that poverty is rooted in structures. By focusing on small specific problems or micro level problems and through problem solving, poverty can be alleviated at the local level.

D.1.4 Social and Solidarity Economy as the Pathway to "Leave No One Behind" and "Not To Push Anyone Behind"

Presented by Ilcheong Yi, Senior Research Coordinator, UN Research Institute for Social Development (UNRISD)

The speaker showed that at the global level the trend of extreme poverty has decreased after a few decades. There are two correlations between GDP (as economic growth) and extreme poverty rates. In the age of capitalism (from 1950s to 1970s), poverty was reduced when there was growth in the economy. At the same time, because of unequal distribution of economic growth, the income inequality leading to extreme poverty has also happened within and between countries.

When addressing economic and poverty, the 2030 Agenda went deeper about the structural roots of poverty by emphasizing inclusive access, comprehensive and systemic approach. The rallying call for transformation signposted its commitment to "Leave No One Behind". This transformation needs participation not only from the government, but also from the enterprises of diverse

economic models and civic sector. Both will play a key role in the fundamental transformations from social to economic, from environmental to technological (the 2030 Agenda, para 41).

The Social and Solidarity Economy (SSE) as defined in the recent UN GA resolution "Promoting the Social and Solidarity Economy for Sustainable Development" (A/77/L.60):

> "encompasses enterprises, organizations and other entities that are engaged in economic, social and environmental activities to serve the collective and/or general interest, which are based on the principles of voluntary cooperation and mutual aid, democratic and/or participatory governance, autonomy and independence and the primacy of people and social purpose over capital in the distribution and use of surpluses and/or profits, as well as assets, that social and solidarity economy entities aspire to long term viability and sustainability and to the transition from the informal to the formal economy and operate in all sectors of the economy, that they put into practice a set of values which are intrinsic to their functioning and consistent with care for people and planet, equality and fairness, interdependence, self-governance, transparency and accountability and the attainment of decent work and livelihoods and that, according to national circumstances, the social and solidarity economy includes cooperatives, associations, mutual societies, foundations, social enterprises, self-help groups and other entities operating in accordance with the values and principles of the social and solidarity economy. (UN GA Resolution "Promoting the Social and Solidarity Economy for Sustainable Development" (A/77/L.60)).[25]

Multiple conditions and contexts have coalesced to cause SSE to expand in numerous countries. People in their role as workers, producers, consumers and citizens are organizing and engaging in various forms of collective action to defend their livelihoods and realize their rights in contexts of heightened vulnerability associated with globalization, economic liberalization and shocks such as the 2007/2008 financial and food crises.

The SSEs give benefits, especially in the economy and do not harm in terms of environment and social development. Its multiple functions and purposes override the profit motive of a capitalistic company (see Figure 11).

Figure 11: Multiple functions and purposes (Source: Ilcheong Il, for ETC 2023, UNOSD)

It goes against the grain to consider SSE as a nested branch of the market economy. According to Coraggio (2015) SSE is situated in-between different broader forms of economy, i.e., public

[25]https://social.desa.un.org/sdn/new-un-resolution-on-social-and-solidarity-economy#:~:text=At%20its%2066th%20plenary%20meeting%20on%20April%2018%2C%202023%2C%20the,60).

economy, business/private sector economy and popular economy where non-traditional actors respond to the economic demands of the operation (see Figure 12).
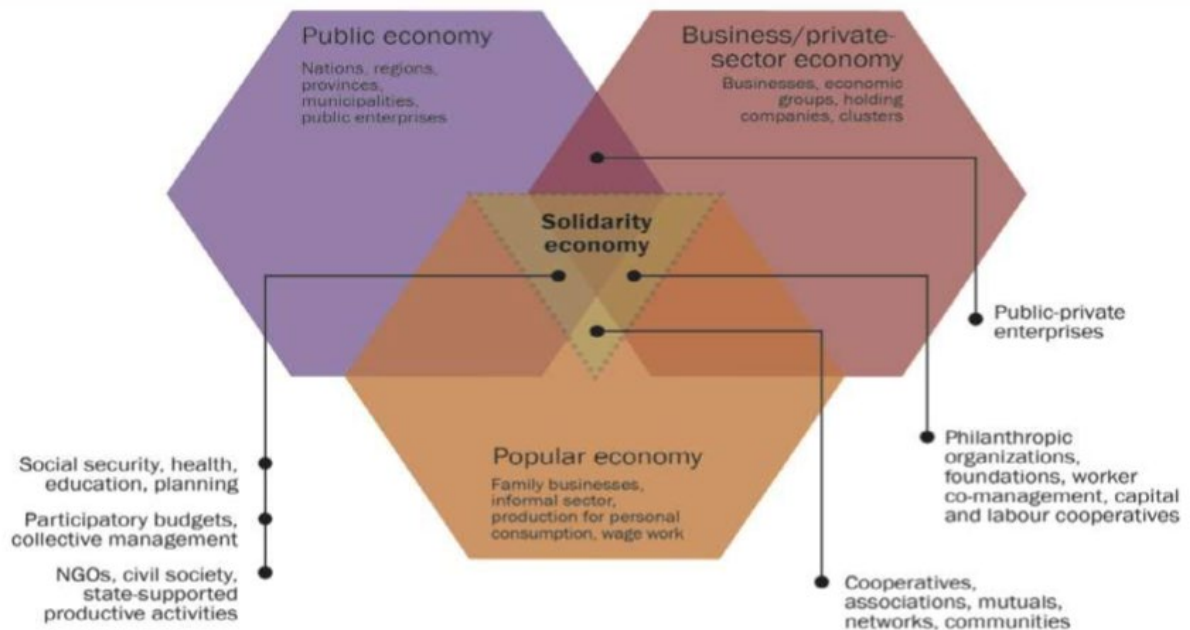
Note: The term "solidarity economy", used in this figure, is often used in Latin America and is synonymous with social and solidarity economy.
Source: Coraggio 2015.

Figure 12: Social and Solidarity Economy within the Broader Economy (Source: Coraggio 2015 "Institutionalising Social and Solidarity Economy in Latin America") [26]

The importance of the SSE can be seen through the lens of employment generated by the cooperatives around the world. In 2022 alone, approximately 3.32 billion people were estimated to be employed around the world (Source: Eum 2023 Presentation at CIRIEC Conference in Seoul, Table 3).

Cooperatives differ from limited-liability companies and joint-stock companies through their value orientation and democratic decision-making processes. It is particularly suited for implementing the SDGs at the micro level. (Note 6)

(Note 6. The cooperative idea has spread in many countries. Worldwide, cooperatives have approx. 800 million members in over 100 countries; they secure 100 million jobs in 2018.

- In Canada, every third citizen is a cooperative member.

- In France, cooperatives provide 700,000 jobs.

- In Japan, 91 percent of farmers are organized in cooperatives.

- In Kuwait, 80 percent of the retail trade is made up of consumer cooperatives.

- In Bolivia, cooperatives manage a quarter of all national savings.)

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[26] Coraggio, J.-L. (2015). "Institutionalizing Social and Solidarity Economy in Latin America" in Utting, P. (Ed.) "Social and Solidarity Economy: Beyond the Fringe", Bloomsbury Publishing. Chapter 7, p. 130 – 181. https://books.google.ch/books?hl=en&lr=&id=Rv40EAAAQBAJ&oi=fnd&pg=PA130&dq=Coraggio,+solidarity+economy, +2015&ots=4WLfADttaQ&sig=APAQnvX1oonRnvv4t8hnZx94iQY#v=onepage&q=Coraggio%2C%20solidarity%20econo my%2C%202015&f=false

(Source: www.deutschland.de, 05.07.2018)[27]. [28])

Number of jobs created in and through cooperatives (estimate of 2022)

	Number of coops	Employees (A)	Worker – Members (B)	Producer-managers	Total employment (A+B+C)	User-Members (D)	Total Members (B+C+D)
Europe (35)	221,960	4,710,595	1,554,687	9,157,350	15,422,632	152,064,608	162,776,645
Africa (35)	375,375	1,939,836	37,836	20,410,298	22,387,970	33,638,298	54,086,442
Asia (33)	2,156,219	7,426,760	8,573,775	219,947,186	235,247,721	320,130,233	547951194
America (39)	181,378	1,896,257	982,285	3,237,493	6,116,035	417,580,296	421,800,174
Oceania (12)	2,391	75,438	0	147,071	222,509	30,696,144	30,843,215
Grand total (156)	2,937,323	16,048,886	11,148,583	252,199,398	279,396,867	954,109,679	1,217,457,660

Source: Eum 2023 Presentation at CIRIEC Conference in Seoul

In 2022, approximately **3.32 billion** people were estimated to be employed in the world.

Table 3: Number of Jobs Created in and through Cooperatives (Estimate of 2022)
(Source: Eum 2023 Presentation at CIRIEC Conference in Seoul, Table 4)[29]

Country case studies on the SSE development were included in the presentation. However, due to the time limitation, they were not presented. These case studies included German, Seoul, Brazil, Rwanda, and India. Here, summaries of the German case and Rwanda case are included for information.

Germany. (Note 7)

There are five pillars of SSE in Germany, i.e., cooperative banks, rural cooperatives, buying and marketing cooperatives, consumer cooperatives and housing cooperatives. Table 4 lists the relative size and market presence.

Types of SSE	Units	Market Share
Cooperative banks	1,200 units	50 million customers
Rural cooperatives	3,000 units	70 % of milk production
Buying and marketing cooperatives	1000 small scale cooperatives	n.a.
Consumer cooperatives	n.a.	n.a.
Housing cooperatives	n.a.	10% of national housing stock

Table 4: Lists of German cooperatives of relative sizes and market presence.
(Source: Ilcheong Yi, presented at ETC 2023, UNOSD)

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[27] https://www.deutschland.de/en/topic/business/cooperatives-examples-from-germany-and-around-the-world#:~:text=Today%2C%20Germany's%207%2C500%20cooperative%20enterprises,also%20spread%20in%20other%20countries.

[28] For more information on cooperatives in Germany, see www.genossenschaften.de and wohnungsbaugenossenschaften.de

[29] 9th CIRIEC International Research Conference on Social Economy. https://emes.net/news/9th-ciriec-international-research-conference-on-social-economy-call-for-papers/

(Note 7. "Cooperatives have a long history in Germany. …… In the middle of the nineteenth century, Friedrich Wilhelm Raiffeisen and Herman Schulze-Delitzsch founded around the same time the first cooperatives, that is, associations of people pursuing a common goal in accordance with the principles of self-help, self-management and self-responsibility. Today, Germany has more than 7,500 cooperatives with a total of 20 million members, and the number is growing.

In contrast to other social formats, cooperatives are formed not only for the sake of economic success. People are propelled into these communities of solidarity primarily for reasons of social justice and ecology. Members of a cooperative are often also its employees or customers. Today the model works not only in the areas of agriculture, banking and trade; it also promises solutions for the energy transition, influx of refugees and housing shortages." (Quotes from Deutschland.de, 21.02.2017)[30]

<u>Rwanda.</u>

Another success story of applying SSE principles to the low-income countries is the case of Rwanda. Development of SSE took root in the health sector concerning community-based insurance schemes (CBHI). CBHI schemes deployed both bottom-up and top-down approaches.

Since its establishment in 2001, the Rwanda CBHI scheme has been associated with positive health outcomes including reductions in infant and maternal mortality (Rwanda Social Security Board, 2019)[31]. Also, the CBHI has provided financial protection for a majority of the Rwanda informal sector against catastrophic health expenditure and improved general healthcare utilization in Rwanda[32, 33]. Thus, the CBHI remains the most popular health insurance scheme in the country. Between 2003 and 2022, the Scheme coverage increased exponentially from 7% to 85% in 2008 and to more than 90% in 2010 (Yi, 2023). Together with other health insurance schemes in the country, CBHI schemes contributed lifting Rwanda's overall health insurance coverage to more than 96% in 2012. (Note 8)

(Note 8. According to the Rwanda Social Security Board's Report (2023)[34], "The socio-economic capabilities of the Rwanda Community Based Health Insurance (CBHI) beneficiaries" Despite its successes, the CBHI has recently faced challenges of increasing deficits, stagnated enrolments, and increasing number of members make only part payment of their household contributions, all of which threaten its sustainability. In 2020, the government earmarked new financial sources for the CBHI including RWF 6 billion annual Government budget allocation, levies of RWF 20 per litre of fuel sold by each fuel trade company in Rwanda, one-tenth (10%) of road traffic fines, RWF 100 per hour from parking fee levied on vehicles (City of Kigali), half a per cent (0.5%) of the net salaries of employees paid by the employer, and ten per cent (10%) of tourism revenues. While these new revenues have improved the CBHI financials, the recent CBHI Sustainability Plan estimates that these funds will not be sufficient in the medium to long term. Thus, the need to explore additional channels of financing including increasing the CBHI contributions for the Ubudehe1 category 2 and 3 members.")

Country Case Presentations

D.1.5 "Chile: Ending Poverty in all its forms 2017 -2022"
Presented by Jenny Alicia Encina Galaz, Technical Secretary & Undersecretary of Social Evaluation, Head of Social Affairs, Ministry of Social Development and Family, Government of Chile

Chile presented its 3rd Voluntary National Review (VNR) in July 2023 which covered all 17 SDGs in accordance to the guidelines of the UN DESA. This review was conducted with the participation of different stakeholders private and public sector civil society local governments, and academia.

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[30] Model for the future: cooperatives. https://www.deutschland.de/en/topic/business/brands-markets/model-for-the-future-cooperatives

[31] Rwanda Social Security Board (RSSB), 'Assessment of Provider Purchasing Mechanisms Under the Community-Based Health Insurance in Rwanda'. 2019.

[32] United Nations Development Programme (UNDP), '3rd Rwanda National Human Development Report. Policy Innovations and Human Development, Rwanda's Home-Grown Solutions.' 2021.

[33] Rwanda Social Security Board (RSSB), 'CBHI Membership report 2022, 3MS Data, Jul 2022, Kigali, Rwanda'. 2022.

[34] https://www.ispor.org/docs/default-source/intl2023/ispor23achawposterthe-socio-economic-capabilities-of-the-rwanda-cbhi-beneficiaries123963-pdf.pdf?sfvrsn=a95e3dcc_0

A National Socioeconomic Characterization Survey (CASEN) has been conducted every 2 to 3 years since 1987. The survey produces data representative of the country and its 16 regions based on more than 70,000 face to face interviews. It is used to report the official poverty rate to produce official inequality figures to characterize the population and to provide input for the design of public policies. CASEN's 2019 version was postponed due to the COVID 19 pandemic. Due to COVID and the mobility restrictions implemented by the Government, in 2020 a shorter version of the CASEN questionnaire was used. Data collection was mainly based on telephone interviews. This meant that some important indicators (e g the MPI) were not produced. CASENs 2022 version was again based on face to face, in person interviews and data and results for poverty and inequality were released in July 2023. Chile's 2023 NVR used 2017 and 2020 CASEN data.

COVID-19 has impacted the performance of the Chilean economy and its social wellbeing in terms of people facing extreme poverty (Target 1.1.1) and living below the national poverty line (Target 1.2.1). In 2022, Chile recovered from the downward trend regarding these two targets. There are, however, still gaps in 2022 between women and men at the territorial level regions and between groups e.g. indigenous peoples, migrants. This outcome is due to the support of public policies, such as by increasing the monthly minimum wage, subsidies and benefits, by establishing mechanisms for child support debts payment, by having a productivity agenda, etc. Also, not only civic society organizations started initiatives, but private sector and higher education institutions also participated to support SDG 1.

To monitor the progress made in implementing the SDGs, intersectoral groups were established and reported to the National Council. Various technical secretaries were also appointed to oversee the implementation (see Figure 13). She explained the structure how monitoring works in the country. She shared what the country has learned after making progress and even though the country has made progress on reducing poverty, a lot more needs to be done to achieve SDG 1.
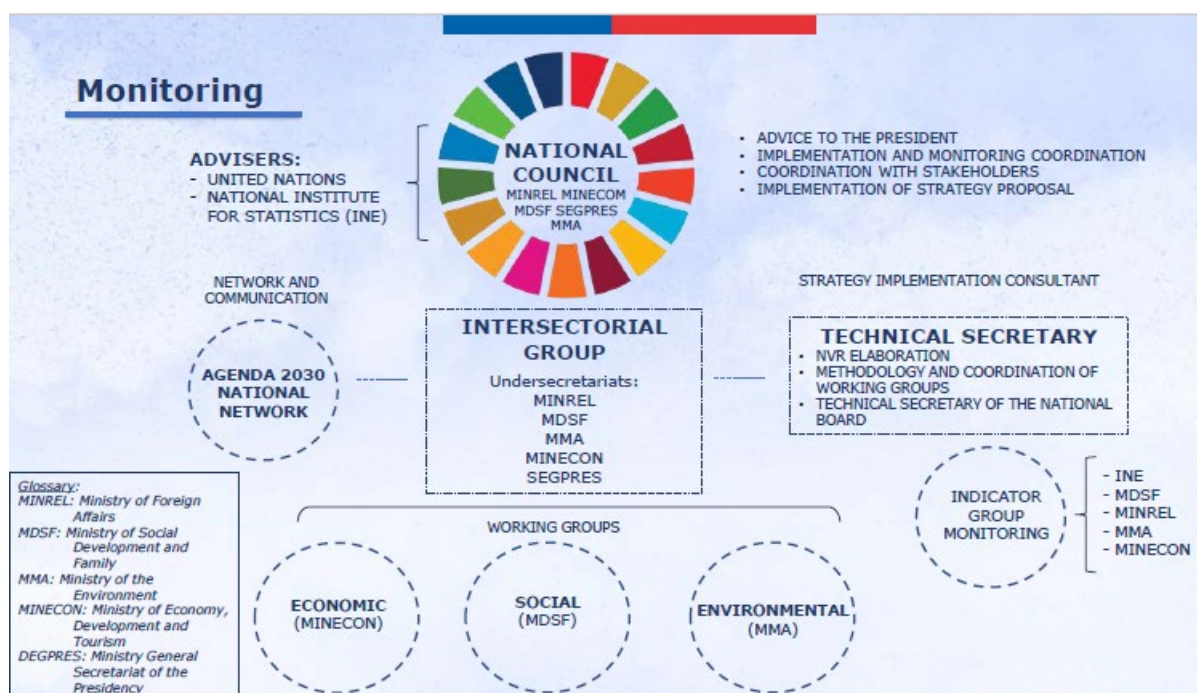
Figure 13: Monitoring Architecture for SDG Implementation in Chile
(Source: Presentation by Jenny Alicia Encina Galaz during ETC 2023 of UNOSD).

The presentation was concluded by highlighting the challenges faced by the government. They are:

- Continue the path of poverty reduction accelerating the process;
- Strengthen the social protection system;

- Design an inclusive National Care System to face social, demographic and epidemiological changes;

- End inequality discrimination and all forms of violence against specific population groups;

- Improve healthcare access and wellbeing at all ages;

- Improve access and quality of education at all levels Give better opportunities for training and formation at all stages of life; and

- Keep working in better housing conditions and across in sanitary services.

On lessons learnt, the speaker pointed out the following key points:

- Mobility restrictions due to COVID 19 pandemic had a strong impact on occupation and incomes.

- School closures kept children away from schools, while not all of them had access to remote learning.

- It is key to include civil society in the implementation and monitoring of SDG.

- Subsidies, conditional and unconditional transfers were key to maintaining a minimum level of wellbeing during the crisis.

- Reducing gaps for different groups of populations remains a challenge.

<u>Questions from the participants</u>

Q: Regarding the monitoring part, what are the challenges of the data collection process?

The monitoring process is hard. It needs coordination and collaboration. All ministries in government need to understand its process and agree on a specific timeline. Also, the country needs to improve in finding out which indicators are being used and to include the stakeholders outside government in the process.

D.1.6 National Multidimensional Poverty Index (MPI) of Thailand: Experiences and Challenges

Presented by Pojjanaporn Krichtitayawuth, SDGs and Multilateral Framework Unit, International Strategy and Coordination Division, Office of the National Economic and Social Development Council

The overall performance of Thailand, according to the SDG Dashboard, ranked 43 out of 166 countries included in the comparison. Specifically, Thailand has made major progress on 7 out of the 17 Goals, i.e., SDG 1 (poverty), SDG 3 (health and wellbeing), SDG 4 (education), SDG 8 (growth and decent work), SDG 11 (sustainable urban development), SDG 12 (sustainable consumption and production) and SDG 13 (climate change). Achievements are acknowledged in the Sustainable Development Report 2023 (see Figure 14).

AVERAGE PERFORMANCE BY SDG
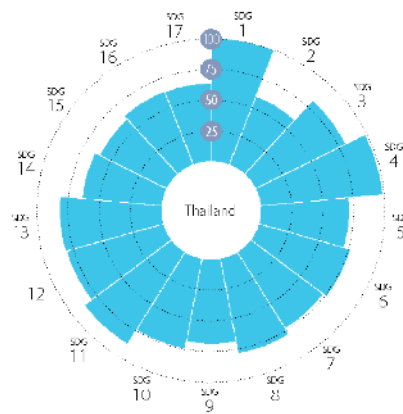
Figure 14: Average Performance of Thailand by SDG
(Source: Sustainable Development Report 2023)

When measuring poverty, Thailand has previously mainly used *monetary* poverty measures called the poverty line. Starting in 2017, measuring deprivation gained central stage in policy debates. With the success of constructing the Child MPI in Thailand in 2018, the Office of the National Economic and Social Development Council (NESDC) took another step in 2019 by producing the National Multidimensional Poverty Index (National MPI) as an additional official measure of overall poverty in Thailand. It was also constructed with the purpose of monitoring the progress of SDGs, particularly SDG 1.2.

Thailand's National Multidimensional Poverty Index (MPI) which consists of 4 dimensions (i.e., education, healthy living, living conditions, and financial security) and 12 indicators in contrast to the global MPI index developed by the University of Oxford.[35] (Table 5)

Dimensions	National MPI Indicators	Dimensions	Global MPI by OPHI Indicators
Education	1. School year 2. School lag 3. Stay with parent	Education	1. Years of schooling 2. School attendance
Health living	4. Drinking water 5. Self-care 6. Food	Health	3. Nutrition 4. Child mortality
Living conditions	7. Waste management 8. Internet 9. Asset ownership	Living standards	5. Cooking fuel 6. Sanitation 7. Drinking water 8. Electricity 9. Housing 10. Asset
Financial security	10. Saving 11. Financial burden 12. Pension		

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[35] https://ophi.org.uk/multidimensional-poverty-index/

Table 5: Comparison between Thailand's National MPI and Global MPI by Oxford University (Source: Consultant's articulation. National Economic and Social Development Council & Oxford Poverty and Human Development Initiative, University of Oxford)

Spatial multidimensional poverty by provinces identifies the territories where the multidimensional poor are concentrated. While concentration of the MPI poor is consistent with that of monetary poverty in some areas, others are not. Many of the multidimensionally poor in Thailand face deprivations in accessing the pension system, implying that people in the post-retirement period do not have financial security. Living conditions are another dimension of which the multidimensionally poor in Thailand are most deprived of. Accordingly, policies should focus on creating good living conditions in every community such as proper waste management system and internet infrastructure.

To end poverty in all its forms, the interlinked deprivations that poor people experience need to be addressed to reduce the intensity of poverty and thereby empower poor people to exit poverty. A right policy mix at the national and subnational levels is needed to address differences in intensity and composition of poverty in urban and rural areas.

Thai People Map and Analytical Platform (TPMAP) is an integrated data management system for targeted human development in Thailand. TPMAP is established to address the data gap regarding poverty. The national poverty line does not provide information on critical questions of who, where, what, and how so that poverty reduction strategy can be more targeted.

TPMAP integrates the database from government (mainly), physical data, and household survey data. After the collection and integration of data, Thailand can do the analysis and divide it into 3 main target groups, which are deprived, vulnerable, and low-income. As the last step of processing data, visualization of data is important to understand what people need in terms of health, living standard, education, income, and access to public services and how to help them. Through TPMAP, it was found that there were almost 1 million people in urgent need of policy support after overlaying the survey results of Basic Minimum Needs, registration of Welfare Card Holders, and other sources of data on the vulnerable. TPMAP system can display poverty in five dimensions and helps to identify targets at different levels from households to national. To summarize, TPMAP is helping to analyze problems, to formulate policy, to translate policy into practices, and to evaluate policy impacts.

TPMAP is an example of collaboration between stakeholders. The role of government is important in terms of firm & true commitment, clear policy/ plan/ process, enabling laws & regulations and shared benefits to all parties involved, not just burden sharing. These are key success factors for TPMAP.

Questions from the participants

> Q: How many resources are needed to cover all the aspects and dimensions of poverty? How many people are covered by the data collected?

The main data that the country uses is the Basic Minimum Needs (BMN) survey from the Ministry of Interior, which was started a few decades ago. Also, other departments, government officials and volunteers help to have this data. However, BMN survey does include Bangkok since they have another administration procedure of collecting data.

> Q: How long has the country been using the system? Also, how do data generate interventions to keep people from being poor? How long does it take to process the data?

It took 2-3 years to develop, run, and make the system official. For the collection of data, it takes 3-4 years.

> Q: Is TPMAP open to the public or is it only open to the policymakers?

It is open to the public. However, regarding the individual information, it needs special access. For the visualization of data, the public can see it.

> Q: Is the system complicated or easy? If it is complicated, may I know how complicated it is? Also, could you explain how to communicate it? Also, should other countries use the technology since machine communication is always the bottleneck?

High officials of the government decided to implement TPMAP and it works. Also, they have another system, which is a digital government platform where people get the budget to make a project. Through that, people put the declaration, urgency, and the reason based on the data from TPMAP.

Comment from Ms. Lichia Saner-Yiu: The budgeting process is important (she referred to the case in 2000 about the importance of budgeting). It is really interesting how data relates to finding out who, what, where, and how to reduce poverty.

Group Discussion

There was a group discussion as part of closing the Module 2 for SDG 1. There are 2 questions that bring awareness to a country in terms of key barriers and innovations. By sharing, participants from various countries can learn from peers.

- Q: What innovations does your country have in this policy area?

- Q: What are the key barriers for achieving the SDG?

Table 6 presents a compilation of innovations submitted by country representatives at this ETC. These innovations have contributed to the progress made regarding SDG 1 Poverty Eradication.

Country	Innovations	Responsible Actor	Challenges
Egypt	▪ "Decent Life", a presidential initiative launched in 2019 aims at improving livelihood for the poorest villages in Egypt targeting more than 4000 village (around 60% population) ▪ Intervention include providing basic services (health, education, water sanitation, and infrastructure)[36]	Presidency	
Ghana (Note 9. A list of Innovative interventions for accelerating attainment of SDG 1 was presented in the Ghana 2022 VNR, p.13, with reflections on	▪ Leap Management Information System[38] ▪ Digitisation of LEAP reporting system ▪ Beneficiary Charter of Rights (& Responsibilities) (BCR&R) [39]	Ministry of Gender, Children and Social Protection LEAP secretariat under MGCSP MGCSP and stakeholder groups (Note 10. Based on the web search, it could be a public-	▪ The level of disaggregated data ▪ Late release of LEAP reports (Note 11. Other reflection is available in the Ghana 2022 VNR report available on line, see footnote 34)

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[36]

https://www.presidency.eg/en/%D8%A7%D9%84%D8%B1%D8%A6%D8%A7%D8%B3%D8%A9/%D9%85%D8%A8%D8%A7%D8%AF%D8%B1%D8%A9-%D8%AD%D9%8A%D8%A7%D8%A9-%D9%83%D8%B1%D9%8A%D9%85%D8%A9/

[38] The Livelihood Empowerment Against Poverty (LEAP) is Ghana's national cash transfer Programme and key part of the Social Protection (SP) system.

[39] https://www.cdighana.org/dissemination-of-leap-beneficiary-charter-of-rights-and-responsibilities-14-03-2018/

	• Ghana School of Feeding Program (GSFP)[40 , 41]	private philanthropic initiative)[42]	
emerging issues)[37]	• E-monitoring tool to capture real-time of caterers of all beneficiary schedule		
	• Tree Senior High School (Note 10)		
Haiti	• free seed distribution along with social protection measures		
South Sudan	• A long war mode		
	• The priorities are security & infrastructure. But there are subsidies for food production and free vaccination during pandemic; live-stock freedom of movement		
Uruguay	• flexible unemployment insurance during pandemic;		
	• reforms in educational systems;		
	• addressing the challenge of slums		

Table 6: Tabulation of responses made to address the questions regarding innovations and challenges in implementing SDG 1 on poverty eradication by Egypt, Ghana, Haiti, South Sudan, and Uruguay

Day 2, 6th September 2023

Module 3

SDG 2 – Zero Hunger, food security and improved nutrition and promotion of sustainable agriculture (Ms. Lichia Saner-Yiu, UNOSD Consultant)

Framing: Food Security, biodiversity, deforestation and gender dimension

Presently, 1 in 10 people worldwide suffer from hunger and malnutrition. Many of them are children and small landowner farmers.

Hunger has many different faces (Table 7). It goes from undernourishment to undernutrition to starvation. In this sense, food security refers to the availability of food and to populations or individuals and how they can access food that meets their preference and dietary needs.

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[37] Ghana 2022 VNR, p. 13. https://hlpf.un.org/sites/default/files/vnrs/2022/VNR%202022%20Ghana%20Report.pdf

[40] https://www.mogcsp.gov.gh/ghana-school-feeding-programme-gsfp/#:~:text=The%20Ghana%20School%20Feeding%20Program,on%20hunger%2C%20poverty%20and%20malnutrition.

[41] Iddrisu, I., Gunu, I.M., & Rahaman, N.A. (2022) "Challenges of school feeding in Ghana: Its effect on enrolment and attendance", *Social Sciences & Humanities Open*, vol. 6(1). https://www.sciencedirect.com/science/article/pii/S2590291122000390

[42] https://www.ghanaweb.com/GhanaHomePage/features/Schools-Under-Trees-After-55-Years-Of-Independence-232408

Undernourishment	Refers to an individual's caloric intake. When someone consumes less than 1800 calories per day, they are considered **undernourished**.
Undernutrition	Does not refer specifically to calories, but instead highlights an individual's deficiencies in energy, protein, and/or essential vitamins and minerals.
Malnutrition	Refers more generally to the issue of an unbalanced diet. Encompassed within Malnutrition is **undernutrition** and **overnutrition**.
Starvation	The most severe, and damaging, form of malnutrition. When someone is starving, their caloric intake is less than what is required to sustain life. Starvation over a prolonged time can cause irreparable damage to the individual's body, potentially resulting in death. This is called **inanition**.

Table 7: Faces of Hunger (Source: adopted from Antilla, March 2023)[43]

How many people are hungry or suffer from insufficient food intake or nutrition intake? Figure 15 shows the State of World Hunger which encompasses all forms of hunger classified in Table 7. It is projected that by 2030, more than 600 million people will still face hunger and there is little or no progress being made to reduce anaemia worldwide (UN Statistics, DESA, 2023).
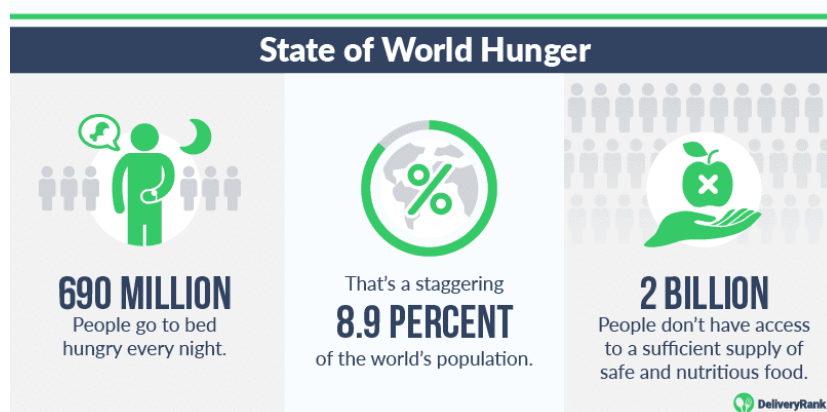
Figure 15: The State of World Hunger (Source: Antilla, March 2023).

High food prices continue to plague many nations. The share of countries experiencing moderate to abnormally high food prices has gone from 15.2% in 2015-2019, to that of 48.1% in 2020, and declined in 2021 to 21.5% (UN Statistics, DESA, 2023). With the higher occurrence of extreme weather events around the world in 2023 and continued war in Ukraine, the resulting food price hike will most likely continue and push more people into hunger and food insecurity. Figure 16 showed the prevalence of severe food insecurity in different parts of the world.

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[43] https://antilla-martinique.com/world-hunger-key-facts-and-statistics/
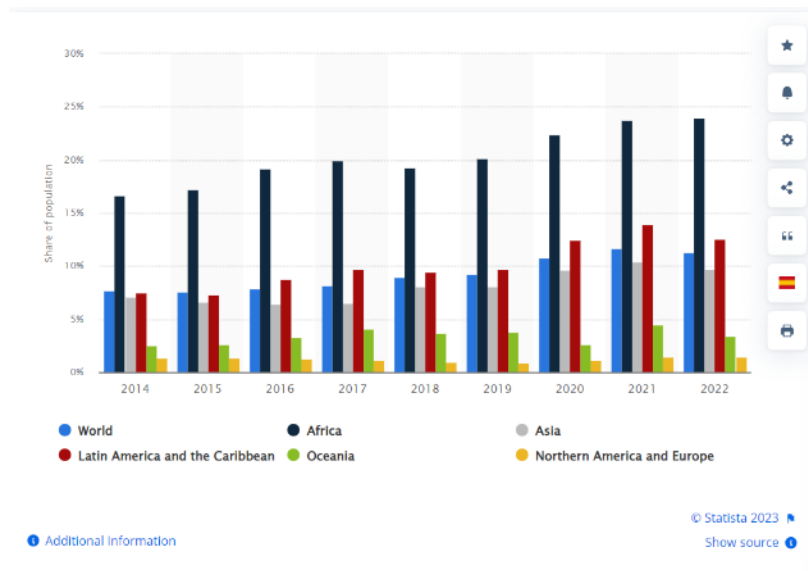
Figure 16: Prevalence of severe food insecurity in different regions from 2014 to 2022
(Source: Statista, 2023)[44].

The pathway out of food insecurity should not be based on more use of fertilizers or pesticides, but rather on the promotion of nature-based solutions that strengthen the climate and increase pest resistance of plants and also improve harvest and yields. Additionally, strengthening the capacities and income generation potential of the farming communities can also help. This point is of particular importance since the majority of the world's poor and hungry are smallholder farmers. 80% of the most impoverished people are living in the rural areas of the developing countries and most rely on farming for sustenance. Yet, survival of these smallholder farmers is under threat due to severe land degradation due to many unstainable farming practices (see Figure 17).

Figure 17: State of the Smallholder Farmer and Hunger (Source: Atilla, 2023) [45]

Investing in sustainable methods for farming will be essential to save the livelihood of smallholder farmers by building up or ramping up agricultural extension services and networks.

Scientific knowledge and green technologies need to be integrated into the agricultural practices to enhance sustainability of agriculture. Green agricultural technologies are needed to enable the

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[44] https://www.statista.com/statistics/987120/prevalence-severe-food-insecurity-worldwide-region/

[45] Antilla: World Hunger: Key Facts and Statistics https://antilla-martinique.com/world-hunger-key-facts-and-statistics/

farming communities to transform agricultural practices to achieve food security, protect biodiversity, revert deforestation and generate higher knowledge content type of employment.

Creation of non-farming income generation can be a policy objective to retain the viability of rural communities and regenerate the agricultural sector. Agripreneurship development is one of the strategic options to foster a longer and greater value chain to diversify the rural economy and generate greater value addition and economic opportunities for youth with higher educational qualifications.

D.2.1. "Introduction of FAO and Transformation to Sustainable Agrifood Systems" presented by Shengyao Tang, FAO Representative and Head of FAO Partnership and Liaison Office in the Republic of Korea

According to the State of the Food Security and Nutrition in the World Report (2023)[46], 735 million people were affected by hunger in 2022, an increase of 122 million from 2019, before the global pandemic. Furthermore, 2.4 billion people were moderately or severely food insecure in 2022. The 735 million undernourished population are mostly residing in Asia and followed by Africa (See Figure 15).
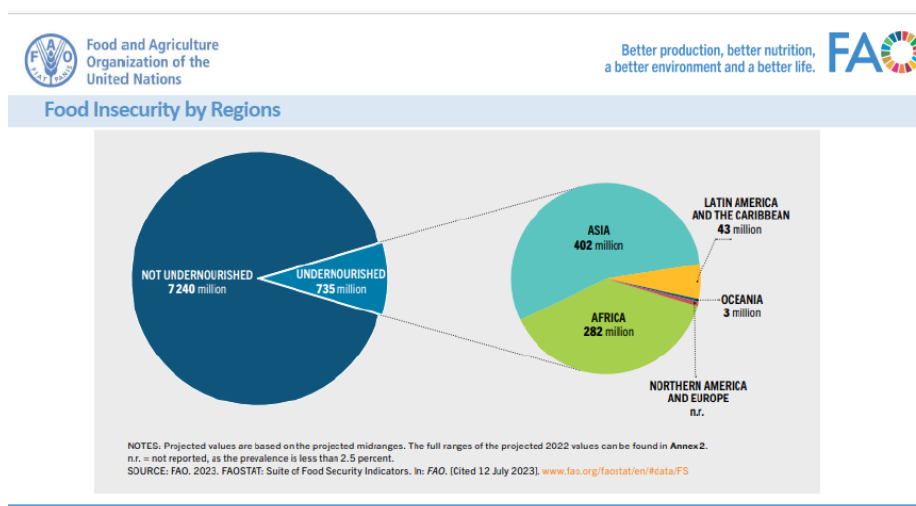
Figure 18: Food Insecurity by Regions (Source: FAO 2023.)

There are several key factors for food insecurity, which are related to conflict and insecurity, economic shocks, weather extremes, macroeconomic risks, international food prices, agricultural input prices, structural and long-term challenges.

The Food and Agriculture Organization of the United Nations (FAO) functions as a platform for the following: information hub for statistics, databases and flagship publications[47]; policy support[48]; capacities development; know-how, skills and expertise sharing[49]; standard setting (including Standards, Conventions, Agreements and Treaties); and a meeting place for nations. The FAO Strategic Framework adopted a grassroot and people centred approach (Figure 19) in order to achieve Four Betters, i.e., better production, better nutrition, better environment, and better life (see Figure 20). (Note 12, 13)

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[46] https://www.fao.org/documents/card/en?details=cc3017en

[47] https://www.fao.org/publications/home/fao-flagship-publications/en

[48] https://www.fao.org/policy-support/coronavirus-pandemic/en/

[49] GIEWS - Global Information and Early Warning System on Food and Agriculture. https://www.fao.org/giews/en/
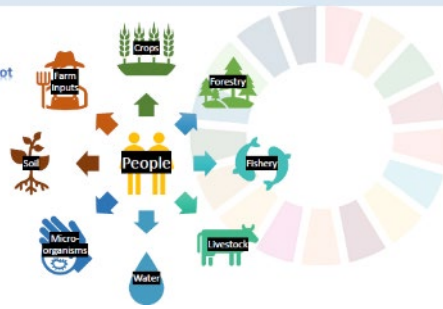
Figure 19: People Centred Approach to Long Term Food Security
(Source: FAO 2023)

(Note 12: FAO Strategic Framework 2022-31 seeks to support the 2030 Agenda through the transformation to MORE efficient, inclusive, resilient and sustainable agrifood systems for better production, better nutrition, a better environment, and a better life, *leaving no one behind*.)[50]

(Note 13. Normative and standard-setting instruments of FAO. For example, its International Sustainable Bioeconomy Working Group (ISBWG) established a set of Aspirational Principles and Criteria for Sustainable Bioeconomy (P&C) in 2016. 10 aspirational principles and 24 criteria were the basis of the report Indicators to monitor and evaluate the sustainability of bioeconomy.)[51]

FAO also works together with other agencies and partners, such as UN Food Systems Summit and Global Stocktaking Moment[52], and others. Lastly, the speaker concluded by saying that progress needs to be made on sustainable agrifood systems in terms of assistance, policy, and practices.
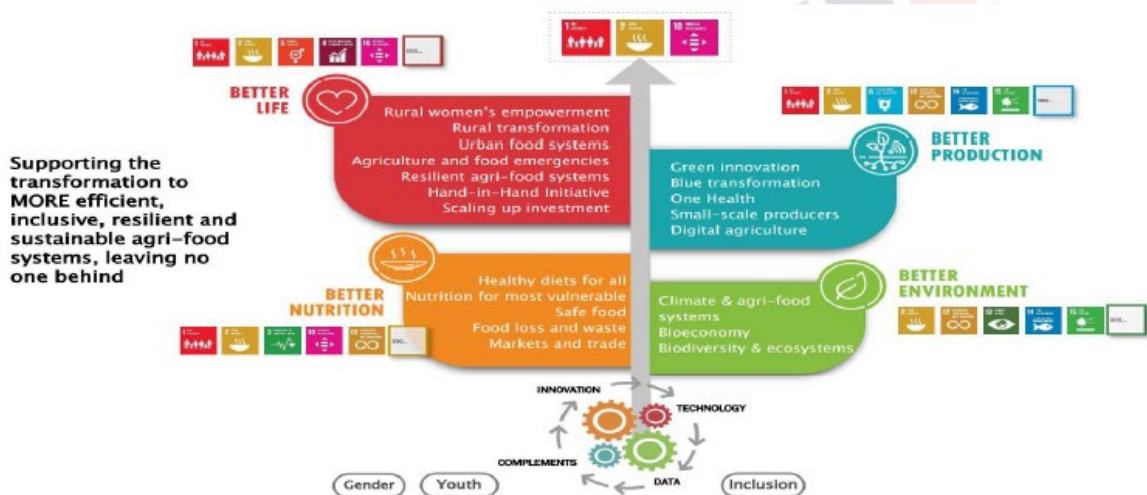
Figure 20: Transformation in achieving Four Betters (Source: FAO Director General's Medium Term Plan 2022-2025 and Programme of Work and Budget 2022-2025)[53]

Questions from the participants

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[50] https://www.fao.org/strategic-framework/en

[51] https://www.fao.org/in-action/sustainable-and-circular-bioeconomy/approach/nssinstruments/en/

[52] https://www.unfoodsystemshub.org/fs-stocktaking-moment/

[53] https://www.fao.org/3/ne576en/ne576en.pdf

Q: After World War II, agriculture has been decreasing. How will the agrifood systems be done successfully and sustainably?

In economics, one learns that the percentage of agriculture will decline when a country develops. They will move to the second and third industries, which are carried out in the city. Then, there is a crisis for food and agriculture. It is important to know when and how to move towards early industrialization and other sectors. It can be implemented through a household contract responsibility system so they can make their own decision in terms of how to grow and how to distribute. At the same time, the farmers should diversify their income so that they can have enough income. The role of government policy about markets is important so that farmers can take initiatives and have incentives and have the will to work for better returns.

Q: Why do we still have hunger and poverty even though FAO works on food sustainability?

Regarding the global food security situation, FAO will take care of each country and work together with the country. However, FAO cannot set a particular policy unless it is requested and, also, FAO is a policy advisor and guide who gives technical assistance, such as on increasing agriculture, food security, and infrastructure, like other international NGOs.

Comment from Ms. Lichia Saner-Yiu: There is a question regarding "locus of control". The domestic policy is the country's responsibility. The Paris Declaration on Aid Effectiveness (Figure 21) and the Accra Agenda for Action give the ownership to the countries to set their own strategies and development process. The partners and donors were given guidance on important elements to achieve effectiveness such as co-agenda setting, alignment, harmonization etc. Also, we need to talk about SDG 17 later in the course regarding mobilizing extra resources in the most effective manner. The question of effectiveness and impact is not an easy question to answer.

Figure 21: Paris Declaration for Aid Effectiveness
(Source: The Development Assistance Committee of the OECD)[54]

D.2.2. "Agripreneurship Development of Small Land Holder Farmers as A Strategic Choice for Hunger Alleviation in the Rural Areas"
Presented by Prof. Raymond Saner, Director, Diplomacy Dialogue, CSEND and Professor, International Management and Organisations, Basle University

"According to World Bank estimation, there were 500 million smallholder farming households globally in 2016 that also comprised a large proportion of the world's poor living on less than 2 US$ a day. In a more recent study in 2021, Hannah Ritchie found that 84% of the world's 570 million farms

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[54] https://www.un.org/en/ecosoc/newfunct/pdf/asia-pacific%20development%20cooperation%20forum%20%28steve%20groff%29.pdf

were smallholders with less than two hectares in size. Still, smallholder farms produce 29% of the world's crops (Ritchie, 2021). Even so, many smallholder farmers are some of the poorest people in the world who often must face hunger. At the same time, the survival of small farmers is put at risk due to the trends of the agricultural sector towards industrial farming and the concentration of land ownership" (Saner, Yiu, Roberts, 2023, p. 2).[55] Agripreneurship is conceptualized as a pathway for the smallholder farmers out of poverty by "adopting an integrated approach to the economic activities of smallholder farmers and rural development" of the locality, and "to foster higher value addition by forming collaborative relations along knowledge intensive supply and value chains".

Already pilot tested by the FAO, agripreneurship has shown concrete results of improving the livelihood of poor farmers and of creating work opportunities through rural entrepreneurship start-ups. However, it needs to be noted that individual agency in taking entrepreneurial risks is one of the ingredients in pulling oneself out of poverty but alone is insufficient to achieve a thriving business. Other factors with the surrounding business ecosystem need to be considered and mitigated in order to enable business development and advance rural development and wellbeing. This observation was validated by a recent study (Saner, Yiu, Roberts, 2023).

Different agripreneurial initiatives, such as planting high-market-value crops, participating in off-farm and/or nonfarm employment through specialization by the household members (on food washing installations, agricultural working tool, etc.) and/or diversification (in eco-tourism, handicrafts, and community-based credit systems), as part of a holistic strategy to improve household earnings and to have bargaining power when facing large industrial food companies, or mitigation capacities when facing climate change and other issues and uncertainties.

When making policy regarding food security and rural economic development, it is essential to ensure access to public services for smallholder farmers to break away from subsistence farming. "Services for Agriculture"[56] has a broad spectrum of components and actors. It ranges from direct support to the farming communities, like extension services, local credit schemes, to business support and market access. Services that are part of this agripreneurship landscape can be: community-based transport services, cold storage, online trading system and payments, farmers cooperatives, rental services for farming equipment, repairing farming tools, organic farming, eco-tourism etc.

To conclude, the speaker presented a schema that captures a top down and bottom-up flow of exchanges. Policy interventions that create synergies between agripreneurship and poverty alleviation and food security involving different actors with respective unique capabilities operating in a dynamic food ecosystem with inclusive access to value creation and fair benefits sharing (see Figure 22).

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[55]Saner, R., Yiu, L. & Roberts, S. 2023. Closing policy gaps to enable agripreneurship of smallholder farmers in developing countries. https://ferdi.fr/dl/df-ouxjJnZ9WU8bcLXV2zRR4d7g/ferdi-wp322-closing-policy-gaps-to-enable-agripreneurship-of-smallholder.pdf
[56] https://www.ifad.org/en/web/operations/-/project/1100001065
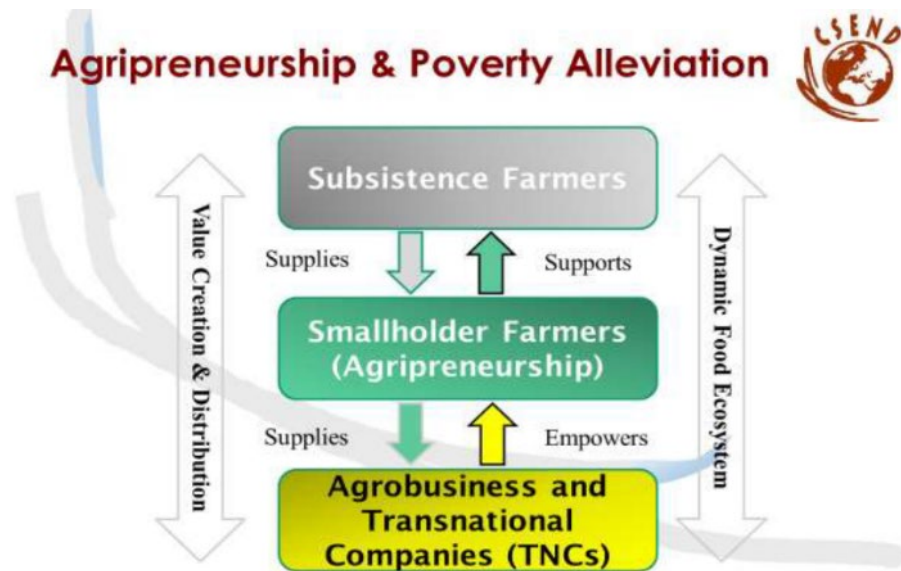
Figure 22: Synergistic effect between agripreneurship and poverty alleviation/food security
(Source: Saner, Yiu & Roberts, 2023)

Questions from the participants

Q: Usually the children of farmers do not want to be farmers and they would like to seek jobs in the city. What will happen if they stay in the city and do not want to be farmers?

Outward bound migration from the rural area to the urban or peri-urban territories is not necessarily bad since productivity will increase due to the shading of excess manpower. However, when rural migrants do not have a job in the urban areas nor are willing to return to their rural origins, this will create trouble.

To resolve this phenomenon of concentration of unemployed youth population in the urban areas cooperation is needed from education, youth and other sectors. The government has the power to make national planning on how to reduce the overall population of farmers and to make plans for a just transition to the industrial or service sectors. Also, consideration needs to be given to the farmers who are getting old and are not schooled to learn new technologies or information tools. To ensure wellbeing for all (SDG 3), focus needs to be placed on the fundamental SDG 1, i.e., multidimensional poverty, first. This can be done through local partnerships, access to public services, conversation, and involvement of international community. To ensure the progress of facing the food security (SDG 2) challenges, we, as agents, need to become more transparent than before when taking policy decisions and selecting operational choices.

Country Case Presentations

D.2.3. "Towards Achievement of Food Security in Malawi"
Speaker: Sophie Kang'oma, Director of Monitoring and Evaluation, Department of Economic Planning and Development, Malawi.

81.62% of SDGs are domesticated in Malawi national development plan (Malawi 2063)[57]. Its main objective is to transform Malawi into a youth-centric inclusive wealthy and self-reliant industrialized upper middle-income country. Malawi 2063 has 3 Pillars to lead the country to an inclusively wealthy and self-reliant countries. They are:

1.   Agri culture productivity and commercialization

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[57] https://npc.mw/wp-content/uploads/2021/02/MW2063-VISION-FINAL.pdf

2. Industrializations

3. Urbanisation

MIP-I is Malawi's first 10 Year Implementation Plan operationalizing the development plan[58] and has flagship projects for each pillar. (Note 14: MIP-1 aims to meet two key milestones: 1) to raise the country's income status to lower-middle level by 2030; and 2) to meet most of the Sustainable Development Goals (SDGs) whose end-line target is 2030)[59].

<u>Status of SDG 2 in 2021</u>. Significant progress has been made regarding food insecure households; waste; the percentage of children born with low birth weight; and agriculture share of government expenditure. Moderate progress was also seen in the following areas: undernourishment; moderate or severe food insecurity; stunting; overweight and exclusive breastfeeding. Four areas were identified as off target - underweight, agriculture orientation index for government expenditures, agriculture share of GDP and annual growth in agriculture GDP. A comparative view of the relative weight in terms of the implementation of SDG 2 can be seen in Figure 23.
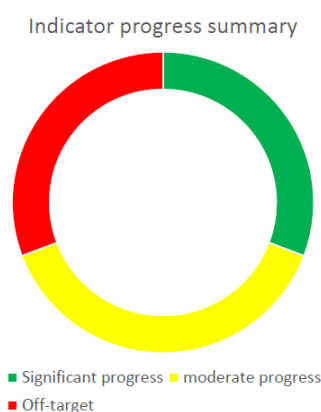
Figure 23: Comparative view of the relative weight in terms of the implementation of SDG 2
(Source: Sophie Kang'oma, ETC 2023)

Challenges in meeting the SDG 2 in Malawi can be summarized as follows:

1. Climatic variability and hazards.

2. Over reliance on rain fed agriculture.

3. Economic instability i.e. foreign currency shortages, inflation.

4. Poor infrastructure to facilitate profitable agricultural marketing.

5. Lack of structured markets for a number of high value crops like soybeans and groundnuts.

To meet these challenges, government interventions related to SDG 2 are:

- Shire Valley Transformation Project[60] whose beneficiaries include youth and women – This involves building irrigation infrastructure and supporting the establishment and operationalization of Smallholder Owned Commercial Farm Enterprises (estates).

- Development and rehabilitation of irrigation schemes[61] - a number of schemes have been targeted across the country.

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[58] https://npc.mw/wp-content/uploads/2023/02/MIP-1-Progress-Report-2023.pdf
[59] https://www.fao.org/faolex/results/details/en/c/LEX-FAOC216690/#:~:text=MIP%2D1%20aims%20to%20meet,end%2Dline%20target%20is%202030.

[60] https://svtp.gov.mw/
[61] The World Bank, 2021, MALAWI Irrigation, Rural Livelihoods and Agricultural Development Project, and Agricultural Development Program Support Project.

- AGCOM – reached 13,379 male and 25,473 female beneficiaries and provided Mk 6.3 billion matching grants to 173 producer organizations (value added products). (Note 15. Agricultural Commercialisation (AGCOM) Project is a Malawi Government flagship programme for transforming smallholder agriculture from mostly subsistence to commercial. The project links together Producer Organizations (POs), service providers (including research and extension) and off-takers in a value chain, in a concept known as a Productive Alliance (PA)) [62]

- Social Protection Programmes targeting the poor, weak and unemployed.[63]

- Agriculture Infrastructure and Youth in Agribusiness Project (AIYAP)[64] financed by the African Development Bank - In 2022/23, provided K356,805,840 matching grants to 119 farmer groups (benefitting 1,817 males & 2,636 females).

- National Economic Empowerment Fund (NEEF) provided finance to women and youth in agribusiness.[65]

- Small and Medium Enterprises Development Institute (SMEDI) provided entrepreneurship and business management training to farmer cooperatives.[66]

- AFIKEPO Programme[67], Investing in Early Years (IEY)[68] - a community-based management of acute malnutrition, moderate acute malnutrition, infant and young child feeding programmes and projects promoting community nutrition.

- World Food Programme (WFP) provides daily meals to around 600,000 school children in over 450 primary schools.[69]

- Affordable Inputs Program (AIP) provides subsidized farm inputs to rural farmers.[70] (Note 16. AIP programme currently combines an economic and a social objective, respectively: (i) increasing agricultural production; and (ii) assisting poor farming households.)

- Recruited extension workers to promote delivery of extension services.[71]

- 13 Agriculture technologies generated in 2022-23 which included seven crop varieties, two to promote full army worm control and four different fertilizers.

https://documents1.worldbank.org/curated/en/515771612377662563/pdf/Malawi-Irrigation-Rural-Livelihoods-and-Agricultural-Development-Project-and-Agricultural-Development-Program-Support-Project.pdf

[62] https://www.agcom.gov.mw/

[63] Social Protection in Malawi: Assessment Based National Dialogue Brief.
https://www.ilo.org/wcmsp5/groups/public/---africa/---ro-abidjan/---ilo-lusaka/documents/publication/wcms_493330.pdf

[64] https://projectsportal.afdb.org/dataportal/VProject/show/P-MW-AAZ-004

[65] https://sarpn.org/documents/d0001262/P1496-policy-paper_malawi_May2004.pdf

[66] https://www.smedi.org.mw/

[67] UNICEF (2020) Report For The Afikepo Nutrition Programme and Nutrition-sensitive Agriculture component in Malawi. https://www.unicef.org/malawi/reports/report-afikepo-nutrition-programme-and-nutrition-sensitive-agriculture-component-malawi

[68] World Bank Project on "Investing in Early Years for Growth and Productivity in Malawi https://projects.worldbank.org/en/projects-operations/project-detail/P164771

[69]
https://www.wfp.org/countries/malawi#:~:text=WFP%20supports%20education%20through%20the,bought%20from%20local%20smallholder%20farmers.

[70] https://www.ifpri.org/publication/guiding-principles-aip-reform#:~:text=Malawi's%20Affordable%20Inputs%20Program%20(AIP,ii)%20assisting%20poor%20farming%20households.

[71] Sydney Chaima (2020) Malawi: Government to Recruit 337 Extension Workers. Malawi News Agency (Lilongwe). 10 September. https://allafrica.com/stories/202009100744.html

Monitoring mechanisms involve a coordinated structure through the Pillar and Enabler Coordinating Groups (PECGs) and specific ministries, departments and agencies. The Department of Economic Planning and Development in collaboration with key players produces the country's report on all SDGs.

To conclude, the following recommendations were made to better progress of SDG 2 in Malawi:

- Promote timely provision of early warning signs.
- Promote cultivation of early maturing varieties of crops.
- Promote Irrigation farming methods.
- Promote sound economic management.
- Promote weather insurance among small to medium scale farmers.
- Finalise the development of the new Agriculture Policy.[72, 73]
- Finalise the Millenium Challenge Corporation and Malawi Government proposals on Accelerated Growth Corridors (AGC) project and the Increased Land Productivity project.[74]

Questions from the participants

Q: how does Malawi negotiate with climate change?

A: We need to accelerate progress more.

Q: If you do not have a target in SDG 2 regarding climate impact on food security, how do the agencies coordinate?

A: The country has national key deliverables. The Ministry of Finance should add climate impact to this target so that we can come up with the plan.

D.2.4. Status of SDG 2 (Zero Hunger) in Bhutan

Presented by Phurba, Dy. Chief Planning Officer, Office of the Cabinet Affairs and Strategic Coordination, Kingdom of Bhutan

An overview of the implementation of SDGs in Bhutan was given. SDGs were referred to when formulating the 12th Five Year Plan Objective and the National Key Results Areas (NKRAs). The preliminary assessment of the 12th Plan NKRAs vis-à-vis the SDGs showed that 16 SDG goals have been integrated into the 17 NKRAs, except SDG 14, Life under Water.

Implementation of SDG 2 in Bhutan is led by the Ministry of Agriculture and Livestock by giving policy support, technical support, overall guidance and other inputs to the local governments which bear the operational responsibilities.

Gaps in SDG 2 attainment are structural. While close to 100% (97%) of households were food self-sufficient, food sufficiency was mainly dependent on high volume imports. For example, food self-sufficiency ratio for Bhutan's stable cereal, like rice, was only 45%. Rural households still

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[72] Ministry of Agriculture and Food Security, 2010. The National Agriculture Policy. https://faolex.fao.org/docs/pdf/mlw141073.pdf

[73] World Bank, 2017. New Policies to Help Transform Malawi's Agriculture Sector https://www.worldbank.org/en/news/feature/2017/01/31/new-policies-to-transform-malawi-agriculture-sector

[74] Millenium Challenge Cooperation, (2022) Malawi Transport and Land Compact, September 28, https://www.mcc.gov/where-we-work/program/malawi-transport-land-compact

experienced seasonal food shortages, and approximately four percent of people in rural areas reported experiencing food insufficiency.

Likewise, gaps in ensuring sustainable agricultural productivity remained. The agricultural sector employs 43.5% of the workforce and produces 14.67% share of the GDP.

Eight years into implementing the SDGs, data availability remains an issue concerning timeliness and reliability. For example, more up to date data is required for a better understanding of the nutrition situation in the country today.

Key challenges in achieving SDG 2 are a few. These challenges exist in the domain of labour shortage, feminization of agriculture and ageing farming population and human wildlife conflicts. According to the 2021 National Impact Assessment Report on Electric Fencing, farmers suffer crop loss between 19% to 43% annually due to wildlife damage despite guarding their fields for 3- 4 months.[75]

Other challenges are farming land and land fragmentation, low usage of modern agriculture and livestock inputs and technologies (about 24%) with about 29% of the agricultural area under assured irrigation. Agriculture in Bhutan remains predominantly subsistence farming. Only 9% of farmers produce for sale. The marketing of agriculture and livestock commodities is constrained by small land holdings, scattered settlements, low volume, seasonal production, high transportation costs, post-harvest losses, inefficient domestic market linkages and limited export market diversification. This weak value chain and marketing logistics prevents the country from moving up the country development ladder (Note 17 on Rostow's economic growth model)

(Note 17. Different measures are used to assess the country development which included 1) Social – relating to the development of the people of the place; 2) Economic - relating to the finances and wealth of the place; 3) Environmental – relating to the quality of air, water, soil etc., 4) Political - relating to the political systems and freedoms afforded by the place. Adopting a continuum perspective of development changing over time, Walt Rostow (1959) suggests that economic growth goes through five basic stages of different lengths (see Figure 24).
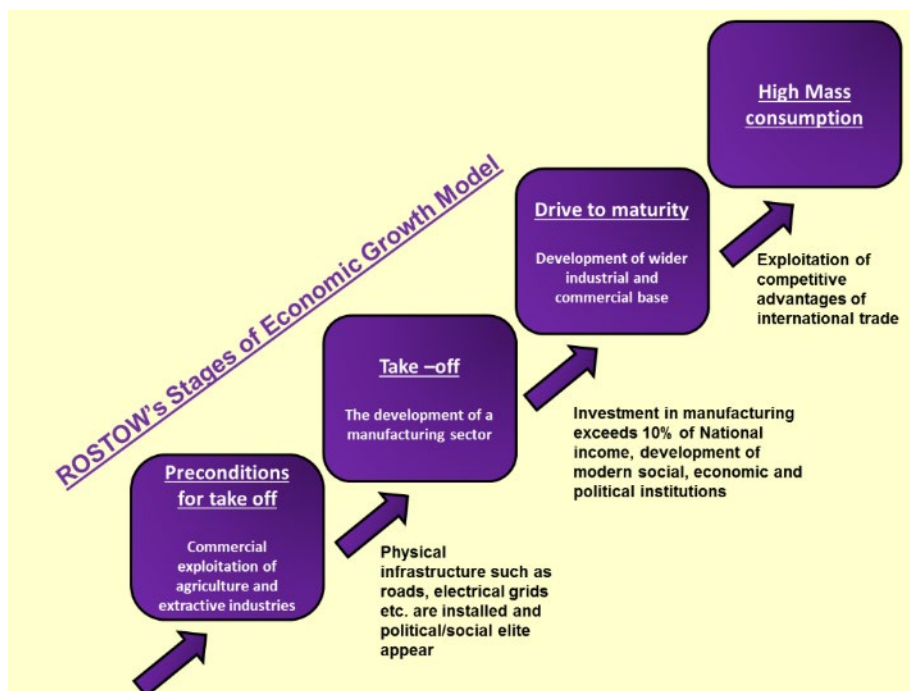

Figure 24: Rostow's Stages of Economic Growth (Source: W.W. Rostow, 1959)[76]

Climate change and other emerging issues such as pests and diseases also add to the vulnerability of the agriculture sector of Bhutan.

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[75] https://www.nppc.gov.bt/wp-content/uploads/2021/10/EF-impact-assessment-report.pdf

[76] https://en.wikipedia.org/wiki/Rostow's_stages_of_growth

As a strategic response, different policy interventions have been introduced. These include the following:

1. Relaxation of wetland utilization[77] and revitalization of fallow land.[78]

2. Agri-tech commercial farming, innovation, mechanization, and clustered production.

3. High value agriculture and livestock farming, high end export markets, niche commodities, digitalization, product diversification, ease of doing business.

4. Innovative interventions, commodity-based landscape, commercial organic farming, standardization and certification and bioprospecting.

Bhutan has developed the Dashboard to Enhance Wellbeing of All (DEWA) Platform[79], an integrated dashboard to monitor GNH, SDGs and development management in the country. It will enable more up to date analysis of SDG indicator status as well as current state of data gaps and availability.

To move forward, Bhutan intends to implement two national strategies from 2024-2029 by: supporting food security and commercializing technology enabled high value agriculture and livestock commodities.

Questions from the participants

> Q: Since the country has a labour shortage in agriculture, do they receive farmers from abroad to help?

For the labor shortage, it is seasonal since it depends on the season of agriculture. Also, we do not allow farmers from outside. We might need to shift policy to increase industry and agriculture in the country. Also, the data that is presented is the percentage of people who are registered as farmers, but it does not mean that they are actually working in the farm sector only. [80]

> Q: I realize that there are more women in the agriculture sector in the country. Could you elaborate more about the problem?

A: Since females are the head of household in the country, they inherit a proportion of land and they do the agriculture. For the males, they usually go to school and get better education and work in other sectors. Because Bhutan has a role structure, it becomes a challenge.[81] Females and males need to work together to come up with innovative solutions, such as technology.

> Q: How does the country integrate the SDGs into the National Plan?

In 2015, SDGs were adopted by our leaders so we identified which of the indicators are relevant for Bhutan. Through that, we found the key areas and key agencies and took it forward to have 17 National Areas. It is quite different from SDG. However, it is the combination of two or several SDGs (see Figure 25).

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[77] The Uguen Wangchuck Institute of Conservation and and Environment. Saving Wetland Sky High: Inventory of High altitude wetlands in Bhutan.
http://www.uwice.gov.bt/admin_uwice/publications/publication_files/Reports/2011/UWICER-IOHAWIB.pdf

[78] Technical Report: Land Use Land Cover Assessment of Bhutan 2020. https://www.nlcs.gov.bt/wp-content/uploads/publications/LULC_Technical.pdf

[79] http://www.dewa.gov.bt/

[80] Department of Labour, Ministry of Labour and Human Resources. Regulation on Foreign Workers Management 2022. https://www.moice.gov.bt/wp-content/uploads/2022/08/Regulation-on-FWM-2022.pdf

[81] National Commission for Women and Children, Royal Government of Bhutan. 2019. Gender Equality in Bhutan – A Situational Analysis - Kunzang Lhamu, NCWC, Director 05/Apr/2019. https://www.ncwc.gov.bt/notifications/324

Figure 25: Structure of SDG implementation in Bhutan
(Source: Phurba, ETC 2023 presentation)

Throughout the time, we made policy indicators and made huge transformations, including in the internal restructuring, to increase productivity. We also made short- and long-term plans and goals on how to coordinate and integrate through annual planning and budgeting.

Module 4

SDG 13 – Take urgent action to combat climate change and its impacts (moderated by Ms. Sara Castro De Hallgren, Sustainable Development Officer, UNOSD)

Framing: Climate Change, health, humanitarian crises, and climate injustice (Ms. Lichia Saner-Yiu, UNOSD Consultant)

Extreme weather events, heat stress, declining air quality, changes in water quality and quantity, declining food security and safety, and changes in vector distribution and ecology threaten all peoples and countries. As the planet heats (see Figure 26), climate risks are increasingly complex, frequent, and unpredictable; compounding existing vulnerabilities and inequities within populations causing emergencies that cascade across different systems and sectors.

Figure 26: Global average temperature anomalies (1850-2022) by different modeling and databases (Source: WMO, 2023)

Although the Paris Agreement of 2015 outlines a global action framework that incorporates provisions of climate finance for developing countries, this support has yet to be materialized. Wealthy nations must be urged to step up support for Africa and vulnerable countries in addressing past, present, and future impacts of climate change. Better alignment of Foreign Direct Investment (FDI) with the countries' climate transition policies will be a step toward closing the investment gap needed for climate adaptation and just transition.

This module explored policy options for countries to reduce climate risks and vulnerabilities and to examine co-benefits and synergies with other SDGs that underpin a country's development strategies in times of climate emergency and other man-made calamities. In this context, developing countries most exposed to climate threats need to re-examine their domestic policy coherence to effectively mobilize international support with great effects. Technologies are available to correct past mistakes and help countries switch to a green path which can reduce vulnerability to climate threats.[82, 83]

D.2.5. "Key Points on Climate Change and Policymaking with Nexus Solutions"

Presented by Sara Castro De Hallgren, Sustainable Development Officer, UNOSD

IPCC projections for 2300 in the 'BaU' scenario to potentially bring global temperature back to 50 million years ago (see Figure 27).[84] (Note18)

(Note 18. "Historic data from 1850 to today show the distinct increase after 1950 marking the onset of the Anthropocene. Future projections for global temperature for three Representative Concentration Pathways (RCP) scenarios in relation to the benthic deep-sea record suggest that by 2100 the climate state will be comparable to the Miocene Climate Optimum (~16 million years ago), well beyond the threshold for nucleating continental ice sheets. If emissions are constant after 2100 and are not stabilized before 2250, global climate by 2300 might enter the hothouse world of the early Eocene (~50 million years ago) with its multiple global warming events and no large ice sheets at the poles". EurekaAlert, 2020) [85]
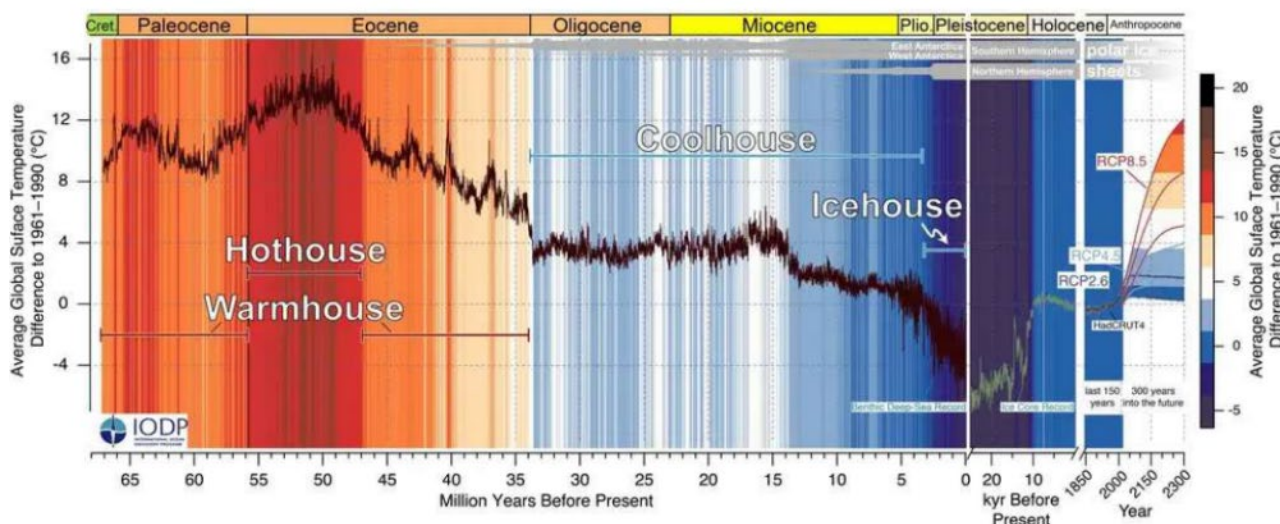
[82] https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(22)01991-2/fulltext

[83] https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(22)01986-9/fulltext

[84] https://www.ipcc.ch/report/ar6/wg1/downloads/report/IPCC_AR6_WGI_Chapter04.pdf

[85] University of California, Santa Cruz (2020) High-fidelity record of Earth's climate history puts current changes in context. EurkaAlert. September 10. https://www.eurekalert.org/news-releases/687550

Figure 27: Past and Future Trends in Global Mean Temperature Spanning the Last 67 Million Years
(Source: University of California - Santa Cruz)[86]

How would climate change impact the world population? Asia with its largest population is most vulnerable to the extreme weather and other associated uncertainties, followed by Africa. It is estimated that every 7 persons out of 10 in 2100 will be living either in Asia or Africa (Figure 28). Both continents are also home of the largest number of poor people who are most vulnerable to any forms of disaster if socio-economic development brings no major improvement on human development of these two continents.
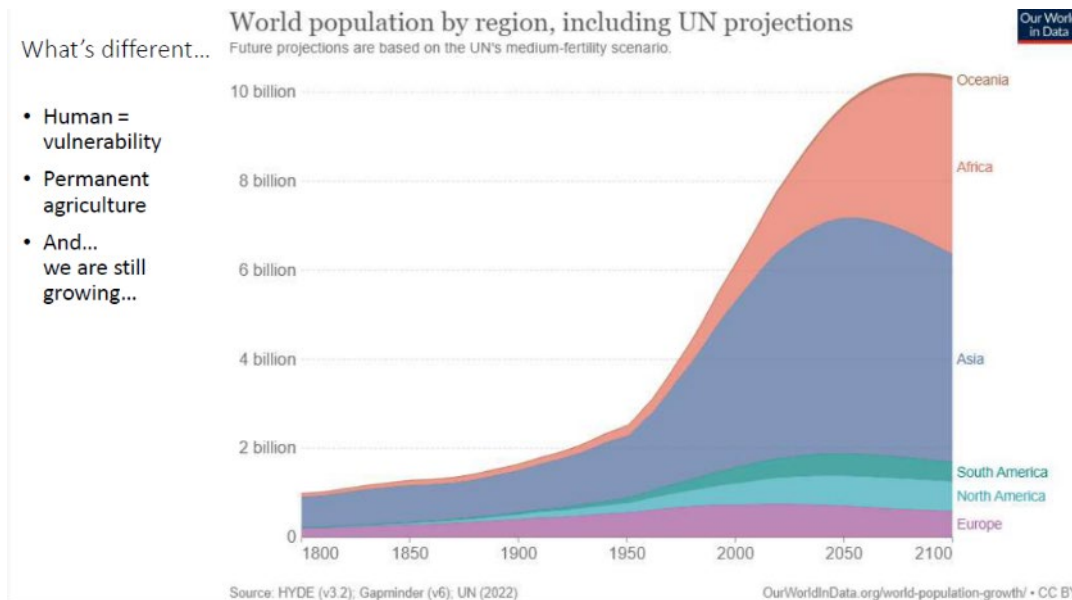
Figure 28: Demographic projection to 2100
(Source: Hannah Ritchie, Our World in Data)[87]

What are the consequences of continued population growth and unimpeded global warming? A Costs and Benefits Analysis would show that humans will be both positively and negatively affected while nature will adapt.

If global leaders unite in a systemic net-zero transition, the global economy could see 5-decade gains of US$43 trillion. Yet, the most vulnerable will be impacted depending on adaptation pace, lost productivity, food and water security. They won't be able to adapt, especially agricultural production, making the farming communities the most vulnerable.

Any time left? Earth's tipping point is getting closer. The world will exceed 1.5 degree Celsius by 2035 and faces a 2.5 degree Celsius warning by 2100 (see Figure 29).

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[86] https://www.eurekalert.org/multimedia/885810

[87] https://ourworldindata.org/region-population-2100
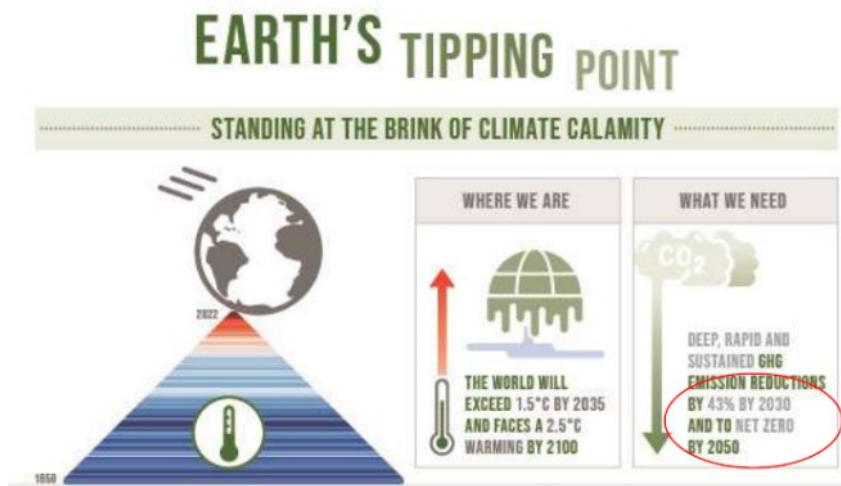
Figure 29: Earth Tipping Point (Source: UN DESA Sustainable Development. 2023)[88]

Along other SDGs, SDG 13 still remains lacking in terms of progress. Taking a closer view from Asia and the Pacific regarding progress in the areas of poverty reduction, hunger, health, climate change, life under the water, life on land, peace, justice and strong institutions and partnership for the goals, the situations are worrisome to say the least (Figure 30).
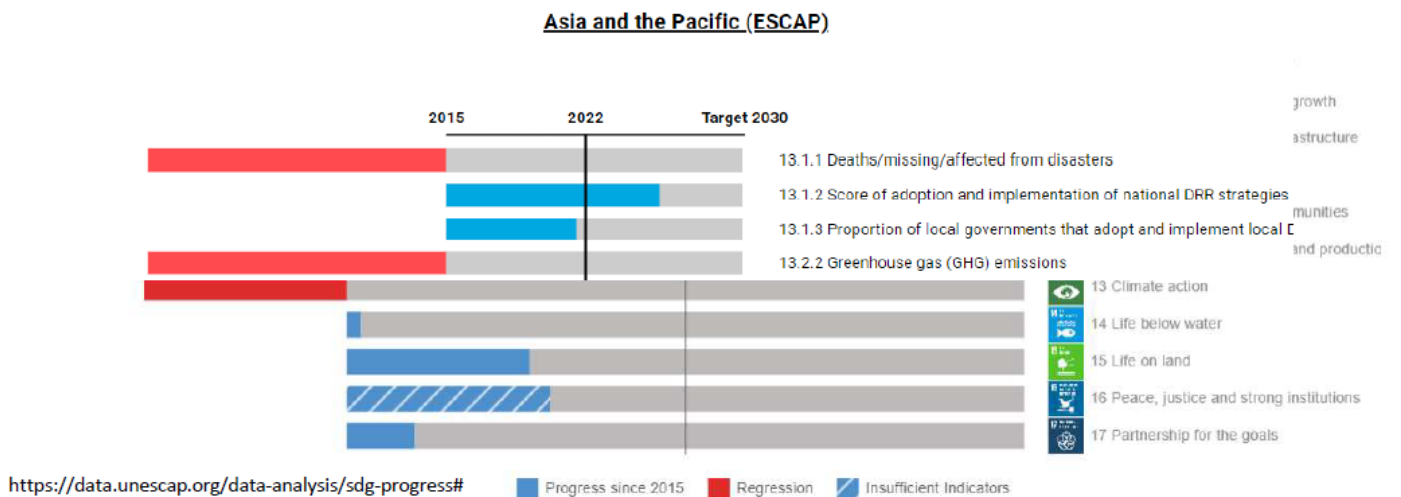
Figure 30: Stocktaking of selected SDGs implementation in Asia and the Pacific Region
(Source: ESCAP, 2023)[89]

A recent survey on SDGs and nexus approach for policymaking showed that the primary concerns amongst the respondents were: triple planetary crisis for biodiversity loss, climate change and pollution; just transition, policy options and monitoring and assessment; tools for risk-informed planning and enforcement at local level.

The central element in dealing with climate change crisis and maximizing collective action impact concerns human behaviour. Social norms, habits, behaviors are contributing to the lack of progress in dealing with climate change. Behavioral science solutions underpin personal choices for policy innovations. People-centered approaches e.g., cognitive psychology should be adopted to define deep rooted needs of people.

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[88] https://sdgs.un.org/goals/goal13
[89] https://data.unescap.org/data-analysis/sdg progress#

To conclude, a stepwise model in planning for green growth behaviour interventions was introduced which consisted of five steps from defining the green growth priorities for impact (Step 1) to diagnostic of current behavior (Step 3) to horizontal expansion and scale up (Step 5) (see Figure 31).
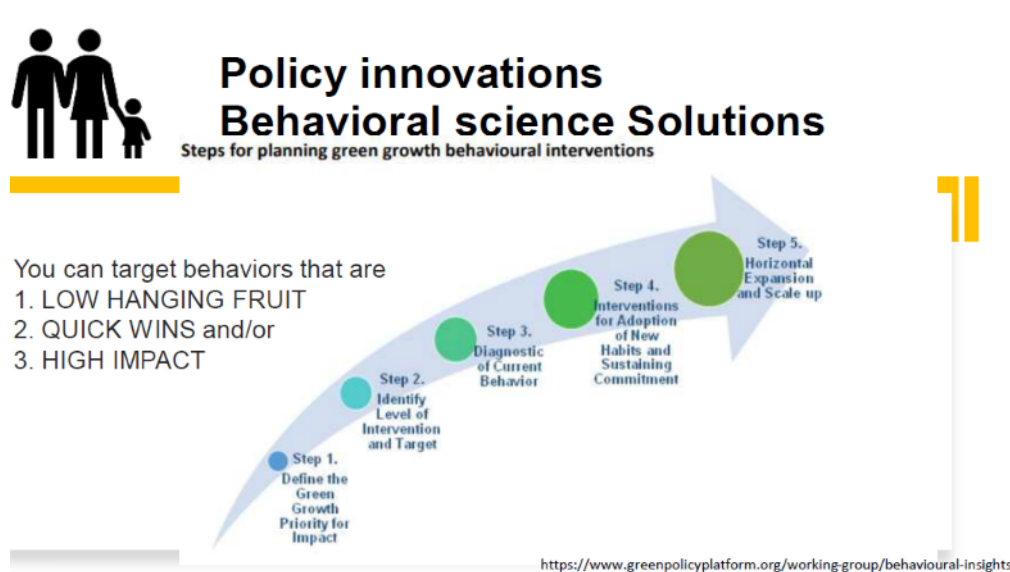
Figure 32: Behaviour Science Solutions to Policy Interventions
(Source: Sara Sara Castro de Hallgren, ETC 2023 presentation)

D.2.6. "Environmentally Sound Technologies for Low Carbon Climate Resilient Development"

Presented by Suil Kang, Coordination Officer, Climate Technology Centre and Network (CTCN)

Environmentally Sound Technologies (ESTs) are technologies or systems that can have significantly higher environmental performance in comparison with other technologies, in terms of environmental protection, limiting pollution, and better addressing sustainability, recycling, and waste management.

SDG 17.7 Promotes sustainable technologies for developing countries. In the context of climate change and EST, this target is to promote the development, transfer, dissemination and diffusion of environmentally sound technologies for developing countries on favourable terms including concessional and preferential terms, as mutually agreed by 2030.

Connected to its implementation, Indicator 17.7.1 reviews "the total amount of approved funding for developing countries to promote the development, transfer, dissemination and diffusion of environmentally sound technologies". This indicator is measured in terms of the total trade of tracked ESTs, which includes exports, imports, and re-exports and re-imports, as well as national investment in ESTs.

China and the USA are the largest exporters of the ESTs and importers as well. Combined exports of ESTs of China and USA approximately amount to around US$1 trillion in 2020 (UN Statistics Division, UNDESA, 2023) (see Figure 33).

Export of environmentally sound technologies, 2020
Environmentally sound technologies (ESTs) are technologies that have the potential for significantly improved environmental performance relative to other technologies. This indicator shows the value of exported ESTs in current US-$.

No data $0 $5 billion $10 billion $25 billion $50 billion $100 billion $250 billion $500 billion

Source: UN Statistics Division   OurWorldInData.org/trade-and-globalization • CC BY
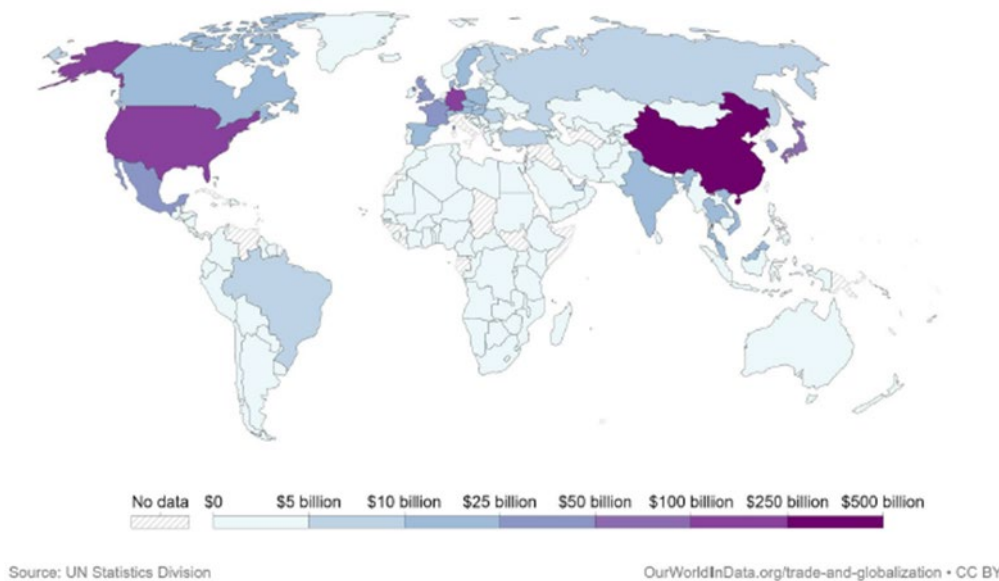
Figure 33: Import of ESTs by countries, 2020
(Source: https://unstats.un.org/sdgs/metadata/files/Metadata-17-07-01.pdf)

What are climate technologies? These technologies help 1) reduce GHGs, include renewable energies such as wind energy, solar power and hydropower; 2) adapt to the adverse effects of climate change, e.g., drought- resistant crops, early warning systems and sea walls 3) soft climate technologies such as energy-efficient practices or training for using equipment.

Technologies are often classified into three types: hardware, software, and orgware.

- Hard technologies, or *hardware*, refer to physical tools;

- Soft technologies, or *software*, refer to the processes, knowledge and skills required in using the technology; and

- Organisational technologies, or *orgware*, refer to the ownership and institutional arrangements pertaining to a technology (Christiansen et al., 2011, UNFCCC, 2014b)[90].

It is important to understand the differences between these technology types, as well as their synergies and complementarities.

A brief description on the UN Climate Technology Centre and Network (CTCN), an integral mechanism of the climate convention follows. UN CTCN was established by Parties in 2010 (COP16) as an implementing arm of technology mechanism. The official operation was started in 2014 jointly by UNEP and UNIDO with a mission to stimulate technology cooperation and enhance the development and transfer of technologies to developing country parties at their request. CTCN services include technical assistance, knowledge sharing and collaboration and networking to support the implementation of the Paris Agreement (Figure 34).

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[90] Christiansen, L., Olhoff, A., and Trærup, S., 2011. (eds.): Technologies for Adaptation: Perspectives and Practical Experiences, UNEP Risø Centre, Roskilde, https://wedocs.unep.org/20.500.11822/8040 Also referenced in https://unfccc.int/ttclear/misc_/StaticFiles/gnwoerk_static/TEC_column_L/0cac6640a3b945c08e7a54f8e496223e/55e192e14cd6495f975f4098843baf7e.pdf
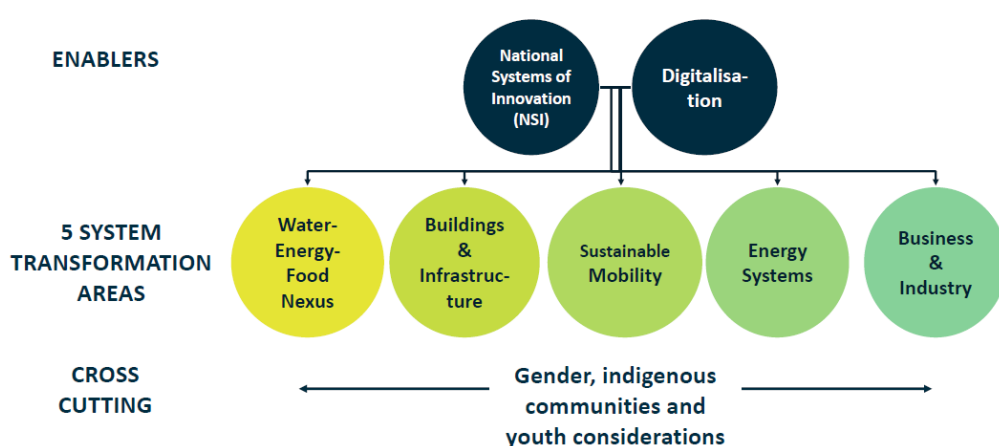
Figure 34: Programme of Work of the CTCN (2024-2027).
(Source: Suil Kang, ETC 2023 Presentation)

To conclude, a quick summary of the outputs was presented in terms of distribution of TA requests by region, objective (mitigation, adaptation and combined), by sector and by type of assistance. For the period of 2019-2022, CTCN received 193 TA requests, implemented 154 TAs and served 90 countries. 58% of active TAs during the period of 2019-2023 supported SIDS and LDCs.

D.2.7. "Climate FDI? Reality or Fantasy?"

Presented by Amelia Santos-Paulino, Chief, Investment Issues and Analysis Section, Investment Research Branch, Investment and Enterprise Division, United Nations Conference on Trade and Development (UNCTAD)

Key findings in the 2023 World Investment Report[91] were highlighted.

- Global FDI flows declined in 2022 to $1.3 trillion, down 12 percent, but new project announcements showed bright spots. For example, Greenfield projects were up by 15%, international project finance were also up by 8%; however cross-border Merger and Acquisition decreased by 4%, FDI flow showed 12% decline.

- FDI in developing countries increased marginally, but growth was concentrated in a few large emerging economies. Figure 35 compared the FDI inflows by region in 2021-2022.

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[91] https://unctad.org/publication/world-investment-report-2023

	Per cent
World	1 295 / 1 478	- 12
Developed economies	378 / 597	- 37
Europe	- 107 / 51	..
North America	338 / 453	- 26
Developing economies	916 / 881	+ 4
Africa	45 / 80	- 44
Latin America and the Caribbean	208 / 138	+ 51
Asia	662 / 662	0

■ 2022 ■ 2021
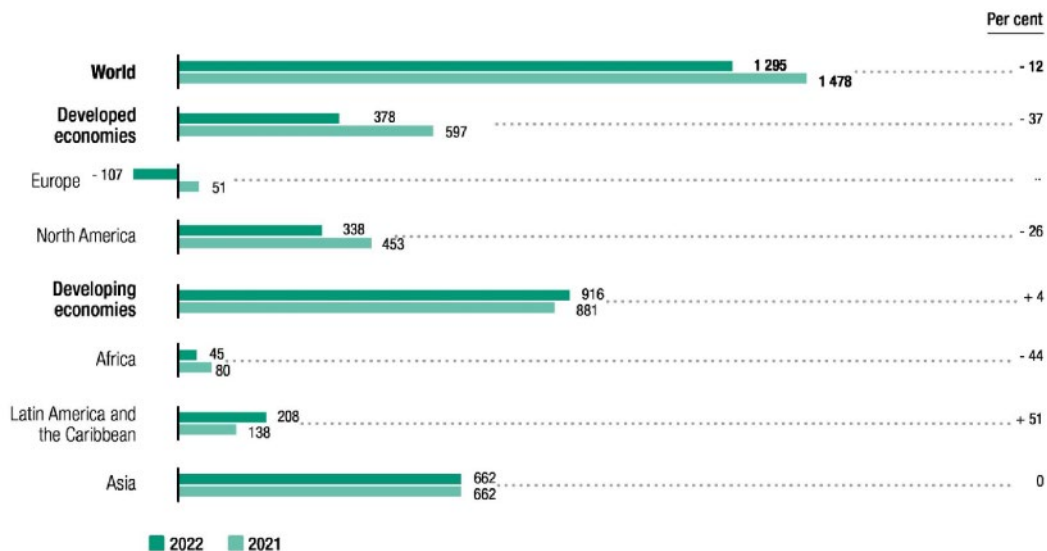
Figure 35: FDI inflows by region in 2021-2022 (billions of dollars and per cent)
(Source: 2023 WIR Report)

- International private investment activity in SDG sectors increased substantially in 2022 but the growth is unbalanced (see Figure 36). By comparing 2022 and 2015 the largest increase in the number of projects can be seen in climate change (SDG 13), by 21%; followed by infrastructure related investment (SDG 7, SDG 9 and SDG 11), by 16%. What is worrisome is the 19% decline in investment in agriculture and food chains (SDG 2).

		2021–2022	2015–2022
Infrastructure Transport infrastructure, power generation and distribution (except renewables), telecommunication	7, 9, 11	+26%	+16%
Renewable energy Installations for renewable energy generation, all sources	13	+8%	+21%
WASH Provision of water and sanitation to industry and households	6	+20%	+13%
Agrifood systems Agricultural production and processes; fertilizers, pesticides and other chemicals; R&D; technology	2	+6%	-19%
Health and education Hospital facilities, school buildings and other infrastructure for service delivery	3, 4	+8%	+11%

Figure 36: number of projects (Per cent). (Source: 2023 WIR Report)

- Investment in renewables has nearly tripled since 2015, but growth in developing countries has been slower. There is even a 8.2% decrease in terms of investment projects in the least developed countries.

- Capital markets and sustainable finance in 2022 continued to show signs of upward trend in sustainability related investments and projected to reach 7,012 billion USD. The sustainable bond market continues also to grow, despite a decline in the issuance of new bonds in 2022 reaching 14 times growth in annual issuance from 2017-2022. Social bonds after a strong growth from 2019 showed signs of slowing down (Figure 37).
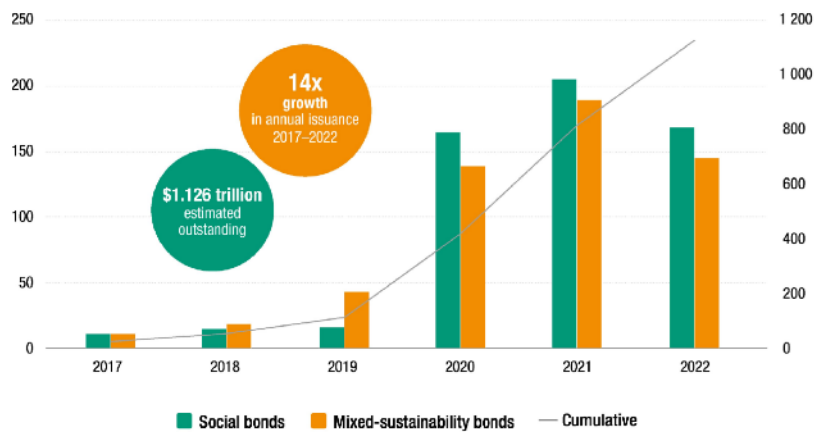
Figure 37: Global sustainable bond issuance, by category, sector and region, 2022 (Billions of dollars and year-on-year growth) (Source: WIR 2023)

- Global FDI flows declined in 2022 to $1.3 trillion, down 12 percent, but new project announcements show bright spots.

- FDI in developing countries increased marginally, but growth was concentrated in a few large emerging economies, such as China.

- Stock exchanges play a major role in promoting responsible investment. Of which training in ESD topics are the fastest growing type since 2014, followed by written guidance on ESG reporting (see Figure 38).
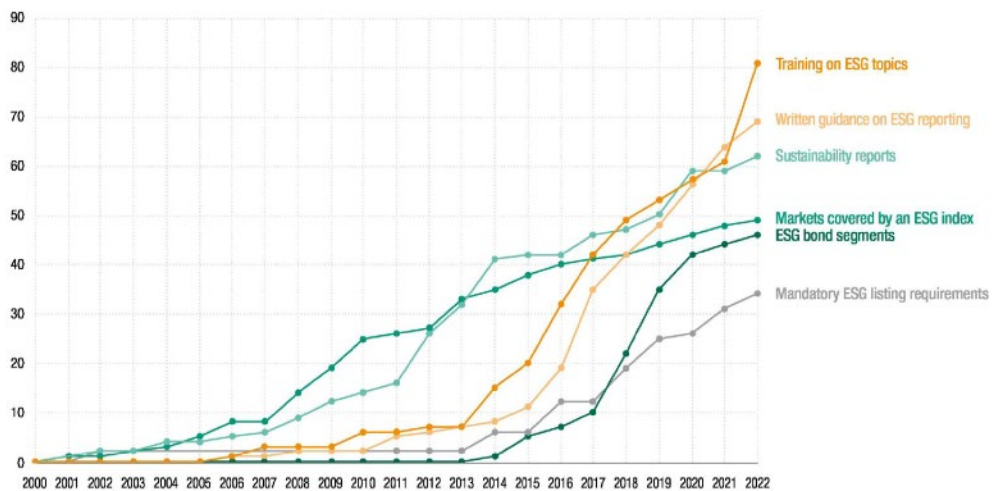
Figure 38: Stock exchange sustainability trends, 2000–2021 (Number of exchanges) (Source: WIR 2023)

- Investing in sustainable energy for all is central to achieving most of the SDGs. The countries most in need of energy investment are least successful in attracting energy-sector FDI. In most countries with low rates of FDI in renewable energy, this deficit reflects overall weakness as a destination for FDI. Top 10 developing economies by investment in renewable energy (2015-2022) consist of Brazil, Viet Nam, Chile, India, Kazakhstan, Taiwan province of China, Egypt, Mexico, Indonesia, and Morocco.

- Investment decisions about new energy infrastructure are driven by various factors and the specific political context. Drivers and determinants of energy transition investment include economic, regulatory, technological and environmental considerations while

political context involves energy security concerns, nationally determined contributions and energy transition strategies (see Figure 39).

Economic
- Investment and operating costs
- Cost of capital
- Expected returns

Regulatory
- Investment climate (e.g. planning process)
- Sector regulations (e.g. electricity pricing)
- Fiscal tools

KEY FACTORS

Technological
- Readiness and suitability of technologies, intermittency issues
- Availability of technological and human capacity
- Surrounding infrastructure, transmission lines, storage

Environmental
- Presence of fossil fuel resources
- Renewable energy potential
- Climate and environmental concerns

Political context: energy security concerns, nationally determined contributions, energy transition strategies

Figure 39: Drivers and determinants of energy transition investment
(Source: WIR2023)

Table 8 lists key challenges for international investment in the energy transition. These challenges vary from different contexts and corresponding trends, i.e., general FDI trends, to project finance trends, investment policy and capital market and sustainable finance trends.

FDI trends	
Geographical concentration	Despite strong growth in international investment in renewable energy at the global level, many developing countries are lagging behind.
Sectoral and supply chain concentration	International investment focuses very much on renewable energy generation and much less on other sectors that are crucial for the energy transition.
Investment paradoxes	The pipeline of new investment projects in fossil fuels is still flowing and will for another two decades or more, with asset lifetimes exceeding 30 years.
Project finance trends	
Reliance on international investors	FDI plays a significant role in renewables projects worldwide, but more so in those countries most in need of and least attractive to international investors.
Cost of capital constraints	The high cost of capital in countries in debt distress or with high risk ratings is a strong disincentive for investors to shift towards renewable energy assets.
Insufficient and unbalanced support	International support mechanisms are crucial to catalyse investment; a relatively low share of support reaches countries with low access to electricity.
Investment policy trends	
Weak investment planning in NDCs	Nationally determined contributions and energy transition strategies in many countries do not provide a sufficient basis for effective investment promotion.
Generic investment promotion tools	Developing countries and especially LDCs rely to a large degree on investment promotion tools not designed specifically to support the energy transition.
Old-generation IIAs	Un-reformed IIAs can hinder the implementation of measures needed for the energy transition.
Capital market and sustainable finance trends	
Sustainable finance momentum	Climate finance slowed in 2022, trends in energy markets caused a shift in investment portfolios back to fossil fuels and greenwashing concerns remain.
Institutional investor inertia	A majority of the world's largest funds do not yet disclose or commit to net zero in their investment strategies.
Low coverage of carbon markets	More than three quarters of global emissions are not yet covered by carbon markets, and the spread in the price of carbon across markets is too wide.

A Global Action Compact is needed to respond to the identified challenges and achieve balance between various imperatives and interests. This proposed Global Action Compact will articulate the desired guiding principles and define the design criteria for investment strategies, policies and treaties. The goal of this compact is to implement a just transition to meet global climate goals, to achieve the goal of access to affordable and clean energy for all, and to ensure energy security and resilient energy supply.

Country Case Presentations

D.2.8. "Korea's Climate Action: National Stocktake"

Presented by Eun-Hae Jeong, President of the Greenhouse Gas Inventory & Research Center (GIR), Republic of Korea

The vision and goal of GIR is to be a global GHG think-tank for low carbon development. Its mission is threefold: to become the GHG information hub and manage GHG inventory with efficiency; to accelerate low carbon development and reduce GHG; and to expand global network and outreach and contribute to international climate change mitigation efforts. [92]

After a brief view of the Korean economy and its composition, the focus of the talk moved to GHGs Inventory and Nationally Determined Contributions (NDC) to CO_2 emission reduction. Corresponding institutional arrangements were propagated into framework law, regulations and action plans (see Figure 40).

Figure 40: Korea's institutional arrangements in achieving carbon neutrality and maintaining green growth development (Source: Eun-Hae Jeong, ETC 2023 presentation)

A MRV (measurement, reporting and verification) system has also been put in place to ensure compliance and implementation.

GHG Emissions by sector was mapped. The industrial sector produces 37.6% of GHG emissions, one of the highest amounts, followed by the energy supply sector at 32.7% of the total emissions and buildings at 7.4%. GHG emission per GDP has continued to decrease from 650 ton CO_2eq/billion Korean won in 1990 to 350 ton CO_2eq./billion Korean won in 2020.

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[92] https://www.gir.go.kr/eng/

The national GHG Reduction Target expects GHG cuts of 40% by 2030 by carrying out the following:

- Increase the use of clean electric power and hydrogen;
- Improve innovative energy efficiency in connection with digital technologies;
- Facilitate the development and commercialization of carbon-free future technologies;
- Promote sustainable industrial innovation and circular economy;
- Strengthen the carbon sink functions of nature and ecology including forests, mud flats, and wetlands.

Tracking and assessment of GHG reduction and progress are done across government ministries and offices by defining indexes and setting sector and task goals, and collecting and submitting yearly performance data (Source: 4th Biennial Update Report of the Republic of Korea (Government of ROK, 2021)).

Mitigation policies and measures were set by sectors in addition to setting up a Korean Emissions Trading System. These mitigation policies and measures cover the following sectors, i.e., energy transition, industry, building, transportation, waste, public and other sectors, agriculture and fishery, and forest carbon sinks.

Lessons learned were shared as the concluding remarks of this presentation. It was found that people centered approaches and inclusiveness is the key to reduction of GHG emissions, e.g., air quality drives the phase out of old coal power and significantly reduces both GHGs and air pollutants. Synergies can be materialized with careful policy measures[93, 94] e.g., National Council on Climate Change and Air Quality recommended major policy directions in this regard. Ultimately, political leadership and strong public support induce consistency even with administration change (40% reduction compared 2018 level).

Ample challenges ahead due to the economic structure of the country to reduce air pollution and overall GHG emission. These challenges include:

- Uncertain outcome of ESTs: the need for rapid emission reduction over short period of time is hampered by uncertainty in major emission reduction technologies (e.g. Hydrogen DRI, Bio Naphtha, batteries)
- Trade-offs with other goals, such as rare metal extraction, water food energy nexus, development vs conservation, etc.
- Divergence at multilevel interdependencies to reduce air pollution and GHG emission. Not only nations, regions, and communities are divided in their views of the right paths forward, by science, and also by the seemingly weak common interests.[95]

Day 3, 7th September 2023

Module 5

[93] Jung, T.Y., 2019, "Air Quality and Regional Co-operation in South Korea". *Global Asia*, Vol.14 (4) December. https://www.globalasia.org/v14no4/cover/air-quality-and-regional-co-operation-in-south-korea_tae-yong-jung

[94] Ministry of Foreign Affairs. Multilateral Environment Diplomacy. Accessed 08.10.2023. https://www.mofa.go.kr/eng/wpge/m_5654/contents.do

[95] Climate Action Tracker, South Korea. 17.07.2023. https://climateactiontracker.org/countries/south-korea/policies-action/

SDG 16 – Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable, and inclusive institutions at all levels (Ms. Lichia Saner-Yiu, UNOSD Consultant)

Framing: Transparency, good governance, performance feedback, citizen engagement as means to promote peace, justice, and inclusive institutions at all levels, with a special attention to the city level

Socio-economic, political, cultural and environmental conflicts are creating humanitarian emergencies displacing more than 100 million people. Almost 1 in 6 businesses have received bribe requests from public officials and citizens' trust of public institutions are eroded steadily by negative news or fake news often amplified by social media.

The collusion of power and wealth have reduced the civil liberties in many countries, while voices of the citizens and marginalized groups are often not heard. Democratic deficit has had a detrimental effect on the functioning of public institutions and diminished social cohesion, solidarity and common vision to tackle sustainability crisis.

The lack of access to justice and social protection makes children, women and other vulnerable groups vulnerable to abuse, human trafficking and other forms of inhumane treatment. Good governance is necessary to strengthen the performance of the public institutions and deliver the expected public services in compliance with the standard and regulation.

Good governance can ensure effective and close alignment of political decision making with the will and needs of the people. It also safeguards the alignment of practices and performance of the public institutions with established policies and standards. Good governance which focuses on the process of getting things done, supports the congruence between policy, budgeting, and service delivery with transparency, equity, inclusiveness and participation (Figure 41). The public institutions are meant to "say what they do" and "do what they say" and "report what they have done".
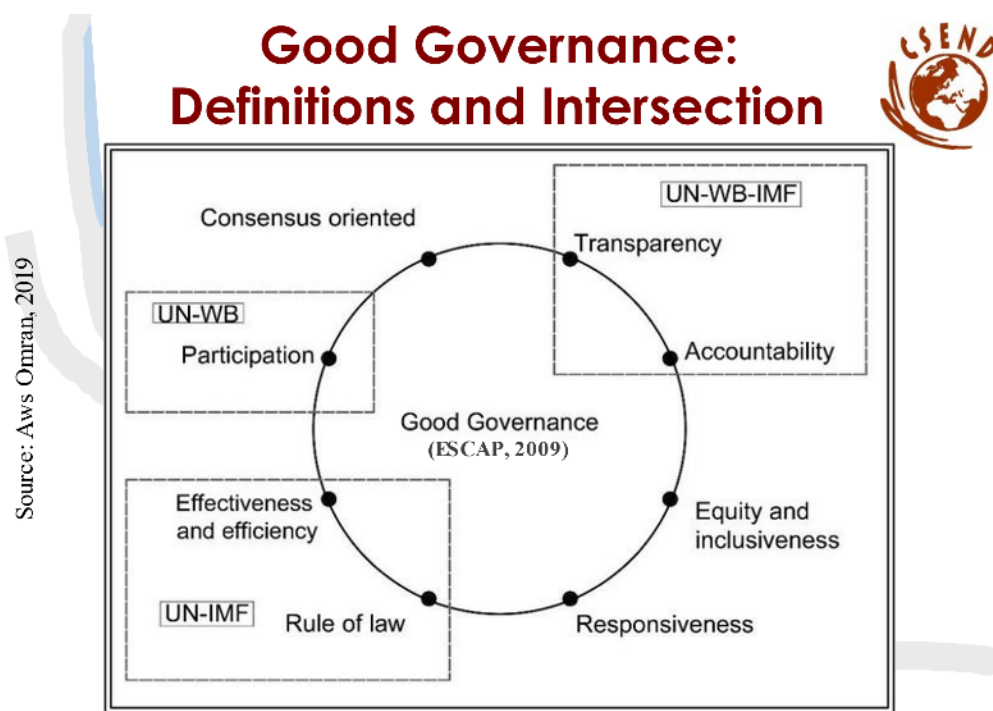
Figure 41: Good Governance by definition with converging views (ESCAP, 2009)[96]

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[96] Omran, A. 2018. "Urban Governance in War Torn Countries - Case study: urban governance in Damascus-Syria before and during the conflict".

In the spirit of Leaving No One Behind, such transparency brings forth true accountability to the citizens. Various tested procedural instruments exist to regulate the rule making or policy design processes. They are:

1. opening up the policy process;

2. supporting decision-makers with evidence and consultation new proposals;

3. giving access to information to citizens; and

4. creating bodies to limit maladministration.

Specific design mix, fitting the national contexts and institutional capacities could lead to positive policy outcomes measured by the quality of business environment, the control of corruption and environmental performance[97]. These policy performance outcomes are in line with the SDG Goal 16 of the 2030 Agenda resulting in good governance toward sustainable development.

D.3.1. "Strengthening Public Administration for the 2030 Sustainable Development Agenda"
Presented by Jorg Michael Dostal, Professor, Graduate School of Public Administration, Seoul National University

Strengthening Public administration by strengthening the UN system? Specific characteristics may hinder the functioning and performance of the UN system. These characteristics are:

- Political nature of the UN system

- Intergovernmental organization (IGO)

- Competing political logics:

- State hierarchy versus nominal equality between states

- State power versus global society/global public opinion (UN itself is not a state)

- State influence versus influence of numerous non state actors invited to participate in the UN system

- Degrees of autonomy of the UN personnel partially derives from the demands of individual states and funders

Trade-offs in the UN system involve different logic. Logic 1 views UN as a state hierarchy with hard power. Permanent Members of the Security Council (P5) are: (1) USA, (2) Russia (previously Soviet Union), (3) Britain, (4) France, (5) China. The Veto power of the permanent members of the Security Council locks in the power distribution in the international system in 1945. There have been endless reform debates without reform since at least the 1990s.

Logic 2: UN General Assembly (193 member states) where one state has one voice. The General Assembly can resemble a 'talking shop', but thereby provides nominal equality between states. The UN system includes various organizations and bureaucracies with their own 'embedded autonomy'. The boundaries of the UN system are not fixed: they often facilitate participation of NGOs, academics, experts, philanthropists, celebrities, global public opinion.

Programmes and funds are financed through voluntary rather than assessed contributions. The Specialized Agencies are independent international organizations funded by both voluntary and assessed contributions".[98] The voluntary funding is causing legitimacy problems within the UN

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https://www.researchgate.net/publication/322581192_URBAN_GOVERNANCE_IN_WAR-TORN_COUNTRIES_-_Case_study_urban_governance_in_Damascus-Syria_before_and_during_the_conflict

[97] Radaelli, C., Kamkhhaji, J., Wagemann, C., Dunlop, C. & Taffoni, G. (unpublished manuscript). 2023.

[98] https://www.un.org/en/about us/un system

system, e.g. 'political investors' such as the Gates Foundation influencing the WHO research program.

2030 Agenda for Sustainable Development with 17 SDGs is very broad and apparently has uncontroversial goals. It does not clearly acknowledge that all public policy includes tradeoffs and that costs are being imposed on states and citizens, e.g. e-governance versus citizens' control of their own data, increasing energy prices for 'greening' the economy, competition over 'old' and 'new' ('green') strategic resources, and a shift in the boundary between state and civil society (new normative demands are being imposed in the name of green values the boundary between state and civil society and between state and citizens' life world is being shifted).

What is just and/or appropriate will always be contested in public policy, e.g. green taxes might reduce living standards and increase poverty. Increasingly, public policy assumes the form of multi-year and multi actor 'organizational discourse'.

Organizational discourse is "a controlled environment for the creation, development and dissemination of political discourse" to 'bridge the gap between political beliefs and concrete agenda-setting efforts' (Dostal, 2004)[99].

The 2030 Agenda for the SDGs has been confronted with deep regression rather than progress since 2020. Major policy failures include: (1) 'Collateral damage' of COVID policies (e.g. lockdowns, closure of education systems, economic damages to SME and the self employed); (2) Economic crisis due to collapse of production chains and exploding public deficits; (3) War in Ukraine: General focus on increasing military expenditure across the world crowds out other public spending. This sentiment is echoed by the Sustainable Development Goals Report, Special Edition 2023:

> "It is time to sound the alarm. At the midpoint on our way to 2030, the Sustainable Development Goals are in deep trouble. An assessment of the around 140 targets for which trend data is available shows that about half of these targets are moderately or severely off track; and over 30 per cent have either seen no movement or regressed below the 2015 baseline." (p. 4)[100].

A pivotal question is "How to strengthen public administration in order to advance SDG agenda?"

There is the general problem with broad normative agendas. The UN asks for SDG recommitment of member states that are in practice focusing on other issues. War in Ukraine crowds out other concerns. The green transition is open ended and is costly and contested, e.g. trouble of the current German government to impose costs on German households for 'energy transition' and crisis of industries due to high energy prices. The words 'should' and 'must' are frequently used in the 2023 SDG report to ask governments for things that they might not be able to deliver (even if they were strongly committed!)

Some demands made in the 2023 SDG Special edition report (p. 6):

'Leaders should embrace the climate acceleration agenda to drive a just renewables revolution and secure climate justice for those on the front lines of the climate crisis.'

'Major investments are needed to strengthen public sector capacity and build appropriate digital infrastructure.'

[99] Dostal, J. M. (2004). Campaigning on expertise: how the OECD framed EU welfare and labour market policies - and why success could trigger failure. Journal of European Public Policy, 11(3), 440-460. https://nbn-resolving.org/urn:nbn:de:0168-ssoar-54910-5

[100] https://desapublications.un.org/publications/sustainable-development-goals-report-2023-special-edition

'An effective regulatory framework is needed to align private sector governance models with sustainable development objectives'

'Member States should recognize and address the need for deep reforms of the international financial architecture through a new Bretton Woods moment, including by enhancing the voice and participation of developing countries in the governance of international financial institutions'.

These demands question the existing state hierarchy and power structures in the global financial system and institutions. Some demands are also rather unspecific, e.g. is a 'just renewables revolution' a question of political willpower or do we face cuts in living standards in the case of cuts in energy consumption?

Collaboration between UN member states (and in the context of regional organizations) suffers from lack of commitment and different economic interests. The SDGs might still serve a useful purpose in monitoring the situation and communicating progress or regression in various fields of policy making to UN member states. There is considerable scope to improve policy efficiency by increasing collaboration between UN member states (e.g. solar panels and wind farms might be employed in regions of the world in which they can be utilized most effectively). It is certainly necessary to keep a normative commitment to development, poverty reduction, and reconciling environmental and social justice concerns.

Questions from the participants

Q: National commitments of the country? Ideal or realistic

SDGs guide right governance. It might sound cautious and critical-but governance wants to hear reason.

Q: Do you think it will be difficult to get consensus?

There is no exact discourse, domestic agendas- not aligned with SDGs. More reliable statistics - transparent- do they really want that or back up?

Q:. The UN System: what level of engagement is appropriate in terms of timing and views?

(Note 19. When reflecting on the ways and means to progress the 2030 Agenda, the transboundary dimension and long-term impact of national policy on the global system as a whole becomes self-evident. In this context, the UN system as a space and platform for coordination, consultation, consensus making and learning is even more pivotal. How to engage with the UN, especially its development system, and the capacity to engage should be some of the strategic considerations relevant for all countries.

In this regard, two documents could be of useful reference: 1) views from the donor side: "Implementing the OECD Recommendation on Policy Coherence for Sustainable Development: Guidance Note", Chapter 4 (OECD, 2021)[101]. 2) views from the UN side: Model United Nations Guide: How Decisions are Made in the UN (UN, 2023)[102]

Q: Which developing nations are doing right?

(Note 20: A complex question. One perspective in thinking about "Doing Right" is measured by the level of human and social development over time, e.g., a decade. Thus, doing right would mean a country's capacity of leveraging international resources and cooperation coupled with smart national decision making that has led to higher level of human development. Then one can look at the Human Development Index of the past 10 years for example to answer this question.)

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[101] https://www.oecd.org/gov/pcsd/pcsd-guidance-note-publication.pdf
[102] https://www.un.org/en/model-united-nations/how-decisions-are-made-un

D.3.2. "Realizing the 2030 Agenda for Sustainable Development through digital government and innovative approach to citizen engagement"
Presented by Keping Yao, Senior Governance and Public Administration Expert, Project Office on Governance, UN DESA

Why go digital? The thinking is that digital government will be better able to achieve the 2030 agenda and ensuring LNOB. Digital technologies have allowed governments to play a key role in addressing the challenges and in ensuring effective delivery of essential public services during this period of growing uncertainty and vulnerability. Digital government can play a role in building effective, inclusive and accountable institutions to support policy making and service delivery for the SDGs. Digital government has experienced an ongoing shift from the traditional technocratic e-government approach to a digital development agenda – policy oriented, data-centric and politically driven.

By supporting the achievement of SDG16, digital governments can act as an enabler across all SDGs: SDG3 Good Health and Well-Being and SDG4 Quality Education: digital government for improved delivery of public services including better access to healthcare and better access to quality education. SDG5 Gender Equality: digital government for higher level of participation of women in decision-making processes and thus foster gender equality. SDG10 Reduced Inequalities: through improved delivery of public/basic services and higher participation in decision-making, digital government for reducing economic/social barriers and inequalities. SDG2 Zero Hunger: digitalization of agriculture for effective hunger eradication programmes. SDG11 Sustainable Cities and Communities: digital government for coordinated decision-making, planning and plan implementation for sustainable and resilient cities and communities. SDG17 Partnerships for the Goals: digital government for cultivating global and regional cooperation between public institutions as well as strategic partnerships with other stakeholders.

Digital government has expanded and evolved from siloed approaches to whole-of-government and whole-of-society approaches. With the evolution of digital government, public administrations and institutions around the globe have been irreversibly transformed—both structurally and in terms of the dynamics between Governments and the people they serve, policies, institutions, strategies and tools. The increasing contributions of digital transformation and digital government in accelerating the realization of the 2030 Agenda and in making sure that no one is left behind and offline in the digital age.

The COVID-19 pandemic has compelled governments to develop digital solutions to ensure the continuity of public services and societal stability - often taking them outside the scope of existing policies and regulations, e.g., collection of personal data and information, partnership with private sector – data sharing and digital solutions, creating new digital platforms – e.g., cloud computing for data centralization, and leveraging frontier technologies – e.g., using 5G, AI (for diagnosis). The pandemic has tested the responsiveness, agility and digital resilience of Governments, providing opportunities to strengthen multilevel governance across regional and local jurisdictions, e.g., provision unified platform for local governments. Since the COVID-19 pandemic, 90 per cent of Member States have established dedicated portals, or created space in their national portals, to address issues and public services related to the pandemic.

Digitalisation has also empowered citizen engagement in policy making processes. Using crowdsourcing and analytics, governments can gain volumes of feedback on the issues requiring their actions. While nearly every country is engaged in the process of digitalization, not all have achieved the same level of development in digital government. Digital divide is a new form of inequality. The COVID-19 pandemic has brought this divide into sharp relief. Contrasting to its capability to connect, digital divide also at the same time means exclusion. This tension increases when governments rely more and more on ICT to deliver essential services. The 2022 UN E-

Government Survey on "The Future of Digital Government", reported on the percentage of countries offering sector-specific mobile services by region (see Figure 42). Europe was found to be the region that reached the highest degree of digitalisation (80%) in the five sectors out of six surveyed, which included social protection, health, education, environment, and employment. Africa and Oceania are the two continents with the lowest percentage of digitalisation of public services.

Figure 1.25   Percentage of countries offering sector-specific mobile services, by region, 2022
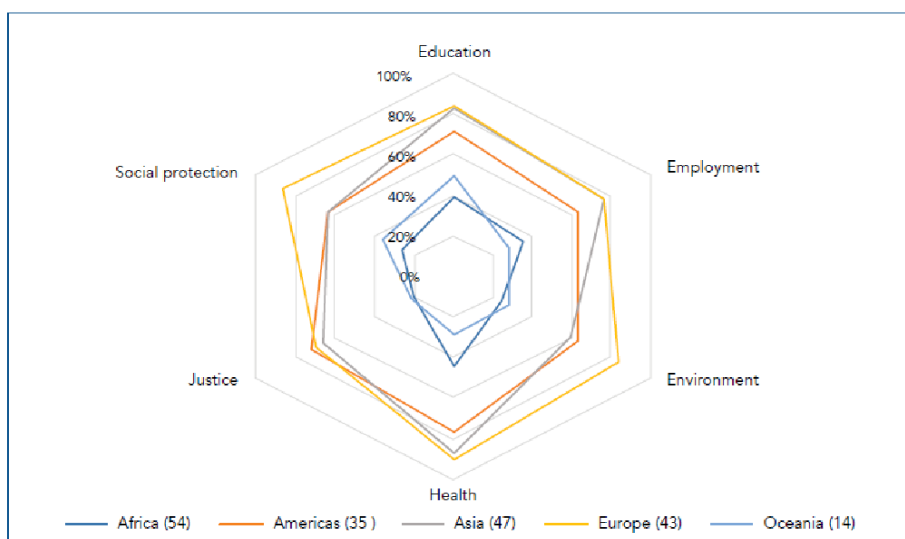
Source: 2022 United Nations E-Government Survey.

Figure 42: 2022 UN E-Government Survey, The Future of Digital Government)[103]

Digital exclusion has three root causes: Access, Affordability and Ability. To eliminate this divide that may lead to closing of other divides, such as knowledge, value (monetized or not), innovation and governance gap. A Whole-of-Government approach is called for to ensure no-one-is-left-behind (LNOB). This Whole-of-Government approach needs to be coupled with institutional coordination to address the digital exclusion through an integrated framework of *data, design and delivery* (3Ds) in LNOB.

Public participation is a key dimension of governance, and its importance is highlighted by many SDG indicators and targets, including target 16.7, which calls for ensuring "responsive, inclusive, participatory and representative decision-making at all levels".

The E-Participation Index (EPI) developed by the Division for Public Institutions and Digital Government, DESA, assessed online participation by utilizing a three-point scale:

- e-information: provision of information;

- e-consultation (Government consults on policy or on services delivery at different stages of the process and possibly provides feedback); and

- e-decision-making (Government involves people in decision-making).

Innovation regarding citizen engagement were found ranging from adding feedback option to the government portal, to enabling whistle blowing on corruption cases and filing of complaints. Figure 43 showed the percentage of countries offering e-participation tools from 2018 to 2022.

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[103] https://desapublications.un.org/sites/default/files/publications/2022-09/Web%20version%20E-Government%202022.pdf

Figure 1.33 Percentage of countries offering e-participation tools for leaving feedback, reporting public corruption, and filing a complaint, 2018, 2020 and 2022
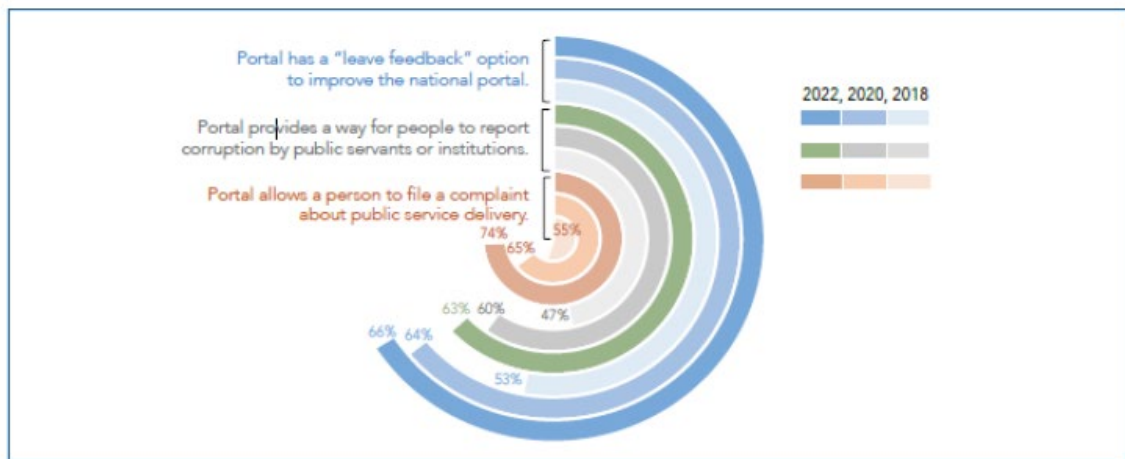
Source: 2022 United Nations E-Government Survey.

Figure 43: Percentage of countries offering e-participation tools (2018 to 2022)
(Source: 2022 UN E-Government Survey, The Future of Digital Government)[104]

Country cases were also presented which included e.g., India, Peru, Rwanda, Togo, Serbia etc.

The presentation was concluded on the emerging trends concerning the future of digital government and a reminder.

"The COVID-19 pandemic has forced Governments and societies to turn towards digital technologies to respond to the crisis in the short term, resolve socioeconomic repercussions in the midterm, and reinvent existing policies and tools in the long term" (The Future of E-Government, 2022).

- Digital transformation in the public sector is not just about improving process efficiencies in government organizations; it also plays a key role in strengthening public services provision and opportunities for community engagement.

- Data will be central in enabling digital development – e.g., making use of contextual data indicators can allow governments to gain a more acute understanding of local issues and accurately gauge public concerns.

- A digital society is largely data driven and public institutions are working to achieve data optimization by developing novel approaches to data collection, collation, analysis and dissemination.

- Data centricity requires Governments to make data accessible, usable, and actionable across all levels of government.

- Cybersecurity and privacy data protection have become priority issues for Governments.

- Evolving technologies and new approaches in digital government.

Conclusion: LNOB should guide policy development and implementation in digital government and the public sector. Innovations and the broader digital transformation must aim to be truly inclusive. In this regard, governments should adopt "inclusion by design", "inclusion by default" or "inclusion first" strategies. A whole-of-government approach that integrates multilevel, multisectoral and

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[104] ditto

multidisciplinary strategies and partnerships is needed for the implementation of inclusive digital government.

> Q: In view of the lack of data sovereignty how can we achieve it that context (inclusive e-government)?

(Note 21: A valid question when governments are missing data to be informed on the who, where, what and how public service delivery is inadequate and exclusive. However, data sovereignty, data residency and data localization are complex issues involving multi stakeholders with varying power to influence. However, efforts are made to bring forward some regulations in the data management and use through global common standard.

The Secretary General presented a policy response through his call for a "Global Digital Compact" ("Our Common Agenda", policy brief 5). The essence of this brief is to propose the creation of a Global Digital Compact, a comprehensive blueprint designed to promote an open, free, secure, and human-centric digital future. This future, rooted in universal human rights, seeks to enable the attainment of the Sustainable Development Goals (SDGs). [105])

As part of this Compact, the Secretary General's Envoy on Technology[106] is facilitating also the deliberation on the "digital public goods" as means to avoid further deterioration of the digital divide. Promoting digital public goods is "to unlock a more equitable world, a global effort is needed to encourage and invest in the creation of digital public goods: open-source software, open data, open artificial intelligence models, open standards and open content."[107]

D.3.3. "Measures to Strengthen the Policy Coherence for Sustainable Development and Good Governance: Experiences from OECD Countries and others"
Presented by Ernesto Soria Morales, Senior Policy Analysts, Policy Coherence for Sustainable Development, Public Governance Directorate, OECD (video)

Policy coherence is an essential means for progressing the 2030 Agenda and SDGs that cut across the whole range of policies and shape sustainable development process of a country. Coherence can be seen as a *means* to address the following systemic phenomena such as trade-offs, co-benefits, transboundary impacts, short term interests and long-term development. It is vital in turning vicious cycles into virtuous cycles (see Figure 44). This presentation shared some institutional practices from OECD countries and spotlighted shared challenges and lessons learnt thus far when adopting the PCSD approach in policy making.

By improving the coherence, a key principle of good governance, by reducing fragmentation, overlap, and duplication in government programmes of the US government, amounted to financial benefits of USD 262 billion were achieved of which USD 216 billion was accrued from 2010 to 2018 while USD 46 billion were projected for 2019 (United States Government Accountability Office (GAO), 2019)[108].

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[105] Our Common Agenda - Policy Brief 5: A Global Digital Compact. July 2023. https://indonesia.un.org/en/238874-our-common-agenda-policy-brief-5-global-digital-compact

[106] https://www.un.org/techenvoy/

[107]

https://www.un.org/techenvoy/sites/www.un.org.techenvoy/files/general/Digital_Public_Goods_Summary_PDF.pdf

[108] Report to Congressional Addressees: Additional Opportunities to Reduce Fragmentation, Overlap, and Duplication and Achieve Billions in Financial Benefits (GAO-19-285SP). https://www.gao.gov/assets/700/699740.pdf

Figure 44: Interactional Effect of SDGs (Source: Global Sustainable Development Report 2019 The Future is Now – Science for Achieving Sustainable Development, United Nations, New York, 2019)

What is Policy coherence for sustainable development (PCSD) approach? The PCSD approach of the OECD was adopted by the member states in 2019 and consists of four pillars:

Pillar I: Institutional capacities and skills. This pillar involves developing and enhancing political and administrative mechanisms, structures, processes, systems and tools essential to enable governments to harmonize and deliver the SDGs in an integrated manner.

Pillar II: Country practices and support through mutual exchanges and discussions that could be means for improving the content of national strategies, strengthen institutional mechanisms, address transboundary impacts and ultimately enhance policy coherence in the implementation of the SDGs.

Pillar III: Data and analysis on cross-sectoral interactions to provide a methodological framework to support countries in tracking progress on policy coherence for sustainable development.

Pillar IV: Partnership and peer learning essential to identify solutions and good practices and to promote coordination and collective action in the achievement of internationally agreed SDGs.

Based on over two decades of experience gained by OECD countries in promoting policy coherence, the following building blocks of the PCSD approach include the following (Figure 45):
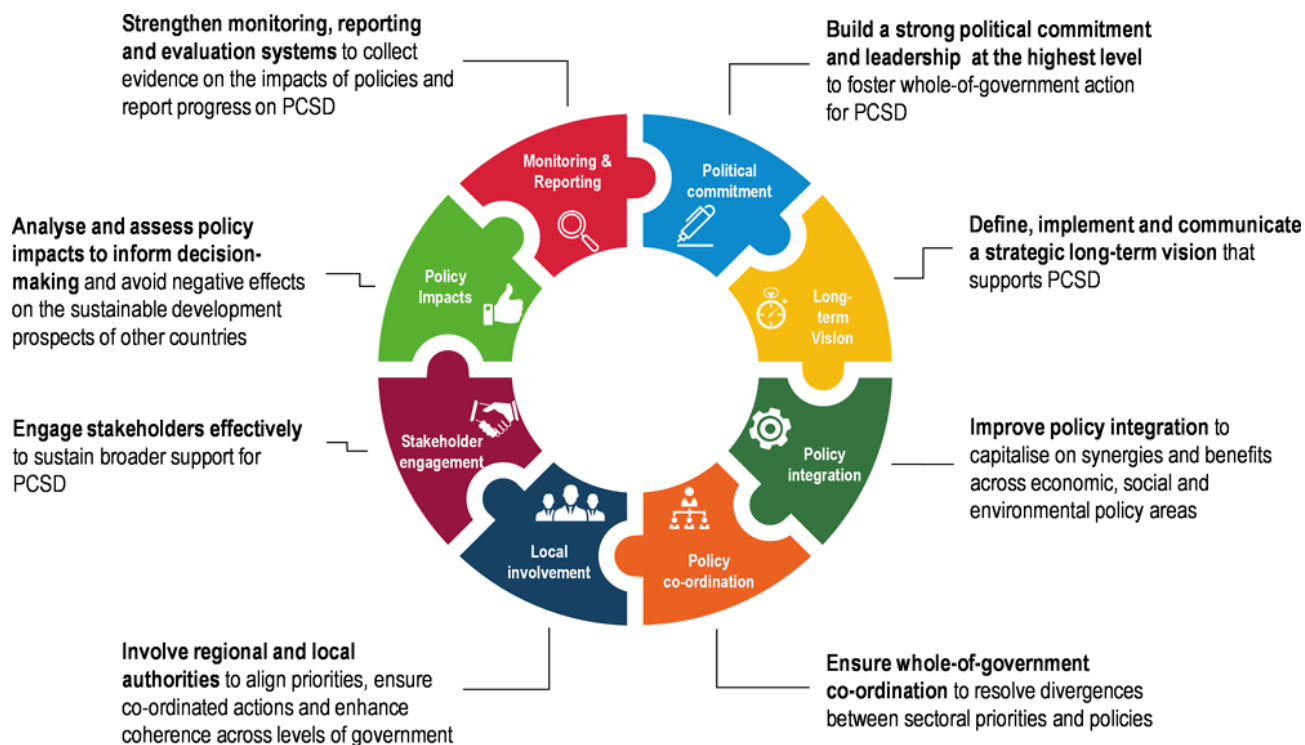
Figure 45: Building Blocks of Policy Coherence for Sustainable Development[109]

Additionally, the following institutional mechanisms[110] were identified that support PCSD approach in the OECD countries and others:

1. Formal commitment - political commitment is a precondition for Coherence.

2. Lead institution oversees PCSD.

3. There is a long-term vision for PCSD and SDG budgeting.

4. Coordinating mechanisms with mandates for PCSD.

5. Mechanisms to engage sub-national stakeholders on PCSD.

6. Requirements to analyse transboundary impacts.

There are multiple obstacles interfering with achieving policy coherence for sustainable development. Of which the two most important obstacles are 1) the lack of long-term measures to ensure sustained commitment to PCSD beyond electoral cycles and 2) limited enforceability of PCSD measures. Insufficient capacities in human resources, expertise of policy makers on the topic and legal and political framework, all constitute the second cluster of obstacles. Figure 46 illustrate these obstacles by level of importance.

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[109] https://www.oecd-ilibrary.org/sites/9789264301061-5-en/index.html?itemId=/content/component/9789264301061-5-en

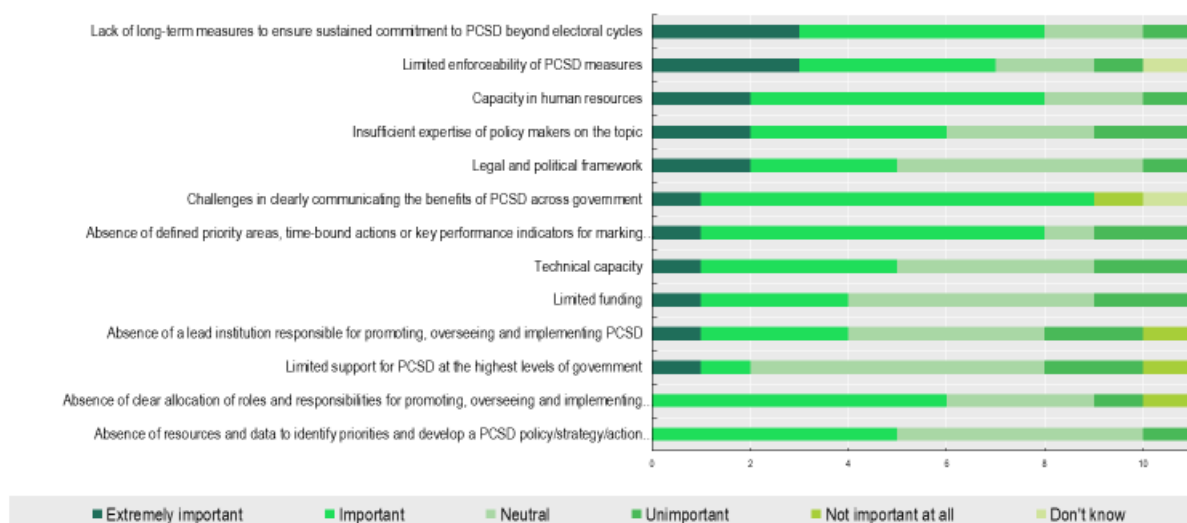[110] https://www.oecd.org/governance/pcsd/toolkit/institutionalmechanisms/

Figure 46: Obstacles to enhancing policy coherence for sustainable development
(Source: Presentation to the ETC 2023 by Ernesto Morales, OECD)

To conclude, the following lessons were highlighted:

1. Realising synergies between SDGs depends on policy coherence – silos exist not only in organisations but also in people's minds;

2. In the absence of mechanisms for coherence, policies risk continuing to reinforce unsustainable solutions;

3. Policy coherence is inextricably linked to processes;

4. There is no one-size fits all approach to promote PCSD, nevertheless, there are common principles that apply to most countries.

OECD has developed a self-assessment tool which can be found at
https://www.oecd.org/governance/pcsd/toolkit/selfassessment/

Country Case Presentation

D.3.4. Grenada: Facts and National sustainable development plan (NSDP)- 2035

Presented by David Anthony Hopkin, Policy Development Officer, Cabinet Office, Office of the Prime Minister, Grenada

SDG 16 highlighted the importance of good security sector governance for the achievement of the 2030 Agenda and specifically the key elements of the SDG 16, i.e., "peaceful and inclusive societies for sustainable development, access to justice for all, and effective, accountable, and inclusive institutions at all levels.

The strategic focus of the National Sustainable Development Plan (NSDP) - 2035 rests on the three sustainable development pillars; the society, the economy, and the environment. Accordingly, Vision 2035 is translated into the following three National Goals (Table 9).

1. **Goal #1**: High Human and Social Development: Putting People at the Center of Sustainable Development and Transformation.	1. **Outcome #1** - A Healthy Population	
	2. **Outcome #2** - Educated, Productive, Highly Skilled, Trained, and Conscious Citizens	
	3. **Outcome #3** - A Resilient, Inclusive, Gender-Sensitive, and Peaceful Society	
2. **Goal #2**: Vibrant, Dynamic, Competitive Economy with Supporting Climate-and-Disaster-Resilient Infrastructure.	4. **Outcome #4** - Broad-based, Inclusive, and Sustainable Economic Growth and Transformation	
	5. **Outcome #5** - Competitive Business Environment	
	6. **Outcome #6** - Modern Climate-and-Disaster-Resilient Infrastructure	
3. **Goal #3**: Environmental Sustainability & Security.	7. **Outcome #7** - Climate Resilience and Hazard Risk Reduction	
	8. **Outcome #8** - Energy Security and Efficiency	

Table 9: National Goals for Sustainable Development 2020– 2035
(Source: National Sustainable Development Plan (NSDP), Grenada)[111]

In 2022, Grenada presented its first Voluntary National Report. This First Voluntary National Review (VNR) [112] focused on seven (7) of the seventeen (17) Sustainable Development Goals: Goal 4 Quality Education; Goal 5 Gender Equality; Goal 8 Decent Work and Economic Growth; Goal 13 Climate Action; Goal 14 Life below Water; Goal 15 Life on Land and Goal 17 Partnerships for the Goals.

Ten critical success factors for the realisation of vision 2030 were identified covering judicial governance, national security, public sector governance, corporate governance, inclusive governance, macroeconomic stability, quality human resources and mindset, partnerships, leadership and collective responsibility and shared values. Applying to the context of SDG 16, six targets pertaining to corruption, violence, human trafficking, access to justice, discrimination and governance will be measured against specific measures (see Figure 47).

[111] https://observatorioplanificacion.cepal.org/en/plans/national-sustainable-development-plan-2020-2035-grenada
[112] https://hlpf.un.org/sites/default/files/vnrs/2022/VNR%202022%20Grenada%20Report.pdf
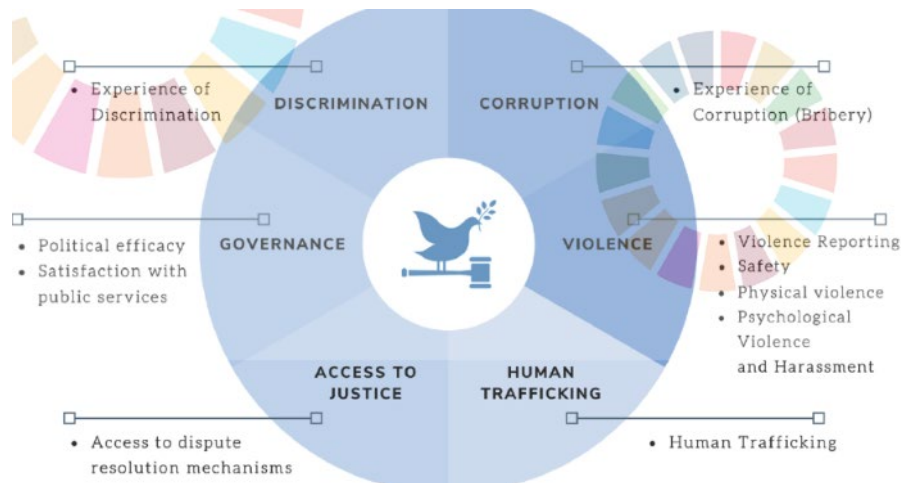
Figure 47: SDG 16 and its targets and measures in Grenada's National Sustainable Development Plan (2020-2035) (Source: Grenada's National Sustainable Development Plan (2020-2035))

A strategic intervention to attain SDG 16 is to upgrade various policies and programmes that have been central to the government toolbox. They are, Strengthening Evidence Based Decision Making for Citizen Security in The Caribbean (CariSECURE 1.0)[113], National Harnessing Young Potential Excellence (HYPE) Mentoring Programme, Institutions to fight corruption and Court System/Prison System.

CariSECURE 2.0[114] was launched in March 2023 will be implemented by the UNDP, with the financial support of USAID to 2.0 activity will support USAID's strategy to reduce youth involvement in crime and violence and strengthen counter Trafficking in Persons (TIP) efforts in the Caribbean. It employs a multi-pronged, human rights-based approach designed to improve national capacities to use evidence based approaches to identify the root causes of youth crime and design policies, strategies, programs and interventions. CariSECURE 2.0 will work at regional, national, and community levels in Barbados, Grenada, and St. Vincent and the Grenadines to build capacity of youth serving institutions to collect and analyse timely, reliable and standardized disaggregated data for youth crime prevention and response.

The second major initiative is the National HYPE Mentoring Programme- harnessing young potential exchange program. The National HYPE Mentoring Programme framework is developed around the context of providing alternative adult support and guidance to children in conflict with the law.

The third is to enhance the functioning of the Institutions to fight corruption and Court System/Prison System in Grenada.

1. Grenada's Integrity Commission[115] established by the Integrity in Public Life Act No.14 of 2007 and later on was repealed and replaced by The Integrity in Public Life Act No. 24 of 2013 (the Act). The purpose of the Commission is to improve governance through ensuring integrity in public life, to obtain declarations of assets, liabilities, income and interests in relation to persons in public life and to give effect to the provisions of the Inter American Convention against Corruption, (IACAC); and the United Nations Convention Against Corruption (UNCAC).

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[113] CariSECURE Quarterly Report, First Quarter Year 4 – October 01 – December 31, 2019.
https://info.undp.org/docs/pdc/Documents/R46/CariSECURE%20QUARTERLY%20REPORT%20Y4%20Q1.pdf
[114] https://www.undp.org/barbados/press-releases/carisecure-20-forms-part-us-government-initiative-support-citizen-security-grenada
[115] https://www.grenadaintegritycommission.org/

2. The Financial Intelligence Unit was set up to prevent and detect money laundering, terrorist financing, and other serious financial crimes, through collaboration with local, regional, and international stakeholders with the vision to achieve a Secure Financial Sector.

3. Judicial System Reform aims to improve access to Justice for the vulnerable, build confidence in the judicial system, and work with stakeholders to provide support structures for victims, families, and accused. Modalities used for the reform included:

    a. Training of stakeholders inclusive of the judiciary, and the media.

    b. Introduction of Mediation at the court and community level. In 2023 the number of trained court mediators increased by 29. A total of almost 40 certified court mediators on island.

    c. Improve the efficiency of the Court.

    d. a digital court filing system.

4. His Majesty Prisons provide rehabilitation by providing inmates with employability and life skills. For persons involved in the rehabilitation process, only about 5 - 10% of them return. Those persons who are not involved in rehabilitation have a 70% return rate.

Challenges and Gaps exist to achieve SDG 16 which consists of insufficient data management for effective decision making, poor physical infrastructure and working conditions, and the lack of staff, social workers in this sector. Poor remuneration of staff has not created greater pressure in staff retention and recruitment.

A key recommendation is to implement statistical development and modernisation as identified in the OECS Regional Strategy for the Development of Statistics 2017 to 2030.[116]

Module 6

SDG 17 – Strengthen the means of implementation and revitalize the Global Partnership for Sustainable Development (Ms. Lichia Saner-Yiu, UNOSD Consultant)

Framing: Technology, science and capacity building are major pillars of the Means of Implementation of the 2030 Agenda. Development Finance underpins the acquisition of these means.

Provisions outlined in SDG 17 on global partnerships are grouped into different domains of commitments and programmes covering technology, science, capacity building, statistical capacities and data generation (see Figure 48). Partnerships between public institutions (national and international level), private sector, non-profit organisations and philanthropic organisations are suggested to combine financial resources and technical capacities for the implementation of the 2030 Agenda. There are partnership mechanisms set up to finance different transformative needs of the 2030 Agenda for Sustainable Development including strengthening national statistical systems. Strategic up-takes by the developing countries could facilitate the implementation of the 2030 Agenda and meeting part of the resource demands.

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[116] https://www.oecs.org/en/our-work/knowledge/library/statistics/oecs-rsds-2017

Figure 48: SDG 17 and Its Targets covering different means for implementation
(Source: Lichia Saner-Yiu, ETC 2023 presentation)

Targeted instruments exist to assist the least developed countries to access high end technologies or ESTs. Relatively high costs of technology transfer often push these urgently needed technologies out of reach. The UN Technology Bank for Least Developed Countries is one of the mechanisms dedicated to enhancing the contribution of science, technology and innovation for sustainable development in the world's 46 least developed countries.[117]

D.3.5. "An Introduction to the World Bank Group Korea Office: Ending Extreme Poverty, Promoting Shared Prosperity"
Presented by Jason Allford, Special Representative, World Bank Group Korea Office

History of Korea and the World Bank Group partnership goes back to 1955 and intensified by opening a WBG Korea Office in 2014. In 2010, Korea become a DAC member and transformed its international engagement to as a significant donor. By 2019, Korea's contribution to the IDA replenishment reached USD 451.66 million. Presently, the World Bank Group Korea office conducts knowledge sharing, engages in building partnership, works with Korean firms, and provides operational support by bringing Korea's development experience, advantage and resource to developing countries.

Innovative Korea (Flagship) Report[118, 119, 120]

> Q: What are the important resources that Korea had until the World Bank Group established the partnership with Korea?

The Korean government has played a key role in its take off. Despite the political changes throughout its recent history, the country followed steadfastly strong development paths and made progress. Korea is strong in technology and culture industry. Also, Korea and other East Asian countries (Japan

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[117] https://www.un.org/technologybank/

[118] https://www.worldbank.org/en/country/korea

[119] https://www.youtube.com/watch?v=9xDfzjEeIIM

[120] OECD Reviews of Innovation Policy: Korea 2023. https://www.oecd.org/publications/oecd-reviews-of-innovation-policy-korea-2023-bdcf9685-en.htm

and China) focus on exports and enjoy high domestic savings. Through that, they can manage the domestic politics since they do not rely on foreign investment.

(Note 21: Reference can be made on the World Bank Study on East Asia Miracle: Economic growth and public policy: Main report (1993). "The report examines the public policies of 8 high-performing Asian economies (HPAEs) from 1965 to 1990. It seeks to uncover the role those policies played in the dramatic economic growth, improved human welfare, and more equitable income distribution in Hong Kong, Indonesia, Japan, Malaysia, the Republic of Korea, Singapore, Taiwan (China), and Thailand.) [121, 122]).

> Q: What is the agenda in the World Bank Group Korea office in terms of it being a financial instrument to meet expectations to achieve 2023 Agenda for Sustainable Development, especially the difference before and after pandemic?

There are a lot of innovations on financing taking place in Korea[123]. We focus on strengthening the health system based on agreed parameters or criteria and we give access to the financial instruments.[124] (Note 22: Korea- World Bank Partnership Facility (KWPF)[125])

> Q: In your opinion, where should we invest since there are an increasing number of developing countries that are in debt distress? Is it physical infrastructure or other targets? What is your opinion about public-private partnership (PPP) for social development and social infrastructure? (from Mr. Raymond Saner)

There is no systematic way since it depends on the country and its cases. Regarding the PPP (public-private partnership), the current president of World Bank Group is focusing on scaling the project of PPPs in international development[126].

(Note 23. Reference to The World Bank Brief, titled "How Can Public-Private Partnerships (PPPs) be Successful?" July 6, 2023) [127]

● Comment from Ms. Lichia Saner-Yiu: PPP (public-private partnership) is a terminology where the government works together with the private sector to finance, build, and operate the project. Learning from Hong Kong, Cross Harbour Tunnel became a role model of PPP, constructed under a 30-year private-sector franchise based on a build–operate–transfer model. The title was passed to the Hong Kong government in 1999 upon termination of the franchise [128]. This timeline is a good reminder of the importance of project planning and management. Any delay or budget overrun will increase the financial burden therefore proper risk sharing among partners for a successful PPP is

[121] Birdsal, N. et. al. (eds), 1993, "East Asia Miracle: Economic growth and public policy", The World Bank. https://documents.worldbank.org/en/publication/documents-reports/documentdetail/975081468244550798/main-B

[122] World Bank, 2018. "Riding the Wave: An East Asia Miracle for the 21st Century". http://hdl.handle.net/10986/28878

[123] Korea - World Bank Group Partnership Facility https://www.worldbank.org/en/programs/korea-world-bank-group-partnership-facility

[124] The World Bank, 2023, "Unlocking Access to Health: Caribbean and Central America Forge Path to Universal Health Coverage". SEPTEMBER 14. https://www.worldbank.org/en/news/feature/2023/09/14/unlocking-access-to-health-caribbean-and-central-america-forge-path-to-universal-health-coverage

[125] International Bank for Reconstruction and Development /The World Bank, 2019, "Korea- World Bank Partnership Facility (KWPF): Resource on Korean Institutions for Potential Collaboration. https://pubdocs.worldbank.org/en/720381565794151706/Partner-Mapping-KWPF-Website.pdf

[126] "Strategic and International Studies on Strengthening of World Bank Delivery on Private Capital Facilitation" Remarks by President David Malpass at the Center for Strategic and International Studies on Strengthening of World Bank Delivery on Private Capital Facilitation. https://www.worldbank.org/en/news/speech/2023/03/23/remarks-president-david-malpass-strengthening-delivery-on-private-capital-facilitation-csis

[127] Mohammed, N., Salem, Y., Ibanez, M. and Bertolini, L., 2023. The World Bank Brief, "How Can Public-Private Partnerships (PPPs) be Successful?". JULY 6. https://www.worldbank.org/en/region/mena/brief/how-can-public-private-partnerships-ppps-be-successful

[128] https://en.wikipedia.org/wiki/Cross-Harbour_Tunnel

necessary. "Allocating risk, in the context of a PPP, means deciding which party to the PPP contract will bear the cost (or reap the benefit) of a change in project outcomes arising from each risk factor. Allocating project risk efficiently is one of the main ways of achieving better value for money through PPPs." (The World Bank, Public Private Partnership Legal Resource Centre [129]).

Proper budgeting with good financial management in a PPP financing scheme is important since the risk is on the government side. Also, the country should develop PPP project by adopting UNECE people first PPP principles and standards. [130] The application of PPPs to finance sustainable development should not focus solely on making profit, but also on creating social and environment values and shared fairly. The financial arrangement for PPP projects normally has a 20 to 30 years duration. It is important to avoid leaving the debt to the future generations to payback without creating opportunities for sustained development momentum, especially important when investing in infrastructural development.

D.3.6. "Strengthening Statistics for SDGs: Experiences in Asia Pacific Region"

Presented by Arman Bidarbakhtnia, Head of Statistical Data Management Unit, Statistics Division, UN Economic and Social Commission for Asia and the Pacific (ESCAP), online

There are two dimensions to statistical data management when it comes to the development of SDG indicators, i.e., national and international/global. Two sets of distinctive yet interrelated questions concerning the selection of nationally appropriate statistical indicators need to be considered (see Figure 49).
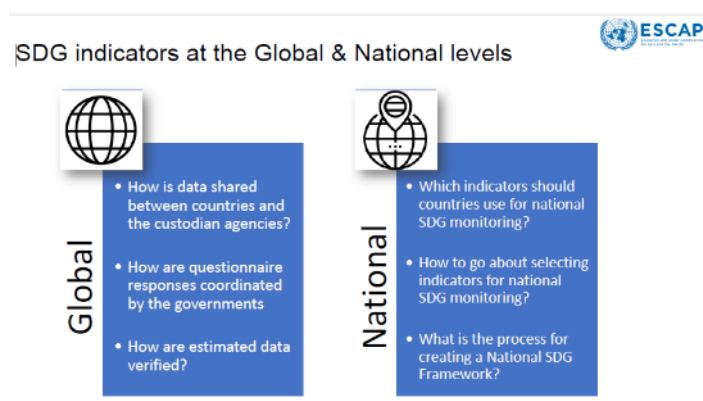
Figure 49: SDG Indicators at the Global and National Levels
(Source: Arman Bidarbakhtnia, ETC 2023 presentation)

For the monitoring process at the global level, statistical data are first collected from multiple sources including citizens and big data by the national statistical system and they then flow to respective international custodian agencies[131] assigned to specific SDG indicators. Reversed flow happens after verifications by the Agencies (see Figure 50).

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[129] https://ppp.worldbank.org/public-private-partnership/allocating-risks

[130] https://unece.org/ppp/products

[131] Roles and responsibilities SDG monitoring and reporting- The Custodian Agencies.
https://www.unwater.org/news/roles-and-responsibilities-sdg-monitoring-and-reporting
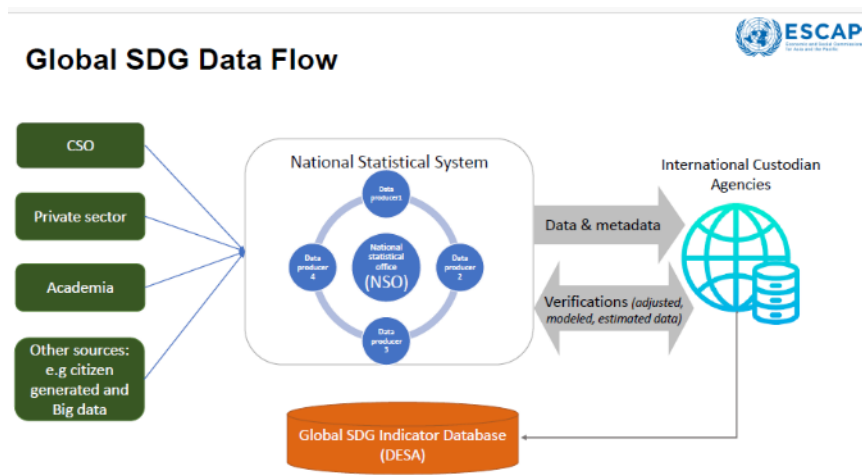
Figure 50: Data Management Process Flow
(Source: Arman Bidarbakhtnia, ETC 2023 presentation)

To track national SDG progress, there are six building blocks to set up the national statistical system. They are:

1) indicator identification & selection by reviewing global indicators to identify applicable ones to own country context and to supplement global indicators with national proxies;

2) target setting by setting relevant "national target values" for each indicator for national assessment;

3) methodology & progress analysis by applying sound statistical methods;

4) effective mechanism to share and assure data quality to be used for assessing progress managing national data flows through coordination, collection of quality data and validation;

5) dissemination and communication of results to the public and policy makers; and

6) identifying national priorities based on the national SDG progress assessment.

In the Asia-Pacific region, two key questions are asked when measuring SDG progress: "How much progress has been made?" and "Are the SDG targets going to be achieved by 2030?" To answer these questions, ESCAP and UN Agencies produce regional progress reports annually[132]. The 2022 SDG Progress Report for the Asia-Pacific showed that variant degrees of progress have been made on most of the SDGs in the region except the SDG 13 on Taking Urgent Action to Combat Climate Change and its Impact (see Figure 51).

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[132] Asia and The Pacific SDG Progress Report 2023: Championing Sustainability despite Adversities. https://www.unescap.org/kp/2023/asia-and-pacific-sdg-progress-report-2023

Figure 51: SDG Progress in Asia Pacific 2022
(Source: UN ESCAP 2022)

UN ESCAP supports the countries through National SDG Tracker[133], an online analytic tool that helps governments to get a snapshot of SDG progress and a dashboard to measure distance to target. A visual sample of the snapshot and dashboard is presented in Figure 52. ESCAP supports countries to monitor their national and sectoral plans to tackle complex issues, overlapping vulnerabilities, and to establish a comprehensive indicator framework.

Reflection: Even though UN ESCAP has a mandate to collect data, however reporting on indicators has been a problem in Thailand. There are various issues, such as not having the data or using some data only. Because of these difficulties, the data in the National SDG Tracker is not fully representative (of the actual situation).

Comment: We have the statistical data. However, the data is not integrated so the country should have a budget for the statistics department to develop data.
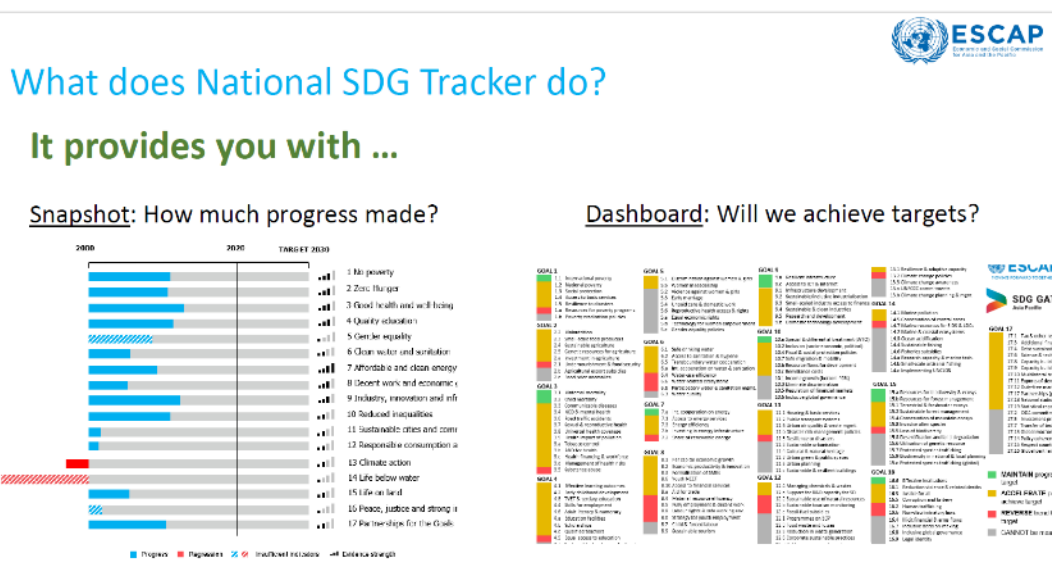
Figure 52: ESCAP's National SDG Tracker (Source: ESCAP 2023)

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[133] https://data.unescap.org/stories/national-sdg-tracker

Q: For the National SDG Tracker, is it for all countries? (by Mr. Phurba from Bhutan)

Comment: We need to remember that accountability is a process that needs to be standardized and to be supported by bureaucracy to verify the records (date) and to assess the situation.

Comment: The data flow between the National SDG Tracker and government's SDG tracker is an ongoing process as illustrated in Figure 50. It needs to initiate the discussion on data sharing, e.g., what data a country has and how the data has been used. Agreement needs to be reached through several streamlining processes on reporting framework.

Comment: Through the discussion, we find out that there is a big area for future investment in regard to the global digital public system. It is important to start the process of the operations and the coordination. It affects the dynamics of the relationship between government and other agencies. Also, we recognize that the data has not been transferred smoothly and addressing the flow of data/information needs effort.

Country Case Presentation

D.3.7. "Uruguay: a country committed to sustainable development strengthens alliances with society to achieve it"

Presented by Horacio Pablo Bafico Perez, Advisor to the Director, Planning and Budget Office, Government of Uruguay

Uruguay is a country with a long tradition in terms of sustainable policies and one of the first countries to implement welfare policies worldwide. It also adhered from the beginning to the objectives of the 2030 Agenda.

Reference as made to the UN Strategic Cooperation Framework (UNSDCF) (Note 24). The Uruguayan government outlined its strategic priorities, clearly contributing to the attainment of the SDGs outlined in the 2030 Agenda. They are:

- Moving towards an economy that fosters innovation, generates employment, and ensures sustainable development.

- Reforming state institutions to establish an efficient government that is present in communities and accountable to citizens.

- Implementing public policies that ensure education, social protection, and quality health care for all.

- Progressing towards a society that upholds individual development, rights, and leaves no one behind.

For SDG financing, the country uses green bonds[134, 135] with a two-way interest structure with the unique feature that the country could benefit from an interest rate reduction if it surpasses its environmental targets. The issuance of green bonds in October 2022 marked a significant stride in integrating the country's environmental objectives into the government's financing strategy, and in incorporating environmental concerns within economic policy design. This policy choice enabled the government to directly align its debt management strategy with the environmental commitments already undertaken by the nation under the Paris Agreement.

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[134] Uruguay issues the first bond aligned to climate change indicators for 1.5 billion dollars. https://www.undp.org/latin-america/press-releases/uruguay-issues-first-bond-aligned-climate-change-indicators-15-billion-dollars
[135] https://www.iadb.org/en/news/uruguay-issues-global-sustainability-linked-bond-idb-support

The bonds considered two indicators (reduction in greenhouse gas emission intensity and preservation of native forest area) that collectively contribute to two complementary global public goods: mitigating global warming and safeguarding carbon stocks and biodiversity.

Uruguay also uses the Renewable Energy Innovation Fund (REIF)[136, 137], part of the Joint SD Fund, to focus on renewable sources, energy sector and decarbonization of the industrial and transportation sector by reducing energy cost and increasing the involvement of women in the clean energy economy.

Monitoring.   Uruguay established the monitoring system of different (national) indicators of the 2030 Agenda through their annual updating, under the supervision of the National Institute of Statistics (INE), a governing body of the national statistical system that has developed a Strategic Plan for the 2020-2024 period. The INE is in a process of updating its indicators. These processes to improve products are supported by institutions such as the Economic Commission for Latin America and the Caribbean (ECLAC), the International Labour Organization (ILO), and UNFPA.

In the 2021 VNR, it was stated regarding concerns and challenges related to SDG 17 and particularly financing:

"It is considered necessary to continue advancing in the implementation of the new fiscal institutional framework that allows for the consolidation of public accounts and greater transparency. Simultaneously, it is essential to persist with development and investment promotion policies for employment recovery. Finally, progressing with the integration of environmental considerations into economic policy analysis is of interest for Uruguay. In this regard, the role of green bonds is to fund such initiatives.

(Note 24. The United Nations Sustainable Development Cooperation Framework (UNSDCF) is a core instrument for providing a coherent, strategic direction for UN development activities by all UN entities at country level. "General Assembly resolution 72/279 elevates the United Nations Development Assistance Framework (now renamed the United Nations Sustainable Development Cooperation Framework) as "the most important instrument for planning and implementation of the UN development activities at country level in support of the implementation of the 2030 Agenda for Sustainable Development (2030 Agenda)……. The Cooperation Framework now guides the entire programme cycle, driving planning, implementation, monitoring, reporting and evaluation of collective UN support for achieving the 2030 Agenda. The Cooperation Framework determines and reflects the UN development system's contributions in the country and shapes the configuration of UN assets required inside and outside the country." [138]

> Q: how does the country extend the coordination with other stakeholders to succeed with its decision on the strategic selection of SDGs indicator? Does the government include mitigation and adaptation when making economic decisions? Does the government commit to it?

The government commits to achieving the 2030 Agenda. The country makes coordinated effort through communication and marketing that shows the importance of protecting the environment and mitigate or adapting to climate change. The ministry works together with the civil society sector and other sectors on green hydrogen and other issues through a pilot project.

> Q: How does the UN buy the electric cars? Is it sustainable when the UN stops supporting?

The recent situation is that this is a small pilot project for electric cars. We need to see if it works in the future or not. If it works, it leads other governments to use this project and it will lead to a good opportunity to lend money for sustainability in the future.

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[136] https://www.jointsdgfund.org/programme/renewable-energy-fund-innovative-finance-clean-tech-solutions-uruguay

[137] https://www.unido.org/news/through-renewable-energy-innovation-fund-reif-unido-and-its-partners-will-support-uruguays-2nd-energy-transition-decarbonizing-transportation-and-industry-sectors

[138] https://unsdg.un.org/resources/united-nations-sustainable-development-cooperation-framework-guidance

Comment: A similar case happened in Bhutan where they give incentives based on sustainability to taxi drivers to use electric cars by giving a 30% loan and it is working at the moment.

Comment from Ms. Lichia Saner-Yiu: There are two different cases on how to finance sustainable development, which is through giving credits or incentives inside the country (in Bhutan) and going to the international financial market to borrow the money (in Uruguay). The question that we do not know is how long will it take to achieve the intended outcome.

Day 4, 8th September 2023

Module 7:
The Way Forward for Agenda 2030 (Ms. Lichia Saner-Yiu, UNOSD Consultant)

Framing: Ownership of the SDGs by All and Localisation

The Sustainable Development Goals summarized our world's shared vision to end poverty, rescue the planet and build a peaceful world. In 2019, the UN Secretary General called on the world leaders, countries and peoples to mobilize for a "decade of action" on three levels: global action to secure greater leadership, more resources and smarter solutions for the Sustainable Development Goals; local action embedding the needed transitions in the policies, budgets, institutions and regulatory frameworks of governments, cities and local authorities; and people action, including by youth, civil society, the media, the private sector, unions, academia and other stakeholders, to generate an unstoppable movement pushing for the required transformations. Now the world is fast approaching the Summit of the Future in 2024, the rally cry for the Decade of Actions remains true to the cause:

1) Mobilize everyone, everywhere.

2) Demand urgency and ambition.

3) Supercharge ideas to solutions.

D.4.1. "Localising the SDGs: Progress and Challenges for Local Governments"
Presented by Simon Gilby, Sustainable Development Officer, UNOSD.

SDG 11 Sustainable cities and human settlements that are inclusive, safe, resilient and sustainable is a response to the deepening of urbanisation. To ensure the cities' sustainability when 70% of the projected 9 billion world population will be concentrated in urban areas, all elements of the 2030 Agenda need to be addressed. As a matter of fact, cities as a subnational unit need to be aligned with and carry out all SDGs on their territory as they serve as the frontline for the delivering of national SDG strategies and plan.

The UN Secretary General has identified SDG localization as an essential area for action[139] (Note 25). Two-thirds of SDG targets cannot be reached without subnational government engagement (OECD, 2020)[140]. Subnational governments, along with civil society and the private sector are key to SDG implementation.[141]

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[139] IISD, 2022, "UN-Habitat, New York City Report on VLR Movement", 3 February. https://sdg.iisd.org/news/un-habitat-new-york-city-report-on-vlr-movement/#:~:text=In%20a%20foreword%20to%20the,areas%20of%20action%2C%20she%20writes.
[140] OECD, 2020, "A Territorial Approach to the Sustainable Development Goals: A Synthesis Report". https://www.oecd.org/cfe/a-territorial-approach-to-the-sustainable-development-goals-e86fa715-en.htm
[141] https://www.oecd.org/cfe/territorial-approach-sdgs.htm

(Note 25. 0n the 3rd February 2022 IISD reported on the launching of a joint report, "Leading Locally: The Origins and Impact of the Voluntary Local Review" by the New York City Mayor's Office of International Affairs and UN-Habitat (December 2021) on the emergence of voluntary local review of SDG implementation (VLRs).

"The report highlights the NYC Declaration[142] on the Voluntary Local Review, which 333 subnational governments have signed[143]. In a foreword to the report, UN Deputy Secretary-General Amina Mohammed notes that *two-thirds of the SDG targets* will not be reached without the engagement of local and regional governments. Therefore, the UN Secretary-General has identified SDG localization as one of three essential areas of action, she writes. He also established a Task Force on the Future of Cities to consider how to better engage local authorities in the UN's work" (IISD, 3 February, 2022)[144]

Localization of the Sustainable Development Goals (SDGs) refers to the process of defining, implementing, and monitoring strategies at the local level to achieve global, national, and subnational sustainable development goals and targets. Often unsustainable consumption and production tend to concentrate in major urban centres where local governments often lack resources and capacity in managing complex issues such as the interlinkages of the SDGs.

The first Voluntary Local Review (VLS) was developed and reported in 2018 during the High Level Political Forum (HLPF). It was recognised for its importance. Since then, VLR has become a key tool for both raising awareness about the SDGs and also creating a platform to bring stakeholders together at the local level to develop a shared vision and roadmap for SDG implementation.

Voluntary local reviews started as a bottom-up process for cities to showcase their contributions for achieving the SDGs. It used the VNR as a template before developing its own guidelines,[145]. The early VLRs included for example New York City, Kitakyushu City, Toyama City, Shimokawa Town (IGES, 2023)[146].

VLRs grew swiftly, which led to the development of various guidelines by the UN agencies and research and academic institutions. Within the UN Family, there are guidelines published by the Economic and Social Commission for the Asia-Pacific (ESCAP) [147]; Department for Social and Economic Affairs (DESA)[148]; UN-HABITAT in collaboration with UCLG[149]; United Nations Economic Commission for Europe (UNECE) [150]; and United Nations Economic Commission for Africa (UNECA)[151].

[142] Voluntary Local Review Declaration Text. https://www.nyc.gov/site/international/programs/voluntary-local-review-declaration.page
[143] IISD, 2019, "Local Governments Commit to SDG Reporting in VLR Declaration", 26 September.
https://sdg.iisd.org/news/local-governments-commit-to-sdg-reporting-in-vlr-declaration/
[144] Ditto footnote 116.
[145] UN-Habitat, 2021, "Guidelines for Voluntary Local Reviews Volume 2: Towards a New Generation of VLRs: Exploring the local-national link". https://unhabitat.org/guidelines-for-voluntary-local-reviews-volume-2-towards-a-new-generation-of-vlrs-exploring-the
[146] IGES, 2023, "State of the Local Voluntary Reviews 2023: Follow-up and Review of the 2030 Agenda at the Local Level", https://www.iges.or.jp/en/pub/vlrs-2023/en

[147] UN ESCAP, 2020, "Asia-Pacific Regional Guidelines on Voluntary Local Reviews: Reviewing local progress to accelerate action for sustainable development goals. Manuals and Training Materials". https://www.unescap.org/resources/asia-pacific-regional-guidelines-voluntary-local-reviews#
[148] UN DESA, 2020, "Global Guiding Elements for Voluntary Local Reviews of SDG implementation". https://hlpf.un.org/tools/global-guiding-elements-for-voluntary-local-reviews-of-sdg-implementation
[149] UCGL and UN Habitat,2020, "Guidelines for Voluntary Local Reviews Volume 1: A comparative analysis of existing VLRs". https://www.uclg.org/sites/default/files/uclg_vlrlab_guidelines_2020_volume_i.pdf
[150] UNECE, 2022, "Guidelines for the Development of Voluntary Local Reviews in the ECE Region". https://unece.org/sites/default/files/2023-03/UNECE%20VLR%20guidelines%20ENG.pdf
[151] UNECA, 2022, "Voluntary Local Reviews in Africa". https://www.uneca.org/voluntary-local-reviews-africa

Others actors published also their own guidance note for local level progress including for instance reporting by : the Institute for Global Environmental Strategies (IGES)[152]; the European Commission Joint Research Centre (EUJRC)[153]; the International Institute for Sustainable Development (IISD) and theSustainable Development Institute, Monash University[154].

An increase of Voluntary Local Reviews (VLRs) can be seen from the number of VLRs made public. In 2022 alone, a total of 57 VLRs were published. A distribution by origin is tabulated in Table 10 below. The smallest local administrative unit of the group has 8,000 inhabitants, while the largest counts 4,600,000 inhabitants.

Table 10: The Number of VLRs Presented in 2022 by Origin (n=57)

Latin America and the Caribbean	26
Europe	21
Asia	8
Oceania	1
North America	1

(Source: State of the Local Voluntary Reviews 2023, IGES, 2023[155], revised from the Table presented by Simon Gilby, ETC 2023 presentation)

There have also been some VLRs in Africa reported by the UNECA[156].

The Voluntary Local Review process follows planning, data collection, reporting and follow-up cycle, which can be exemplified by the UN ESCAP model presented in its 2020 Guidelines (see Figure 53 below).

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[152] IGES is in process of developing the "VLR Ecosystem." This is expected to contain three components: 1. VLR Lab; 2. VLR Guideline; and 3. VLR Workshop." IGES, 2023. "Online Voluntary Local Review (VLR) Lab I About: VLR Guideline". https://www.iges.or.jp/en/projects/vlr/about

[153] Siragusa, A., Vizcaino, M.P., Proietti, P. and Lavalle, C., 2020, "European Handbook for SDG Voluntary Local Reviews", Publications Office of the European Union, Luxembourg, doi:10.2760/257092, JRC118682. https://publications.jrc.ec.europa.eu/repository/handle/JRC118682; "European Handbook for SDG Voluntary Local Reviews - 2022 Edition". https://publications.jrc.ec.europa.eu/repository/handle/JRC129381

[154]Monash Sustainable Development Institute, Monash University, 2022, "City of Melbourne Voluntary Local Review (VLR)". https://www.monash.edu/about/strategic-direction/sustainable-development/progress-report/monash-progress-report-2021/sdg17-2021/engagement2/city-of-melbourne-voluntary-local-review-vlr. "UNSDG: City of Melbourne Voluntary Local Review 2022. https://www.melbourne.vic.gov.au/SiteCollectionDocuments/un-sustainable-goals-voluntary-local-review.pdf

[155] Ortiz-Moya, F., Tan, Z., & Kataoka, Y, 2023, "State of the Voluntary Local Reviews 2023: Follow-up and Review of the 2030 Agenda at the Local Level". Institute for Global Environmental Strategies (IGES). July. https://www.iges.or.jp/en/pub/vlrs-2023/en

[156] UNECA, 2022, "Local Reviews of Sustainable Development Progress in Africa Published". January. 10. https://www.uneca.org/stories/local-reviews-of-sustainable-development-progress-in-africa-published
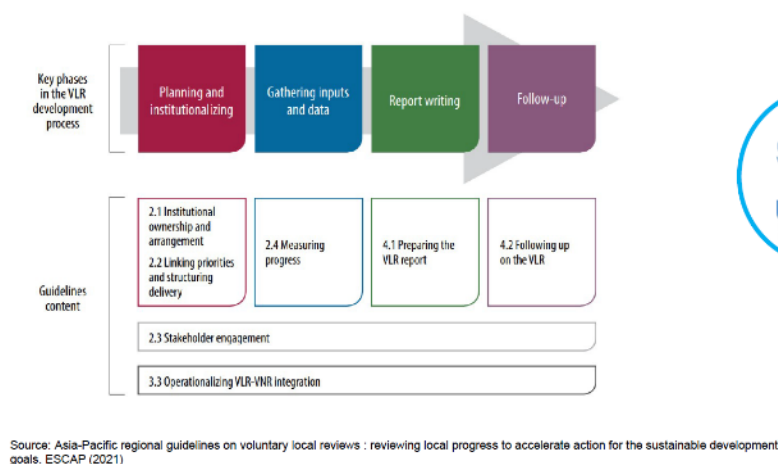
Figure 53: Process map of a VLR (Source: ESCAP, 2021)

It is important to acknowledge that VLRs need to be closely aligned with the national SDG implementation plan. Therefore policy coherence is also necessary, which requires a top down and bottom up consultation and coordination. Information gathered from VLRs needs to be fully integrated with the VNR while at the same time VLR process can be used to engage more diverse stakeholders who normally might be too marginal to be included in the review process. This is the proposed top-down process. The bottom-up process involves the use of VNR as a reference point to conduct a VLR while at the same time VLR can be used as an avenue to address structural issues that Subnational Groupings (SNGs) are not mandated to respond to. Considerable coordination actions are involved when integrating VLRs and VNRs in a coherent manner. Mechanisms need to be established to ensure an effective and efficient coordination, i.e., a national mechanism to support and consolidate the VLRs; a platform to communicate the VNR timetable so that SNGs can submit their VLRs in time to inform the VNRs; and a stakeholder engagement mechanism designed for use by both VNR and VLRs as an interconnected process.

Three case studies were presented to examine the localization process of the SDGs. They were: Costa Rica, Philippines, Zimbabwe. It was made clear that empowering sub-national and local levels through VLRs enables deepening ownership of the SDGs and development of context sensitive and specific solutions.

Following reflections can be useful should there be interest to incorporate VLRs into the VNR development process.

- VLRs present a clear opportunity to support sustainable development in a focused and context-sensitive way.

- VLRs can broaden the scope and ensure inclusivity.

- VLR processes can highlight gaps in capacity and information.

- Co-creation and shared visions is critical for VLR development.

- National government support is crucial, but needs to be enabling not overwhelming.

Closing Remarks

by Mr. Chun Kyoo Park, Head of Office, UNOSD

Mr. Park closed the four-day ETC by acknowledging the dedication, commitment, and shared vision of a better world for all among the participants. He stressed that the ETC experience has "reinforced

the understanding that the SDGs are not just a global agenda; they are a call to action, a promise to future generations, and a roadmap towards a more sustainable and equitable world."

He went on to say, "Let us leave here today with renewed vigour, armed with the knowledge and inspiration to drive positive change in our communities and nations. Together, we can turn the SDGs from aspirations into realities. As we embark on this shared mission, I have no doubt that we will make the world a better place for ourselves and generations to come."

Final Remarks

This Substantive Executive Training Report aims to capture the key elements of the knowledge exchange and sharing that took place within the process of the ETC 2023 in Incheon, Korea, on 5 to 8 September. In addition, some tacit knowledge was brought to the foreground to fill the "gap" left by the speakers in order to give context to their presentation. The form of "Notes" was used to communicate the addition made by the consultant and to indicate responsibility for possible misrepresentation.

It is hoped this report can serve as a mini guidebook on the selected SDGs and related debate based on its extensive citation and references.

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