SUMMARY BY THE VICE-PRESIDENT OF THE ECONOMIC AND SOCIAL COUINCIL
Economic and Social Council 2018 Integration Segment

"Innovative communities: leveraging technology and innovation
to build sustainable and resilient societies"

1-3 May 2018
ECOSOC Chamber

Introduction

The 2018 ECOSOC Integration Segment took place from 1 to 3 May 2018 at United Nations Headquarters in New York, under the theme of "Innovative communities: leveraging technology and innovation to build sustainable and resilient societies."[1] It provided a platform to review policies that support an integrated approach to achieving sustainable development with a focus on increasing resilience, leaving no one behind and the implementation of the 2030 Agenda. The Integration Segment featured approximately 45 panelists from Member States, the United Nations system, civil society, academia and the private sector.

The Integration Segment is mandated by General Assembly resolution 68/1. Its main functions are to bring together the key messages of Member States, the subsidiary bodies of the Council, the United Nations system and other relevant stakeholders and to promote the balanced integration of the economic, social and environmental dimensions of sustainable development.

The objectives of the 2018 Integration Segment were to: (1) to discuss how policy makers should use integrated policy approaches to enhance resilience and inclusion; (2) to showcase policy instruments and mechanisms that support risk management; and (3) to discuss how technology and innovation can support efforts to strengthen public policy and governance structures to build more inclusive, sustainable, and resilient communities. A Conference Room Paper reflecting the inputs received was made available as a background to the discussion.[2]

Main messages from the 2018 Integration Segment

1. Technology alone cannot provide answers to global challenges, but it can increase options and make it easier to deploy effective solutions.
2. It is essential to ensure that technology serves the poor, aims toward inclusive development, and is used to enable people to develop preventive, responsive and rehabilitative capacities to deal with risks and vulnerabilities.

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[1] Detailed information about the 2018 Integration Segment is available on the dedicated web page of the Segment: https://www.un.org/ecosoc/en/events/2018/integration-segment
[2] https://www.un.org/ecosoc/sites/www.un.org.ecosoc/files/files/en/2018doc/2018-integration-segment-conference-room-paper.pdf

3. Commitment, cross-cutting work, collaboration, consistency, and capacity building—along with political will—are essential for overcoming challenges.
4. Young people are agents of change; to empower them, countries must invest in sustainable development education, capacity building, and intergenerational partnerships.
5. To leverage technologies and innovation for building sustainable and resilient societies, efforts must be locally contextualized and driven; use of technology and innovation must be inclusive; approaches to development must be integrated; and capacities and institutions must be strengthened to anticipate risk and increase strategic foresight.
6. In developing countries, where a lack of data is one of the greatest challenges, concrete steps must be taken to ensure effective capacity building, leadership-spearheaded progress, and true inclusion of all.

Opening Session

In his opening statement, the Vice-President of the Council, H.E. Ambassador Marc Pecsteen (Belgium) stressed that the Integration Segment presents an opportunity to promote knowledge sharing and lessons learned, and provides a platform for exchanging best practices and enhancing interlinkages among the sciences and other disciplines. While new technologies hold promise for achieving the 2030 Agenda, Mr. Liu Zhenmin, UN Under-Secretary-General for Economic and Social Affairs advised participants to prioritize solutions that are pro-poor and equitable, and highlighted the Technology Facilitation Mechanism in this connection.

Some challenges to sustainability are political in nature, requiring trade-offs among different development strategies and approaches to resource allocation that risk placing vulnerable populations at a disadvantage. Increased interaction among political, social and technological sectors can foster innovative solutions, and incorporate indigenous knowledge into global strategies on resilience. Speakers recommended actions to develop protocols for knowledge exchange between indigenous peoples and governments. They stressed the need to increase female technological leadership, empower youth, and value research and innovation coming from small companies.

Session 1: Resilience decoded – building blocks towards 2030

This session explored the multidimensional concepts of resilience and vulnerability, examining different perspectives and approaches within various disciplines and sectors. The discussion focused on the need for bottom-up and localized solutions for resilience that involve vulnerable sectors, including the urban poor, persons with disabilities, and indigenous persons in designing policies for resilience.

Broken, disconnected, and absent infrastructure weakens resilience and prevents coordinated responses to disasters, while rising inequalities exacerbate vulnerabilities. Psychological resilience, which is rooted in social and cultural identity, was examined in light of the risks of IT usage, the costs versus benefits of technology, and cyber security.

Technology is best employed as a way to enable people to develop capacities to deal with risks and vulnerabilities so that they do not turn into disasters and crises. Evidence has shown that investing in disaster risk reduction is more cost-effective than relying on emergency responses. To create resilient cities, the interlinkages among physical infrastructure, safety, and digital technologies must be addressed.

Session 2: Technology and Disaster Risk Reduction

The adoption of the Sendai Framework prompted the creation of disaster risk reduction strategies at national and regional levels, in partnership with civil society and the private sector. This discussion focused on the use of technology and early warning systems for effective disaster risk reduction.

Social and community-specific resilience efforts to ensure food security, provide access to post-disaster funding and allocate resources to local governments were identified as key components of national-level strategies. The need to increase investment in science, technology and inovaton in developing countries was frequently emphasized as critical for strengthening early warning systems and empowering local communities to promote disaster risk reduction strategies.

Member States highlighted their experiences and priorities in using technology for disaster risk reduction, noting that the digital divide is a reality for developing countries whose ability for sustainable development is hindered without access to critical ICT infrastructure. Developing countries need access to technology for economic growth and job creation, including rapid and affordable access to the Internet. SIDS are particularly vulnerable to economic shocks, climate change, and natural disasters, and require greater access to technology and capacity building to improve coordination and increase the use of data technology to help plan for disaster risk reduction.

To be effective, disaster risk reduction technologies must incorporate measures to equally support the infrastructure and hard equipment; the software, including its methodologies; and the organizational arrangement for sustainability, which is critical for success.

The Caribbean Risk Information System (CRIS), a virtual platform for risk management data and information to facilitate analysis, research, and greater public awareness on risk management and climate change, was presented as an example of an innovative technology tool for disaster risk reduction that aims to facilitate evidence-based decision making on building resilience throughout the Caribbean using satellite images, maps, and data analysis of buildings to identify and anticipate impacts and assist policy makers to plan effectively.

In the Sahel, both high-tech and low-tech strategies are employed to combat the negative effects of drought; low-tech strategies developed by indigenous communities are considered equally important as high-tech strategies.

In the question and answer session, *Uruguay* reported that is promoting social innovation by investing in education, with the goal of ensuring that all students and teachers in primary school will have their own computer and best possible broad brand systems. *Ecuador* highlighted the issue of innovative transportation technologies for resilient cities. *Nigeria* is collaborating with the African Union to develop science, technology, and innovation (STI) and overcome challenges related to lack of technology infrastructure. *Morocco* supported placing youth at the center of innovation strategies, and noted that the Ministry of Interior manages a crisis-monitoring center for disaster risk reduction. *Mexico* reported recent increase in Internet access throughout the country by 20 per cent, noting the need for resilient infrastructure to enhance telecommunications.

Session 3: Balancing infrastructure development and sustainability

The effects of increasing migration are a major challenge in many cities, placing an enormous strain on resources and infrastructure. Homelessness is also a growing problem, related to lack of access to infrastructure. This discussion revolved around how technology can help to provide solutions to increase resilience and sustainability.

The need for quality reliable infrastructure was repeatedly emphasized as essential for sustainable economic development, job creation, quality education and health services, adaptation to the effects of climate change, and cyber security. Spatial planning attuned to the needs of the urban poor can help to foster more resilient cities, engaging them in citizen-driven mapping and local planning strategies. The ability to leverage geospatial information management can help provide insight into local contexts.

Amman, Jordan has experienced an enormous strain on resources and infrastructure—including water, education, unemployment, transportation, housing, and medical services—due to mass migration and an influx of refugees. Resilient infrastructure is needed both to accommodate the large number of people in the city and to help create job opportunities for refugees and migrants. Amman has adopted the use of the City Resilience Framework to help assess their state of resilience, and has committed to building by 2020 a resilient and efficient smart mass transport system that maximizes use of efficient local sources of energy, to offset the growth in private car ownership that has caused chronic congestions and increased the need for more parking.

Medellin, Colombia has undergone a transformation since the 1990s, from being the most dangerous city in the world to a leader in innovation. By investing in education, health and infrastructure in areas of the city where the human development index was lowest, using an integrated development strategy that followed good examples from European cities, and incorporating protection of the environment in developing green corridors as part of an urban environment plan for the center of the city, a cultural shift was achieved within the local community. The city now incorporates 140 SDG indicators into their city's development plan, and recognizes that everyone must be engaged in order to achieve the SDGs.

New York City is educating, engaging and mobilizing citizens through its 'greeNYC' initiative to help the city meet its ambitious sustainability goals of generating zero waste by 2030 and reducing greenhouse gas emissions by 80 per cent by 2050.

The 'United for Smart Sustainable Cities' initiative advocates for national policy to ensure ICTs play a key role for smart, sustainable cities, and helps countries build national capacity to guard against cyber threats.

Session 4: National Strategies for Resilience

This session focused on developing national strategies for resilience, while also stressing the importance of regional perspectives and South-South cooperation. While resiliency may differ from setting to setting, inclusiveness is always a central principle. Climate change was discussed in this context as a global challenge that presents a unique opportunity for inclusion and collaboration, adapting science and technology for community development and local innovation. Technology plays a crucial role for the development of early warning systems, where multi-stakeholder platforms and can inform national and local decision-making.

Regional platforms can help support critical aspects of the development of national strategies for resilience such as identifying data gaps, initiating climate change adaptation swaps, establishing and maintaining early warning systems, strengthening capacity building and adopting a nexus approach. Resilience should also be integrated into fiscal frameworks.

A number of participants highlighted initiatives in this context.

The *'Blue Fund for the Congo Basin Commission'* addresses deforestation and irrigation issues, and develops ecotourism in the Congo basin.

The *'National SDG Scorecard'* developed by Women Thrive Worldwide gauges the extent to which grassroots women's rights and gender equality organizations have been involved in the implementation of the SDGs in 2017, and reveals that their inclusiveness is lacking in the formulation of national development plans and resilience strategies.

IUCN highlighted the project *'Mangroves for the Future'*, which aims to achieve conservation, restoration and sustainable management of coastal ecosystems as key natural infrastructure that supports human well-being and security, and called for more research toward nature-based solutions combined with technology.

Session 5: Leveraging technology and innovation to support resilience and inclusiveness in Africa in the context of the 2030 Agenda and Agenda 2063

In a session devoted to addressing development of the Africa region, participants again highlighted the data gap and the urgency to invest in research and technology to close it. The importance of national development strategies to align the 2030 Agenda and the Agenda 2063 was also underscored, as was the need for South-South cooperation to fast-forward progress by facilitating the sharing of best practices and creation of economies of scale.

The multidimensional development challenges faced by Africa also require a more comprehensive approach to addressing vulnerability, inclusive policies emphasizing the importance of gender equality, mainstreaming and improving access to services, and advancing international trade and regional cooperation. An enabling, inclusive and participatory policy environment is key for leveraging technology and innovation to build capacity and support resilience in Africa. Collective efforts involving African partners, commitment and collaborative leadership across the continent is needed.

A number of initiatives were highlighted that aim to enhance socio-economic development through ICTs, including the *'Technology for Good'* initiative and the *'ICT for Girls Programme',* which focus on access for users in sub-Saharan Africa.

It was noted that Africa is the fastest growing mobile market in the world, and in order to capitalize on the socio-economic benefits that come with the growing mobile market, the network infrastructure needs to be efficient and robust. There is a need for cost effectiveness, consumer education, policy integration, private sector engagement, and partnership development that incentivizes innovation. Mobile money solutions can enhance financial inclusion and have the potential to empower rural populations.

The Trans-African HydroMeteorological Observatory (TAHMO) a public-private partnership for weather monitoring that has installed 500 stations across Africa for agricultural and climate monitoring, was

presented as having potential to help create a broader data infrastructure. There is potential to expand and build capacity, as Internet access is still not widely available in Africa. In order to leverage technology and mitigate vulnerabilities of the African continent, there is a need to invest in research, to close the data gaps and address questions related to intellectual property rights. The role of youth is also important to create ownership of technological advances.

The UN has a key role to play in the region, notably to enhance partnerships and showcase impactful initiatives.

Session 6: Designing a resilient and sustainable future – a toolkit to better prepare for tomorrow

The final session expanded on the many applications of different types of technologies for resilience and sustainability. Speakers stressed the importance of political leadership from all levels of government, the need for data to be open and accessible to everyone to help identify and prepare for risks, the need for integrated strategies using both technology and training to more effectively prepare for disasters, and use of geospatial technologies in planning for disasters.

Participants called for increased support to innovation development, focused enhancement of disaster prevention rather than disaster recovery, use of existing resources (e.g. food, electricity, data) in a more efficient way, a multi-risk approach to disaster strategies, and a strengthened nexus between humanitarian issues and development.

The Economic and Social Council and its functional commissions could serve to analyze emerging trends in science and technology, help to build resilience, analyze the impact of new technologies on the labor market, and serve as a platform where representatives of civil society, the academic community, the private sector, and intergovernmental organizations can have an exchange on effective policies in science and technology for resilience.

Closing session

H.E. Ms. Marie Chatardova, President of the Economic and Social Council, concluded the Integration Segment by offering four main messages. First, she reiterated the multi-dimensional nature of the resilience concept, and observed that while its origins can be traced back to natural sciences, resilience has become prevalent in many different disciplines such as psychology and sociology, and more recently in economics, information technology and disaster risk reduction.

Second, she was encouraged to learn that many countries and cities around the world have already developed resilience strategies, and expressed appreciation for the experiences, examples and lessons learned that were shared by governments, local authorities, civil society organizations and the private sector.

Third, the importance of stakeholder engagement, in particular at the community level, shows that the key to resilience of countries is the resilience of its various communities. Consequently, the importance of social cohesion, participation, inclusive decision-making, and ultimately trust among different actors cannot be overemphasized. In the process, technology can be an effective tool to leverage solutions, while ensuring that they are not managed properly to avoid the risk of creating new vulnerabilities.

Finally, she said that the success of resilience strategies depends on all of us. In an ever more interconnected world, raising awareness for global challenges, through evidence-based information, through education and training is critical. She also invited everyone to attend the special ECOSOC meeting on 23 May 2018 in New York on sustainable, resilient and inclusive societies through participation, to continue the discussion.

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