Report from the Inter-sessional Panel of the Commission on Science and Technology for Development (CSTD), on the 2013 ECOSOC Annual Ministerial Review
Lima, Peru, 7-9 January 2013

Summary

During the 2012-2013 Inter-sessional Panel of the Commission for Science and Technology for Development (CSTD), in Lima, Peru, one of the sessions explored issues related to the ECOSOC 2013 Annual Ministerial Review, which will focus on the role of Science, Technology and Innovation, and the potential of culture, for promoting sustainable development and achieving the Millennium Development Goals. The Inter-sessional Panel was hosted by the Government of Peru from the 7th to 9th of January 2013, and chaired by Ambassador Miguel Palomino De La Gala (Chair of the CSTD 2012-2013).

This session included presentations by UNDESA, ECLAC and UNCTAD, followed by discussions on key policy messages and recommendations to be delivered to ECOSOC, as well as regional challenges and priorities.

Key policy messages

The discussions in the Inter-sessional panel, including during the session on AMR, resulted in several key messages in the interface of science, technology and innovation (STI) and development, many of which also highlighted issues pertinent mainly, but not exclusively, to Latin America and the Caribbean (LAC) :

- Investments in science and technology, and particularly information technology, have a positive impact on economic growth and social development. Science, technology and innovation (STI) offer solutions and options for overcoming development challenges, especially through ‘green’ or low carbon development strategies.
- Science and technology approaches can be used for averting climate change impacts. Countries should consider preparing an inventory of greenhouse gas emitting sources and linking it to a science and technology roadmap that proposes

improvements in areas including urbanization, transport, energy, waste management and deforestation.

- Local and traditional knowledge that builds on cultural values is crucial for the development of science and technology policies that address local issues.
- Development of appropriate modern infrastructure is essential to realizing the benefits of STI. Financing is a key element in this regard. New, innovative business models are needed to capitalize on available opportunities. One initiative mentioned was the Little Rock Accord, signed by the Club De Madrid and the P-80 Group Foundation, to link resources available through sovereign wealth, pension funds and other sources, to viable projects.
- Greater urgency should be attached to the challenges created by a growing middle class and the pursuit of unsustainable consumption and production patterns. For many developing countries, including inLAC, population growth may be a less urgent concern than the issue of increasing consumption.
- There is need to distinguish between high and low technology and their use in and application to particular contexts.
- ICT and broadband access should be seen as empowering STI. Public-private partnerships should be established to enable progress in both realms.
- Strong policy and regulatory frameworks are needed and the development of a culture of innovation should be encouraged through education. National development strategies, including broadband and spectrum allocation policies, should be elaborated.
- Internet literacy and development of high quality local content play a critical role in penetration and use of broadband, in addition to the issue of infrastructure.
- In many developing countries, including LAC, the cost of mobile technology and broadband access is still high. As a result, broadband penetration remains relatively low. The use of options such as Universal Service Funds is often effective in overcoming these limitations.

I. Introduction

In July 2013, the Economic and Social Council of the United Nations will hold its seventh Annual Ministerial Review (AMR) at the UN European Headquarters in Geneva. The review will focus on the "role of science, technology and innovation, and the potential of culture, for promoting sustainable development and the achievement of the Millennium Development Goals."

In preparation of the AMR, a session took place on 9 January 2013 within the CSTD 2012-2013 Inter-sessional Meeting with discussions about regional challenges and priorities mainly, but not exclusively, for LAC.

The United Nations Conference on Trade and Development (UNCTAD), which is responsible for the substantive servicing of the CSTD, organized the session in collaboration with the United Nations Department of Economic and Social Affairs (DESA).

The session brought together delegates of CSTD member States and a diverse group of stakeholders from governments, the private sector, academia, NGOs and the United Nations system to discuss the role of STI for promoting sustainable development and achieving the Millennium Development Goals. The session provided an important opportunity for CSTD member countries to contribute to the AMR, and to exchange best practices and lessons learned.

II. Issues in Science, Technology and Innovation for Development

The CSTD selects at each of its annual sessions new priority themes to be reviewed during the following inter-sessional period. At its fifteenth session held in May 2012, CSTD delegates chose two substantive themes for the 2012–2013 inter-sessional period, namely, “Science, technology and innovation for sustainable cities and peri-urban communities”, and “Internet broadband for an inclusive digital society”. These priority themes were discussed at length in dedicated sessions of the 2012-2013 Inter-sessional meeting, with the participation of experts.

A. Science, technology and innovation for sustainable cities and peri-urban communities

Participants in the Inter-sessional meeting discussed the challenges that cities face on their path towards sustainable urban development. Major challenges include unplanned urban growth and the need to prioritize the elaboration and implementation of effective strategies to improve urbanization processes. Issues regarding institutional

capacity for serving new growth areas and problems such as pollution constitute major concerns in many developing countries, including the LAC region. STI can help to solve these urban challenges by enhancing urban management, delivering better environmental outcomes, providing higher resilience against natural risks, improving resource efficiency, and creating new employment opportunities.

On the issue of sustainable mobility, experts highlighted the importance of enhancing public transportation, promoting bicycle use, and improving pedestrian infrastructure. They also stressed the imperative to reduce travel needs, shift towards more sustainable transportation models, and enhance energy efficiency.

Experts underlined the opportunities for STI to support urban and peri-urban farming. Greener cities could help deal with problems resulting from rapid urbanization. Nevertheless, many countries still lack legal and institutional frameworks for the integration of agriculture in urban areas and provision of services and financing for small growers.

Experts also highlighted the role of public policy in fostering innovation ecosystems that build STI capacity for sustainable urbanization. The sustainable development paradigm requires new approaches to meeting basic needs. Both high and low technologies need to be integrated into a working system of solutions. Innovation ecosystems should ensure that technology moves from inventors to beneficiaries. New financing models are important to deploy available technologies. For example, the Little Rock Accord signed by the Club of Madrid and the P-80 Group Foundation in December 2012, aims to mobilize pension and sovereign wealth funds for investment into technologies that address climate change and resource shortages.

B. Internet broadband for an inclusive digital society

Participants underscored that broadband access is of great importance for development, especially in sectors such as education, health, agriculture, finance/banking, e-Government, and local entrepreneurship. There are challenges and gaps to be overcome in order for the benefits of broadband and ICT’s to become a reality. Despite the tremendous improvements, including in LAC, particularly in access to mobile phones, it was noted that broadband access was still lagging due to the gap in mobile broadband penetration in the region. Experts argued that the digital divide in the region in terms of access, penetration and use is becoming wider. Participants identified key action areas for continued

development of broadband access, including: increased government commitment; improved regulatory frameworks promoting competition and investment; and coordinated demand strategies so that consumers can adopt and benefit from broadband access.

Participants saw broadband as a major tool for an inclusive world, reducing inequalities, and improving access to healthcare and information. Despite its benefits, many countries suffer from the high cost of broadband. Therefore, there is a need to bridge the gap in access and affordability both at the regional and country levels.

C. WSIS follow-up, including preparation for the 16th session of the CSTD

Participants undertook a review of the implementation of the WSIS outcomes. It was emphasized that the WSIS helps to maintain the multi-stakeholder nature of Internet governance discussions. Participants reported on and assessed their own efforts towards WSIS implementation. They follow-up on and shared their future plans to achieve the targets set out in the WSIS+10 plan of action. It intended to provide WSIS stakeholders with both guidance and a vision for the way beyond 2015.

The WSIS Forum, launched in 2006 in follow up to the Tunis Agenda for the Information Society and organized by the ITU in collaboration with UNESCO, UNCTAD and UNDP, provides a mechanism to evaluate and reward stakeholders for their efforts on the implementation of WSIS outcomes. Reference was made to the report on "Measuring Information Society", which was published in 2012 and delivered two authoritative benchmarking tools to monitor information society developments worldwide:

1) The ICT Development Index (IDI), which ranks 155 countries' performance based on ICT infrastructure and uptake.
2) The ICT Price Basket (IPB), which is a unique metric that tracks and compares the cost and affordability of ICT services in more than 160 countries globally.

Both the IDI and the IPB are powerful measures for benchmarking and explaining differences among countries and within regions when it comes to ICT developments.

It was noted that significant progress has been made in terms of ICT statistical production, although there are still deficits in conceptual and methodological references. It was stated that developing countries, including in LAC, can contribute to and benefit from the WSIS+10 process in two ways: to make an assessment of their progress around WSIS targets; and to provide a regional approach to the prospects and future challenges in the field of information society.

III. 2013 ECOSOC Annual Ministerial Reviews (AMR)

In the session on the 2013 ECOSOC AMR, **Mr. Vijaya Kumar, Chairman of the Industrial Technology Institute of Sri Lanka, and member of the CSTD,** informed that STI can help to: (i) raise life expectancy from 50 to 64 years; (ii) reduce infant mortality from 13% to 6%; (iii) improve access to safe water from 35% to 65%; (iv) raise the literacy rate from less than 50% to 70% and; (v) improve living standards for billions of people. He mentioned that country competitiveness based solely on low labour costs would eventually be unsustainable and soon vanish. As such, an alternative paradigm of country development has been moving towards finding ways in which science and technology infrastructures and relevant policy initiatives could foster sustainable economic growth.

Mr. Kumar pointed out that poverty reduction strategies should focus more on rural and urban productivity, health, education, gender equality, water and sanitation, environmental sustainability, as well as on STI. He noted that real development progress has not reached the most vulnerable, considering that the poorest children are still facing the slowest progress in improved nutrition and that the opportunities for full and productive employment for women are still scarce. He mentioned that STI has more potential to contribute to the achievement of the MDGs. He also highlighted that the CSTD has recommended targeting of 1% of GDP on R&D spending, but that only a few developing countries are able to do so with most giving low priority to investment in STI. He stated that this is not surprising due to the low human capacity in STI in developing countries and that these countries cannot have immediate returns to their investments. The main achievements in ICT are principally in mobile telephony, driven by the private sector, and in the internet penetration rate which reached 21% in developing countries. In his view, the UN needs to focus its STI interventions on improving capacity to absorb technology, enhancing employment in the manufacturing industry, and improving agricultural productivity of certain crops.

Mr. Mario Castillo, Project Coordinator, ECLAC, presented on "STI in Latin America and the Caribbean region." In his presentation, he noted that the region has enjoyed nearly a decade of relatively high growth; inflation is under control in nearly all countries and, in general, stable economic conditions prevail. He highlighted that despite this improvement, the gap in STI between developed countries and LAC continues to be significant. Specifically, he emphasized the low levels of innovation in the region and the persistence of the productivity gap compared with developed countries. Mr. Castillo underlined that the current patterns of economic growth in LAC are not consistent with sustainable development. He argued that in the current context,

natural resource governance is key to achieve sustainable development in the LAC region. He stated that the magnitude of the effort to move to a more sustainable development path implies significant modifications in the current patterns of production, consumption, distribution, the technological paradigm and the existing relative price structure.

Mr. Neil Pierre, Chief, Policy Coordination Branch, OESC/DESA, stated that the Commission is meeting at a crucial time for ECOSOC as the focus of the deliberations relate directly to the theme of the 2013 ECOSOC Annual Ministerial Review – "Science, technology and innovation, and the potential of culture, for promoting sustainable development and achieving the Millennium Development Goals". He noted that the timing of the meeting also marks the commencement of work in the UN General Assembly to elaborate a set of sustainable development goals, coinciding with significant advancement in the preparations for a post-2015 UN development agenda. He also mentioned that super-imposing these major concurrent initiatives is the intergovernmental focus on strengthening ECOSOC itself. He stated that the key policy messages or recommendations from this meeting would be transmitted to the ECOSOC Substantive Session in July. The main messages of the deliberations, together with those of other regional consultations, will be incorporated into the Secretary General's AMR report to be presented at the July Substantive session of ECOSOC. Additionally, the Secretary General is requested to submit a thematic report for discussion also in July, on the Council's contributions to the post-2015 development agenda. Here, too, the contributions of the CSTD will be valuable, he added. He stated that mainstreaming science, technology and innovation into the proposed SDGs and post-2015 development framework will be critical to integrating the three elements of sustainable development. He noted that economic, social and environmental policies are all closely intertwined with science, technology and innovation systems, which should be seen both as means to implement any agreed development framework, as well as central elements of such a framework. Science and technology have a crucial role to play in informing our understanding of the mechanisms of sustainable development, developing options for sustainable growth and facilitating adoption of evidence-based practices, he concluded.

The presentations and discussions throughout the CSTD Inter-sessional Panel formed a backdrop to the AMR discussions. The deliberations contributed to the identification of some policy messages from developing countries including in the LAC region that could be relevant to the ECOSOC AMR theme during the global review of progress in science, technology and innovation and culture in July 2013. Particularly, deliberations under the priority theme of

the Inter-sessional panel on 'Science, technology and innovation for sustainable cities and peri-urban communities' explored issues related to STI and sustainable development in the context of promoting clean energy. The priority theme on 'Internet broadband for an inclusive digital society' was centred around discussions on how sectoral dimensions of STI (in this case, ICTs) could be better integrated towards achieving MDGs.

Conclusions

Across the developing world, including in the LAC region, challenges remain, such asthe need for sustained efforts in innovation and technological development, a pronounced digital divide, relatively low access to broadband in terms of affordability and availability, and heterogeneity in broadband infrastructure investment, with consequences for achieving inclusive societies. The main conclusions and recommendations include the following:

1. The LAC region exhibits increased economic, social and political stability and good overall economic performance. General projections for the region are very good as it continues to enjoy increased social partnerships and social dialogue, with lower levels of unemployment.
2. Despite these positive trends, there are high levels of inequality across the developing world, including in the LAC region. Education quality and access is also uneven. While foreign direct investment levels have risen in recent years, there are low levels of technology absorption, technological inputs in exports and labour productivity.
3. To offset some of these challenges, policies should be implemented to strengthen the links between low productivity sectors with sectors that are at technological frontiers in many developing countries, including in the LAC region. Greater incentives should be considered to channel foreign direct investments into increasing labour productivity and technological absorption.
4. The developing countries, including in the LAC region should increase the levels of investment in research and development, currently at an average of 1% of GDP, in order to enhance innovation and capitalize on its economic and social benefits.
5. Public policy and regulation should be geared towards increasing investment in education and digital literacy. In addition, ICT regulatory and strategic planning and visioning frameworks should be established or strengthened where necessary.