INTERSESSIONAL PANEL OF THE UNITED NATIONS COMMISSION ON SCIENCE AND TECHNOLOGY FOR DEVELOPMENT (CSTD)

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Contribution by Belgium

to the CSTD 2020-2021 priority theme on "Using science, technology and innovation to close the gap on Sustainable Development Goal 3 on good health and well-being"

PRIORITY THEME 2: Using science, technology and innovation to close the gap on SDG 3, good health and well-being

United Nations Commission on Science and Technology for Development (CSTD)

INPUT OF BELGIUM

Questions

1. Can you give examples of projects/policies in your country aimed at using science, technology, and innovation for early warning, risk reduction and management of national risks? What are the main outcomes? And What are the main challenges confronted while trying to implement these projects/policies in your country or region?

2. Can you provide examples of policies/projects/initiatives aimed at strengthening national health innovation systems? For example, how does your country build innovative capabilities through investments in R&D and human capital? What institutional and regulatory arrangements are in place to stimulate healthcare innovation and effectively address safety, ethical and other concerns?

3. Could you share case studies of regional and international cooperation that have strengthened health capacities, particularly in developing countries? Can you provide success stories involving regional or global cooperation in academic research networks, STI diplomacy, or initiatives to make healthcare innovations accessible for all?

4. Could you suggest some contact persons of the nodal agency responsible for projects/policies, related technologies and international collaboration in this context as well as any experts (from academia, private sector, civil society or government) dealing with projects in this area? We might contact them directly for further inputs or invite some of them as speakers for the CSTD inter-sessional panel and annual session.

5. Do you have any documentation, references, or reports on the specific examples on the priority theme in your country or region?

Input

The Belgian federal government, the Flemish authorities and the Walloon authorities support a number of projects and initiatives aimed at strengthening national health innovation systems, as well as projects using digital technologies to improve healthcare in developing countries. You will find below examples of initiatives and projects, with mention of the agency responsible for its implementation.

1. Can you give examples of projects/policies in your country aimed at using science, technology, and innovation for early warning, risk reduction and management of national risks? What are the main outcomes? And What are the main challenges confronted while trying to implement these projects/policies in your country or region?

- In terms of risk reduction, WeLL (Wallonia e-health Living Lab) and the University of Liège (LUCID, Faculty of Applied Sciences) are working within the framework of an EU-funded project (Wal-e-Cities), to integrate health and well-being in the development of smart cities. These new cities that integrate ICT to enhance the quality of their services (be it for energy or mobility) bring in an integrated approach to their development which includes health and well-being. The project Wal-e-Cities has an "Urban environment and citizen well-being" component, which seeks to respond to the challenges of citizen well-being and health in future Smart Cities. Some risks for city dwellers are identified such as low attractiveness of

city centres, impact of sedentary lifestyles and eating habits on quality of life, improvement of the urban environment, ethical issues of the connected city, digital divide, ...

- Also aiming at risk reduction, the Wallonia e-health Living Lab has developed a **Health Impact Assessment methodology** (similar to Environmental Impact Assessments). These studies aim to evaluate *ex-ante* the impact that a project (a building, a road, any project without necessarily having a direct link with health) will have on the health and well-being of the population. It also measures impact on health inequalities and tries to make the initial project evolve so as to maximise positive impacts and reduce inequalities. This methodology makes direct use of the SDGs framework (more information: Lara Vigneron, coordinator of the Wallonia e-health living lab, +32 (0) 486 48 93 06, Lara.VIGNERON@well-livinglab.be).

2. Can you provide examples of policies/projects/initiatives aimed at strengthening national health innovation systems? For example, how does your country build innovative capabilities through investments in R&D and human capital? What institutional and regulatory arrangements are in place to stimulate healthcare innovation and effectively address safety, ethical and other concerns?

- Le Patient Numérique (the Digital Patient) is a community created to share knowledge and best practices on e-health among healthcare players in Belgium, and is based in Wallonia. It brings together 65 hospitals and 20 MedTech companies. Recently, it has grown to include stakeholders from Luxemburg, France and Switzerland to launch the 150 Shades of e-Health project. Through this project, the "Digital Patient" community has created an index to score the disruption value of digital solutions in the daily health practice (contact: thierry.vermeeren@ozconsulting.be).

- The Wallonia e-health living lab manages the setting up of innovation centres in hospitals, with each centre being adapted to the specific needs of the hospital where he is settling in.

3. Could you share case studies of regional and international cooperation that have strengthened health capacities, particularly in developing countries? Can you provide success stories involving regional or global cooperation in academic research networks, STI diplomacy, or initiatives to make healthcare innovations accessible for all?

- The Federal government and the Flemish authorities support financially the **Institute for Tropical Medicine Antwerp, which has numerous cooperation with health institutes and health authorities in developing countries**. Whereas digital technologies are often used in those cooperation projects (for exchange of knowledge, training, etc.), scientific innovation and research as well as capacity building are the main drivers for this type of cooperation. For instance, the Department Foreign Affairs of the Flemish authorities supports cooperation between the Institute for Tropical Medicine Antwerp and the "Institut Nacional de Saud" in Maputo, Mozambique. The partner organization is a reference testing facility and laboratory of the Ministry of Health in Mozambique. As such, it played a key-role in de COVID-response in Mozambique.

- The Flemish authorities support **two health projects of the Clinton Health Access Initiative promoting the use of new technologies to improve the health care system in Mozambique** (see also https://view-awesome-table.com/-LMwGw0wqJDAKoJ7LG7O/view?filterP=Internationale%20NGO's&filterV=2016&filterZ=CHAI for a complete description of the projects in English, in pdf format). The first project addresses the Maternal, Newborn Health continuum, supporting innovations bringing sustainable improvements to health. The second project aims at reinforcing the national health system and increase the number of HIV patients receiving treatment. Specific attention is given to mothers and infants and mother-to-children transmission.

- The Flemish authorities support **several projects aiming at better access to SRHR for vulnerable teenagers and women in Mozambique** (see also https://view-awesome-table.com/-LMwGw0wqJDAKoJ7LG7O/view?filterG=Mozambique&filterN=Bevolking%20%26%20Repro

ductieve%20Gezondheid for a complete list and description of these projects) . **Amongst those projects, two are being implemented with the use of digital technologies**. The NGO **PCI Media** provides multimedia communication tools and aids for health care workers in charge of sensitization campaigns on SRHR targeting teenagers. Innovative use of media can be a game changer for SRHR. Local languages and the local cultural context are used when producing the content. Specific attention is given to reaching teenagers living with a disability or teenagers who are difficult to reach. The second project, implemented by NGO **CUAMM**, is part of a programme to improve sexual and reproductive health in adolescents and women with a focus on enhanced access to contraception, HIV and STD prevention and treatment through tailored interventions in schools, communities and health facilities. The target groups (teenagers and women) are reached through their schools, the local health centers or their local community structures. For teenagers, the objective is to improve health care and health information, with a focus on SRHR, whereas for women, the objective is prevention and treatment of specific female problems (fistula, etc.) The project is implemented in the districts of Tete city, Moatize, Nhamayabue and Mutarara. Besides supporting schools, local health care centers and local communities, the project mobilizes a network of activists, peers and community actors in order to reach teenagers through targeted sms messages. The project should reach 200.000 teenagers and young adults in the above mentioned districts (which is about 30% of the total population).

- The Flemish authorities support the **World Health Organization's research and trainging programme HRP** (the UNDP/UNFPA/UNICEF/WHO/World Bank Special Programme of Research, Development and Research Training in Human Reproduction; it is the main instrument within the United Nations system for research in human reproduction). HRP has the lead in *digital health solutions* within WHO. Belgium recommends that you contact Mr. Garrett Mehl (mehl@who.int ; +41792043883), who is an excellent expert in this field. https://www.who.int/reproductivehealth/hrp/en/

- Five **projects using innovative digital tools** (mass sms, AI, big data, mobile application, etc.) **in the health sector** are supported by **the Federal development cooperation agency ENABEL**. You can find the outline and evaluation of those initiatives on the following webpage: https://www.wehubit.be/en/projects (select "health" in the sector drop down menu). The projects are being implemented in Burkina Faso, Uganda, Tanzania and DRC Congo.

Examples of projects:

- **Medi-Capt:** application and platform for collection and use of forensic evidence photos.
- **Mama Rescue**: mobile money transport vouchers for mothers to get free transport to give birth to their child in health centres.

General (across sectors):

- **Digital technologies are increasingly present in development programmes**. You will find below a number of **lessons learned** by the Belgian federal development cooperation when making use of digital technologies in development programmes :

1) **Cooperation between public and private sector** is important. Belgium is at the basis of the European D4D-HUBEU-Africa, where cooperation between private and public sectors is paramount.

2) **Digitalization accelerates the implementation of all SDG's**. Digital technologies make for increased cost-efficiency.

3) The **digital principles** (www.digitalprinciples.org) are a set of living guidance intended to help practitioners succeed in applying digital technologies to development programs. They are central in the Belgian D4D strategy.

4) The **connectivity** debate (how to connect all regions across the world) should be based on a **cost-benefits** analysis. Innovative financial mechanisms are necessary.

5) **"Off line strategies"** i.e. measures, strategies and actions that influence the context of the project are as important as the technical components in a digital project. This refers to the human rights and freedom of speech context, but also to the fight against cyber criminality and how local politics are conducive of a favorable digital eco-system.

6) **Digital divide**; Leave no one behind. The growing gap in connectivity amongst the population often reflects the gap in access to basic social goods (electricity, water, food, etc.) Partners should not work in silo and should see connectivity as one of the "global public goods". This is best exemplified by the need for digital education in the context of COVID-19 restrictive measures.

4. Could you suggest some contact persons of the nodal agency responsible for projects/policies, related technologies and international collaboration in this context as well as any experts (from academia, private sector, civil society or government) dealing with projects in this area? We might contact them directly for further inputs or invite some of them as speakers for the CSTD inter-sessional panel and annual session.

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