

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

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Contribution of Germany

to the CSTD 2016-17 priority theme on 'New innovation approaches to support the
implementation of the Sustainable Development Goals'

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On behalf of Germany's Development Cooperation (BMZ) we have gathered information on tech-entrepreneurship, engaging with the private sector, using hackathons, and promoting education and employment of women as examples for new innovation approaches to support the implementation of the Sustainable Development Goals.

Example 1: Tech-Entrepreneurship and bottom-up innovation through 3D-printing

Concerning grassroots, bottom-up and inclusive Innovation, we recommend to look at the work of tech-start-ups in Africa, that use 3D-printers and open source technology to enable pro-poor and per-poor innovation to reach SDG 1, SDG 9 and SDG 12:

Good and documented specific examples include:

- Woelab Togo - Premier Espace Africain de Démocratie

Technologique <http://ww.woelabo.com> (News: e.g.

<http://www.bbc.com/news/world-africa-33803685>)

- AB3D African born 3Dprinting

<http://ab3d-kenya.wixsite.com/ab3d> and the the Nairobi FabLab

Robotics Outreach Program (printing amongst others a shoe inlet for handicapped people, News:

<http://www.istg-africatomorrow.com/SISTEM-Ombatti-Mar2016.html>).

German Development Cooperation supports such tech start-ups and their hubs through the new "Tech Entrepreneurship Initiative Make-IT", for more information on Make-IT, see

http://www.bmz.de/de/mitmachen/Wirtschaft/Make_IT/index.jsp (in

German), and provides spaces for Tech-Entrepreneurs and 3D-Printing

organizations to network internationally, see BMZ Cebit meeting on open manufacturing & more:

<http://www.fieldready.org/single-post/2016/03/08/CeBIT-2016-innovation-andglobal-collaboration>

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Example 2: Engaging with the private sector to promote inclusive innovation

German Development cooperation also works with private sector to promote inclusive pro-poor innovation, and runs several "inclusive business hubs" worldwide.

Two specific examples include:

- SMK Inclusive Innovation Challenge 2016 Indonesia for tech

innovations for communities with Intel: The Internet-of-Things

Innovation Challenge in Indonesia 2016 is a challenge and training

programme for students of schools for technical and vocational all over

Indonesia to get familiar with the open circuit hardware, earn

teambuilding skills and develop an idea for an inclusive IoT Innovation,

which has a positive and strong impact on communities, if not the

society. The mission-oriented "SMK Inclusive Innovation Challenge

2016" was implemented by the GIZ Responsible and Inclusive Business

Hub Southeast Asia on behalf of the German Federal Ministry for Economic

Cooperation and Development and in Partnership with Intel. See

<https://smk.dicoding.com>

- Strategic Alliance on SME promotion and inclusive innovation

with Bosch in India: German Development cooperation in India is working

with Bosch on providing affordable technology-based solutions in key

areas of the SDG, supporting health suppliers in order to benefit

low-income patients and expand access to better health services. One

example is a locally-developed eye-care solution that screens and

detects eye diseases. The system, composed of both hardware and software, is more affordable for individual practices and big health suppliers compared to competitors. In a country in which nearly one in every three citizens is visually-impaired, the provision of such a product can impact a significant number of lives - an estimated 80% of vision loss cases in India are preventable if they are detected early enough. (programme just started, documentation on request)

Example 3: Using hackathons to promote education, health

German Development cooperation is mainstreaming innovative digital approaches contributing to the SGDs, such as hackathons. The main tool to promote such tools is a new set of guidelines and step-by-step instructions to implementing agencies of German Development cooperation, the "Toolkit - Digitalisation in Development Cooperation and International Cooperation in Education, Culture and Media", for "hackthons", see section 4 "Methods, Tools and Approaches", point 4.3 "how do I plan a hackathon".

https://www.giz.de/de/downloads/ICT_Toolkit_and_Glossary_ENG.pdf

Specific examples of the use of hackathon of German Development Cooperation in the area of education, health include the following:

- Hackathon "Gamification for Social Good" at the e-learning

Africa conference 2015, see:

<https://10innovations.alumniportal.com/hackathon/best-practice-the-gamify-it-hackathon-gamification-for-social-good.html>

and

- Challenge "Hacking for Global Health" in Kenya 2016/2017

- a Hackathon complemented with additional support for the best ideas created as well as their presentation to Chancellor Merkel and experts from the health industry in Germany, see: <http://hack4health.info>

Example 4: Promoting women's education and employment in ICT

Germany is committed to remove the barriers that prevent women from taking full advantage of the benefits of the digital transformation and to take steps towards enhancing women's and girls' e-skills and participation in the digital world as users, employees and entrepreneurs. Germany places the topic of "eskills4girls" on the agenda of its G20 presidency in 2017.

One example of promoting education and employment of women in ICT has only recently started in Rwanda as part of the programme "Promotion of Economy and Employment -

Eco-Emploi". Please find information on the programme attached.

Information on the promotion of women has not yet been included in the pdf, but can be submitted at request.

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Promotion of Economy and Employment – Eco-Emploi

The challenge

Rwanda has maintained steady growth and macroeconomic stability for the past 15 years, between 2001 and 2015 real GDP growth averaged at about 8% per annum. However, most of those in employment still work in poorly paid positions, above all in agriculture. In 2000, the government of Rwanda established the “Vision 2020” as an economic blueprint to achieve a knowledge-based economy and become a middle-income country by 2020. The Economic Development and Poverty Reduction Strategy II (EDPRS2) recognises the important role of employment for economic development and poverty reduction and, accordingly, call for “200,000 off-farm jobs to be created each year”.

The most challenges remain generating employment opportunities for disadvantaged groups, especially the youth and women, and transform current vulnerable jobs into productive and remunerative ones. The national development strategies concentrate on strengthening the private sector, improving technical and vocational education and training (TVET), and raising the employment rate.

Our approach

The programme Eco-Emploi is part of the priority area “Sustainable Economic Development” of the Rwandan-German Development Cooperation. Eco-Emploi embodies an integrated approach of technical and vocational education and training, labour market interventions and private sector development. It supports the economic sectors ICT, wood

Project Name	Promotion of Economy and Employment –Eco-Emploi
Commissioned by	German Federal Ministry for Economic Cooperation and Development (BMZ)
Project region	Rwanda
Lead executing agency	Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH
Duration	June 2016 –May 2019

economy, tourism and creative industries [above all audiovisual business] through joint activities with public and private actors. Additionally, the programme provides advice to the government, public and private actors operating in the areas of economic and employment promotion and TVET.

The overarching objective is to create a convergence between a better qualified work-force and the demand of more competitive enterprises.

The benefits

To foster growth of the economic sectors ICT, wood economy, tourism and creative industries, commonly known as core-groups of key actors are formed to identify needs and challenges in the respective sector’s value chain. For example, challenges in regulatory frameworks or a need for certain labour skills are identified and subsequently addressed in joint activities with the respective actors. The strengthened network of the different actors in the sectors is expected to have an additional positive impact through more coherence and alignment.



L: IT lab in SOS Hermann Gmeiner Technical High School, Kigali

R: Former women street vendors at Musanze Public Market

Page2. L: Kwetu Film Institute, editing room

R: A carpenter at Integrated Craft Production Centre in Rubavu District



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To improve conditions of the business and investment climate, the programme is working with the Rwanda Development Board (RDB) and the Private Sector Federation (PSF) in all 30 districts through public private dialogues (PPD). Longstanding cooperation experience paved the road to better relations with the private sectors and leads to a substantial improvement in the business environment through dialogues. More support will be provided to sector and thematic PPDs at national level and specific business development services. Small and medium sized enterprises' competitiveness in technical and management areas are strengthened through business development services. The group counselling approach Nucleus which was piloted in previous years shall be extended in scale and focused on the selected economic trades and will build a sustainable financing structure.

The orientation of TVET on the needs of the business sector is crucial, as qualifications of graduates need to meet occupational standards set by expert workers from companies. The supporting activities, therefore, focus on initiating cooperation between TVET schools and enterprises aiming at increasing workplace learning (dual training and apprenticeship). Additionally, the quality of training is enhanced by ensuring a continuous Training of Trainers (ToT) programme on practical skills upgrading. In previous years, the advisory services in skills development led to the improvement of the capacity of the TVET-system towards a more demand oriented labour market system. Further support will ensure the institutionalisation of training courses for school-based TVET trainers and in-company-trainers under a national decentralised ToT system. Additional focus will be on the implementation of employment oriented further training courses envisaged in the NEP to address immediate job opportunities for the young graduates.

The support to labour market interventions focuses on the priorities set in the NEP. In partnership with the Ministry of Public Services and Labour, public job centres will be established in medium sized cities and the existing Kigali Employment Services Centre (KESC) will be supported to improve and expand its services with a special focus on integrating marginalised groups in the labour market. In the past, labour market interventions contributed to a better coordination and monitoring of NEP-activities at national and district level and facilitated the matching process of jobseekers and potential employers through the KESC. Further support will ensure the improvement of the capacities of the government to produce and process employment data through the Labour Market Information and Analysis (LMIA) System, which includes the Labour Force Survey (LFS), for informed labour market policy-making. Further Employment Service Centres are planned to be developed in the other medium sized cities to improve the coverage with and delivery of employment services in the country.

The economic empowerment of women and people living with disabilities are a cross-cutting effort in all activities of the programme.

Success factor

Eco-Emploi applies the integrated approach of technical vocational education & training, labour market interventions and private sector development to four specific economic sectors in Rwanda. With this clear focus and the necessary mandate of addressing the respective sector's needs with crucial activities, it is achieving sustainable economic development.

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