UNLEASH Rwanda

Thematic Tracks





Introduction to thematic tracks

Talents in the UNLEASH Rwanda Innovation Lab will get a hands-on opportunity to work in teams on one of seven thematic tracks that tackle specific Sustainable Development Goals (SDGs).

You can find an overview of all thematic tracks in this document. The thematic tracks have been developed by UNLEASH in close collaboration with partners, the UNLEASH Community, and stakeholders of UNLEASH Rwanda.

Content of thematic tracks

Each thematic track contains 1) a description on why the thematic track is relevant for the UNLEASH Rwanda Innovation Lab, 2) a range of challenges to address, and 3) resources that you can use to make your decision on which thematic track you would like to work on during UNLEASH Rwanda.

After you have informed yourself about the thematic tracks, you pick your first and second priority tracks in the Cvent registration form under "SDG Tracks".

UNLEASH will do its best to provide all Talents a spot in your preferred track, however there is <u>no guarantee</u> that you will work within one of your priority tracks.

How can I use the thematic track descriptions?

Each thematic track description aims to <u>inspire creative thinking</u> and <u>provide fact-based resources</u> that help you to anchor your problems, ideas, and solutions in the right thematic and user-centred context.

The thematic track challenges do not prohibit you from developing a problem, idea, or solution outside of the scope of the challenges. They are purely informational and suggestive.

How will the thematic track look like?

Each thematic track has:

- 120+ Talents developing solutions within the theme
- 10+ Facilitators guiding Talents through the innovation process
- Experts supporting by providing content-specific feedback, insights, and guidance to Talents during the UNLEASH Innovation Process.
- Innovation materials (e.g., UNLEASH Activity Cards, stationary, easels, prototyping materials, etc.)
- Access to drinks and food to keep you and your brain energized

How does the UNLEASH Rwanda program look like?





(2 Dec)

UNLEASH Rwanda kicks off with an Opening Ceremony to welcome and inspire Talents.



INNOVATION PROCESS

(3-6 Dec)

Talents break into different thematic areas to co-create solutions in teams supported by Facilitators and Experts.



PITCHING & CLOSING

(7-8 Dec)

Talents pitch their ideas during the closing days, featuring a marketplace and a closing celebration event.

UNLEASH Rwanda SDG Tracks





Financial Inclusion



Non-Communicable Diseases





Sexual and Reproductive Health







ICT and Youth In Work



Reliable and Renewable Energy



Circular Economy





Climate Action and Land Use











Overview and challenges

The COVID-19 pandemic accelerated the adoption of digital banking, changing the way we access financial services. Technology has had a key role in the progress towards financial inclusion, but 1 out of 4 people still don't have access to banking services.

Promoting financial inclusion empowers individuals and communities, fostering economic growth, reducing vulnerability, and advancing social equity.



Financial inclusion in East Africa and Rwanda

Even though more than 90% of Rwandans have access to financial services, the young population is the group who suffers the highest rate of exclusion, followed by adult women. As in the rest of Sub-Saharan Africa, mobile money services have contributed to a higher financial inclusion, yet the gender gap still remains.

Sub-Saharan Africa is the region with the highest penetration of mobile money in the world, but also the one with least access to ICT infrastructure.



Challenges that you could address with your team



Financial literacy. Equip individuals with essential skills for accessing and managing financial services online.



Mobile-Based Social Welfare. Create user-friendly mobile apps for easy access to social welfare benefits.



Financial health. Support individuals in making informed decisions, manage debt, and build a strong foundation for their longterm financial health.



Last-Mile Finance. Design the digital infrastructure, required for training, support, and access to financial services, particularly in remote and underserved areas.



Financial disparity. Provide women with tailored financial services, training, and resources to enhance their financial independence and economic decision-making.



Finances for Youth. Equip young people with tools on financial planning, investment, and entrepreneurship to improve their economic future.

References

- → UN DESA. 2023. The Sustainable Development Goals Report 2023
- → FinScope. Financial Inclusion, Rwanda. 2020.
- → Macknight, Joy. Rwanda's efforts to improve women's financial inclusion. The Banker. June 23, 2023. Link.



Overview and challenges

Non-Communicable diseases (NCDs) are chronic conditions that cannot be transmitted between individuals. They are the leading cause of death globally, responsible for 71% of all life losses. NCDs encompass cardiovascular diseases, cancers, respiratory diseases, and diabetes. Risk factors such as tobacco use, unhealthy diets, physical inactivity, and harmful alcohol consumption contribute to NCD prevalence. NCDs are a significant public health challenge, with around 15 million premature deaths occurring annually of which 86% happen in low- and middleincome countries. Prevention management require coordinated and innovative approaches worldwide.



Non-Communicable Diseases in East Africa and Rwanda

East Africa, like many regions worldwide, is experiencing a rising burden of Non-Communicable Diseases (NCDs). In East Africa, NCDs-related morbidity and mortality is increasing with the latest statistics showing an average of 35.6% NCD mortality. A major challenge in the region lies in the detection and diagnosis of diabetes, as 7 out of 10 Africans who suffer from it are unaware of their condition. According to the International Diabetes Foundation 24 million adults in the African region are living with diabetes and 297,000 adults in Rwanda are living with diabetes.



Challenges that you could address with your team

Access to care, awareness, and prevention of NCDs, particularly for poor and vulnerable populations



Universal Health Coverage. What strategies can we create that ensure NCD patients living in rural areas have access to treatments and care?



Urban Planning for Wellbeing. How can we design urban environments that promote and sustain healthy habits to prevent NCDs?



Early Diagnosis. How can we design (digital health) tools and stimulate early NCD symptom detection to prevent confusion with diseases as malaria, resulting in mistreatment?



Healthy Pregnancies. How can we provide better access to antenatal care in pregnancy and skilled care during and after childbirth to prevent NCD mortality?



Community Advocacy. How can we support local community leaders to advocate for NCD prevention and awareness?



Mental Health Integration. Integrate mental health support into NCD awareness, prevention and its effects on people.

References

- Non-Communicable Diseases. World Health Organization. September 16, 2022. Link.
- → Non-Communicable Diseases. World Health Organization. September 16, 2022. <u>Link</u>.
- → Juma, P. (2017). Non communicable disease benchmark survey in east African countries report 2017. Nairobi: East African NCD alliance.
- →International Diabetes Foundation. Consulted on August 2023. <u>Link</u>.
- → World Health Organization, 2021. Factsheets: Noncommunicable Diseases. <u>Link.</u>
- → World Health Organization, 2021. Diabetes prevention, care challenges in Africa. <u>Link.</u>







Overview and challenges

Addressing Sexual Reproductive Health and Family Planning (SRHFP) is a crucial step towards an equitable society. Global disparities persist as only 56% of women aged 15 to 49 can make their own decisions on their sexual reproductive health, and access to a safe abortion remains out of reach for 1.2 billion women and girls.

While progress is evident, the COVID-19 pandemic exacerbated gaps in maternal health and contraception methods, resulting in 12M women experiencing disruptions in family planning services leading to 1.4M unintended pregnancies in lower- and middle-income countries.

Ensuring universal access to sexual and reproductive health will not only reduce the maternal and infant mortality, but also pave the way to economic prosperity, reducing spending of low-income families and inequalities.

Sexual and Reproductive Health in East Africa and Rwanda

Whilst Rwanda is a leading country within Sub-Saharan Africa when it comes to regulations and laws that guarantee universal sexual reproductive health care, information and education, the region has the lowest proportion of women and girls making informed decisions on their reproductive health in the world.

Three of the top 5 countries with the highest number of maternal deaths are in East Africa, and maternal mortality is still a challenge in Rwanda, where 203 women die per 100,000 births.



Challenges that you could address with your team



Access to contraceptives. Ensuring availability and affordability of modern contraceptives.



Decreasing teenage pregnancies. Identifying and tackling the root causes of teenage pregnancies and support young girls to prevent undesired pregnancies.



Reducing maternal mortality. Training for healthcare workers to improve antenatal care and increase skilled birth attendance.



Rural access to healthcare. Developing strategies to reach remote and underserved communities with SRHFP services.



Family planning for all. Addressing the social stigma around family planning and reproductive health services.



Mental health and Sexual and Reproductive Health and Family Planning. Integrating mental health support into SRHFP services.

References

- →UN Women (2021). Progress on the Sustainable Development Goals: The Gender Snapshot 2021. Link
- → World Development Indicators from the World Bank | Data Catalog updated on June 30, 2023
- Finding innovative ways of improving the quality of maternal and newborn health care through a groundbreaking mentorship program, UNFPA, May 26, 2023. Link.
- →Guttmacher Institute (2021): Sexual and Reproductive Health Care Is Key to Achieving Universal Health Coverage. Link.



Overview and challenges

Today's youth face huge challenges in finding jobs and earning a decent income. Around the world, 25% of youth are not in education, employment or training, and they are far more likely than adults to find themselves unemployed or in low paying, informal sector jobs.

ICT literacy (including communication / collaboration; problem solving; safety; content creation; and information / data literacy) is still low worldwide, which negatively impacts universal and meaningful connectivity. Furthermore, the world is facing an unequal access to ICT infrastructure, which hinders the possibility for sustainable, economic growth. Providing young people with access and education on ICT will help them learn valuable skills and boost their employability and confidence to venture themselves in the job market.

ICT and Youth in Work in East Africa and Rwanda

Rwanda operationalized its national strategy for youth employment in 2020, and is considered one of Africa's top 5 fastest-growing economies, with a blooming start-up ecosystem.

The African continent has the youngest population in the world and according to the International Monetary Fund, by 2035 there will be more young Africans in the workforce than in the rest of the world combined. Yet in East Africa, one out of three young people are currently not working, studying or training and the vast majority of those that are working are doing so informally. This, combined with the lack of access to Internet and the missing opportunities that that entails, makes the integration of youth into the workforce a more urgent challenge than in other areas of the world.



Challenges that you could address with your team



Bridging the Digital Skills Gap. Equip youth with relevant digital skills and literacy for emerging job markets.



Digital inclusion. Develop strategies to bridge the digital divide and support youth in situations of vulnerability.



Youth-Led Tech Entrepreneurship. Foster an ecosystem that supports youth in starting and scaling techdriven businesses.



Women participation in ICT. Develop initiatives leveraging ICT to increase women's participation in private, public, and civil society labor markets.



Decent Work for Youth. Create tools to match youth skills with decent job opportunities, promoting sustainable economic growth.



Formal Employment. Stimulate and develop collaborations with private sector actors to increase formal employment opportunities for youth.

References

- → UN DESA. 2023. The Sustainable Development Goals Report 2023
- → FinScope. Financial Inclusion, Rwanda. 2020.
- → Macknight, Joy. Rwanda's efforts to improve women's financial inclusion. The Banker. June 23, 2023. <u>Link</u>.
- The transition from the Informal to the Formal Economy in Africa, International Labour Organization, December 2020. <u>Link</u>.



Overview and challenges

People have witnessed progress in getting access to reliable and renewable energy, but substantial disparities persist to this day. The world's conflicts and economic uncertainty combined with the volatility of energy prices poses great challenges to reaching the almost 700 million people without access to electricity, and to transition to cleaner and reliable energy sources.

Urgently accelerating electrification, investments in renewables, and grid enhancements are essential to improve healthcare, reduce gender inequality and achieve other sustainable development goals.



Reliable and Renewable Energy in East Africa and Rwanda

From the 700 million who don't have access to electricity in the world, 80% live in Sub-Saharan Africa. The region also lacks access to clean fuels and technologies, which could negatively impact global access too.

Rwanda's electrification rate is currently 48.7%, and their ambition to reach 100% electrification by next year will focus on improving network reliability nationwide and increasing electricity access for manufacturing and household consumption alike.



Challenges that you could address with your team



Energy Microgrids for Last-Mile Access. Create localized energy networks to reach underserved regions.



Energy Efficiency. Establish closed-loop energy systems to minimize waste and maximize energy potential.



Preventing Energy Usage. Develop efficient cooling techniques and apply demand planning to accommodate for increased urbanization.



Smart Energy Consumption. Limit energy poverty through developing tailored solutions linked to livelihoods to minimize energy usage.



Accessible Energy for Critical Institutions. Ensure healthcare facilities and schools have reliable energy access to boost sustainable development.



Energy Storage Solutions. Develop efficient energy storage and distribution of peak usage to ensure uninterrupted supply.

References

- → UN DESA. 2023. The Sustainable Development Goals Report 2023
- →IEA, IRENA, UNSD, World Bank, WHO. 2023. Tracking SDG 7: The Energy Progress Report. World Bank, Washington DC. © World Bank. License: Creative Commons Attribution—NonCommercial 3.0 IGO (CC BY-NC 3.0 IGO).
- Rwanda's 100% electrification target by 2024 receives FRW 82.1 billion financing boost. Ministry of Economy and Finance. June 4, 2021. <u>Link</u>.



Overview and challenges

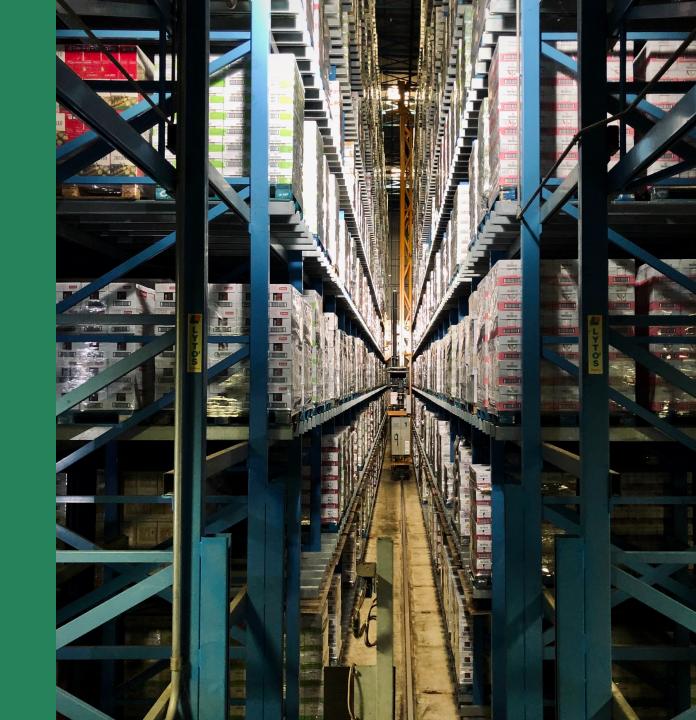
The "circular economy" is opposite of a "linear economy" in which resources are extracted, processed, and discarded as waste. Circularity instead is a regenerative approach that reshapes consumption and production patterns, which is essential to accelerating the achievement of the SDGs. The circular economy focuses on minimizing negative impact from various business models by continually reusing materials, repurposing and regenerating, and seeing waste as an opportunity.

Only 7.2% of used materials are cycled back into our economies after use and with 92 million tons of clothes that end up in landfills every year and 20% of clothes being recycled, it is crucial to change the way we consume and produce goods. A circular approach promotes refusing consumption/production when not needed, reusing and repurposing used materials, reducing waste and extending product lifecycles by design.

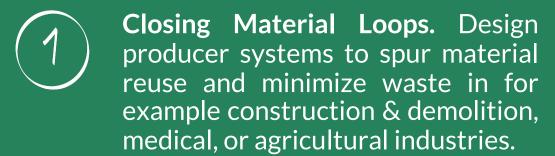
Circular Economy in East Africa and Rwanda

Rwanda has embraced the circular economy as a cornerstone of its growth strategy. Its pioneering ban on single-use plastic has resulted in an investment opportunity for young entrepreneurs, with the emergence of start-ups reinventing the country's plastic waste and its supply chains.

In Africa, 70 to 80% of the municipal solid waste generated is recyclable, yet only 4% is recycled. With the urban population in Africa increasing the fastest of all continents at 3.5% per year, Sub-Saharan Africa is expected to become the dominant region globally in total waste generation.



Challenges that you could address with your team



Circular Fashion. Increase the longevity of textiles' use phase by developing durable, repairable, and circular fashion products that can be recycled when worn down.

Reusing and leasing infrastructure.

Develop initiatives that make it common to reuse and share products, materials, and technologies.

4

Low impact materials. Promote alternative, next-generation, and long-lasting materials for clothes production.

5

Modular design. Reconfigure the design of commonly used products to be taken apart, reused, and repurposed.

6

Sustainable Supply Chains. Build and support transparency and ethics in supply chains that prioritize circular principles, e.g. around (mis)using landfills.

References

- → 17 most worrying textile waste statistics and facts. The Roundup. <u>Link</u>.
- → Rwanda makes strides in plastic ban. Global Times. August 9, 2022. <u>Link</u>.
- United Nations Development Programme: What is Circular Economy and why does it matter? Link.
- → World Resources Institute: Circular food in Rwanda. Link.
- United Nations Environment Program: Africa Waste Management Outlook, 2018. Link and Link.
- -> Circular Economy on the African Continent (GRID-Arendal, ACEN, Footprints Africa, 2021)
- → Five Big Bets for the Circular Economy in Africa (WEF, ACEA and AfDB, 2021). Infographic
- → The Circular Economy: Our Journey in Africa So Far (Footprints Africa, 2021)
- → Financing the circular economy (Ellen McArhur, 2020)

A focus on five cross-cutting thematics in Sub-Saharan Africa

The five big bets for Africa's path towards the circular economy are industries that offer immediate opportunities for increased circularity that will improve the economy, jobs, and the environment on the continent in the long term (Africa Circular Economy Alliance):



Built environment

African cities are growing at a rate of 4% (twice the global average)



Food systems

Africa's food systems are valued at trillions of dollars by 2030



Packaging

Annual loss of USD 80-120bn of reduced plastic value after initial use



Electronics

The value of raw materials in Africa's e-waste is USD 3.2bn



Fashion & textiles

<1% of clothing is recycled, leading to a loss of USD +100bn annually



Overview and challenges

Unsustainable land use is the primary causal factor on climate change, and their critical relation has damaging effects on the Earth's living conditions and ecosystems. The effects result in rising temperatures, extreme weather events, and irreversible tipping points such as ocean acidification and the inability for forests to recover from fires and draughts. Landscapes change forever and species go extinct in masses.

Effective climate action requires preserving and restoring natural habitats, safeguarding biodiversity, and promoting sustainable land use. Addressing these intertwined challenges will help mitigate the adverse effects of climate change and preserve the Earth's vital ecosystems.



Climate Action and Land Use in East Africa and Rwanda

East Africa's climate makes the region incredibly vulnerable to the consequences of climate change, as the region is prone to droughts and floods. Africa is also responsible for only a fraction of global greenhouse gas emissions but is suffering disproportionately from climate change.

Rwanda lost 501 ha of humid primary forest from 2002-2022, making up 1.2% of its total tree cover loss in the same time period and the total area of humid primary forest in Rwanda decreased by close to 1%. Challenges around land degradation remain relevant now and in the future.

Climate mitigation and adaptation measures need holistic and cross-border efforts across land management, reforestation and habitat preservation.



Challenges that you could address with your team



Climate adaptation tools. Setting up early warnings systems will mitigate the loss of lives and assets.



Conflict-free commodities.

Develop initiatives to eliminate conflict causing land degradation and rights violations, e.g. within soy, palm

oil, timber, and biofuel supply chains.



Nature conservation and restoration. Develop ways to measure, monitor, and verify biodiversity levels and threats to help sustain vulnerable ecosystems.



Green supply chains. Shorten global supply chains and strengthen collaborations in, access to, and funding for sustainable production in the agri and construction sectors.



Sustainable agriculture. Integrate water and resource efficient methods that prevent land degradation, sustain fertile land, and lower longterm costs.



Climate-resilient infrastructure.

Design and construct climate-smart infrastructure adapted to extreme weather events such as flooding and heatwaves.

Resources

- → National Center for Atmospheric Research (NCAR): https://ncar.ucar.edu/
- -> CREWS East Africa Project Launch | World Meteorological Organization (wmo.int)
- → World Meteorological Organization (2023): Africa Suffers Disproportionally from Climate Change. Link.
- → Global Forest Watch. <u>Link</u>.





Questions?

- → Remember to complete your registration before **September 11** at 12 PM GMT.
- Check your e-mail for the personalized link to register on the dedicated registration platform Cvent
- → You will find the answers to all your questions in the guidelines provided Cvent landing page as well as on the form.





THANK YOU!