





GGGI TECHNICAL REPORT Regional Inclusive Green Economy Training - Rwanda

April 2020



Copyright © 2020

Global Green Growth Institute Jeongdong Building 19F 21-15 Jeongdong-gil Jung-gu, Seoul 04518 Republic of Korea

The Global Green Growth Institute does not make any warranty, either express or implied, or assume any legal liability or responsibility for the accuracy, completeness, or any third party's use or the results of such use of any information, apparatus, product, or process disclosed of the information contained herein or represents that its use would not infringe privately owned rights. The views and opinions of the authors expressed herein do not necessarily state or reflect those of the Global Green Growth Institute.

Cover image @gggi



Inclusive Green Economy

Capacity Building Program for Civil Servants from Ethiopia, Kenya and Rwanda



ACKNOWLEDGEMENTS

This Inclusive Green Economy Capacity Building knowledge sharing report is written by Okechukwu Daniel Ogbonnaya-Project Manager and Pamela Birungi-Communications Officer of GGGI Rwanda.

Edited by Dr. Anders Ekbom and Emelie Ceaser, Co-Directors of the IGE program at the Gothenburg Centre for Sustainable Development of the University of Gothenburg Sweden.

The project would like to acknowledge the Mentors Dr. Claudine Uwera, Dr Haile Selassie Mehdin, Mr. Daniel Slunge and Mr. Richard Mulwa.

Further acknowledgements are made to the resource team Mr Innocent Kabenga, Ms Inhee Chung, Dr Richard Mulwa, Dr Hazel Gachunga, Pascal Gataete, Dr Denis Rugege, and Dr Hailesalassie Medhin.

We would also like to acknowledge GGGI Staff members that managed the logistics and administration for the two week training: Vanessa Umurahokeye; Franco Kamanzi; Jean Pierre Munyeshyaka and Victoire Urinayo.

This project was funded by the Swedish Institute (SI), a public agency that promotes interest and trust in Sweden and around the world.

TABLE OF CONTENTS

ACKNOWLEDGEMENTS	4
1. ORGANISER	6
2. CONTEXT	6
3. TWO WEEK IGE TRAINING	13
4. TRAINING MODULES	13
5. LESSONS LEARNT & RECOMMENDATIONS	22
6. SURVEY RESULTS	23
ABOUT THE GLOBAL GREEN GROWTH INSTITUTE	26

The programme has been carried out with financial support from the swedish institute

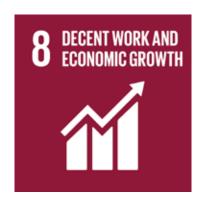
1. ORGANISER

Gothenburg Center Sustainable for Development (GMV) at Chalmers University of Technology and the University of Gothenburg is the organizer of this programme, in collaboration with Global Green Growth Institute (GGGI) in Rwanda. Gothenburg Center for Sustainable Development (GMV) in Gothenburg, Sweden is a network organization maintained by Chalmers University of Technology and the University of Gothenburg, which promotes research, education and capacity building for sustainable development. GMV staff have extensive experience from developing countries in the field integrated of environmental economics.

GMV has a broad international network, with experience stretching 20-30 years in environmental economics in a developing country context, and deep theoretical, conceptual as well as practical knowledge and experiences of Green economy in practice.

The Global Green Growth Institute (GGGI) is a treaty-based international, intergovernmental organization dedicated to supporting and promoting strong, inclusive and sustainable economic growth in developing countries and emerging economies.

It works across the thematic priorities of



sustainable energy, green cities, sustainable landscapes, and water & sanitation.

GGG aims to deliver impact through six strategic outcomes: GHG emission reduction, Creation of green jobs, Increased access to sustainable services, such as clean affordable energy, sustainable public transport, improved sanitation, and sustainable waste management, Improved air quality, Adequate supply of ecosystem services, and Enhanced adaptation to climate change.

2. CONTEXT

This program strengthens national capacity to create an Inclusive Green Economy (IGE), which is one of the prerequisites for achieving Agenda 2030. The program covers all the themes of Agenda 2030, with focus on Goal 8: Decent working conditions and economic growth.

The main objective of the capacity building program was to strengthen developing countries' capacity for transformation to an inclusive green economy through increased knowledge and application of economic policy instruments, organizational change, and the building of national systems and transparent institutions. All participants obtained a greater understanding, a deeper knowledge and ability to critically review and analyze current economic policies and

conditions and identify opportunities for a transitioning towards a green economy. This has strengthened each participants role as change agents within their respective organizations.

The program was an advanced training with direct applicability for the participants' daily work. It included some theoretical training within IGE, practical exercises, study visits, project development and support for implementing their own change work. The focus was on the use of economic instruments such as environmental taxes, pollution fees, subsidies or subsidy reduction, trading systems and other types of financial incentives for societal development in line with Agenda 2030. The program was prepared to educate officials (primarily economists) in government institutions such as ministry of finance,

tax agencies, environmental and energy ministries, agricultural and natural resource authorities and other central government agencies for IGE.

The programme managed to achieve an active and strong link to the participants' professional area but also to strengthen the professional exchange between participants, enriching the programme through their different professional and geographical backgrounds. The programme has a regional focus, aiming to strengthen professional networks both within and between the represented countries. The two-week training was held at the La Palisse Hotel Nyamata, Bugesera, District, Eastern Province in Kigali, Rwanda. The 19 government and selected policy institution officials, were from Ethiopia, Kenya and Rwanda



PROGRAMME OBJECTIVE

The Inclusive Green Economy Capacity Building Program aims at strengthening developing countries' capacity for conversion to an inclusive green economy (IGE) through increased knowledge and application of economic instruments, organizational change, and building national systems (for Green economy applications in practice) and transparent institutions.

PROGRAMME STRUCTURE

Phase 1

PLANNING

In the recruitment and planning phase (Phase 1), invitations, selection and admission of participants took place.

Phase 2

PREPARATION

During the preparation phase (Phase 2) mentors had a joint start-up meeting with participants in each country, where the national mentor is in country while the Swedish mentor is on Skype or situated in the participant's organization.

During the meeting, participants received an introduction to the program and its phases, objectives, expected outcomes and tasks to be accomplished.

Phase 3

FORMULATION AND IMPLEMENTATION

IGE Project formulation and implementation phase. After mentor's visits, participants were given four months to implement their respective projects.

Phase 4

TRAINING COURSE

The scheduled teaching phase is a two-week intensive training course that was conducted in Kigali in Rwanda from 9th-20th of September 2019.

Phase 4

FINALIZATION OF PROJECTS

In the final phase, participants completed their projects. Participants are offered mentoring support via the Internet (email, Skype etc.). This phase ended with a final seminar through an online video conference where all participants and mentors participate.

THE INCLUSIVE GREEN ECONOMY PROJECT (IGEP)

The training programme is built around the participants' Inclusive Green Economy Projects (IGEPs). The aim of the IGEP is to build on, strengthen, or improve already ongoing IGE work in the participant's organization, and that is within the mandate of the organization. The focus of the IGEPs depends on the needs of the organization, to be determined by the participant and her/his colleagues and supervisor.

The IGEP was initiated at the start of the programme and will evolve throughout the 7 months (May-Dec) of the programme duration. Each participant has been assigned two mentors, whose roles are to provide coaching and advice (on-line and in person) in designing and implementing the IGE. The participant will manage the development and implementation of the IGE and is expected to be motivated for this task.



RESULTS

Individual level

Increased undestanding of IGE and the application of economic instruments.

Increased knowledge of organizational changes.

Expanded international regional and national networks.

Organisational level

Increased capacity for IGE and application of economic instruments.

increased priority on IGE and economic instruments.

Introduction of IGE economic instrument project or support for on going processes.

Institutional level

Improved cooperation between organization and sectors in the region/country.

Strengthened conversion to IGE and application of economic instruments.

Participants

- Participants defined and initiated an individual IGEP.
- Their IGEP were firmly anchored in their respective organization's mandate and responsibilities.
- The programme does not provide any financial support for the IGEP and its implementation.
- Participants understood that the IGEP should fit into their ordinary work schedule and be financed through their organization's operational budget (if necessary; some projects may not require any upfront costs). It is the responsibility of the participants organization to secure any funding that may be required for the successful implementation of the IGEP.

Mentors

- Each participant was assigned two mentors.
- The mentors' roles were to provide feedback on the assignments related to the IGEP, offer advice, critical questions, support, and encouragement.

• Each participant communicated with their mentors via e-mail or video conference during all phases of the programme. During the scheduled training course (phase 4), participants had the opportunity to set up individual meetings with their mentors. In addition, each mentor was able to visit the participants organization during the training programme.

Reporting

- Participants carried out and reported on the IGEP tasks provided in this training documents and knowledge gained from the two in-person training. Participant reported directly to their mentors and maintained effective communication with them throughout all phases of the Training Programme.
- Regular reporting and communication will allow mentors to follow participants work and to support them. This provided the participants with the needed tools and knowledge to fulfill their commitments and participation in the programme.

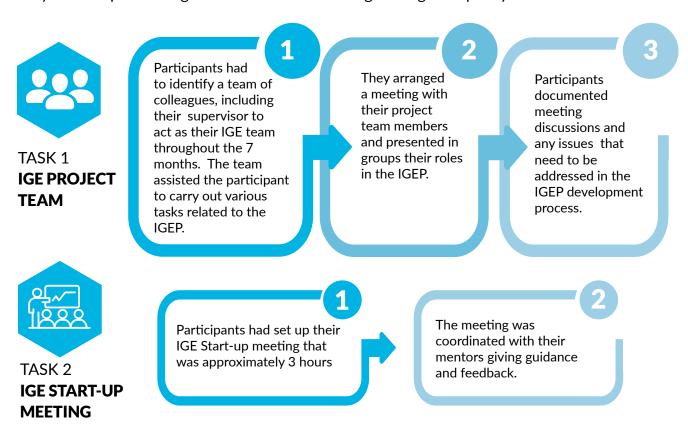
The deadlines for reporting on each of the tasks were outlined prior to the training:

Phase	Task
2	1 IGE project team
	2. IGE start-up meeting
3	1 IGE project plan
	2 IGE Project presentation
	3 IGE baseline
4	Two-week training course in Rwanda
5	1 IGE final project report

Phase 2

PREPARATION

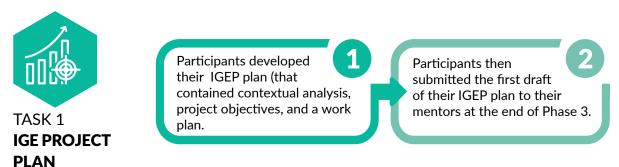
During the first two phases of the IGE Training Programme, participants developed an IGE Project (IGEP). The main purpose of Phase 2 was to help participants analyze and elaborate why their respective organization should be strengthening its capacity or work related to IGE.



Phase 3

FORMULATION AND IMPLEMENTATION

After the start-up meeting and the mentors' visits, participants were given approximately four months to formulate and implement their respective projects





TASK 2
IGE PROJECT
PRESENTATION

During phase 3 participants from the same country collabolated to develop a draft IGE Baseline report.



TASK 3 NATIONAL INLCUSIVE GREEN ECONOMY BASELINE

At the beginning of Phase 4 in Rwanda, all participants presented the results of the IGE project process as well as the preliminary ideas to their peers.

The baseline report development created the opportunity for each participant to connect with others as well as to start conducting an analysis that reflects, their country's current status with respect to IGE and the use of economic policy instruments for managing environmental issues. This process helped build relationships between participants from the same country group, as well as to anchor the program in organizations as participants' resource groups will serve as support to facilitate the baseline report.

The national baseline report was used to map out issues like:

- Has IGE been introduced in the country?
- How, and to what extent? In which sectors and policy areas?
- What are the strategic (or key) IGE organizations in each country?
- How does the distribution of responsibilities for IGE action look like in the public administration?
- What economic policy instruments are applied in the country to achieve an IGE?
- What are the main sources and providers of information on IGE in the country?

Phase 4

TRAINING COURSE

During the training course in Rwanda participants amongst themselves worked to provide each other with support and feedbackin an interactive environment.

They had individual mentor meetings to discuss the progress of their IGEP and their IGEP plan in more detail. Then they worked individually to elaborate their IGEP plan for Phase 5 of the training programme



Phase 5

FINALISATION OF PROJECT

Capacity Building Programme for Inclusive Green Economy

Each participant will continued to utilize their learning from their IGEP training, and then conclude by the end of Phase 5. In this phase participants consolidated their experiences to date – both for their own records and for sharing with their colleagues. This also was a requirement for obtaining the Training Programme Certificate.

Upon approval of the reporting requirements by the IGEP training programme management, each participant received a Certificate of Accomplishment that demonstrated the modules and learning from the training.

3. TWO WEEK IGE TRAINING



The two weeks training commenced with participants presenting their understanding and the rationale for an Inclusive Green Economy (IGE). This was done through their analysis, reflections and description of their current status on IGE through a baseline report/presentation.

Field visit were conducted to the Enviro-Serve's E-Waste facility located in Bugesera, Eastern part of Rwanda. Another visit was to Nyamirambo Women Skills Acquisition Center located in Kigali. Both visits showcased IGE in practice from a technology and job creations aspects as well as from an inclusive growth perspective.

The second week gave each participant to review and opportunity operationalization of IGE in their respective countries, look at each case study, discuss challenges opportunities and and their organizational changes for IGE in context of the countries institutional, political and economical analysis.

4. TRAINING MODULES

What is the rationale of IGE by Anders Ekbom

The presentation focused on understanding the rationale for an Inclusive Green Economy (IGE) by conducting an analysis, reflections and description of the participant's current status on IGE through a baseline report/presentation. Looking at the use of policy instruments for managing environmental issues. Participants prepared 5-7 presentation slides after their group or individual discussions and reflections.

Countries baselines and reflections by Emelie Cesar

The participants presented their country's baselines as well as shared lessons on where each country (Ethiopia, Kenya, Rwanda) is at in the IGE pathway.



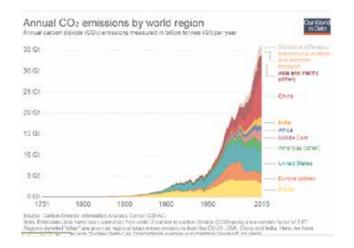


Implication of Green Economy; and the Market Mechanism and Economic & Financial Instruments - by Prof. Thomas Sterner.



Prof. Sterner who delivered his lectures via teleconference from Gothenburg wanted to understand the backgrounds of each participant in relation to the work they do as well as their knowledge about climate change. He presented the global average temperature model from 1850-2018 with its carbon dioxide concentration looking at the daily, weekly and monthly average and what is needed to stabilize the climate (ref to Fig. 1 below on Annual CO2 emission by World Region).

The mitigation cost estimates at 1.5 degrees Celsius were discussed. He ended the session by showing the different commitments by countries to reach their emission reduction goal.



Prof. Sterner presented information on the price and consumption of gasoline in four different countries (Australia, Italy, UK, and USA) to pose and answer the question on "Do Economic Instruments Work? While the USA has the highest consumption rate, it also has the cheapest. Whereas, the revers is the case for Italy who has the most expensive gasoline price and the lowest consumption.

Case Study - The Swedish Climate policy Councils by Asa Lofgren

This presentation was delivered by Asa via teleconference and she introduced to all participants the concept of cap and trade. She esplained the cap and trade system as one that designed to reduce pollution in our atmosphere by setting a film limit for controlling carbon emissions and other forms of atmospheric pollution by creating a market for buying and selling emission allowances. For example, an upper limit is set on the amount of emission a given business or organization may produce but allows further capacity to be bought from other organizations that have not used their full allowance.

She used Sweden as a case study to explain the European Union Emissions Trading Scheme and how cap and trade is used as a policy instrument to mitigate environmental problems in general and reducing carbon emissions.

Strategic Environmental Assessment and Green Economy by Anders Ekbom

This session highlighted the applications of Strategic Environmental Assessment (SEA) which is a legal instrument that assesses strategic environmental issues pertaining to policies, plan and programs. Anders explained how SEA tool is used to assess, inform and influence environmental policy instruments through legislation, economic tools, education and awareness raising.

Participants learned the difference between SEA and EIA, whereby SEA is required in implementing

policies and programs while EIA is required when conducting projects. An important message was to always remember the 5 l's of SEA which are:

- Influencing decision makers,
- informing planners and stakeholders on environmental risks and opportunities,
- Interaction among planners,
- Institutions to analyze, strengthen the capacity and reform if necessary
- Integration of environment in other sectors and development themes.

Operationalizing IGE Ethiopia: Ethiopia's Climate resilient Green Economy Strategy by Dr Haile Selassie Medhin

Dr. Haile used Ethiopia as a case study by explaining its Climate Resilience Green Economy (CRGE) strategy. The main CRGE pillars are:

- 1. Improve agricultural production activities for higher food security while reducing emissions
- 2. Protect and re-establish forests for their economic and ecosystem services
- 3. Expand renewable power generation
- 4. Transport, industry and buildings transition to modern and energy-efficient technologies

Operationalizing IGE Kenya: Key policies documents and processes by Dr Richard Mulwa

Dr. Richard Mulwa explained how the Kenyan government is putting in place the enabling environment for IGE in policies, plans and acts being implemented in health, agriculture, environmental protection, energy, manufacturing through Green Economy Strategy and Implementation Plan (GESIP) (2016-2030). The GESIP guides all stakeholders to adopt development pathways with higher green growth.

IGE policy instruments that exist in Kenya are categorized into 4:

- 1. Charge and fee system,
- 2. Fiscal instruments,
- 3. Financial mechanism, and
- 4. Market creation and development.

IGE and Global actors by Okechukwu Daniel Ogbonnaya and Innocent Kabenga

The instructors focused on the SDGs goal 17: Partnership for the goals which targets 5 main areas: - Finance,

- Technology,
- Capacity building,
- Trade, and
- Systemic issues

This goal aims to enhance North-South and South-South cooperation by supporting national plans to achieve all the related targets.

Some of the Global Actors that were presented are:

- GGGI/GGKP,
- African Union,
- African Development Bank,
- UNEP/UNDP/PEI,
- UN-PAGE/UNITAR,
- Green Economy Coalition,
- OECD,
- Nordic Development Fund,
- World Resource Institute,
- European Union,
- EfD and world meteorological center.

What is GMV (Gothenburg Center for Sustainable Development) and what does it do? By Emelie Cesar

GMV has an Environmental Economics Policy group that promotes sustainable development through different functions as follows:

- SIDA Helpdesk on Environment and Climate Change - Environmental advice and support to SIDA
- Erasmus+ SEA programme collaboration on SEA between academia in Europe and Asia
- Research-policy interaction Univ. courses, support to the EfD initiative
- Inclusive Green Economy training programme 2019

Organizational Change for IGE by Prof. Hazel Gachunga

Prof. Gachunga explained how change management can help strengthen people's ability to manage and lead change in their projects.

Change management is basically a strategic capability designed to increase change capacity and responsiveness and it can be done at both project and organizational level. There are 3 types of change: structural, technological and people change. The instructor explained how change is a process not an event and it consists of 3 states

- 1. Current state (where you are today)
- 2. Transition state
- 3. Future state (where you want to be) and basically where you want to be means you are getting benefits from all the work you have done through the transition phase.

She further explained that change do sometimes fail due to political issues, resistance and being afraid of change. A change succeeds through good communication, good leadership, better diagnosis of the issue, plan budget and monitor the change.

Workshop- Gap analysis by Dr Anders Ekbom and Emelie Cesar

The main goal of this presentation was to deepen the understanding of IGE as a system and discuss how to strengthen the IGE systems in the participants' respective countries and organizations. The instructor explained to the participants that constraints and enabling factors for IGE work are described at system level (political system, transparency and sharing of information), organizational level (Leadership, commitment, accountability), and finally at individual level (knowledge, time, resources and incentives).

After the presentation, the participants were asked to Analyze their National System for IGE practice and to do a gap analysis of their National IGE system and thereafter to Identify constraints and enabling factors for the IGE system in their

countries at different levels. The purpose of this group work was to help participants learn about the IGE system in their countries and identify the key priorities for improving it.

The role of Tax administration for IGE by Martin Solvinger

The main goal of this presentation was to educate the participants about the role of tax administration for IGE by giving an example of tax compliance in Sweden. He explained Drivers for voluntary compliance, Role of enforcements and audits, tax compliance in the future and taxes and the environment.

The instructor shared with the participants some observations from developing countries about tax administration.

- A need for expanding the tax base
- Multinationals, Small/medium sized companies, individuals moving towards digitalized services Not always "back" of old (IT-) systems
- Driven by mobile phone usage
- Short term solutions (maximize tax collection by enforcement) distorts long term sustainable revenue (i.e. voluntary compliance)
- Corruption hinders trust in the institutions
- More understanding of the taxpayers needs and views

Evaluation and Readiness Assessment of IGE work in Rwanda and other countries by Dr Denis Rugege

This presentation focused on the finding of Denis Rugege on his work on Green Growth readiness assessment in Rwanda and other countries. He started by explaining what and where are key green growth readiness gaps in the context of NDC and SDG implementation in Africa in general, and target countries.

This assessment was done by the joint project of GGGI and AfDB for Africa Green Growth readiness in general and In-depth assessments – case studies: Morocco, Mozambique, Rwanda, Senegal, Gabon, Kenya and Tunisia.

Throughout the readiness assessment, 40 indicators were considered across 9 categories namely: Political vision & commitment, Legal & regulatory readiness, Institutional & governance readiness, Policy readiness, financing readiness, sectoral readiness, Monitoring & evaluation readiness, human capacity and R&D, Technology & Innovation readiness.

The instructor shared with the audience his findings about African countries Green Growth Readiness and his recommendations on the implementation of Green Growth strategies.

IGE for impact: Planning for impacts and how to influence decision making by Okechukwu Daniel Ogbonnaya



This session focused on the different planning tools used in policy planning, analysis and decision making. These tools ranged from the Results Based Management system, log frame, theory of change, resource planning, stakeholder mapping and influencing, and decision-making trees.

The second part of the training looked at how to design projects and facilitate financing. Examples were drawn from practical case studies of IGE projects and programs from the three participating countries (Ethiopia, Kenya, and Rwanda).

Conducting IGE: Link policy development, strategic planning and integration by Daniel Ogbonnaya

This session focused on the need to plan IGE from an immediate, medium- and long-term perspective using an integrated system. The example of mainstreaming adaptation into plans were dealt with thoroughly with the participants understanding the different entry points in an adaptation continuum.

Field visit 1 (14th, September 2019): e-waste recycling facility in Bugesera

This field assisted the participants understand the concept of circular economy especially on how policies could be translated into practice.

The e-waste recycling project is to offer an "end of life "solution for electronic and electrical waste, allowing a sustainable use of Information Communication Technology(ICT) in the country, by preventing a negative impact of electronic waste on the health and the environment once the equipment has reached its end-of life.





The visit to the e-waste recycling facility in Bugesera

Field visit 2 (21st, September 2019): Nyamirambo women's center

The field visit gave participants a better understanding of green economy in the context of sustainable development and poverty eradication that results in improved human well-being and social equity, while significantly reducing environmental risks. The NWC project is to address gender-based violence, gender inequality and discrimination. Its mission is to provide education and vocational training to women who cannot afford it, in order to gain opportunities for employment. They create a large variety of women's accessories, children's clothing, and home décor products.



The field visit to the Nyamirambo women's center

Outdoor activities: A game called "Climate call" facilitated by Emelie Cesar

Climate call game's purpose was to teach participants how they can reduce their own Co2 emission footprint from a daily livelihood approach. The cards were designed by Chalmers University of Technology, University of Gothenburg Sweden.













The participants in training

ANNEXURE A

INCLUSIVE GREEN ECONOMY (IGE) PROJECT - RWANDA CASE STUDY

IGE PROJECT TITLE:

RAISING - AWARENESS ON THE IMPORTANCE OF ECO-INDUSTRIAL PARKS (EIPs) AND INTEGRATION OF LIGHT INDUSTRIES INTO MIXED-USE URBAN DEVELOPMENT.

TEAM MEMBER(S): MBABAZI Diana, RUTEHENDA Frank, NSENGIYUMVA Faustin and MUGABO William

ORGANISATION: Ministry of Finance and Economic Planning, Ministry of Infrastructure and Ministry of Environment

DATE: 13th Jan 2020

IGE PROJECT MENTORS: Prof Anders Ekbom

1. BACKGROUND & RATIONALE

This Inclusive green economy project reaffirms Rwanda's commitment to address climate change and our resolve to lessen the potential hardships that climate change may pose to the sustainable development of our country. Rwanda has now embarked on the new National Policy on Environment and Climate Change. The policy, therefore, seeks to provide strategic direction on environment and climate change in Rwanda, bearing in mind its linkages with our socioeconomic development.

Industrialization typically plays the role of creating prosperity through increasing access to employment, incomes and improving manufacturing value added across the global world. Although it generates economic benefits that help to promote and contribute to GDP, job creation among others ,it has also negative impacts on the environment. It contributes to climate change, excess demand of resources and resource depletion, and generation of wastes that pollute environment.

After realizing that, most pressing problems of pollution in Rwanda are those associated with

air, water and land degradation. Often, industrial, household or hazardous waste are disposed near recreational, agricultural land, residential locations or water sources where they become a source of air, water and soil pollution. One of the rapidly growing sources of pollution is e-waste in the form of old computers and other electronic gadgets which contain toxins. Chemical and medical waste is also increasing.

2. OBJECTIVES OF THE IGE PROJECT

The main objective of this IGE project is to enhance awareness among industrial sector stakeholders on how to translate the proposed industrial parks into environmentally sustainable "eco-" industrial parks (EIPs) and how to strategically integrate light industries into mixed-use urban development.

3. ACTIVITIES CONDUCTED

The following activities were undertaken and accomplished as part of the implementation of the IGE project:

- Prepare Concept Paper on Eco-Industrial Parks (EIPs)
- 2. Analytical assessment of existing policies and strategies in line with IGE.
- 3. Analytical assessment on how light industries are mainstreamed into mixed- urban land use
- 4. Development of EIPs Guidelines
- 5. Conduct awareness workshop for key stakeholders.

4. PROJECT OUTPUTS ACCOMPLISHED

- Policy gap identified
- Light industries integrated into mixed-use zoning regulations in urban development master plans.
- EIPs Guidelines developed
- Workshops conducted

5. ANALYSIS OF RESULTS

The project activities outlined a number of assessments that have discovered gaps in policy and legal frameworks in line with implementation of IGE in Rwanda.

The gaps are many but not limited to the following: (1) lack of policy supporting tools like EIPS guidelines;

(2) No detailed specific criteria to be considered in selection of industrial locations as per the existing master plans of City of Kigali and six secondary cities.

Discovering gaps have informed policy makers to understand the need of integrating IGE program in the demarked industrial parks and this will be done through Planning and budget call circulars 1 and 2 for the next fiscal years 2021/2022 going forward. In addition, assessment of existing master plans informed key stakeholders, the importance of setting criteria to be considered in selection of industrial locations where light industries need to be a major concern. This will be advocated and considered in the continuous process of reviewing master plans for the city of Kigali and six secondary cities.

Awareness raising that has been conducted in the master plans consultation workshops raised the sense of urgency to integrate IGE concept into policy, programs , projects and planning processes at both national and local level. A lesson learned from the IGE project is that it is critical that awareness raising activities shall be rolled out every year and should be much focused in planning and budgeting process.

6. SUSTAINABILITY/OWNERSHIP

To promote sustainability, IGE approaches should be embedded in all Government Policy, plans, Programs and project's outputs and be replicated across. Nevertheless, government needs to put into consideration resources to scale up the interventions, eg. through National Strategy for Transformation (NST1), by engaging different stakeholders, development partners and donors such as SIDA, and others to acquire support and resources for future replication of good practices through such projects.

There is a need for Ownership of beneficiaries which impacts on sustainability to ensure continuous awareness raising and training that will guarantee communities own the project activities and maintain them. The Sustainability of IGE project will be warranted by including the EIPs guidelines into the environment and

climate change mainstreaming checklist that is given during Planning and Budget Call Circular and indicators related to Eco-Industrial Park will also be included for annual monitoring to ensure compliance.

Regarding sustainability of the IGE project, training must be conducted and proliferated. Provisioning of funds play important roles in sustaining the project.

7. WAY FORWARD

As articulated under the sustainability section of this IGE case study report, the guidelines were not developed in this period of time as it required consultancy work that was not planned or budgeted for in the Government of Rwanda 's fiscal year 2019/2020.

This case study shows the opportunities with developing an eco-industrial park guideline from an inclusive green economy approach. Related mandate institutions in Rwanda needs to closely coordinate to ensure the development of the guideline is fast tracked. This will also create the enablers for green investment in this important sector for Rwanda's development.

We plan to have indicators related to Eco-Industrial Park that implement the EIP guidelines in the fiscal year 2021/2022 during the planning and budgeting call circulars. The Ministry of Infrastructure, Ministry of Environment, Ministry Trade and Industry and the Ministry of Finance and Economic Planning will ensure that the EIP Guidelines are developed and integrated in the Checklist for mainstreaming environment and climate change into the development sectors of Rwanda's Economy.

The IGE capacity will be strengthened though rigorous trainings for both the planning and finance departments in respective institutions but also working hand in hand with other technical departments to ensure that IGE policies are put in place and the tools to implement them are developed.

8. CONCLUSIONS

The case study from Rwanda concluded that for a country to achieve sustainable development, environmental sustainability must be taken into consideration.

This applies to policies, legislation and programs. Over the past years, the government has taken measures to ensure national development is in harmony with the protection of the environment where the extent of pollution and impact on climate change depends on the type of industries, thus distinction between heavy industries and light industries is critical when strategizing industrial design and location.

This IGE project aimed at enhancing awareness among industrial sector stakeholders on how to translate the proposed industrial parks into eco-industrial parks and how to strategically integrate light industries into mixed-use urban development.

The implementation of the IGE Project will also be important to Rwanda where it will take advantage of zoning the sites for light industries since the urban planning documents such as Kigali city and six secondary cities mater plans have been reviewed. However, this should come up with the set of criteria to permit light industries to co-habitat with people, on how to deal with eco-industrial parks.

This project has also allowed us to offer some capacity development to the staff who are in the same field in regards to environment and climate change sectors and through this process we also particularly learned how to manage multistakeholder platforms, composed of a diverse set of stakeholders with various (often diverging) opinions and interests vis a vis this process itself.

The team managed to enrich their skills through having more engagements on constructive discussions (or rather negotiations), and to lead these discussions into consensual outcomes. This happened concurrently while we were trying to define the objectives as well as the key streams of interventions (activities) on the reviewing of the revised city of Kigali master plan.

The project also recommended that Gothenburg Centre for Sustainable Development (GMV), Chalmers University of Technology, the University of Gothenburg and the Swedish Institute continue to support IGE capacity building, in order to get sufficient human resources in IGE capable of driving streamlining the IGE for sustainable development in raising awareness on the reduction of the heavy pollution caused both heavy and light industries.

5. LESSONS LEARNT & RECOMMENDATIONS

The IGE program was a great opportunity to translate the SDGs into actionable plans focusing on SDG 8 on promoting sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all. The practical nature of the training ensured that participants were able to not only design their projects in line with the SDG 8 but also learnt and shared knowledge through expert guidance from the resource persons.

The training approach and methodology is highly recommendable as it created a platform for meaningful participation and transparency in decision making. Moreover, problems were presented and tackled first from an analytical point to ensure a robust solution rather than jumping into solutions.



It is recommended that trainings of this nature and others should ensure that the distinction between institutional versus organizational change are clarified from the onset. The IGE training was able to do this through a section on change management where the structure, people and processes of an organization, as well as institutional rules, incentives and enforcement mechanisms were discussed.

Finally, the environment for a training matters to delivering the desired outputs and outcomes. The two weeks IGE training was carried out in a very conducive environment devoid of many distractions but also helped the participants to focus on learning, networking and delivering on their respective projects.

The training schedules that were filled with classroom type lectures, discussions, outdoors games and field activities created the opportunity for the participants to explore the different ways to solving problems within organization and institutions through team building. The informal nature of rendering the training helped increased the participants engagement and creativity in relation to how their final projects were delivered.

A scale-up of the IGE training will ensure a wider reach to policy makers to mainstream inclusive green economy in their daily decision making, thus, contributing to meeting the targets set out in the SDG 8.

6. SURVEY RESULTS

Overall impression (voluntary)

- 1 The training was very helpful, but it needs to be done on annual basis so as to increase the awareness but also equip countries with possible tools to transition towards IGE depending on the country specific context.
 - I personally believe that this training has given me an opportunity to share experiences both from colleagues and other countries perspective, especially in terms of operationalizing IGE. I also benefited in terms of the knowledge I gained. This type of training should be proposed to be held for other countries in order to adopt best practices around IGE and make the world economy greener. Thank you
- Good to use distance learning approach (virtual connection with lectures) but good to really check on reliability of internet connection to avoid frustration. However, this approach is very beneficial in many ways.
 - Good to set up rules in the beginning of the course i.e. use of computers/iPhone to avoid distraction during lectures.
 - Make sure that all participants attend all planned activities e.g. some of us did not
 feel that the field visits did concern us. We were asked to vacate the rooms to go
 home during the weekend but were not clearly informed how to meet with other
 colleagues to move together to the identified sites. This did not seem professional on
 the organizational side of the training.

- This training has been very nice and it is important for all the three countries. You learn of the best experience in conducting training, sharing experiences. The presenters from Gothenburg are very knowledgeable, and experienced to provide training. But the network (Internet) was not stable as we needed it to be ,so when you organize this kind of training look for hotels which have a good WIFI and network. I am very happy about the training and usefulness for my work and my country too. Thank you. Excellent, well done.
 - The overall training course conducted was good. However, the only problem that I observed is the online Skype lecture was not effective due to poor quality of the internet and you miss the benefit of the presence of a lecture in the training place. Thanks a lot, I learn a lot from this IGE training.
- The course was good but i was overloaded with a lot of work and exercises where some times hard to capture the rest of the work that is planned ahead since it is too much.
 - There is need to give people taking this course more time to do the group work and projects too.
 - In case it is a need to be a project it should be financed otherwise the participants may not have a right voice to implement it unless the senior leader see it as useful for the program.
 - The course should be more relaxed not so heavy or you have to put it into two
 sessions since the two weeks are very many for us to leave work which is not
 easy to have permission for the two weeks leave. You should make it in phases of
 one week and one more week to avoid being absent from our work place.
 - Video calls are good but when the internet is not good then everything is not good cause some parts are not achieved well. Thank you
 - First and foremost, since trainings equip people with skills there is a need to organize those trainings far away from the place we work from because at work they normally disturb our daily concentration. Furthermore, more resources/funds should be provided so that the developed project should be funded. Lastly, going forward, our Minister should be informed one year before the training. Thanks for your kind cooperation and good lectures provided to us.

- The course is generally good, and very relevant and therefore there is a need to have more practical sessions. This will help trainees to get a hands on experience.
 - Make the training rotational to different countries so that participants can have a practical feel of what other countries do.
- Great course and it would be wonderful to even expand the scope of the course and involve non-economists who work in the area of climate change, environment, or biodiversity conservation.
 - To make it more effective and efficient in the future its good to add some politicians. Allow the training exercises more time to exercises as individual and in a group activities. Well done. Thank you again and again.
- Thank you so much for the great work you have done. We have learned a lot and I am 120% positive that all developing countries need to hear about inclusive green economy so that they can develop a strategic plan toward their developmental plans and visions. The early they know about IGE the fast and easy will all the developmental goals lead to a productive result.
 - Make the course a bit more relaxed.
 - Come with contemporary IGE problems/challenges and engage in a proposed stepwise solution provision after the problem analysis
 - · Make the course shorter to avoid loss of interest
 - Tailor a certificate/diploma course for in the job training at university of Gothenburg and an African University
 - Analyze all global political discussions (important) towards an IGE world.
- The training was very good but it would be good to have many field visits to explore how IGE is integrated on the ground. Next time think on how many visits can be arranged.

SI. Swedish Institute



ABOUT THE GLOBAL GREEN GROWTH INSTITUTE

The Global Green Growth Institute was founded to support and promote a model of economic growth known as "green growth", which targets key aspects of economic performance such as poverty reduction, job creation, social inclusion and environmental sustainability.

Headquartered in Seoul, Republic of Korea, GGGI has 32 Members with operations in 33 countries

Member Countries: Australia, Burkina Faso, Cambodia, Costa Rica, Denmark, Ethiopia, Fiji, Guyana, Hungary, Indonesia, Jordan, Kiribati, Republic of Korea, Lao PDR, Mexico, Mongolia, Norway, Papua New Guinea, Paraguay, Peru, Philippines, Qatar, Rwanda, Senegal, Sri Lanka, Thailand, Tonga, United Arab Emirates, United Kingdom, Uzbekistan, Vanuatu, Viet Nam

Operations: Burkina Faso, Cambodia, Caribbean (OECS), China, Colombia, Costa Rica, Ethiopia, Fiji, Guyana, Hungary, India, Indonesia, Jordan, Kiribati, Lao PDR, Mexico, Mongolia, Morocco, Mozambique, Myanmar, Nepal, Papua New Guinea, Peru, Philippines, Qatar, Rwanda, Senegal, Thailand, Tonga, Uganda, United Arab Emirates, Vanuatu, Viet Nam



Follow our activities on Facebook and Twitter





www.gggi.org