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Liquefied Petroleum Gas Clean Cooking solution for Environment Quintuplet Impact Project

Good Life Foundation GOLf

goodlifefoundations.org

**LP GAS CLEAN COOKING FOR ENVIRONMENT QUINTUPLET IMPACT
PROJECT- GCCE - QIP - #1 DRC**

Table 1: Project Log

Summary	Data
Initiator	Good Life Foundation
Beneficiary country	Democratic Republic of Congo
Project Development Objective	The Project General Objectif (PGO) is to promote Gas Clean Cooking as a solution to constrain use of illicit wood fuels, enhance innovation in food production, promote environment protection education, innate public health and medical research across the Democratic Republic of Congo.
Beneficiary entity	78,000 direct beneficiaries being disabled and poorest of poor community members in 26 health zones throughout the 26 provinces in DR Congo and 4,580 indirect beneficiaries;(82,580 beneficiary households).
Components	[1] Liquefied Petroleum Gas Clean Cooking as Clean Energy, [2] Livelihoods Support to Gas Cooking Strategy, [3] Environment Protection Educational Colonies (EPEC) and Medical Study and Drugs Fabric Plant Construction MSDP, [4] Solar Powered Solution to Draught SPSD, [5] Project Management-Policy Support-Monitoring and Evaluation.
Major Impact	This project alone will reduce CO2 emissions in the Democratic Republic of Congo to 43.3 % through {1} suppression of 82,580 sacks of charcoal and firewood in households cooking on monthly basis, {2} establishment of 27 hectares of woodlot in 9 EPECs, {3} nationally conducted strategized public and institutional awareness, {4} Gas Clean Cooking adoption enforcement by Specialized Police Unit.
Primary stake holder	Government of the DRC
Project cost	€ 29,700,000
Funder	

ⁱⁱⁱIn Democratic Republic of Congo

In 26 most vulnerable health zones of the 26 provinces

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ACRONYMS	Full meaning
ACE	Agence Congolaise de l'environnement
ANADEC	Agence Nationale de Développement de l'Entrepreneuriat
ANAPI	Agence Nationale pour la Promotion des Investissements
AFDL	Alliance des Forces Démocratiques de Libération
ArcGIS	Geographic Information System
AQG	Air Quality Guidelines
ARPTC	Autorité de Régulation de la Poste et des Télécommunications du Congo
CAB	Cabinet
CBO	Community Based Organisation
CO	Carbone Monoxide
CO2	Dioxide Carbon

COP 16 CBD	Conference of the Parties to the Convention on Conservation of the Biodiversity
CDD	Community Driven Development
CDOs	Community Development Officers
CINRB	Institut National de Recherche Biomédicale
CS	Communication Specialist
C1	Component One
C2	Component Two
C3	Component Three
C5	Component 5
CITES	Convention on International Trade in Endangered Species
DGI	Direction Générale des Impôts
EIA	Environmental Impact Assessment
ECN	Environmental Conservation and Nature
ESIA	Environnemental Social Impact Assessment
ESIS	Environmental Social Impact Studies
ESM	Environmental Social Management
ESMF	Environmental Social Management Framework
ESMP	Environmental Social Management Plan
ESSS	Environmental Social Safeguards Specialist
ENRP	Environment and Natural Resources Protection
EPECs	Environmental Protection Educational Colonies
FAO	Food and Agriculture Organisation
FARDC	Forces Armées de la République Démocratiques du Congo
FDLR	Forces Démocratiques pour la Libération du Rwanda
FMS	Finance Management Specialist
GBV	Gender Based Violence
GEEC	Groupe d'Etudes Environnementales du Congo
GEMD	Good Life Foundation Environmental Monitoring Data
GCCE-QIP DRC	Gas Clean Cooking for Environment Quintuplet Impact Project in the Democratic Republic of Congo
GIS	Geographic Information System
GoLf	Good Life Foundation
GMCs	Grassroots Management Committees
GRM	Grievance Redress Mechanism
GPS	Grievance Redress Services
GPS	Global Positioning System
HIV	Human Immunodeficiency Virus
H R	Households Representatives
HSE	Health, Safety and Environment
ICNM	Institut Congolais de la Normalisation et de la Métrologie
IMDG	International Maritime Dangerous Goods
INRB	Institut National des Recherches Médicales
IT	Interim Target
ITMOs	International Transferred Mitigation Outcomes
IPPC	International Plant Protection Convention
ISO	International Organisation for Standardisation
ISS	Information Storing System
LPG	Liquefied Petroleum Gas
LPGCCS	Liquefied Petroleum Gas Clean Cooking Solution
LPGS	Liquefied Petroleum Gas Specialist

LSGCCS	Livelihoods Support to Gas Clean Cooking Solution
M23	Mouvement du 23 Mars
M&E	Monitoring and Evaluation
M&ES	Monitoring and Evaluation Specialist
Mt	Metric tones
M&EO	Monitoring and Evaluation Officer
Mha	Million hectares
µg/m ³	Micrograms per Cubic Meter
MIN	Ministry
MTF	Multi-Tier Framework
MW	Mega Watt
MSDP	Medical Study and Drug Fabric Plant
NMT	National Ministerial Title
NGO	Non-Governmental Organisation
PD	Project Director
PDO	Project Development Objective
PM	Particulate Matter
PIM	Project Implementation Model
PM	Project Manager
PMP	Project Management Plan
PMHs	Physical Market Halls
RDC	République Démocratique du Congo
RTNC	Radio-Télévision Nationale Congolaise
SONAHYDROC	Société Nationale des Hydrocarbures
SNEL	Société Nationale d'Electricité
UNEP	United Nations Environmental Program
UNDP	United Nations Development Program
UNESCO	United Nations Educational, Scientific and Cultural Organisation
UNHCR	United Nations High Commission for Refugees
UERA	Uganda Electricity Regulator Authority
US \$	United States dollar
VAC	Violence Against Children
VAT	Value Added Tax
SGBV	Sexual and Gender Based Violences
SMPC	Subproject Management and Procurement Committee
SDGs	Sustainable Development Goals
SPSD	Solar Powered Solution to Draught
SRM	Social Risk Management



Statewide usable strategy
Usable in both moderate households in villages as well as in cities
Portable and easy manipulable Liquefied Petroleum Gas Cooking Cylinder for village Households, Meetings, Offices, Camping, Barbecues and small fit parties

1. Concept Notes of Gas Clean Cooking solution.

According to the World Bank Multi-Tier Framework (MTF) of 2020, clean cooking is attributed to efficiency, convenience, fuel availability, safety, affordability and the avoidance of exposing users to toxic and hazardous environments. Additionally, the World Health Organization Guidelines of 2021 state that clean fuel and technologies are assessed based on the levels of fine particulate matter not exceeding $2.5 \mu\text{m}$ and carbon monoxide emissions. Fuel and technology combinations will be classified as clean if they achieve:

- i. Annual average air quality guideline level (AQG, $5 \mu\text{g}/\text{m}^3$) or the Interim Target-1 level (IT1, $35 \mu\text{g}/\text{m}^3$) for Particulate Matter with a size of $2.5 \mu\text{m}$ (PM_{2.5}); and
- ii. 24-hour average air quality guideline level (AQG, $4 \text{mg}/\text{m}^3$) or the Interim Target-1 level (IT-1, $7 \text{mg}/\text{m}^3$) for carbon monoxide (CO).

Thus, in the context of the National Clean Cooking solution, clean cooking refers to fuels and appropriate technologies that collectively produce a minimum level of toxic emission when used appropriately. This concept aims to ensure the safety, sustainability, and easy accessibility of cooking energy, saving time, and reducing usage costs, as well as minimizing environmental and health impacts for users. This solution is also a crucial tool in implementing national and international commitments aimed at combating climate change and reducing greenhouse gas emissions.

1.1. Background

Since its entry in post-independence chapter, the DRC has never been signing presence into clean cooking innovation. The more sluggish it remained is the harming it was and is to the environment while 90% of households still use wood fuels (charcoal and firewood) in cooking. As of February 2025, the government's energy compact targets a new 30% adoption rate to Liquefied Petroleum Gas Clean Cooking by 2030, benefiting 40 million people. To achieve this plan, the DRC government intends to launch a National Clean Cooking Strategy by end of 2025. This strategy aims to foster use of Liquefied Petroleum Gas (LPG), improved cookstoves and electric cooking.

Only 14%; equivalent to 250,000 households of the population of Kinshasa, the capital city is currently using LPG. The authorities aim at increasing this to 1,2 million households by 2030.

However, significant barriers are constraints to achieving this strategy; they include lack of storage and distribution infrastructure, limited availability of Gas Cylinders, LPG costs of which 1 kilo amounts to US \$ 5.

The reliable problem solver targeted by the government is private sector involvement to surmount these challenges incentives, such as duty exemptions on clean cooking equipment and establishing a regulatory framework conducive to investment are under consideration to structure a viable market.

With a population of over 105 million and a clean cooking technology adoption rate of 1%, the DRC fall one of the lowest penetration levels globally. Despite the widespread use of biomass in cooking posing significant environmental and health risks, it heightens the country's ecological vulnerability, while indoor this pollution causes respiratory and cardiovascular diseases particularly affecting women and children about which the official figures estimate the economic costs of this pollution to US \$ 13,6 billion annually and the ecosystems degradation in DRC is matter accentuating worldwide climate damage.

The Gas Clean Cooking for Environment Quintuplet Impact Project is designed to fulfill the objective of the National Energy Compact's LPG cooking strategy of 2025, by addressing inability of disabled and poorest of poor households to purchase LPG home cooking equipment and creating for these households social economic sustainable livelihoods enterprises which are footprinted solutions to outputting resources maintaining

providence of gas supplies in cycled future time episodes, establishing environmental protective school colonies and public health research facility, conducting statewide structured ecological protection campaigns, irrigation and solar energy adoption sensitization to improve living standards of Congolese and safeguard national and planet's climate.

1.2 Guidelines Considered in the preparation of this project.

This project considers relevant national and international policies, laws, regulations, and guidelines related to clean cooking solutions.

At state level this project refers to environmental protection law in DRC which fundamentally bases on the below pillars:

1) Constitution of the DRC

Article 53 prescribing the following:

. Every person has right to a healthy environment and which is favorable to his/her full development;

. The environment must be protected;

. The state must look after protection of the environment and the health of the people.

Article 123 planned provision for laws to be made concerning protection of the environment and tourism. Article 203 allows for cooperative governance by central government and provincial administrations to protect the environment, natural sites and landscapes and conservation of such sites.

2) Institutions and administrative structure

The parliament is dotted of an environment commission with 4 committees: General environment, Mining environment, Flora and Fauna and environmental control. The aim is to approve laws and policies and environmental perspectives.

3) Ministry of Environment, Nature Conservation and Tourism (MENCT)

Ordinance No 07/018 of 16 May 2001, which specifies the responsibilities through which the president of the DRC gave authority for the management of EIA to the MENCT. Ministerial order No 004/CAB / ECN -EF /2006 of December 2006 in which the Ministry created EIA administration and approval called Groupe d'Etudes Environnementales du Congo (GEEC). Order 008/CAB /MIN -EF /2007 that amended and completed the GEEC and making it a technical structure in the Ministry of Environment for administration of the EIA in the DRC with the outlined objectives:

i. To conduct and coordinate the activities relating to Environment and Social Impact Studies (ESIS);

ii. To define the procedure of ESIS in the DRC;

iii. To ensure that the execution of all projects or development programs are undertaken according to strict environmental and social standards;

iv. To promote capacity building within Congolese administrative structure and within public and private investors in matters relating to ESIS;

-
- v. To promote consultation and information sharing with the public concerning the management of the environment and
 - vi. To present an annual state and environment report for the country. For sustainable development CAB/ MIN/ AFF -ET /049/01 of 3rd December 2001

Therefore, the purpose of this project is to reduce deforestation in DRC, by intensification of awareness over Gas Clean Cooking, rendering available LPG equipment for clean, safe, affordable, sustainable, and reliable cooking solution in households of disabled and poorest of poor people. This solution outlines implementation strategies, targets, outcome indicators, and the stakeholders responsible for implementing the project and their roles. Regionally, the project considers the Sixth East African Community Development Strategy (2021/22 – 2025/26); Internationally, the African Union Agenda 2063 and United Nations Sustainable Development Goals for 2030 (SDGs 2030).

1.3 Outcomes of the GCCE - QIP - #1 DRC

The project has established strategies, targets, and outcome indicators that will serve as tools to ensure the following outcomes:

- i. Increased awareness among citizens and institutions on the importance of using clean cooking solutions;
- ii. Access of clean, affordable, sustainable, and reliable cooking solutions by ensuring availability of cooking intrants, equipment and simplifying procurement processes;
- iii. Reduced cost of clean energy, appliances and efficient cook stoves;

- iv. Applicability of enabling policies, laws, regulations and guidelines to facilitate the adoption of clean cooking solutions;
- v. Increased investment in clean cooking solutions, thereby contributing to economic growth;
- vi. Enhanced capacity to effectively implement clean cooking projects;
- vii. Expanded scope of research and innovation in technologies related to cooking solutions and wider aspects of environment protection.
- viii. Decrease vulnerability of disabled and poorest individuals by promotion of social equality and good governance in clean cooking.

1.4 Methodology

This project has been developed by conducting research related to clean cooking solutions, including policies, laws, regulations, guidelines, and publications from within and outside the country.

The development of this project involved Ministries, Independent Departments, Regional Administrations and Local Government Authorities, Government Agencies and Public Organizations. This ensured that they understand their responsibilities well and execute them accordingly. Other stakeholders involved included the Private Sector and Non-

Governmental Organizations, who were engaged through meetings, dialogue and consultation. The project contacted and continues to consult LPG manufacturers to fetch clear understanding on use of cylinders suiting households clean cooking. Additionally, development partners, well-wishers animated by planet protection philanthropy are being involved through discussions on areas of collaboration, funding for specific project components or sub-projects, and sectoral guidance.

1.5. Benchmarking

Another method used in designing this project is the analysis of various policies and strategies of countries which have succeeded or are keen to increase the use of clean cooking solutions. Those countries include:

1.1. India

According to the World Bank statistics of the year 2023, 71.1 percent of the Indian population had access to clean cooking energy in 2021. In promoting the use of clean cooking energy in India, the Public Institution managing Natural Gas is responsible for development of natural gas transmission infrastructure. The Regulatory Authority initiates and oversees the bidding process for allocating specific zones for the construction of the infrastructure for natural gas distribution. One of the criteria of the evaluation process is the number of households to be connected to natural gas in proximity to the identified project. The Private Sector develops natural gas distribution networks to customers and pays for transmission tariffs.

Regarding to the promotion of LPG, the Government of India, through the Ministry of Petroleum and Natural Gas, has been implementing the “Pradhan Man- tri Ujjwala Yojana Scheme” since 2016. This scheme aims at providing LPG cylinders to low-income households. According to the Ministry of Petroleum and Natural Gas in India, as of 30th January 2023, a total of 95,870,119 households had benefited from the scheme.

The private sector in India is responsible for production of biogas plants. The feedstocks for the biogas plants is from agricultural, municipal and industrial wastes. The produced biogas provides sustainable energy including cooking energy. The produced gas is also compressed into special cylinders (tanks) for easier transportation.

The experience drawn from India highlights how the Private Sector is involved in the distribution of natural gas, whereby this Strategy has developed specific strategies for allocating specific zones to implement distribution projects. Additionally, subsidy programs for clean cooking solutions targeting low-income households is the notable experience, whereby specific strategies have been developed to implement such programs to promote the use of clean cooking solutions nationwide. Furthermore, the establishment of biogas industries is a viable solution for producing clean cooking energy in the country.

1.5.2 Kenya

According to the World Bank Statistics for the year 2023, 23.9 percent of the population in Kenya had access to clean cooking energy in 2021. In promoting the use of clean cooking energy, financial support is provided through the provision of affordable loans for LPG cylinders. According to the Kenya Market Assessment Final Report of 2013, Micro- finance

Institutions collaborate with suppliers to provide affordable and low interest loans. The main objective of this program is to make the initial cost of purchasing cylinders more affordable through a long-term repayment schedule.

Also, in Kenya, the Energy Policy of 2004 aims to develop biogas technology for household use. The government has made development efforts in collaboration with various development partners, whereby according to the Ministry of Energy report of 2023, it is estimated that Kenya has approximately 20,000 biogas systems. Additionally, the government has policies and strategies aimed at promoting the use of biogas, providing technical and financial support, and building infrastructure networks for distributing biogas in various areas.

The Kenya Ethanol Cooking Fuel Master Plan of 2021 outlines strategies for the development of bioethanol so as to increase its usage for cooking. The proposed strategies for increasing the usage and demand for bioethanol include: removing the Value Added Tax (VAT) on bioethanol for cooking to stimulate demand; creating an enabling environment for Private Sector participation in bioethanol projects; and designating specific areas for growing bioethanol feedstocks. Other Strategies were promoting bioethanol markets through affordable loans; establishing strategies to benefit from climate funds; and encouraging results-based financing to support development of the bioethanol industry. Bioethanol is expected to make a significant contribution to the energy mix in Kenya in achieving the goal of 100% clean cooking access by 2028.

The experience drawn from Kenya is on how financial institutions are involved in providing low-interest loans to enable clean cooking entrepreneurs to investment. Additionally, this Strategy has utilized this experience in formulating and enhancing Strategies to develop bioethanol so as to increase its usage for cooking in the country.

15.3 Uganda

According to World Bank statistics for the year 2023, 0.7 percent of the population in Uganda had access to clean cooking in 2021. Despite this low level, the Government of Uganda has been striving to promote the increased usage of clean cooking through various initiatives including the introduction of a special electricity tariff framework for cooking approved by the Uganda Electricity Regulatory Authority (ERA), this framework was launched in 2021. The framework aimed at contributing to reducing the use of charcoal and firewood for cooking starting from January 2022 by making the cost of cooking tariff in households cheaper than using charcoal. The ERA introduced a Declining Block Tariff Structure that allows for differentiated tariff levels based on the amount of energy consumed. In this system, the electricity price decreases as the usage increases beyond the threshold set by the Authority. This system aims to encourage the use of electricity for cooking by ensuring that users who cook with electricity benefit from lower prices.

The experience taken from Uganda is on how to increase the use of electricity for cooking through prepaid meter payments (LUKU). This Strategy has utilized this experience in preparing strategies to increase electricity usage through a system of paying different electricity tariffs to encourage electricity use in cooking in the country.

15.4 Ghana

According to World Bank statistics for the year 2023, 30.3 percent of the population in Ghana were using clean cooking energy in 2021. In promoting the use of clean cooking energy, the Ghanaian Government developed the Clean Cooking Energy Strategy (2020 - 2024) in 2019. Additionally, the government has joined the international Paris Agreement. This agreement aims to address climate change and reduce greenhouse gas emissions, including carbon dioxide emissions and other gases contributing to global warming. It also provides opportunities for countries to engage in the ITMOs trade (Internationally Transferred Mitigation Outcomes), where nations can exchange emissions reduction credits.

According to Ghana's Framework on International Carbon Market and Non-market Approaches report of 2022, Ghana utilizes and benefits from Article 6 of the Paris Agreement through approaches that encourage collaboration with various countries. The collaboration focuses on three main areas which are: partnerships with the private sector; technology and knowledge transfer; and the ITMOs trade. These actions support Ghana in implementing its climate change mitigation strategies.

The experience drawn from Ghana illustrates how to reduce the costs of using clean cooking solutions through subsidies that can be derived from carbon trading. This Strategy has utilized this experience in formulating strategies to leverage funds and international environmental programs to promote the use of clean cooking energy in the country.

2. PROJECT EXECUTIVE SUMMARY

2.1 Background

The Democratic Republic of Congo has the world second largest ecosystem, absorbing around 29 billion tons of carbon dioxide while the Congo Basin sequesters nearly 1.5 billion tons of carbon dioxide in a year (UNEP, 27 February 2023) of which areas (Central region), Eastern, Northern and Western regions have been and remains cruelly plunged in war for more than three decades so far. War generated conflicts out of which more than 120 armed groups remain visibly active as they operate across the Country, and which chose to shelter in the rich and diverse ecology. Within the three decades, from 1994 when DR Congo (by then Zaire) hosted 2 million Rwandan refugees, this forest started its journey to being the bastion of intensive deforestation entailing climate severe damaging effects, resulting into elevation of sea temperature due to increment of CO₂ and other toxic gases as forest /parc's logging is violently and abusively ravaged by human kind's efforts converting these resources into production sites of wood fuels (Charcoal and firewood) and timbers. Charcoal is the most dominantly consumed wood fuel by 90 – 96 % of Congolese culinary system; sold to generate income which is in return [1] partly financing war, [2] enriching the war seniors including officers of the FARDC regular army,[3]

constituting 60 % of livelihoods means for Congolese households, [4] Source of drought resulting into food insecurity affecting 20 % of Congolese population and accentuating communicable diseases,[5] dissipating peace. From this illicit business, the armed group FDLR (Force de Liberation du Rwanda) alone earns US \$ 100 million per annum in Virunga National Parc, a part of the production is sold to neighboring countries and the rest is used as energy to power households cooking while the charcoal illicit trade is an income generating activity to earning survival means of a larger number of people. As of now, the matter is at red indicators' alert; the Democratic Republic of Congo itself (has lost 6,86 Mha of humid primary forest; making up 36% of its total tree cover loss from 1994-2020, it is 6,6% decreased out of 85% of its normal range from 2002 -2023. It has lost 1,18 Mha of natural forest; equivalent to 900 Mt of CO2 emissions (according to Global Forest Watch). If nothing shrewd is implemented, in the sooner half of this century, the world second largest ecosystem's lung will be a savanna; and lives of half world population will be either sunk or consumed by floods, land sliding, tsunami, land desertification, hunger-starvation- acute food shortage, incurable diseases such as respiratory, oesophageal and digestive cancer, pneumonia, and cardiovascular syndromes, wildfire etc.

GAS CLEAN COOKING ENERGY FOR ENVIRONMENT QUINTUPLET IMPACT PROJECT IN DRC

In response to the nefarious impact of intensive deforestation making charcoal the green gold in DRC, the project proposal is a solution curbing out the archaic and risky cooking culture using wood fuels (Charcoal and firewood). It supports the initiative of the government of DRC; planning to boost LP Gas Clean Cooking strategy by end of 2025 as clean energy, alternative solution, supplement to electric grid which punches below weight, far behind in the presented Country. The project addresses lack of access to Liquefied Petroleum Gas clean cooking equipment and products (Cylinders and Gas supply) as far as rural areas are mostly concerned, natural resources protection policy implementation's failure, impoverishment associated with food insecurity, community misinformation-miseducation, conflictual coexistence and struggle to access therapy against CO2 toxicity from Households Air Pollution. The operation will happen in the 26 districts, targeting disabled and poorest of poor individuals' households, war – conflict affected communities and entities that lost educational and health infrastructures and which mostly remained desperate, affected by food insecurity as both fall in deforestation problematic in DRC: Equateur Sud-Ubangui , Nord-Ubangui, Mongala, Bas-Uele, Haut-Uele, Ituri Kongo, Central, Kinshasa, Mai-Ndombe, Kwilu, Kwango , Tshuapa, Tshopo , Kasai Occidental, Kasai Oriental, Kasai Central, Lomani, Nord Kivu, Sud Kivu, Maniema, Tanganyika, Haut-Katanga, Lualaba, Haut-Lomami.

2.2 Project General Objective: (PGO) *is to promote Gas Clean Cooking as a solution to constrain use of illicit wood fuels, enhance innovation in food production, promote environment protection's education, innate public health and medical research across the Democratic Republic of Congo.*

The project ensures participative actions of citizens in collaboration with governmental policy implementation enforcers towards adherence to regulations, to identification of needs in terms of environmental colonies' infrastructure, livelihoods opportunities for community self-reliance and resilience, and public health research while stewarding peaceful-coexistence, social inclusion and the highly ranked desire to social accountability.

2.3 Project Components

The project components include:

Component 1: Liquefied Petroleum Gas Clean Cooking Solution :(LPGCCS): Approximately (€ 2,600,000)

The component will allocate funds to purchase and free delivery of LPG Gas Clean Cooking to 2,000 households in each province; making 52,000 households statewide whom representatives fall into disabled, poorest of poor - war affected categories of individuals. The component focuses on [i] community mobilization about integral use of Gas clean cooking cylinders and use of Gas, [ii] harmonizing connectivity of community to supply of Gas selling facilities, [iii] foiling deforestation's setbacks by working jointly with government policy enforcers in vulgarization of the strategy, in mobilization & sensitization of auto-helping community members to acquire Gas clean Cooking equipment, [iv] establishing community institutions for planning, implementation, monitoring, evaluation and oversight across the enforcement.

Component 2: Livelihoods Support to Gas clean Cooking Solution (LSGCCS); Approximately (€ 18,460,000)

2.3.2.1 sub-component (i) Households Representatives: The component will expeditiously assess abled individuals from 26,000 disabled households, identify one Household Representative (HR) in each. The representatives will be the principal respondents of their households under the project implementation, they will benefit enrollment, financial literacy trainings, bank account opening, and more project interventions. The project will scale up financial support to their accounts for targeting initial households' enterprises that generate income usable for household economic sustainability and progressive means for gas fuel refilling in cycles from the profits made. Each HR receives € 500 as business start-up capital for household economic sustainability.

The component will swiftly and promptly avail appropriate technical guidance to establishment of the HR businesses by playing the key roles: [1] assessing their business plans, provide guidance where needs rise, [2] support on disbursement to their accounts, guide on fund withdrawal, [3] monitor businesses' implementations, [3] establish 3 Physical Market Halls (PMHs) in each of the 26 provinces. **(Cost of sub-component 1: € 13,000,000)**

2.3.2.2 Sub-component (ii) Physical Market Halls: The project will construct Physical Market Halls measuring 20 meters long, 8 meters wide and 4 meters height. [4] the role of PMHs is creating inter-linkage within the HR businesses and networking linkage with other community private sector operators to ensure flux of financial operations and flow of capital as strategy bolstering statewide social economic trend that swallows the gap which would have occurred from closure of charcoal and firewood illicit trade by government stiff policy enforcement. **(sub-component 2: € 5 460 000)**

Component 3: Environment Protection Educational Colonies EPECs and Medical Study and Drugs Fabric Plant Construction MSDP (€ 4,200,000).

2.3.3.1 Sub-component (i) Environment Protection Educational Colonies (EPECs): The component will concern the eastern region of DRC which lost educational and health infrastructure within the 3 decades of war timeline from 1996 up to date and which effects negatively impacted advancement of children and youths. The project will implement 9 Environment Protection Educational Colonies (EPECs) in 3 provinces including 3 in Ituri, 3 in North-Kivu and 3 in South-Kivu. The EPECs fall in features of Construction of 3 EPECs in each of the three provinces, they are modern schools, established on 10 hectares of land each, out of which 2 hectares for construction of school infrastructure, 3 hectares for school woodlot and 5 hectares for school agribusinesses, the school woodlots are especially apiary projects whose plants are herbs, fruits, vegetables, bushes, clover, flowers, shrubs, blossoming etc. The EPECs will be fully equipped to primary school and secondary school standards. The agribusinesses in ECs are shaped by accuracy of technology and good farming practices, each of the 15 hectares in each province will produce 4-6 tons of produce in a season; a total of 180 tons out of the overall hectarage across the 9 ECs of GCCE-QIP #1-DRC, and the farms are demonstration sites for livelihoods upskilling of students and of the project

beneficiary communities. The component funding to each EPEC is amounted to € 300,000; **(€2,700,000)**

2.3.3.2 Sub-component (ii) Medical Study and Drugs Fabric Plant Construction (MSDP): The project as aims to construct a mini-drugs fabric plant which will collect honey yield from the apiary sub-projects established in the created woodlots and process drugs out of it for human therapeutics against carbon dioxide toxicity. The drug fabric plant will be constructed in South-Kivu preferably. The strategy will groundbreakingly spur an innovation explosion for youth empowerment and development of science, research as project impact; **(cost: €1,500,000)**

Component 4: Solar Powered Solution to Draught SPSP (Approximately: € 400,000)

The component draws up defiance to climate change, a solution applicable to businesses of HR livelihoods traditional businesses and to agribusinesses across the project. Solar powered irrigation in small and medium schemes will be applied to defy draught, maximize yield and production scaling up. The GCCE-QIP #1-DRC will launch statewide solar powered solution campaigns targeting [1] farming development dependency and [2] households lighting energy. The farms and woodlots under GCCE-QIP#1-DRC will systematically apply irrigation scheme to prevent climate damaging effects to crops, to harness on yielding, scale up production and leverage land utilization to annum spectrum of exploitation while complying to biological production of produces and food item. Communities will benefit adapted trainings that equip them with new technologies and such skill set will drive replication to households' economic traditional livelihoods.

Component 5: Project Management, Policy Support, Monitoring and Evaluation (approximately 500,000)

This Component supports the national and local level project coordination of activities, including monitoring and Evaluation (M&E) and Information Storing System (ISS), fiduciary management, communication and engagement of citizen and environmental social safeguards management and compliance. Project management under component 1 will be implemented by government policy support through Ministry of Environment and natural resources protection of DRC for new integrated approach of stopping trees logging and charcoal

production at nationwide to enhance community adherence to Gas Clean Cooking solution.

Social Risk Management (SRM): In these components will be an envisioned fact harnessing systemic approach to the mitigation of social risk with emphasis on SGBV and VAC. Given the precarious situation of vulnerability embedded by beneficiaries, and risks that may occur are probable risks during project implementation. Acknowledging that SGBV is a complex and multifaceted problem that will not be eradicated in a single vantage point , the GCCE - QIP - #1-DRC seeks to: [a]support activities with purpose to reduce exposure to SGBV and VAC as a result of the project activities within the community,[2] promotion of rules that foster long-term social and cultural change toward gender equality(e.g allowing leadership and active management of women and girls in togetherness with men and boys in community-based groups -subprojects and or HR enterprises, accessing squats in the Physical Market Halls; all related to the project sector) and [3] facilitate assistance for survivors through referral to safe and ethical care by existing service providers.

2.4 Project Financing: The total estimate funding(€ 29,700,000) is sought in terms of grant to Good Life foundation GOLf, and will be strictly utilized to implement activities of present project in the Democratic Republic of Congo.

3. PROJECT BENEFICIARIES

Two categories form beneficiaries under this project, they include:

- a. **Direct beneficiaries:** The project will potentially benefit a total of 52,000 households of disabled and poorest of poor individuals; the uttermost affected by the long-standing war-conflicts and calamities across the 26 provinces in DRC and 26,000 disabled who will benefit finance support for project economic sustainability that will generate income for gas refilling in cycled lifetime.
- b. **Indirect beneficiaries:** They include (i) 630 employed under component 3 in Environment Protection Educational Colonies, (ii)50 employed in the Medical Study for Drugs Fabric Plant in component (iii) 3,900 entrepreneurs and businesses that will occupy the 3,900 squats throughout the 78 Physical Market Halls at statewide, (iv) suppliers to the

project, contractors, project employees are, in which ever form, considered uncounted beneficiaries. The overall yet known population of beneficiaries is as of equivalent to 82,580 households; thus, the presented beneficiary baseline represents 8.2% of disabled community in DRC. According to the United Nations Development Program (UNDP), stating that a household in Africa is constituted by 7 members, the anticipated expectancy considers an approximate number of 578,060 as population to benefit from implementation of this project. A number estimated to reach 1 million individuals by adding the non-counted beneficiaries. In end of project implementation, this project is expected to have improved living standards of nearly 1 million individuals and disrupt charcoal and firewood cooking to 16% out of 1 million of Disabled households. The description about beneficiaries is detailed in table 2.

Table 2: Beneficiaries description

(1) Beneficiaries	(2) Indirect Beneficiaries	Figures
Component 1		
52,000+26,000 households	Physical Market Halls in C.2	3,900
	School infrastructure in C.3	9x70=630
	Medical infrastructure in C.3	1x50
	Population in C1,2,3	4,580
	Beneficiary total population in C1, C2, C3,	82,580 households

4. PROJECT ACTIVITIES, IMPACTS AND THEIR MITIGATION MEASURES

4.1 Overview of the activities

Due to intensified deforestation rate, livelihoods pressing needs, destruction of educational infrastructure by the series of conflicts, the lack of enough medical care structures and the severity of climate change effects on farms, the proposed project will constrain trees logging and wood fuels cooking in households by distributing 52,000 Gas Clean Cooking equipment (LPG cylinders) to 52,000 households of vulnerable community members including disabled and poorest of poor under project Component 1, support 26,000 disabled households that benefited LPG cylinders with finance resources (capital); applicable to creation of sustainable enterprises of HR in line with livelihoods traditional and non-traditional activities under project Component 2. The salient physical characteristics is relevant to analysis of social and

economic investments which entail civil works and/or construction/expansion of 78 Physical Market Halls under (PMHs) C2, 9 Environment Protection Educational Colonies (EPECs) under project C3, and only 1 Medical Study Drugs Fabric Plant (MSDP) under project C3. Under project C4, the project will conduct nation widespread solar powered solution to draught campaigns targeting food security, deforestation constraining campaigns and policy enforcement measures at state-wide. The project will, in Component 5, carry-out monitoring and evaluation, policy enforcement will be implemented by government and other project stake holders to guaranty project activities' effectiveness.

Overall positive impacts of GCCE- QIP-#1 DRC can be summarized as follows:

Sustainable Social economic support to 52,000 households of disabled and poorest of poor, empowered standards using clean energy, generation of 260,000 new enterprises at state-wide, construction of 9 modern full primary and secondary standardized schools with innovation of agriculture, environment and biodiversity curriculum, 1drug producing mini-plant processing out of 2,9 tons of honey yield from apiary project implemented in the woodlots which groundbreakingly spur innovation explosion for youth empowerment and development of sciences by boosting research at local level, food production scaling up to 180 tons from 45 hectares, creation of employment opportunities through project implementation , contracted activities, etc; improvement in living standards of returnee communities, improvement in Livelihoods food security at household levels; improved environmental and ecosystems services; 54,000 trees to be planted; Source of income to material/equipment suppliers; improvement in connectivity amongst beneficiary communities and neighbour countries' communities and thereby enhancing trade and participate to peace building, delivery and access to social services and will also have positive, significant and long-term local and national gender-based core impacts which include: women empowerment and promotion, enhancement of education sector in the Eastern region of Congo, reestablishment of rainfall cycle by protected ecosystem, conflict disruption by blocking its source of income(charcoal and firewood), reduction of CO2 emissions at worldwide range.

Although the project foreseers minimal and site specific negative impacts during implementation in various components including issues such as; de-vegetation

due to Site clearance for constructions; creation of borrow pits; impacts of equipment storage yard; Air pollution due to dust on construction sites; conflicts over use of dam water and other natural resources; Disruption in the delivery of services during improvements works; Health and safety risks such as accidents at work sites e.g. from electrocution, buildings and as well infectious diseases due to sharing of facilities etc.); Improper waste management; Social risks related to Gender based Violence and Violence Against Children; HIV/AIDS Concerns, land acquisition and displacement concerns, etc. -This ESMF provides step by step guidance on how the above Negative impacts resulting from components shall be mitigated. This guidance includes; screening and development of site specific Environmental and Social Management Plan (ESMP) for each subproject funded, mitigation measures implementation process, reporting, monitoring and evaluation.

This ESMF also provides guidelines for the preparation of the Pest Management Plan (PMP) described in chapter 6 section 6.6 and should be used in cases where agrochemical usage will be required in selected funded projects.

4.2 Implementation overview

The implementation of this project will be mainstreamed by administrative structures of Good Life Foundation, whose role is to principally oversee smooth running of the planned activities through the project's components. Good Life Foundation will, with straitened collaboration, involve the stake holders, mainly the government of DRC at nation and local levels. Accordingly, all levels of governments will have roles in providing oversight and implementation supports in the project implementation. Local coordination structures will be responsible for oversight and coordination of the project implementation at province, territory, villages and community sub-project levels. The grassroots community will play key leading role in the identification, activities prioritization and implementation of their prioritized project activities. The Project Implementation Model (PIM) will set forth the roles and responsibilities of all stakeholders of the project. In addition, the PIM will also include details of all operational and procedural steps regarding reviews and approvals of specific activities, flow of information, detailed description of project management and implementing bodies, procurement, and financial management arrangements, reporting requirements, and manual amendment procedures.

4.3 PROJECT INSTITUTIONAL IMPLEMENTATION ARRANGEMENTS BY Good Life Foundation.

Through its department of Environment and Natural Resources Protection (ENRP) will have overall responsibility for implementing and accounting for project funds and coordinate activities under all project components. GOLf 's chair will be assisted by an Implementation Support Team (IST) that will be led by the Project Director (PD) and will include Project Manager (PM) and Component Specialists (CS)e.g. (Environmental Social Safeguards Specialist (ESSS), (Finance Management Specialist (FMS), M&E Specialist (MES), Communication Specialist (CS), LPG Specialist (LS), Pharmacist Specialist (PS) and shall supervise Project Officers that include:

Project Engineer, Livelihoods Officer, Monitoring and Evaluation (M&E) Officer, Procurement officer, Project Accountant, Environmental Officer and Social Safeguards Officer, Social Safeguards Assistant (SGBV), Social Safeguards Assistant (VAC) and Environmental Safeguards Assistant to provide technical support during implementation, monitoring and evaluation. The Project Implementation Support Team (IST) shall also be responsible for (i) managing project funds (ii) managing the project at the national level, including financial management, procurement in accordance with funder's guidelines and procedures, Monitoring and Evaluation; (iii) finalizing the National Project Implementation Manuals and (iv) producing national progress reports on the project. At province level the Environmental and Natural Resources Focal Point Officer will liaise with Education Focal point, Pharmacist Researcher, Irrigation Officer, Accountant and the whole team will be led by Province Coordinator. At funded subproject level, the head of the institution will collaborate with grassroot leaders, monitoring and evaluation team and they will take lead in management of safeguards issues.

4.4 Project Key Stakeholders.

Ministry of Environment- Natural Resources – National Forestry, Ministry of Gender, Ministry of communication, Ministry of Labour, Ministry of Social Development, Ministry of Health, Ministry of Agriculture – Animal - Fisheries, Ministry of Lands-Housing and Urban Development, Ministry of technology, the GEEC Authority; Local Government Administration Structures (provinces and

territories), contractors; and the funder. Their roles are explained in the main text of this framework.

5. MONITORING, EVALUATION AND REPORTING

The environmental and social safeguards monitoring and reporting shall be carried out by chair and IST Safeguards team, the province coordinator, Community Development officer, Gender and Probation Officers, evaluation and reporting on environmental and social issues will form part of the overall sub-project implementation processes and reporting systems. Communities will keep records of all activities done in their respective community level and submit the same to the local governments for consolidation. The District Environment Officers and Community Development Officer will work with the communities to capture and report on environment and social issues monthly through GCCE-QIP#1-RDC Information Storing System. The monitoring reports will then be compiled by the Safeguards team on quarterly basis and shared with Environmental and Natural Resources Authority, line ministries and the Funder.

5.1 Public Consultations

Appropriate consultations were carried out with stakeholders during the preparation of this ESM. Stakeholders' consultation included relevant Government agencies, chief of administrative territories, Non-Governmental Organizations, non-state actors and civil society groups. Summary of comments are provided in annex 6.

Table 3: Budget of ESMF

Nº.	Item	Cost in €		Total
		Year 1	Year 2	
01.	Training of Line Ministries, Implementing Partners, grassroot leaders, chief of administrative territories, in safeguards management (environment, social, vulnerability issues, GRM issues, monitoring and reporting etc.)	150,000	x	150,000

02.	Waste management infrastructures in construction sites	80,000	10,000	90,000
03.	Hire of Environmental and Social Safeguards Officers and 3 assistants (GBV/VAC, Land Acquisition, Environmental Assistant for 1 years)	200,000	x	200,000
04.	Environmental and Social assessments, auditing, and monitoring	150,000	50,000	200,000
GRAND TOTAL FOR ESMF				€ 640,000

6. LPG GAS CLEAN COOKING FOR ENVIRONMENT QUINTUPLET IMPACT PROJECT IN DRC

6.1 BACKGROUND

Deforestation activities in DR Congo have been linked to issues surrounding the electricity shortfall; only 21.50 % of its population accessing to electricity up to date, in terms of poverty, 73.5% of Congolese are poor, out of whom 10-15 % are disabled and poorest of poor people; and lived with less than US \$ 2.15 daily; making the DR Congo one the five poorest countries worldwide and 60% of Congolese's workforce is employed by precarious traditional livelihoods resources (agriculture) as source of income which is economically vulnerable about the climate change effects related to droughts and floods, hosting refugees fleeing genocide and persecution from political oppression against the human rights abuses and other issues in their respective countries, war and perennial conflicts created by varying numbers of active armed groups operating mostly in the eastern region of DR Congo, the political instability in the same country. Conflicts and tension in the Great Lakes region, Horn of Africa and in the whole Sub-Saharan region mirror the transnational nature of contemporary conflicts, whose consequences in one country affects another especially neighbouring country through refugee flows and the setbacks of their mismanaged presence.

Contextually, the problem points to over three decades in which DR Congo (Zaire) hosted and granted free Asylum to 2 million Rwandan refugees whom partly were armed while fleeing genocide in Rwanda in 1994; in 1996 war

started in Zaire, it was backed by Rwanda and throughout it the UNHCR refugees camps were attacked by Rwandan army, they were dismantled and the survivors out of the 2 million refugees ran to hide in the Congo ecosystem, remained in up to date. They formed an armed group known as FDLR with 12 sub-divisions so far, they are financing this group by logging activities generating to it US \$100 million monthly from illicit trade of Charcoal made in the Virunga National Parc alone. Besides, DR Congo, hosts 520,000 refugees from neighbouring countries; they are all using wood fuel (charcoal and firewood) in cooking. According to GOLF Environment Monitoring Data, deforestation in DRC stands at between 4 and 5 million tons of Charcoal illicitly exploited from the Congo ecosystem annually as of from 2022-2024.

6.2 MATTERS ACCELERATING DEFORESTATION IN DR CONGO

6.2.1 Political instability in the DRC

Door to the deforestation problematic. During the successive series of wars that have been conducted in DRC; in 1996 (AFDL), in 1998 (RCD), 2004 war of (Laurent Nkundabatware and Bosco Ntaganda), in 2013 M23, January 2025 (M23) up to date, the country lost control in several episodes over its land; larger bushy zones have been often sieged by over 130 armed groups whose activities include massive logging for charcoal making, fire wood making and timbers extractions to generate income they use to purchase weaponry which in return is turned against the citizens. Within such war-timeframe the government struggled to setup national strategized policing framework to prevent-impose punitive enforcement against operators of illicit logging on a spoliated land. The war pangs' proclivity are National Parcs including; KAHUZI-BIEGA national parc in South-Kivu, VIRUNGA national Parc in North -Kivu, Garamba National Parc in the North-East, Salonga National Park in south of Congo Basin and Maiko National Park in Kisangani. Given the pell-mell administrative management, environment and natural resources are subjected to ravage and landmark crossing abuses leading to the catastrophic climate change whose impact scores hit-down of DRC and world' economy, climate, safety and living expectancy.

6.2.2 Inadequate use of Arable farmland

While insecurity is knotty issue to agriculture, considering that 60-70 % of arable land in DRC is situated in eastern-region which is a warzone, government expeditiousness in planning, funding, implementing, monitoring and evaluating programs is vitally unsought by officials. With 88 million hectares of arable

farmland, agriculture is dependant to women’s workforce at 60%. A whole hectare of land yields up to 60kgs seasonally and such down-scaled produce is used for substantial end. Men’s activities are oriented to mining businesses. With shortfall of rain harvest as consequences of climate change in DRC, the rescuing mechanism is forest; besides armed groups activism in logging, the poor population in DRC find gap path in charcoal illicit making and trade. The natural reserves are sabotaged as well as private woodlots; a situation leading to almost 5 million tons of charcoal illegally produced in DRC annually. Rain fall in DRC is currently, lightly covering 1.5 month per season of 6 month against a rain shrieking demand of 3-4 months of rain to raise crops to maturity. Around the second day of September each year, when the rainy season sets in, it was rain start day, but due to climate change the planted seeds are crashed by heat from 10th September – to around midst November, and the impact is hazardous to crops health and yields; beyond imaginable, hunger and poverty documented on ground is equivalently expression of the bareness about loathsome deployment of rational potentiality of political in-capita outcomes.

Photo 1



Women’s work force in livelihoods tradition activities in Mugogo village-Walungu Territory - South-Kivu - DRC in December 2024/Photo of Good Life Foundation.

6.2.3 Electricity Shortfall in DRC

Only 21.50 % of supply is consumed at state-wide from the National Grid operator. DRC comprises 10 million households out of which only 1.6 million access electricity. It is third world largest country without electricity. In cities like Goma, the need of electricity is 50 MW yet only 10-11 MW are served from Matempe and 5 MW from National Grid Operator (SNEL). In Goma, the monthly electricity bill goes up to US \$ 50 for a household, rendering electricity unaffordable to a larger number of city's residents.

In South-Kivu, the National Grid operator (SNEL) assumingly supplying 97.4 % in Bukavu City and 56,44% to homes in Goma out of its production, is at close off turmoil driven by environmental degradation in lake Kivu; surrounded by rubbish dumping which are carried by water flows to the Mururu hydro-electric plant, blocks its turbines from normal run. The plant imposes 24-48 hours of electricity interruption to citizens. Such energetic embarrass is majorly the cause of deforestation as the most excessive trees logging country in Africa is DRC.

Photo 2



Lake-Kivu became a dumping site-affecting functionality of Mururu Hydro-electric plant in South-Kivu - Photo of Good Life Foundation/Decembre 2024.

6.2.4 Wood fuel cooking in Democratic Republic of Congo

6.2.4.1 CHARCOAL ILLICIT PRODUCTION AND TRADE

As of now, 90% of Congolese population is still depending on charcoal as source of energy used in cooking for lacking;(1) electricity supply, (2) means and culture of connection to access other sources of energy. The matter benefited favour of political instability and unconsciousness of policing board; the let go system governed much longer. In DRC, wood fuel is a state-wide crosscutting hand-tying up issue. The project sampled data from three bigger and resilience influencing provinces of the DRC, they include:

North-Kivu province

Basing on Good Life Foundation's Environment Monitoring Data (GEMD), up to 100 trucks transporting charcoal were counted in a single day at military security checkpoint of **KIBUMBA** village in the Nyiragongo territory, in the **Virunga National Parc on October 13th, 2022**

Photo 3



An FARDC regular Army's Security Check Point where a military is receiving bribe from driver to let go on the illicit trade of Charcoal.

Motorcycles, Mark GLX were seen transporting up to 6 bags of charcoal and 125 were counted in that single day; one bag of charcoal weighs between 75 and 100 kgs. Charcoal illicit trade is linked to corruption in DRC; at the check point, trucks and motorcycles are inflicted stoppage and roadside parking, drivers and riders go to meet the soldier, put money in their right hands, fold on fingers and greet the soldier with that hand to hand out bribe to him; the action simply means buying pass. The final stage is city market for open commercial purposes - to households – to hotels – to restaurants - and to other end user homes including parties, especially wedding feasts, birth celebrations, send-off events etc.

Favor of bribed security services (soldiers) warrant protection to such illicit businesses while some soldiers of regular army FARDC are directly involved into charcoal making; Mr Nsabimana, a member of Banyarutshuru Community and resident of Kibumba explained the way deals get closed; they are charcoal making sites held by them in depth of Virunga National Park forest, (we go and stay there for up to one or two weeks), then we come with charcoal but it is a risky zone < he said >.

The deforestation is far more having destructive effects to the Flore alone, yet thinking so, our lantern is lit by palpable research that realized how the entire biodiversity is sacrificed, harmed with no rescue stopping measures. The 1000 types of trees and the 10,000 species of animal including forest elephants, Gorillas, Chimpanzees, Okapi, Leopards, Hippopotamuses, Lions, Monkeys, Rhinoceros are in poaching nets.

Rare Chimpanzee families targeted by poachers due to illicit wood fuel exploitation in Virunga National Park

All in tag of poaching of which complementary data is available in GOLF's GEMD in terms of monetary calculated loss. At charcoal market in North-Kivu, preference is accorded to charcoal from Virunga National Parc; reputedly burning longer due to hardness of the Ndobo, Kiwelewele types of trees.

A sac of charcoal reaches at end user's hand costing up to between US \$ 20 and US \$30. The calculation herein used US \$ 20 as minimum rate of purchase for 1 bag of Charcoal across DRC's 11 regions, and same price in neighbor countries such as Burundi, Rwanda and Uganda.

The project sampled Virunga Parc illicit charcoal production, and counted up to 1750 bags in a day, making 52,500 in a month and 630,000 bags in a year. Virunga National Park has lost 6,620 hectares of Primary Rain Forest Since resurgence of M23 from 2013.

South-Kivu province

On July 26th, 2023, at Mudaka market entry in Kabare Territory (south area), 28 trucks transporting charcoal and timbers from Kahuzi-Biega National Parc were counted within 6 hours.

In Kinshasa province (the capital city of the DRC)

On October 18th, 2022, in Kinshasa at **Terminus point**, in Nsele Commune, where Good Life Foundation monitored trucks from Bandundu province; 10 trucks were

seen each two hours with charcoal and hardcore timbers. Besides these, 4 trailers with massive tree logs and timbers were seen taking sea direction. Between 85 and 90% of the 17 million of Kinshasa population use charcoal to cook.

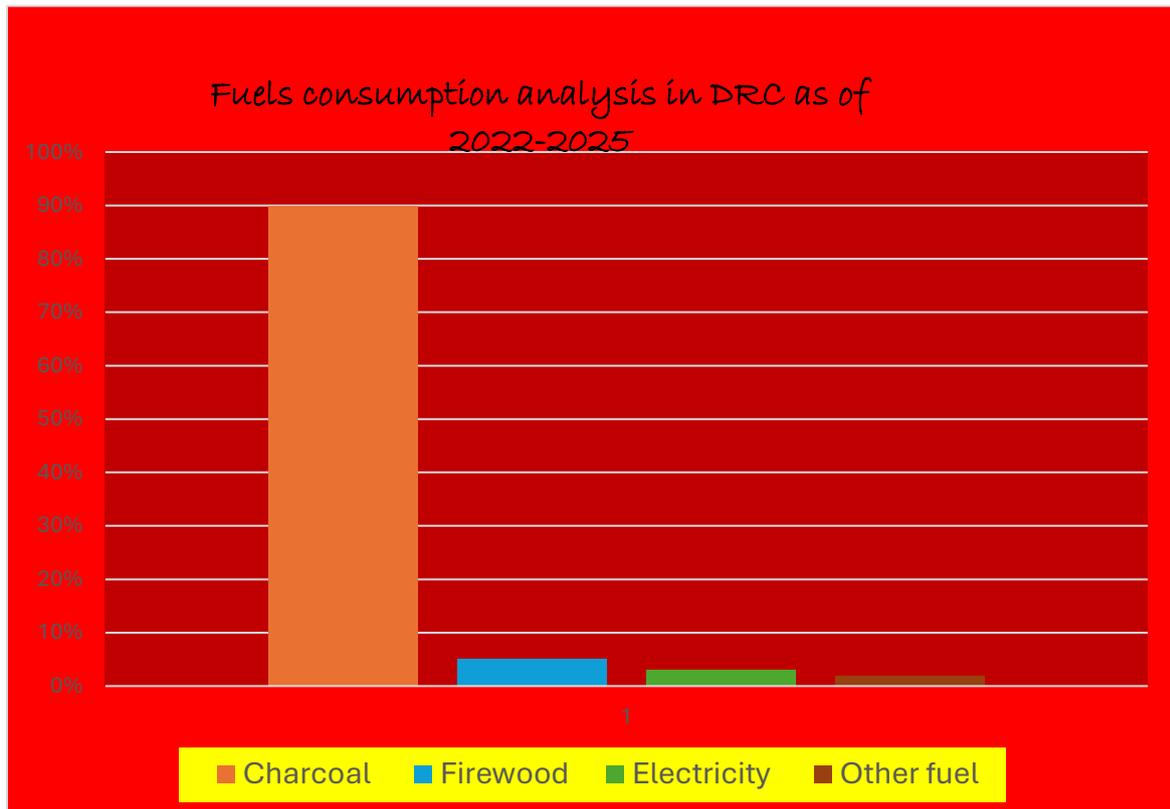
In overpopulated urban areas they use both charcoal and firewood to cook, Charcoal is majorly on top of topics about cooking fuels in urban cities as electricity shortfall, poor delivery and waste infrastructure preside over livelihood hardships in DRC.

In the neighbor Burundi, only 11-12 % of the population access electric power. The project sampled to establish the Balanced Economic Wastes (BEWs), Virunga Parc illicit charcoal production entailed per annum in DRC, it takes in account up to 1750 bags as daily exploitation scope, amounted to 52,500 on monthly basis, and 630,000 bags as annually. **Such a circuit earns US\$ 14, 437,500 in a month and US \$ 173,250,000 yearly in 11 regions and a less estimate of US \$ 5 billion 197 million and five hundred thousand (US\$ 5,197,500,000) that DRC loses across her 11 provinces out of illicit exploitation of charcoal alone within the three war decades starting from 1994 when it hosted 2 million Rwandan refugees up to the year 2025 (Research of Good Life Foundation, in GEMD, 2024).**

If nothing ingeniously conducted is done from now to entirely safeguard the DRC's forest; the world second largest ecosystem will be a Savanna or a desert, as so done could probably

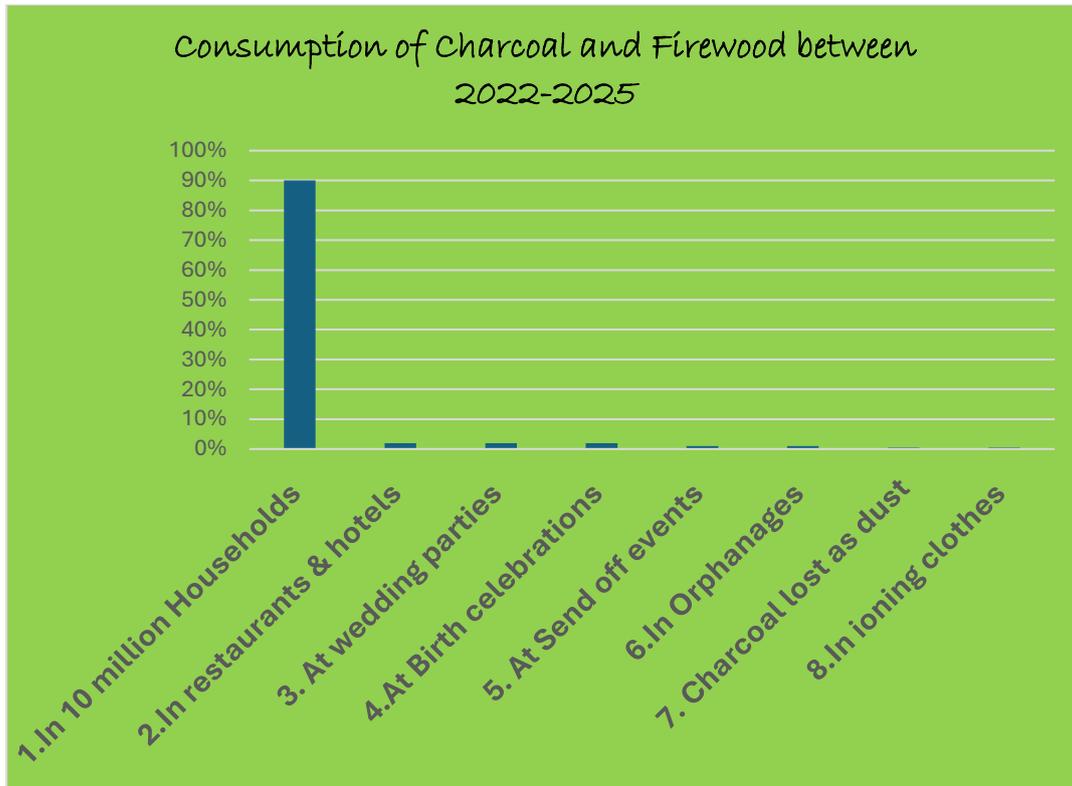
happen across Africa, and half of the world would be emptied of its population at the end of this century due to severe hunger associated with extreme poverty-to food insecurity-malnutrition inherent to both two factors, elevation of sea temperature causing planet warming, infectious diseases, respiratory acute syndromes, cardiovascular diseases, thirst, floods, tsunami, home inundations etc. (Research of Good Life Foundation, in GEMD 2024).

6.2.5 Analysis of Cooking fuels consumption in DRC as of now



6.2.6 Proportional Consumption rate of combined wood fuel in DRC

The events that consume excessivemement charcoal and fire wood in DRC match with the respective ranks; [1] Cooking in the10 million households, [2]restaurants and hotels, [3] weddings’s catering services : 1,183 were officially celebrated in 2023 , [4] birth parties: 30, 175 happed in 2022, [5] Send off events : 783 in 2023, Orphanages



6.2.7 Imminent consequences of deforestation in DRC from 1994-2025

The national environment is associated to severity of effects resulting from climate whereas the world is overwhelmingly hit by environment pollution and to the flow of environment damaging effects of which the sea temperature was globally, concretely evaluated as of September 2024 to 20.87°C; on which DR Congo is nefariously contributing by producing 517 Mt of CO₂ (as of February 2024) from deforestation. It is happening in DRC the following:

1. 78.50% of DR Congolese population not accessing electric energy;
2. 60% of women's workforce is engaged in farmland for substantial agriculture in poor households for lacking alternator empowerment;
3. 90% as rate of exposure of women's health to risks of CO₂ toxicity out of excessive manipulations of Charcoal in sell-out & buy markets, cooking in kitchens form in various places including households and parties; and with high temperature from wood fire in homes and at parties as all follows fume inhalation. Such weakness makes a record of 6 patients being women out of 10 patients in hospital consultations;
4. Households of vulnerable disabled and poorest of poor community members can only absolutely rely on charcoal and firewood as cooking source of energy while using fortune lighting means (a torch). They are deprived of possibility to access news via media, social media and nullified about owning wealth assets, neither businesses, nor enterprises;

-
5. Charcoal illicit trade is enormously funding war and conflicts in DRC; the armed groups known as FDLR, M23, Mai-Mai are involved on daily basis into logging, illegal agriculture, illegal grazing, fishing and taxing. With such enlisted activities, Virunga National Park alone has lost 14% of its agrarian measurements; the income is applied in acquisition of weaponry which in return is killing Congolese innocents and facilitating rape against all ages of female gender dominantly and permanently;
 6. Between 10 and 12 school infrastructure (schools) were attacked, destroyed and lost all surrounding environment properties in north-Kivu alone in the year 2024 due to fights of M23.
 7. The state-wide GEMD counted up to 1750 bags of charcoal in a single region daily, making 52,500 in a month and 630,000 bags in a year.

7. PROJECT JUSTIFICATION

7.1. Vulnerability of Congolese population

1million of households in DR Congolese are disabled people, the number is equivalent to 10 % of the entire population of 10 million households of which major causes are; infectious diseases especially Poliomyelitis and Leprosy, war injuries resulting from the serial wars known as AFDL in 1996, RCD in 1998, Jules Mutebutsi and Laurent Nkunda in 2004, biological impairment, obstetrical emergencies, mental illnesses, sexual and domestic violence against women and girls. The project finds interest in vulnerable and poorest poor community members as it considers the consequences of stigma that they are interfacing which leads to segregation in which they end up into societal isolation and lack of access to social and economic resources. Livelihoods is at highest level of competition in this country, as 60-70% of the population are poor. In the reversible circumstance aimed at eliminating wood fuel use in DRC, while policy enforcement will be hand put at use, this type of people will live worsened tougher conditions which may cost their lives. The project minds too, about the palpable weakness the government is running; while tackling political instability and invasion on its eastern region land, there will appear accentuated much need to support people living with disabilities to acquire the whole set of benefits likely intended by this project, then finally 10.5 million people would be packed in a life terminating crisis due to starvation. The project implementation involves strict environmental monitoring and safeguarding approaches conducted by grassroot leaders under government environmental protection policy enforcement in order to curb wood fuels use. While acting likely, each household not consuming electricity in clean cooking will be purchasing a Liquefied Petroleum Gas cylinder for clean cooking solution, all form of

parties/celebrations will define means to partner with catering services managing clean energy in cooking. This project is then crucially marking valuable point to exist for the sake of carrying out mobilization & sensitization of the entire population of DRC on stopping charcoal and firewood and adopt new strategy < the LP Gas Clean Cooking solution> which strategy is in the development pipeline of the government of DRC to be employed as source of safer, available and affordable energy- fuel to save lives nationally and globally. The GCCE-QIP#1-DRC will empower 52,000 people living with disabilities and poorest of poor by distribution of (free) 52,000 LPG cylinders to address the 420,000 tons of charcoal consumed by 10-15% of disabled population annually in DRC and provide financial business support to them in laying down sustainable long-term project development phase; enabling the beneficiaries to generate income applicable to regular refilling cycles of gas without dependence. The project is mean too, to mitigation of stigma; it builds social insertion of disabled by improvement of their physical environmental, erases economic vulnerabilities by creation of 26,000 new enterprises at statewide for Households Representatives (HR) of disabled people. The project will establish equalized management of the funded sub-projects between disabled and abled community members communities of refugees, returnees and also amongst host communities themselves. Therefore, enhancing the productive capacities and coping mechanisms of the disabled and poorest of poor populations is key to achieving environmental safeguard planned.

7.1.1 Project Sustainability

The project core goal is mitigation of deforestation with the harm and damages poured to the planet's climate; through innovative clean cooking solution, the implementation of present's project activities, outcomes and impacts engenders groundbreaking transformation. To have this solution working longer to long-term and indefinitely, Good Life Foundation considers the following measures:

- i. **Socially**, the project targets vulnerable beneficiaries; they constitute the major portion of population, they were counted among the figure expected to adopt clean cooking solution, yet lacking means to purchase LP Gas facilities. Empowering them is basically the option to rely up on to reach high levels of clean cooking strategy penetration in DRC's population. In the theory involving policy enforcement as prioritized solution against use of Charcoal and firewood in households, security services would have arrested 80% of Congolese, a figure corresponding to more than 70 million people; the scope experiencing vulnerability,

impoverishment and electricity shortfall as roadblock to clean cooking solution.

- ii. **Economically**, the project vision anticipates their empowerment to genuinely render them enabled by {1}LP Gas equipment(Cylinders) and {2} by 26,000 enterprises/businesses creation financing; that strategy is key to project success, they will be empowered by environment and health safe-guard, business building, finance literacy trainings to allow them proper management of their initiatives, success of such efforts will generate monthly regular income, out of which a part will be allocated to LP Gas in refilling episodes. Here over, enormous emphasis is to be pointedly put in this area, during trainings and monitoring activities. Each succeeding set up business is an environment safe-guarding watchdog; it creates a household livelihoods self-reliance evolving in community resilience and their success stories will be captured and pitched at national audiences and panels to broaden community ownership of clean cooking to save lives nationally, regionally and globally, availability of Physical Market Halls etc.
- iii. **Effective communication**, the project foresees long reaching community awareness, through radio, television, campaigns, exhibitions, workshops, website of GOLf, and churches; working out stimulating willingness of the entire Ugandan population to protect themselves by protecting the environment.
- iv. **Official Memorandums enactment**, beyond above prescriptions, Good Life Foundation's agenda is to draw avenues defining memorandums binding it with financial institutions and government structures to ensure clean cooking loaning is specifically in effect and accessible to community members intending to apply it in compliance to clean cooking solutions and to supported subprojects in development phase of their set enterprises.
- v. **Consultations**, meanwhile, the foundation processes diversified consultations with the government in DRC to ensure gas price cutbacks on importations to maximize percentage of adoption.
- vi. **More researches**, the foundation is deployed, in continued research identify a probable more effective and permanent solution to deforestation regionally and continentally. Applicable in upcoming interventions, e.g., a watchdog will be tasked to sensitize 100 new households, ensure they adopt the clean cooking solution, manage the refilling cycle and receive a prize. A strategy to grow through policy enforcement by the government. We anticipate as well, cooperated

involvement of local government, in setting a Special Police Unit, implementing wood fuels constraining policy enforcement to maximize project impact achieving.

7.2 Project General Objective

The Project General Objective (PGO): is to promote Gas Clean Cooking as a solution to constrain use of illicit wood fuels, enhance innovation in food production, promote environmental protection education, innate public health and medical research across the Democratic Republic of Congo.

The project ensures participative actions of citizens in collaboration with governmental policy implementation enforcers towards adherence to rules, to identifying needs in terms of Environmental Colonies' infrastructure, livelihoods opportunities for community resilience, and health benefits while stewarding peaceful-coexistence and the high ranked desire to social inclusion and accountability.

The operational approach will be Community Driven Development (CDD) involving:

- a. Building grassroots institutions;
- b. Ensuring the voice of all communities is heard in decision making;
- c. Strengthening decentralized government administrative functions; and
- d. Investing in public service delivery and social mobilization to enhance social cohesion among beneficiary communities.

The Proposed General Objective is to improve access to social services, expand economic opportunities and enhance environmental management for project direct and indirect beneficiaries' households and state-wide population.

8. PROJECT COMPONENTS

Component 1: Gas Clean Cooking as Clean Energy: GCCS (€ 2,600 ,000)

The component will allocate funds to sub-component (i) for purchase and delivery of LP Gas Cylinders to 2,000 households in each province; making 52,000 households statewide whom responsible fall into disabled, poorest of poor and war affected protocollary accepted. The component focuses on [a] community mobilization about integral use of Gas Cooking and use of Gas, [b] harmonizing connectivity of community to supply of Gas selling facilities, [c] foiling deforestation' setbacks by working jointly with government policy

enforcers in vulgarization of the strategy, in mobilization & sensitization of auto-helping community members to acquire LP Gas Clean Cooking cylinders,[d] establishing community institutions for planning, implementation, monitoring, evaluation and oversight across the enforcement and allocate funds to sub-component (ii) community capacity building on gas usage awareness.

Component 2: Livelihoods Support to Gas Cooking Solution (LSGCS), (€ 13,260,000)

The component will expeditiously assess abled individuals from 26,000 disabled and poorest households, identify one Household Representative (HR) in each. The representatives will be the principal respondent of their households under the project implementation, they will benefit enrollment, financial literacy trainings, bank account opening, and more project interventions. The project will scale up financial support to their accounts for targeting initial households' enterprises that generate income usable to unlock livelihoods patterns for household economic sustainability and progressive means for providence of Gas fuel-energy from the profits made.

The component will swiftly and promptly avail appropriate technical guidance to establishment of the HR businesses by playing the key roles [1] assessing their business plans, provide guidance where needs rise, [2] financial support and disbursement to their accounts, guide on fund withdrawal and provide key financial literacy [3] monitor businesses' implementations in sub-component (i) and establish 3 Physical Market Halls (PMHs) in each of the 26 provinces and score up to 78 of them in sub-component (ii) and [4] create inter-linkage within the HR businesses and networking linkage with other community private sectors to ensure flux of financial operations and flow of capital as strategy bolstering statewide social economic growth that swallows the gap which would have occurred from closure of charcoal illicit trade by government stiff policy enforcement.

Component3: Environment Protection Educational Colonies (EPECs) and Medical Study and Drugs Fabric Plant Construction MSDP (Approximately € 1,500,000)

The component will concern the eastern region of DRC which lost educational and health infrastructure within the 3 decades of war timeline from 1996 up to date and which effects impacted negatively advancement of children and youths. The project will implement construction of 9 Educational Protection Education Colonies (EPECs) in the provinces including Ituri, North-Kivu and South-Kivu in sub-component (i); the EPECs fall in features of Construction of 3 EPECs in each of the three provinces, they are modern schools, established on

10 hectares of land each, out of which 2 hectares for construction of school infrastructure, 3 hectares for school woodlot and five hectares for school agribusinesses, the school woodlots are especially apiary projects whose plants are herbs, fruit trees, vegetables, bushes, clover, flowers, shrubs, blossoming etc. The EPECs will be fully equipped to primary school and secondary school standards. The agribusinesses in ECs are shaped by accuracy of technology and good farming practices, each of the 15 hectares in each province will produce 4-6 tons of produce in a season; a total of 180 tons out of the overall hectareage across the 9 ECs of GCQIP-DRC #1, and the farms are demonstration sites for livelihoods upskilling of students and of the project beneficiary communities. In sub-component (ii) the project aims at construction of a mini-drugs fabric plant which will collect honey yield and process drugs out of it for human therapeutics. The drug fabric plant will be constructed in South-Kivu preferably. The strategy will groundbreakingly spur an innovation explosion for youth empowerment and development of science as project impact.

Component 4: Solar Powered Solution to Draught SPSP (Approximately € 400,000)

The component draws up defiance to climate change solution applicable to businesses of HR livelihoods traditional businesses and to agribusinesses across the project. Solar powered irrigation in small and medium schemes will be applied to defy draught, maximize yield and production scaling up. The GCCE-QIP#1-DRC will launch statewide solar powered solution campaigns targeting [1] farming development auto-dependency and [2] households lighting energy. The farms and woodlots under GCCE-QIP-#1 RDC will systematically apply irrigation scheme to prevent climate damaging effects to crops, to harness on yielding, scale up production and leverage land utilization to annum spectrum of exploitation while complying to biological production of produces and food item. Communities will benefit adapted capacity building that equip them with new technologies and such skill set will drive replication to households' economic traditional livelihoods.

Component 5: Project Management, Policy Support, Monitoring and Evaluation, (€500,000)

This Component supports the national and local level of project activities coordination, including Monitoring and Evaluation (M&E) and Information Storing System (ISS), fiduciary management, communication and engagement of

citizen and environmental social safeguards management and compliance. Project management under component 1 will be implemented by government policy support through Ministry of Environment and natural resources protection of DRC for new integrated approach of stopping trees logging and charcoal making at nationwide to enhance community adherence to clean energy usage.

9. SOCIAL RISK MANAGEMENT

Social Risk Management (SRM): In these components will be an envisioned fact harnessing systemic approach to the mitigation of social risk with emphasis on SGBV and VAC. Given the precarious situation of vulnerability embedded by beneficiaries, and risks that may produce probable risks during project implementation. Acknowledging that SGBV is a complex and multifaceted problem that will not be eradicated in a single vantage point , the GCCE-QIP #1-DRC seeks to [a]support activities with purpose to reduce exposure to SGBV and VAC as a result of the project activities in the community,[2] promotion of rules that foster long-term social and cultural change toward gender equality(e.g. allowing leadership and active management of women and girls in togetherness with men and boys in community-based groups and or HR enterprises related to the project sector) and [3] facilitate assistance for survivors through referral to safe and ethical care by existing service providers.

10. PROJECT OBJECTIVES

10.1 Project Development Objective:(PDO) is to promote Gas Clean Cooking as a solution to constrain use of illicit wood fuels, enhance innovation in food production, promote environmental protection education, innate public health and medical research across the Democratic Republic of Congo.

10.2 Specific Objectives and Challenges

The specific objectives of this project are to:

- i. Increase public and Institutional awareness by conducting state-wide campaigns on the importance of using Gas Clean Cooking solution;
- ii. Provide start up LP Gas Cylinders to households of Disabled and poorest of poor community members at state-wide level;
- iii. Harness livelihoods resilience for disabled and poorest of poor community members to sustain project long term development;
- iv. Construct Environmental Protection Educational Colonies EPECs in 3 regions of eastern part of DRC including Ituri, North-Kivu, South-Kivu;

- v. Facilitate environmental protection Policies, Laws, Regulations and Guidelines' adoption by community compliance on Gas Clean Cooking solutions;
- vi. Promote investments in Gas Clean Cooking by establishing Community Physical Market Halls at state-wide level.
- vii. Build capacity of implementers of clean cooking projects;
- viii. Broaden capacity of research and innovations in technologies related to cooking solutions;
- ix. Enhance food production by solar irrigation solutions;
- x. Incorporate gender equality issues in the clean cooking value chain; and Strengthen good governance in clean cooking.

Table 4: Summary of Challenges and Specific Objectives.

No.	Challenge	Specific Objective
1.	Limited awareness to the public and institutions on the importance of clean cooking	Increase public and Institutional awareness by conducting state-wide campaigns on the importance of using clean cooking solutions.
2.	Lack of Gas Cooker Kits in households of Disabled and poorest of poor community members at state-wide level;	Provide start up LPG - Gas Cooker Kits to households of Disabled and poorest of poor community members at statewide level.
3.	Segregationist social and economic opportunities to disabled and to poorest of poor community members in DRC.	Harness livelihoods resilience by creation of enterprises for disabled households to sustain project long term development.
4.	Lack of adoption of Policies, Laws, Regulations and guidelines regarding cooking solutions	Facilitate environmental protection Policies, Laws, Regulations and Guidelines' adoption by community compliance on clean cooking solutions.
5.	Low investment in clean cooking	Promote investments in clean cooking by establishing Community Physical Market Halls at statewide level.
6.	Limited capacity of implementers of clean cooking projects	Build the capacity of implementers of Clean Cooking solution under this project.
7.	Insufficient research, invention and innovations in technology related to cooking solutions	Broaden capacity of research and innovations in technologies related to cooking solutions.
8.	Alerting food insecurity across the DRC war-conflict zone	Enhance food production by Solar irrigation solutions
9.	Insufficient efforts in integrating gender equality in cooking energy value chain	Incorporate gender equality issues in the Clean Cooking value chain.
10.	Lack of good governance in Clean Cooking	Strengthen good governance in Clean Cooking.

10.3 ACITIVITIES, TARGETS, INDICATOR AND OUTCOME

Table 5: Project Indicator Analysis indicators for the implementation of specific objectives for the transition to clean cooking, as outlined:

Activity	Targets	Indicator	Outcomes
Increase public and Institutional awareness by conducting state-wide campaigns on use of Gas Clean Cooking Solutions.	-Direct beneficiaries intending awareness; -Indirect beneficiaries intending awareness; -Awareness to Governmental structures; -Awareness to private sector operators	- 10 awareness workshops held; with 200 hundred attendants once in a term at statewide level. -1massive radio broadcasted community awareness each month from January 2025 in across the 26 provinces. -Physical contacts, word of mouth and motorized campaigns conducted in each province (20 sessions in each); -40 signposts designed for awareness in each province.	1) 2,000 awakened beneficiaries in each province and 52,000 countrywide. 2) 75% of population in Congo as rate of radio audience reached by broadcasted awareness. 3) 520 institutional awareness accomplished at statewide. 4)81% of DRC population can read awareness information on 1,040 signposts at statewide.
Provide start up LPG - Gas Clean Cooking cylinders to households of Disabled and poorest of poor community members at statewide level.	Protection of environmental resources by empowering disabled and poorest of poor community members while policy enforcement takes place to protect the environment across DRC territory.	52,000 LPG- Gas Cooking cylinders equipment distributed to 52,000 households in 26 provinces of DRC	5)364,000 lives protected at statewide; it is 43 % of the scope to which the government of DRC aims to scale up access to LP Gas Cooking equipment by the end of 2030.
Harness livelihoods resilience by creation of enterprises for disabled households to sustain project long term development	. Disability converted into livelihoods production unit; . and Schools into food production colony.	- 2600 enterprises created by this project; - 45 hectares of farmland created in 9 EPECs in Ituri, North-Kivu and South- Kivu as war vulnerable provinces.	6)2,600 Household Representatives of disabled beneficiaries are selected, trained in financial literacy and manage sustainably 2,600 viable businesses; 7)180 tons of produces scaled up seasonally by 9 EPECs in Eastern region of DRC

	Creation of 9 Environmental Protection Educational Colonies (EPECs);	3 created in Ituri, 3 North-Kivu and 3 in South-kivu. They are primary and secondary modernized standardized EPECs (schools) with 45 students in 1 classroom.	8)540 students benefiting education per year in each school and 4,860 in 9 EPECs; 9) 630 staff employed in the 9 EPECs;
Promote investments in clean cooking by establishing Community Physical Market Halls at statewide level.	Creation of 3 Physical Market Hall in each province.	78 created with sub-division into 50 trading squats each at country wide.	10)3,900 business squats available to benefit non-traditional livelihoods business and promotion of LPG equipment across the 26 provinces.
Facilitate environmental protection Policies, Laws, Regulations and Guidelines' adoption by community compliance on clean cooking solutions	Effectiveness in cooperation with governmental stakeholders of DRC towards Law enforcement against deforestation	Adoption of clean cooking by the community due to strengthened applicability of environmental national, regional and international guidelines.	11)75 % of Congolese population expected to have started coping with LPG clean cooking by end of project implementation.
Build capacity of implementers of clean cooking solution in this project.	Stakeholders, contractors, services providers, project employees inclusive.	26 Inductions, 26 component and M & E workshops in each province.	12)50 induction attendants with a total of 1,300 and 20 attendant of workshops with total of 520 at statewide are fully upskilled.
Broaden capacity of research and innovations in technologies related to clean cooking solutions.	Creation of multisectoral innovation at local level for youth empowerment and development research.	1 Medical Study Drugs Fabric Plant constructed and operated for production of therapeutics against LP Gas toxicity. - It uses honey yield from 72 beehives from the project woodlots apiary sub-projects out of 18 hectares.	13) 2,880 tons of honey as seasonal yield is processed by the Plant in South-Kivu; The plant produces medicines for human therapeutics against Gas hazardous effects. -The strategy groundbreakingly spurs innovation explosion for youth empowerment and development of science as project impact; -50Employment opportunities created;

			<p>-Research promoted in the fields of Medico-biology, Medical Pharmaco-Industry, Apiculture and veterinary, Agronomy and Environment protection.</p> <p>-The project will participate to peace building by new approach of diversity by calling experts from West into plant setting up, operation, management and its maintenance.</p>
Enhance food production by solar irrigation solutions	Vulgarization of irrigation scheme at statewide	Adopted strategy by 60% of Congolese population occupied by Agriculture.	Farm production scaled up to 4 tons on 1 hectare land.
Incorporate gender equality issues in the clean cooking value chain.	Equity in project beneficiaries' selection.	Women and girls placed at center of clean cooking strategy activities.	Women are majorly kitchen managers in DRC, they inclusively partake presence in project crosscutting activities.
Strengthen good governance in clean cooking.	Social Inclusivity of status, gender and opinion	-60% of beneficiaries of this project are women across the five components.	<p>-Upskilling trainings are conducted to empower women on leadership, management, environment protection and on livelihoods resilience</p> <p>-Women occupy leadership in activities related to this project;</p> <p>-Clean Cooking is owned by women;</p> <p>-Women are created linkage with other women through stake holders, contractors, researchers etc.</p>

10.4 Beneficiary Screening Tool (BST)

A. Identification

Names.....Gender.....Birth day.../...../.....

Village..... collectivity Sector.....

Territoryprovincein DR Congo.....

Personal Contact.....alternative.....

Civil status: (Officially married): yes [] No [], family size []

Names of village leader..... contacts.....

Names of spouse.....contacts

B. vulnerability Status

Handicap [], weak vision acuity [], weak audition acuity [], chronic diseases [], beyond 70 years old [], congenital related issues[], mental impairment issue [], returnee household [], Households of orphans [], widow or single mother with children, SGBV survivor [].

C. Livelihoods endowment /Properties owned.

Respond by Yes or No according to the situation you fit into

Land ownership: No land [], a small portion of land [], 1 hectare [], 2 hectares [], 3hectares and plus [], land on lease hold [].

Livestock owned: 1- 5 hens [], a small poultry [], a poultry of 100- 500 hens [], 1 goat-sheep- pig [], 1 cow [], 2 – 5 cows [], a dairy farm [].

Job owned: Jobless [], contractual part-time [], contractual full time [], informal job [], earning salary [].

Trading activities undertaken: Existing [], small size [], big size [], does not exist []

Type of housing: traditional house [], descent house [], number of rooms [].

Hygiene: own toilet [], access clean water from tap [], use water from river [].

D. Environment protection by the household

Respond by Yes of No according to the situation you fit into

Do you cook or you are given cooked food? Yes [], No []

How many times do you cook per day?

What source of energy do you use to cook? Charcoal? Yes [], No []

Firewood? Yes [], No []

Electricity? Yes [], No []

Gas solution? Yes [], No []

Solar system? Yes [], No []

E. Exposure to effects of Carbon dioxide due to use of wood fuels in cooking

How many times do you cook per day? **use digits to respond.** []

Who cooks in your household? **tick in corresponding bracket;** Husband [], wife [], Girls [],

Boys [], other household's members [], household helper [], receive community assistance [].

How many hours do you make to complete meal preparation? **Tick into bracket of matching digit** [1h], [2h], [3h], [4h], [5h], [6h].

F. Knowledge in the household about deforestation and climate change in DRC

What do you think about fume to your health while cooking?

Do you know the origin of the charcoal or fire you are using to cook? And what happens to that resource place when trees are cut to make charcoal and firewood?

Are you constantly receiving rain this year like it was before?

Are you experiencing rain shortfall in your area? If yes, explain:

How long does sunny season take in your area now?

Are gardens/ farms producing food like it was before?

Poorest of poor beneficiary qualification criteria: **Disabled beneficiary qualification Criteria:**

- **Has no land** [] **one vulnerability criteria** []
- **Has between 1-5 hens** [] **two and plus vulnerability criteria** []
- **Jobless** []
- **Has no trading activities** []

Country

Assessment province:

Rural area:

Date:...../...../.....

Names of Participated team members:

1..... Contact..... Professional area.....

2.....

Contact.....Professional area.....

3.....

Contact.....Professional.....

10.5 GCCE- QIP-DRC#1-DRC IMPLEMENTATION MATRIX

The matrix concerns the implementation of specific objectives for transitioning to clean cooking solutions and environmental safeguard as outlined in table No 5

Table 5: Matrix for the execution of specific goals

No	Specific Objectives	Strategy	Target	Outcome Indicator	Timeli ne	Responsible
1	Increase public and Institutional awareness by conducting state-wide campaigns on the importance of using clean cooking solutions.	Communication, awareness and sensitization plan has been prepared on use of Gas clean cooking	Start of communication and awareness plan implementation	Institutions, private sector and national community reached by the Communication Strategy on the use of clean cooking solutions.		Good Life Foundation in collaboration with Ministry of Energy; Ministry of Education, Science and Technology; Ministry of Information, Communication and Information Technology; Ministry of Community Development, Gender, Women and Special Groups. Ministry of Health.

						Ministry of Natural Resources and Tourism
2	Provide start up LPG - Gas Cooking Cylinders to households at statewide level.	52,000 Beneficiaries are households of disabled and poorest of poor and distribution plan elaborated	Execution of distribution plan to reduce pressure on environment resources.	52,000 LPG Gas clean cooking cylinders available in targeted households and put in use at nationwide.		GoL and stakeholders.
3	Harness livelihoods resilience by creation of enterprises for disabled households to sustain project long term development.	Literacy Training, implementation, funding of plan for Households Representatives Businesses. Creation of enterprises for disabled and poorest of poor to sustain use of Gas clean cooking solutions.	Plan implementation Reception of funds by Households Representatives	2600 Livelihood Enterprises created; businesses running/income, generated - income is used to purchase cooking Gas in refilling phase.		Good Life Foundation and Funder
4	Facilitate environmental protection Policies, Laws, Regulations and Guidelines' adoption by community compliance on clean cooking solutions.	Cooperation with institutions/ government stakeholders and security services to educate the community members.	National-wide sensitization plan carried-out	Both word of mouth and printed out messaging on flyers for Laws, Policies, Regulations and guidelines promotion, circulating in printed out and in broadcasted forms.		Good Life Foundation in collaboration with Ministry of Energy; Ministry of Education, Science and Technology; Ministry of Information, Communications and Information Technology; Ministry of Community

						Development, Gender, Women and Special Groups; Ministry of Health. Ministry of Natural Resources and Tourism
5	Promote investments in Gas Clean Cooking by establishing Community Physical Market Halls at state-wide level.	Creation of innovation motivating communities to own the Gas clean cooking solutions.	Expended economic opportunities for community through non-tradition livelihoods investment mitigating environmental resources consumption. Generate income to invest in purchase of cooking Gas	Created livelihoods markets are selling points of LPG home cooking equipment and intrants (Cylinders & Gas)		Good Life Foundation & contractors, stakeholders.
6	Build capacity of implementers of clean cooking in this project.	Train workers, beneficiaries, implementing partners on use of Gas clean cooking solutions.	Preparedness of trainings plan.	Trainings conducted at national-wide level		Good Life Foundation, Funder, Solutions manufacturer, Ministry of Health, Ministry of Science and Technology.
7	Broaden capacity of research and innovations in technologies related to cooking solutions	Increase number of community members compliance to use of Gas clean cooking solutions.	Non-beneficiary community members at national wide level.	Conducted Assessments evaluating impact of national wide awareness and compliance to Gas clean cooking even in rural area.		Good Life Foundation, stakeholders and Funder.

8	Enhance food production by solar irrigation solutions	Launch mass awareness campaigns	Awareness plan targets farmers.	Increased number of farmers using Solar powered irrigation system.		GoL and stake holders.
9	Incorporate gender equality issues in the clean cooking value chain.	Increase number of female beneficiaries to majority.	Verify percent scored by female gender promotion.	Number of female and youths is higher than other beneficiaries.		GoL and stake holders in M&E
10	Strengthen good governance in clean cooking.	Place women on top levels of decision making in Gas clean Cooking Solutions.	Women are integrated in beneficiaries and among implementors	60% of project beneficiaries are women.		GoL and Funder, stakeholders in M&E, Reporting.

11. RESPONSIBILITIES OF GAS CLEAN COOKING ENERGY STAKEHOLDERS

This part of the project describes the responsibilities of various stakeholders in the implementation of this solution, as outlined in table 5.

11.1 Responsibilities

Good Life Foundation in collaboration with the Ministry responsible for Policy, Ministry of Environment and Natural Resources, Ministry of Energy, Ministry of Communication, Ministry of Agriculture, Ministry of Health, Ministry of Internal Affairs, Ministry of Gender and Equality, Parliament will implement and Coordinate the **GCCE-QIP#1 - DRC (Liquefied Petroleum Gas Clean Cooking solution in Environmental Quintuplet Impact Project)** as Strategy and ensure that the objectives are achieved. To relevance, Good Life Foundation ensures that Institutions, Agencies and Consultants involved in this Gas Clean Cooking Solutions develop plans in accordance with this project. It will coordinate the functions of the Fund that will implement this project; oversee the improvement of clean cooking energy infrastructure; and establish a database containing information and statistics on clean cooking. Furthermore, it will conduct comprehensive Monitoring and Evaluation of the implementation of the national plan about Clean Cooking solution in collaboration with key stakeholders.

Good Life Foundation, as implementor and coordinator of this project, it will ensure that all stakeholders understand their responsibilities. The following are the responsibilities of the relevant stakeholders:

11.1.1 Ministry Responsible for Energy

This Ministry has the overall responsibility of overseeing supply of Gas Energy resources to the selling private sector and maintain its availability to market in abundant reserve. It will cooperate with Good Life Foundation to support the implementation's success. This ministry will contribute on community awareness into the National Communication Strategy and the National Awareness and Sensitization Plan on the use of Gas Clean Cooking solutions. In addition, this Ministry will facilitate the review of Policies, Laws, Regulations, and Guidelines related to exploitation, management of Gas and make it more accessible at national-wide.

10.1.2 The Coordination Office

The coordination office by Good Life Foundation plays a significant role in ensuring that the responsibilities outlined in this project are implemented. Ministries responsible for Policy, Parliamentary Affairs, and Coordination; as well as Regional Administration and Local Government Authorities will be involved in facilitating this project at the regional level. Furthermore, the roles of these Offices include providing guidance and coordinating the implementation of tasks within their respective areas of operation.

11.1.3 Sectoral Ministries

The sectoral ministries have crucial responsibilities in the implementation of this project. These ministries include: Ministry responsible for Policy, Ministry of Environment and Natural Resources and Tourism, Ministry of Energy, Ministry of Communication, Ministry of Agriculture, Ministry of Health, Ministry of Internal Affairs, Ministry of Gender and Equality, Ministry of Technology, Ministry of Research, Ministry of Industry and Trade, Ministry of homes affairs etc. These sectoral ministries are responsible for ensuring that their strategies and plans align with the priorities of this project in promoting Gas Clean Cooking innovations.

The responsibilities of sectoral ministries include preparing and improving Policies, Laws, Regulations and Guidelines related to clean cooking; support Good Life Foundation in conducting education and awareness campaigns on the use of Gas Clean Cooking solution; and promoting private sector's involvement in Gas Clean Cooking. Other responsibilities include: encouraging investment in clean cooking initiatives; support Good Life Foundation in carrying out capacity building duties for personnel in overseeing clean cooking projects-businesses; and promoting the use of National and International Funds and Programmes willing to promote and develop the clean cooking initiatives in the country.

Additionally, the Ministry responsible for Environment will coordinate the implementation of the ban on the use of traditional wood fuels (firewood and charcoal). Likewise, the Ministry responsible for research, science, technology, and innovation will promote and foster research, innovation and technology development in energy, appliance on Liquefied Petroleum Gas cylinders, and business models designed by this project under component 1,2.

11.1.4 Government Institutions, Authorities, Agencies and Departments

The Government Institutions, Authorities, Agencies, and Departments have crucial responsibilities in the implementation of this project. These institutions, authorities, Agencies and departments include: Direction Générale des Impôts (DGI), Société Nationale des Hydrocarbures(SONAHYDROC), SEP Congo, Institut Congolais de la Normalisation et de la Métrologie (ICNM), Agence Nationale de Développement de l'Entrepreneuriat (ANADEC), l'ANAPI (Agence Nationale pour la Promotion des Investissements), l'Institut National de la Statistique (INS), l'Institut National de la Santé Publique (INSP), Institut National de Recherche Biomédicale (INRB), L'Autorité de Régulation de la Poste et des Télécommunications du Congo (ARPTC), Radio -Télévision Nationale Congolaise (RTNC), l'Agence Congolaise de l'Environnement (ACE) etc. Good Life Foundation will work closely with these stakeholders to render project implementation smoother and more successful.

11.1.5 Financial Institutions

Financial institutions will establish adequate financial systems to enable local entrepreneurs' participation in this Gas Clean Cooking value chain; provide low

interest loans to local entrepreneurs distributing LPG Clean Cooking products and services; encourage women's participation in the clean cooking value chain; finance clean cooking projects; and promote the use of national and international funds and programmes to support the growth and development of the clean cooking initiatives in the country.

11.1.6 Education and Research Institutions.

Education and Research Institutions have the responsibility to produce experts in clean cooking; conduct research, innovation and technological advancements in energy, appliances, cookstoves and business models related to clean cooking; preserve and disseminate research findings on cooking energy; and build capacity for stakeholders in implementing clean cooking subprojects. Other responsibilities include: participating in sensitization and public awareness on clean cooking; advising Good Life Foundation and stakeholders on science, technology and innovation in clean cooking solutions, including policy and law formulation, research priority setting, resource planning and utilization; and providing technical guidance on all aspects related to cooking solutions. Responsibilities herein after are crosscutting to both five components.

11.1.7 Private Sector

The Private Sector will collaborate with Good Life Foundation to ensure reliable and sustainable access to clean cooking products(Gas and equipment); participate in sensitization and public awareness on clean cooking; support and develop further the strategy of Good Life Foundation, enable low-income individuals in affording clean cooking solutions(Disabled and poorest of Poor) as well as other community members, not beneficiary herein but optionally willing to adopt the cooking solution after benefiting national-wide awareness; collaborate with the Government to identify Policies, Laws, Regulations and Guidelines that hinder efforts in the distribution of clean cooking solutions; ensure the distribution network of clean cooking energy, support Good Life Foundation in availing Liquefied Petroleum Gas cylinders to reach to all rural and urban places of the country; and in expanding Gas Clean Cooking employment opportunities.

11.1.8 Development Partners

Development Partners will collaborate with the Good Life Foundation to promote clean cooking initiatives by building capacity; providing technical and financial support; facilitate technology transfer from both domestic and foreign sources to local producers; and support the implementation of the Gas Clean Cooking for Environmental Quintuplet Impact in the Democratic Republic of Congo and investments in the five detailed sectors.

11.1.9 Non-Governmental Institutions

Non-Governmental Institutions including Non-Governmental Organizations (NGOs), Community-Based Organizations (CBOs) and Faith-Based Organizations (FBOs), will collaborate with Good Life Foundation by participating in sensitization and public awareness on Gas Clean Cooking especially in the goal being matter this project is engaged into; expanding this project's quintuplet strategy in Clean Cooking to communities members non-beneficiaries herein and by providing mobilization of stakeholders on clean cooking initiatives; advocating for the implementation of Policies and Laws related to cooking solutions; and conducting research while advocating for the interests of vulnerable groups.

12. MONITORING AND EVALUATION

12.1. Monitoring and Evaluation Framework

The Monitoring and Evaluation framework is a crucial tool/ requirement in ensuring the achievement of the objectives, strategies, and targets of the Gas Clean Cooking in Quintuplet Impact Project. The framework aims at assessing the implementation and effectiveness of project component performance to facilitate decision making on the progress of clean cooking adoption. Additionally, it provides important measures for monitoring performance indicators for each specific objective of the project. Furthermore, this framework serves as a tool to monitor compliance with the implementation of the quintuplet impact success in environmental protection.

The relevance guaranteed by Good Life Foundation in Gas Clean Cooking for Environmental Quintuplet Impact Project has the overall responsibility of monitoring and evaluating the implementation of the project. Each stakeholder will be required to establish accurate internal monitoring system to ensure

effectiveness in the implementation of the project within their respective organizations.

The monitoring and evaluation framework will include baseline studies, indicators, and sources of information. There will be annual reviews, which will focus on assessing whether the planned activities align with the objectives and targets set. Furthermore, the reviews will involve conducting studies – surveys and evaluations on the beneficiaries to monitor any changes in the outcomes and impact achieved during the project implementation period.

11.1.1 The Objectives of Monitoring and Evaluation

The main objective of the Monitoring and Evaluation Framework is to ensure the effective implementation of the Gas Clean Cooking for Environmental in Quintuplet Impact Project (2026- 2028) and to achieve its objectives within its components and the intended timeframe. This framework will also oversee and provide guidance on the involvement of stakeholders in implementation and monitoring activities; control and measure resource utilization during the implementation of the Strategy; and assess the accountability of each stakeholder and their role in the implementation.

12.1.2 Areas of Consideration in Monitoring and Evaluation

Monitoring and evaluation of the Implementation of this project will focus on the following.

- i. Capacity Building in Monitoring and Evaluation.
- ii. Alignment with other Monitoring and Evaluation frameworks.
- iii. Adoption of Results-Based Management Approaches; and
- iv. Readiness to use the Monitoring and Evaluation System,

12.1.3 Scope of Monitoring and Evaluation framework

The scope of the Monitoring and Evaluation Framework includes:

- [i] Assessment of activities, procedures, and out-comes of the Gas Clean Cooking for Environmental in Quintuplet Impact Project and its contribution to the society; and

[ii] Databases and reporting schedules to be used in the monitoring and evaluation framework of the Gas Clean Cooking in Quintuplet Impact Project.

12.1.4 Performance Indicators

Performance indicators are a way to measure the success of the Gas Clean Cooking for Environment in Quintuplet Impact Project (2026 – 2028). The main function of a performance indicator is to regularly measure progress towards achieving the intended goals. The success of the Monitoring and Evaluation of this project relies on the accuracy of the performance indicator measurement system. The performance indicators for the Monitoring and Evaluation Framework of the Gas Clean Cooking for Environment in Quintuplet Impact Project (2026 – 2028) are attached in Appendix No. 1

12.2 Data Collection and Analysis

The main methods of data collection are conducting surveys, reviewing reports and institutional records, as well as visiting projects in various locations. The collected data will be analysed and disseminated to relevant stakeholders for implementation.

12.3 Monitoring and Evaluation Report

7.3.1. Types of Monitoring and Evaluation Report

The following are important Monitoring and Evaluation reports:

- i. Implementation reports.
- ii. Evaluation reports.
- iii. Reports on various studies, research and survey reports conducted on Gas Clean Cooking Solutions; and
- iv. Reviews of the Gas Clean Cooking for Environment in Quintuplet Impact Project.

12.3.1 Submission of Reports

Reports on the progress of the implementation of this project will be prepared by the relevancy of Good Life Foundation on a quarterly, semi-annual and annual basis as specified in Table No. 6. These reports will be submitted to the Funder

of this project, they will be reviewed and shared to stakeholders (sectoral ministries) with the aim of providing information and improving the performance of the clean cooking initiatives.

Table 6: Submission of Reports

Type of report	Content of report	Submission timeline
Performance reports	They time to time include reports up on implementation of the planned activities	Quarterly, Semi and annum reports.
	Success of the strategy objectives, challenges and lessons learnt, including relevance, effectiveness, efficiency, outcome - impact and sustainability of interventions.	2026, 2027, 2028
Research, Studies, Survey reports	Findings and recommendation on specific issues.	As required
Project review	Overall achievements of the Gas Clean Cooking for Environment in Quintuplet Impact Project objectives, challenges and lessons learnt,	After two Years.

Addendum: these reports will be designed to track the implementation progress; therefore, they will be uploaded to the ISS (Information Storing System) dashboard including the objectives, indicators, implementation status and the source of information. The evaluation assessing implementation and project progress will be conducted each year.

APPENDIX

Appendix No:1: Performance Indicators

No	Specific Objectives	Indicator	Baseline	Outcome	Impact	Source
1	Increase public and Institutional awareness by conducting state-wide campaigns on use of Gas Clean cooking Solutions.	-Direct beneficiaries intending awareness. -Indirect beneficiaries intending awareness. -Awareness to Governmental structures. -Awareness to private sector operators	- 10 awareness workshops held: with 200 hundred attendants once in a term at statewide level. -1massive radio - broadcasted for community awareness each month from January 2026 across the 26 provinces. -Physical contacts, word of mouth and motorized campaigns conducted in each province (20 sessions in each). - 40 signposts designed for awareness in each province.	.2,000 sensitized beneficiaries in each province and 52,000 nationwide. . 75% of population in Congo as rate of radio audience are reached by broadcasted awareness. . 520 participants of institutional awareness accomplished at statewide. . 81% of DRC population can read awareness information on 1,040 signposts statewide.	Public and institutions aware of LPG clean cooking solutions at nationwide.	Awareness phase implementation report.
2	Provide start up LPG - Gas Cooker Kits to households of Disabled and poorest at statewide level.	Environment resources protection by empowering Disabled and poorest of poor community members.	52,000 LPG- Gas Cylinders equipment distributed to 52,000 households in 26 provinces of DRC	364,000 protected lives at statewide; it is 43 % of the scope to which the government of DRC aims to scale up access to LPG Clean Cooking equipment by the end of 2030.	Improvement of living standards, health promotion and protection, reduced use of charcoal and firewood.	Distribution implementation reports and ground assessment.

3	Harness livelihoods resilience by creation of enterprises for disabled households to sustain project long term development.	Converting disability into livelihoods production unit and Schools into food production colonies.	.2600 enterprises created by this project.	2,600 Households Representatives of disabled beneficiaries selected, trained in financial literacy and managing sustainably 2,600 viable businesses.	Gas Clean Cooking Strategy adopted promptly in 2600 households of Disabled. 2600 businesses created.	Identification and Funding processes' reports, and enterprises visiting.
			.45 hectares of farmland created by 9 EPECs in Ituri, North-Kivu and South- Kivu as war vulnerable provinces.	180 tons of produces are scaled up seasonally by 9 EPECs in Eastern region of DRC	Food production value chain	Funding processes' reports and visits
		Construction of 9 Environmental Protection Educational Colonies (EPECs);	3created in Ituri, 3 North-Kivu and 3 in South-Kivu. They are primary and secondary modernly standardized EPECs (schools) with 45 students in 1 classroom standard.	540 students benefiting education per year in each school and 4,860 in 9 EPECs. 630 staff employed in the 9 EPECs.	Gas Clean Cooking solutions adopted in 5,490 more households	Assessment and Survey reports.
		Construction of 3 Physical Market Hall in each province	78 created with sub-division into 50 trading squats country wide	3,900 business squats available to benefit non-traditional livelihoods actors.	3,900 Squats occupant Entrepreneurs adopt Gas Clean Cooking Solutions.	Households and PMHs' assessment reports.
4	Facilitate environmental protection Policies,	Cooperation with government of DRC towards Law	Adoption of Gas clean cooking solutions, and	75 % of Congolese population	Wood fuels consumption reduced	National wide

	Laws, Regulations and Guidelines' compliance on Gas clean cooking solutions	enforcement against deforestation	international guidelines.	comply to LPG clean cooking by end of project implementation.	to 30-40% at national wide	research's report.
5	Promote investments in Gas Clean Cooking by establishing Community Physical Market Halls (PMHs) at state-wide level	Construction of 3 PMHs in each of the 26 provinces with 50 business squats in each.	78 PMHs created at nationwide.	Each PMHs is divided into 50 squats. 3,900 squats created and hosts 3,900 Gas Clean Coking businesses.	Expansion of economic opportunities for communities and adoption of Gas Clean Cooking Solutions.	Field Monitoring reports and implementation reports.
6	Build capacity of implementers of Gas Clean Cooking Solutions in this project.	Stakeholders, contractors, services providers, project employees inclusive	26 Inductions, 26 component and M & E workshops in each province.	50 induction attendants with a total of 1,300 and 20 attendants of workshops with total of 520 at statewide are fully upskilled.	More 520 compliant to Gas Clean Cooking Solutions. Efficient implementation of project activities.	Trainings records and home assessments in Key-informant methods.
6	Broaden capacity of research and innovations in technologies related to Gas Clean Cooking Solutions.	Creation of multisectoral innovation at local level for youth empowerment and development research.	1 Medical Study Drugs Fabric Plant constructed and operated for production of therapeutics against LPG Gas toxicity. It uses honey yield from 72 beehives in project woodlots apiary sub-projects out of 18 hectares.	-With honey yielding capacity of 2,880 tons seasonally -The plant utilizes appropriately such a yield; it is transformed into medicines for human therapeutics against Gas hazardous effects. -50 Employment opportunities created.	Health promotion entailed by youth empowerment. The strategy groundbreakingly spurs innovation explosion for youth empowerment and development of science as	Funding and research reports and field visits.

				-Research promoted in the fields of Medico-biology, Medical Pharmacology, Industry, Apiculture and veterinary, Agronomy and Environment protection. The project participates to peace building by new approach of diversity by calling experts from West into plant setting up, operation, management and its maintenance.	project impact. Poverty reduction contributes to environment protection and compliance to LPG cooking solutions .	
8	Enhance food production by Solar irrigation solutions	Vulgarization of irrigation scheme at statewide	Adopted strategy by 60% of Congolese population occupied by Agriculture.	Farm production scaled up to 4 tons on 1 hectare land.	Establishment of Food value chain matching required standards	Reports and field surveys.
9	Incorporate gender equality issues in the clean cooking value chain.	Equity in project beneficiaries' selection.	Women and girls placed at center of clean cooking strategy activities.	Women are majorly kitchen managers in DRC, they inclusively partake presence in project crosscutting activities.	Women rendered managers of Gas Clean Cooking Solutions.	Projects records.
10	Strengthen good governance in clean cooking.	Social Inclusivity of status, gender and opinion	-60% of beneficiaries of this project are women across the five components.	-Upskilling trainings are conducted to empower women on	Women and youth empowerment to dignity	Women activities , records and assessm

				leadership, management, environment protection and on livelihoods resilience -Women occupy leadership in activities related to present project. -Gas Clean Cooking is owned by women.	resto- Women are created linkage with other women through stake holders, contractors, researchers etc. ration and	ent reports, Live women success story.
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13. PRECAUTIONS ON USAGE OF GAS IN HOUSEHOLD CLEAN COOKING BY BENEFICIARIES

Good Life Foundation, highly aware of the hazardous effects which may occur during times LPG is used in households, planned several preventive measures involving the following;

1.Availability of LPG Sector Special (LPG SS); the role of the LPG Sector Specialist is to train the project beneficiaries of LPG equipment on Gas clean cooking safety, conduct time to time project assessment and reviews over issues related to use of Gas and equipment from the sourcing timeframe, oversee LPG cylinders and equipment's procurement, conditioning and transportation, distribution, trainings, Gas home use and guidance of Households Representatives (HR) of beneficiaries through purchase/ refilling of Gas in sustaining the project under component 2 Livelihoods Support to Gas Clean Cooking Strategy (LSGCCS). The training includes safety measures as described in the below table No. 7 and on the leaflets 1,2. The LPG Sector Specialist engages the project in dealing with all Gas technical aspects not only limited to Gas sourcing from private sector, collaboration with project benefiting country's technical resources but also funder-technical support team and stakeholders and ensures that the project sources LPG equipment meeting **ISO Standards**: International standards like ISO 9001 and ISO 4706 are also relevant for LPG cylinder manufacturing and quality assurance and ISO 14245 specifying requirements for self-closing LPG cylinder valves. The LPG Sector Specialist intervened in research conducted in DRC on Environmental Protection and Monitoring Data, participated to the GCCE-QIP#1-DRC and will oversee LPG sector implantation, Monitoring & Evaluation as well as covering sectorial reporting.

2. Community awareness; national wide sensitization and awareness on LPG safety measures will be carried out by broadcasting methods to reach out to population in entirety of the national Radio & Television audience coverage.

3. The private sector constituting the LPG supplying board will participate to the awareness as well when time to time the beneficiaries visit their installation for recharging Gas.

4. The Households Representatives have amongst their assignments to expand the safety measures skills to the rest of household's members; it is the way awareness will spread all over the country.

5. The trainings and awareness sessions/workshops are in meantime events to campaign for disruption of wood fuels cooking/logging.

Table No.7: Breakdown of precautions to undertake by trained beneficiaries.

Requirements	Actions to undertake
Ventilation	Always use LPG cylinders in a well-ventilated area, such as a kitchen with open windows and doors.
Cylinder placement	Store the LPG cylinder upright on level, stable surface in a well-ventilated area, away from direct sunlight and heat sources
Leak detection	Regularly check for leaks by applying a soaped water solution to the cylinder valve, regulator, and hose connections. If a leak is detected, the gas supply is immediately turned off and the area is ventilated.
Appliance check	Ensure the LPG stove and appliances are in good operating condition and that the connections are secure.
Certified equipment	The GCCE-QIP#1-DRC will distribute certified LPG equipment sourced from a renowned manufacturer to secure lives of beneficiaries.
During use	<ul style="list-style-type: none"> • Never leave unattended the cooking area, the lit burner is continuously surveyed, • Keep flammable materials like curtains, paper and plastics away far from flame, • Wear inflammable clothing when cooking, • Use the gas regulator to control the flame intensity. Gas is not turned on to maximum burn before igniting it, • Ensure that pilot lights or main burners produce s blue flame.
After usage	Always turn off the gas supply at the cylinder and the stove when cooking is ended, empty cylinders are stored in ventilated and cool area, ensure the safety cap is properly secured.
Emergency preparedness	Fire extinguisher suitable for gas fires readily available and of known utilization.
Regular inspections	Maintain regular safety checks for gas appliances and cylinder by qualified professionals.

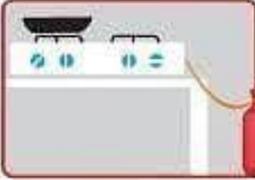
Gas detecting	Installation of gas leak detectors in your kitchen and other areas where to use LPG
Tempering	The safety valves and other fitting on gas appliances are not tempered with
Children	Children and untrained household members are left away of gas appliances and cylinders.

Leaf 1, practical chat explaining safeguards matters in table 7. (Google research leaf)

LPG (COOKING GAS) SAFETY TIPS



Always keep and transport your cylinders in an upright position



Ensure that the cooker burner is at a higher level than the top of the cylinder



Ensure your cylinders are outdoors



To use the gas, turn on the regulator, light your match and finally turn on the cooker burner while regulating the amount of gas desired



After you finish cooking, turn off both your cooker burner & the regulator



If you suspect and LPG leakage e.g around the cylinder valve, pipe joint or hose connection, pour some soapy water around the area where leakage is suspected. If there is a leakage the soapy water will bubble

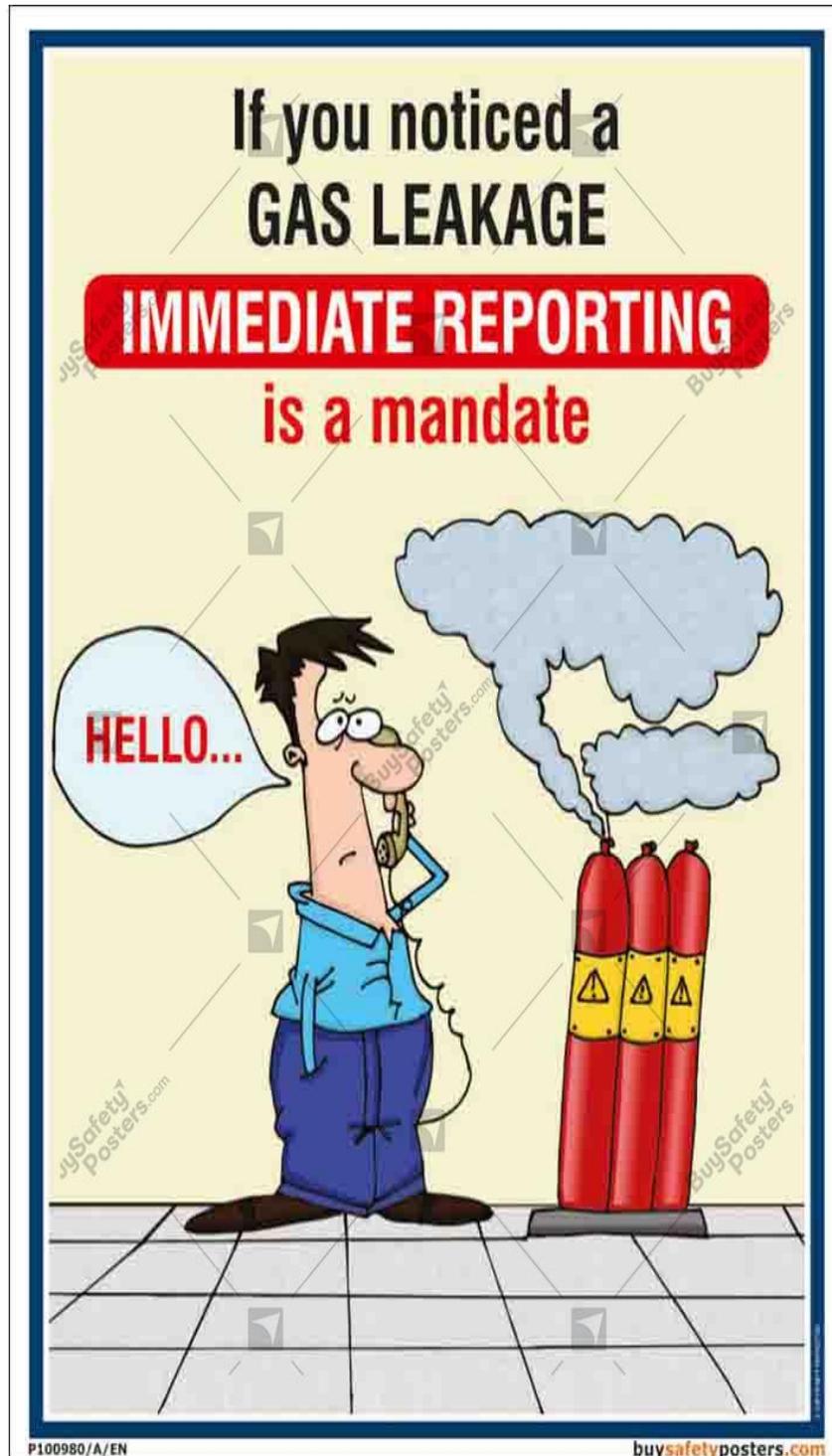


NEVER EVER use naked flames such as lit matches to check for LPG leakages



A Safety Awareness Guide by Techno Oil Cooksafe Initiative

Leaf 2, explaining way to handle emergency related LPG equipment damage. (Google research leaf)



14. ENVIRONMENTAL ASSESSMENT AND SCREENING PROCESS

14.1 Overview of governing Laws

Table No. 8: Overview of governing Laws

Governing Laws	Protocols
National Laws in DRC	
E No 33-2023 of November	ruling environment sustainable management
No 14/003 of 11 February 2014	2011on basic principles on environmental protection
No 11/009 of July 2011	related to natural conservation
International environmental protection Act by DRC	
Timeline	Act
1994	Biological Diversity (CBD)
1995	The United Nations Framework Convention on Climate Change (UNFCCC)
2005	The Kyoto Protocol in 2005.
October 31, 2024.	The Democratic Republic of the Congo (DRC) publicly declared its support for establishment of Ecocide as an international crime — the first African nation to do so. The historic statement was given at the 2024 United Nations Biodiversity Conference (COP16) in Cali, Colombia.

The Laws are backbone regulations on environmental and social assessment in the Democratic Republic Congo. The GCCE-QIP#1-DRC sub-projects to fund will moderately produce environmental and social risks. This project envisages potential minimal risks due to the sensitivity of the setting and the nature and scope of planned activities such as infrastructure construction. However, mitigation measures are readily planned, and the sub-projects will not have a major impact that places the natural environment, its biodiversity, society, or its cultural property at risk). This, therefore, necessitates assessments of sub projects for their site specific environmental likely, social impacts and

preparation of Environmental and Social Management Plans to guide the implementation of mitigation measures, reporting, monitoring and evaluation. The section below shows the steps necessary in the review and approval of projects under the GCCE-QIP#1-DRC.

14.2 STEP 1: ENVIRONMENT AND SOCIAL MANAGEMENT PLANNING PROCESS (ESMP)

Screening is crucial and will be the first step in the project cycle; part of sub projects identification process during the project inception of the implementation under Project component 1,2 and component 3. The objective of the screening in this framework is to swiftly identify the sub-projects which have little or no environmental social risks including Health and Safety issues so that they can move to approval and immediate implementation. Screening will ensure that sub-projects that may have potential adverse impacts are recommended for more detailed studies either through preparation of Project Reports (PR) or full Environmental and Social Impact Assessment (ESIA/EIA). Screening will be carried out following a checklist provided in this framework and can be found in section 14.2 (a) Annex 2.

ANNEX2: GCCE-QIP#1-DRC ENVIRONMENTAL & SOCIAL SAFE-GUARD SCREENING FROM

(a) Environmental & Social Review (ER) Form

(This form filled with appropriate information is to be attached to each sub-project document)

Province: _____ Territory: _____ Village: _____

Sub-project In-charge: _____

Sub-project Name: _____

Sub-project Objectives _____

SPECIFICATION STATUS

1. Will the sub-project encroach onto an important natural habitat Yes [] No []

- a. Wetlands Yes [] No []
- b. Forests Yes [] No []
- c. Land Yes [] No []
- d. Water Yes [] No []
- e. Rangeland Yes [] No []

2. Will the sub-project affect sensitive ecosystems Yes [] No []

If yes, describe how it will affect

3. Will vegetation be cleared Yes [] No []

If yes, are there proposed actions to restore cleared areas

4. Use firewood for fuel Yes [] No []

5. Use petroleum gas fuel Yes [] No []

6. Involves use of pesticides Yes [] No []

-
1. Diversion or use of surface waters Yes [] No []
 2. New or rebuilt irrigation or drainage systems Yes [] No []
 3. Require the construction of a seasonal dam Yes [] No []
 9. Involves latrines, septic or sewage systems Yes [] No []
 10. Waste generation (e.g. slaughterhouse, medical waste, market etc.) Yes [] No []
 - a. Description of type of waste generated solid (bulk), solid (particulate), liquid, gaseous, etc

b. Proposed waste management/disposal methods

11. Residues that may be used as fertilizers: Yes [] No [] In part [] Describe.

12. Do the sub-project activities

Occur within vicinity of a protected area? Yes [] No []

Affect any protected up or downstream? Yes [] No []

Affect any ecological corridors for migratory species? Yes [] No []

13. Are the sub-project activities likely to introduce new species / varieties into the area?

Yes [] No []

What type seeds, invasive species?

-
-
9. Will slope or soil stability be affected? Yes [] No []
- a. Will local resources such as sand, gravel, bricks, ground water be used? Yes [] No []
- b. Will activities cause soil salinity? Yes [] No []

Social Screening

15. Will subproject activities affect aesthetics of the landscape? Yes [] No []
16. Describe existing land use patterns (community facilities, tourism, agriculture etc)
- (i) Will sub-project activities cause any changes in land use Yes [] No []
- (ii) Will the subproject activities restrict peoples' access to natural resources Yes [] No []
- (iii) Are there any cultural/ spiritual sites in the vicinity of the sub project site Yes [] No []
- (iv) Will the sub-project alter any of these sites Yes [] No []
- (v) Will the subproject causes losses in livelihood opportunities for households? Yes [] No []
- (vi) Will the subproject activities affect any resources the people take from the natural environment?
Yes [] No []
- (vii) Will the subproject require any resettlement or compensation of residents including squatters? Yes [] No []
- (viii) Will there be additional demand to local resources (e.g. water supply, sanitation facilities, health centres, lodging, etc.)? Yes [] No []
- (ix) Will the sub-project provide safeguard to workers' health and safety? Yes [] No []
- (x) Measures in place to safeguard human health and safety

- (xi) Is the program likely to create local employment opportunities including women and youth? Yes [] No []

EVALUATION

1. Produce significant amount of pollutants: Yes [] No []
2. Type of pollutants (if yes in 1): Air [] Water [] Soil []
3. Quantity of pollutants (per month): _____

4. Probable cumulative impacts Yes [] No []
5. Means of disposal available: Yes [] No [] In part []
6. Fate of pollutants: _____

7. Remedial measures and any other issues/comments: _____

1 +

Environmental Category C [] C [] B [] A []

Needs Further Evaluation Yes [] No []

Needs LEA Yes [] No []

Prepared by (Name): _____

SIGNATURE: _____

DESIGNATION: _____

DATE: _____

(b) Typical Sub-project Environmental Impacts and their Mitigation

GCCE-QIP#1-DRC ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN

Innovative Subproject:									
Health zone:									
Village:									
Groupement:									
Province:									
Sub-Project phase and activity	Positive Environmental and Social Impacts	Negative Environmental and Social Impacts	Mitigation measures	Indicator	Implementing Agency	Monitoring Agency	Frequency	Cost	Capacity building
Planning phase									

Total cost									
Implementing Phase									
Total cost									
Operation phase									
Total cost									
Prepared by Village Environmental/Assisted by Project Field Lead Name..... Date..... Signature.....					Checked by Province Environment Officer Name..... Date..... Signature.....				

14.3 STEP 2: ASSIGNING THE APPROPRIATE ENVIRONMENTAL EA CATEGORY

The categorization shall be done to all sub projects identified- and shall be done upon conclusion of the screening as described in the screening checklist. Categorization will enable provinces to approve sub projects under category B and below and ESMP developed for proper implementation of mitigation measures identified. In case a planned intervention is categorized as A due to one or more major adverse impacts, it therefore cannot be funded under the GCCE-QIP#1 financing. The intervention will be either re-designed or re-submitted to the environmental screening process after re-design or abandoned. Category A interventions are those for which the Screening for potential impacts concludes that changes to the design or the routing of facilities are required.

14.4 STEP 3: ENVIRONMENTAL AND SOCIAL GCCE-QIP#1-DRC MANAGEMENT PLAN (ESMP)

ESMPs shall be prepared for all the sub projects considering findings of the environmental and social assessment (screening results). ESMP in this framework shall define specific measures and actions to be undertaken by each sub-projects to mitigate risks identified in the Environmental and social

assessment, and associated monitoring indicators. (e.g) contractor shall use adequate anti- erosion measures on steep slopes to prevent run offs and erosion etc. ESMP template that the implementing agencies shall use is attached to this framework in section 14.2 (b) Annex 2.

14.5 CONSULTATION AND DISCLOSURE REQUIREMENTS

GCCE-QIP-#1-DRC project that will have many sub-projects identified and assessed for funding by, a summary of ESMP report shall be prepared annually by GCCE-QIP#1-DRC for all projects approved for funding. The project reports shall give a description of the project, baseline information of project area, potential impacts and mitigation measures, implementation model, monitoring and evaluation methods. The report shall be submitted for review and clearance by (GEEC) prior to sub projects implementations.

Upon clearance of the reports by (GEEC), GCCE-QIP#1-DRC will disclose the ESMP report in the country and forward it to the funder upon information that requires all category B projects to effectively fulfill consultation and disclosure requirements.

For meaningful consultations, the Good Life Foundation - GCCE-QIP#1-DRC) shall apply the following disclosure requirements:

- . Provide relevant material in English (as appropriate), identify local translators who will assist in translation in a timely manner prior to consultation.
- . Make the draft summary ESMP with annexes including details available at province and community level to be accessed by groups affected by the subproject and other stakeholders.

14.6 REPORTING, MONITORING AND EVALUATION

Monitoring shall be continuous process in s GCCE-QIP- #1 DRC as to provide information on implementation of ESMP activities- how well they have been implemented, and where better mitigation may be needed. The monitoring program shall identify what information will be collected, how, where and how often. It will further indicate at what level of effect there will be a need for further mitigation.

The monitoring Plan for GCCEQIP-DRC #1-DRC sub projects shall include:

Responsibilities in terms of the people, groups, or organizations that will carry out the monitoring activities be defined, as well as to whom they report amongst

others. In some instances, there may be a need to train people to carry out these responsibilities, and to provide them with equipment and supplies;

a) Implementation Schedule, covers the timing, frequency and duration of monitoring are specified in an implementation schedule, and linked to the overall sub project schedule;

b) Cost Estimates and Source of resources for monitoring need;

c) Simple and consisted of monitoring methods that can collect useful information by sub project implementers.

d) Simple data collection tools to facilitate easy data collection, analysis and report generation with the aim to:

☒ Assess any changes in baseline conditions;

☒ Assess whether recommended mitigation measures have been successfully implemented;

☒ Determine reasons for unsuccessful mitigation;

☒ Develop and recommend alternative mitigation measures or plans to replace unsatisfactory ones; and

☒ Identify and explain trends in environment improvement or degradation.

Annual status and Audits shall be undertaken for safeguards ESMP implementation performance, shall be done by the project and reports shall be produced and disseminated to stakeholders.

Notably, GCCE-QIP- #1-DRC sub-projects are categorized under EA category B and the main process that shall be undertaken taken to ensure compliance of the projects to environmental, social including health and safety requirements is screening and ESMP processes. However, this ESMF also outlines steps that can be taken for ESIA's.

14.7 ENVIRONMENTAL AND SOCIAL IMPACT ASSESSMENT PROCESS (ESIA)

GCCE-QIP #1-RDC interventions are largely category B type, they do not require ESIA's to be conducted. However, where government sees that the project to be funded is critical and may meet all the expenses required for ESIA processes then the project brief of that specific project shall be submitted to the Executive Director of (GEECE). The Project Brief shall contain essential information on the project in terms of essential elements amongst others; inputs and outputs and its sufficient information to allow the Approving Authority (GEECE), in

consultation with the lead agencies, to screen the project, and agree on the levels of ESIA to be conducted- including identifying and developing stakeholders' engagement plan. And level of engagement with critical stakeholders.

GEECE as part of the review and decision-making process, forwards copies of the Project Brief to key Lead Agencies for review. In case an ESIA needs to be undertaken, the study that will be prepared by the implementing agency/developer and reviewed and approved by GEECE.

The ESIA report will identify and assess the potential environmental and social impacts for the planned activities, assess the alternative solutions, and will design the mitigation, management and monitoring measures to be implemented. The social impact assessment component of the ESIA process shall further assess the likely impacts that a project will have on intended beneficiaries and affected stakeholders.-It will identify, amongst other things, vulnerable/marginalized groups, different stakeholders and their interest in the project, participation processes and how these will be adapted to different social groups and stakeholders, social diversity including gender, understanding the role of informal and formal institutions at various levels, and the social risks beyond risks associated with social safeguards. The detailed process for conduct of the ESIA in DRC is presented in Annex 10.

14.8 OTHER ENVIRONMENTAL SAFEGUARD INSTRUMENTS AND GUIDANCE PROCEDURES

When Physical Culture Resources are concerned, Good Life Foundation envisions that before proceeding with a sub-project which entails the risk of damaging cultural property the project must:

- a. Determine what is known about the cultural property aspects of the proposed project site. The government's attention should be drawn specifically to that aspect and appropriate agencies; NGOs or university departments should be consulted;
- b. If there is any question of cultural property in the area, a survey should be undertaken in the field by a specialist. For the proposed project, implementation of the small-scale civil works will take place in the MSDP unit or EPECs and PMHs without known PCRs, and if any, such PCRs shall not be tampered with by the project, in any way. Projects that have the potential to have adverse impacts on cultural property include;

(i) Projects that include large scale excavations, movement of earth, flooding of an area for creation of a reservoir, demolition, and other surficial environmental changes, and

(ii) Projects that may cause unplanned project-induced developments.

14.9 STEPS TO BE TAKEN UPON IDENTIFICATION AND/OR EXPOSURE OF UNKNOWN PCRS

During construction or through accidental exposure, a cultural heritage site or items of archaeological interest may be identified. As soon as this occurs, the contractor or sub-contractor shall undertake the following procedure to avoid any further damage:

a. The person or group (identifier) who identified or exposed the cultural heritage site or item archaeological interest must cease all activity in the immediate vicinity of the site.

b. The identifier must immediately inform his/her supervisor of the discovery;

c. The supervisor must ensure that the site is secured and control access. For this, install temporary site protection measures which include securing with warning/reflective tape and stakes, avoidance signs around the site;

d. The supervisor must inform relevant Employer personnel especially the HSE Manager;

e. Establish a localized no-go area needed to protect the Chance Find.

f. The responsible site manager must be requested to perform an assessment in order to determine whether the Chance Find is cultural heritage and if so, whether it is an isolate or part of a larger site or feature;

g. Subject to the direction of the Cultural Heritage Specialist, artefacts are to be left in place;

h. No tangible cultural heritage shall be removed unless specific conditions are met;

i. If materials are collected, they will be placed in bags and labelled by the Cultural Heritage Specialist and transported to the nearest cultural heritage/archaeology research authority/center. Project personnel are not permitted to take or keep artefacts as personal possessions;

j. The Cultural Heritage Specialist will document the Chance Find through photography, notes, GPS coordinates, and maps (collect spatial data) as appropriate;

k. If the Chance Find proves to be an isolated find or not cultural heritage, the Site Manager will authorize the removal of site protection measures and activity in the vicinity of the site can resume;

l. If the Specialist confirms that that Chance Find is a cultural heritage site, they will inform the relevant cultural heritage/archaeology body and initiate discussions about treatment;

m. Prepare and retain archaeological monitoring records including all initial reports whether they are later confirmed or not. The record will include coordinates of all observations to be retained within the Project's GIS system (ArcGIS) or equivalent;

n. Develop and implement treatment plans for confirmed finds using the services of qualified cultural heritage experts. The Cultural Heritage Specialist will coordinate this.

o. If a Chance Find is a verified cultural heritage site, prepare a final Chance Finds report once treatment has been completed;

p. While investigation is ongoing, co-ordinate with on-site personnel keeping them informed as to status and schedule of investigations, and informing them when the construction may resume; and

q. If mitigation is required, then rescue excavations will be undertaken by the Cultural Heritage Specialist, except in the case that the chance find is of international importance. Archaeologists with the appropriate expertise in these areas (e.g. hominid remains) addressing more specific finds will be appointed.

During construction, where relevant the protection of cultural/archaeological sites identified by the local community will be monitored to ensure their protection. Any chance finds will also be recorded and monitored; and audit undertaken to ensure that the guidance set out in the chance finds procedure was followed.

During the Project induction meetings, the Contractor and Subcontractors will be made aware of the presence of the on-call Cultural Heritage Specialist. Here, cultural heritage training will also be undertaken. The objective of cultural heritage training is for the Contractor and Subcontractors to manage potential impacts to known and unknown cultural heritage sites by facilitating the identification and reporting of potential Chance Finds encountered during construction works. This can be carried out through a Toolbox Talk.

The Contractor HSE Manager is responsible for providing training through a Toolbox Talk for all construction staff. The Toolbox Talk shall address:

- a. Defining Chance Finds;
- b. Identifying Chance Finds in the field;
- c. Explanation as to why protection measures need to be put in place (avoid environmental harm and avoid prosecution/ legal penalties);
- d. The steps to be taken upon identification and/or expose;
- e. Do's and don'ts; and

Roles and responsibilities of construction Contractors and Subcontractors in the process and the roles and responsibilities of the Cultural Heritage Specialist.

14.10 GRIEVANCE REDRESS MECHANISM

The Grievance Redress Mechanism (GRM) will provide a way to provide an effective avenue for expressing concerns and achieving remedies for communities, promote a mutually constructive relationship and enhance the achievement of project development objectives. It has been learned from many years of experience that open dialogue and collaborative grievance resolution simply represent good business practice both in managing for social and environmental risk and in furthering project and community development objectives. In voicing their concerns, they also expect to be heard and taken seriously. Therefore, GCCE-QIP#1-DRC has to assure people that they can voice grievances and the project will work to resolve them without bias. The project GRM will be augmented by the funder Grievance Redress Service, which provides an easy way for project-affected communities and individuals to bring their grievances directly to the attention of the funder. The GRS will ensure that complaints are directed promptly to relevant Funder team - Managers for review and action, as appropriate. The goal is to enhance the funder's involvement, responsiveness and accountability. The GRS is described on below page 60.

14.11 PROJECT GRIEVANCE REDRESS MECHANISM

GCCE-QIP#1-DRC will apply Community Driven Mechanism (CDM) in grievance redressing mechanisms; it has a well-established GRM from community to the highest level at the province. There are Grassroots Monitoring Groups (GMGs), established in each (groupement) comprised of several villages to promote social accountability at the community level. The GMGs is constituted by 5 democratically elected members of proven integrity (5 members of the beneficiary community) who are not members of the Subproject Management

and Procurement Committee (SMPC). A SMPC comprises 5 members (chairperson, treasurer, secretary and members). Where possible, the Chairperson and/or the Secretary of the CMG are literate. The composition of the committee members includes at least 60% of women. In addition, where there are PWDs committees, these are also encouraged to be established to promote the social inclusiveness in the project.

Social protection coordination committees at parish level under community-based department structure in Local governments also work with communities to handle grievances at parish level. The CMGs with the Social protection coordination committees are required to meet at least twice every month to resolve grievances presented to them and reports submitted to the sub-county environment person every month to enable the sub-county to review both solved and unsolved complains about necessary actions. Grievances are monitored through the Community and sub-county with guidance of the Project Field Lead and CDOs. Analysis of the grievances in the quarterly reports is done by the same team and feedback to communities and other relevant stakeholders is done monthly. All submitted complaints and grievances are added to a database/project files which are updated regularly. Each complaint and grievance are to be ranked, analyzed and monitored according to type, accessibility and degree of priority and reported on monthly basis.

14.12 SPECIFIC TASKS OF THE GO WILL

- a. Set up a systematic process of recording grievances in a register (“Grievance Book”) as well as electronically. The register shall be localizable in the sub-county implementation team office, community level and shall be accessible to residents.
- b. Both written and verbally communicated grievances shall be recorded.
- c. Suggested categories are grievances regarding:
 - i. Replacement structure or land, and procurement of construction materials; ii. Agriculture and crops; iii. Livelihoods; and iv. Valuation process and payment of compensation.
- d. A database shall be prepared for recording and keeping track of the grievances and how they were resolved. The database shall be a ‘living’ document, updated weekly. It should also record the status of each grievance (date opened/in-process/closed). Access to making entries into the database should be restricted to the implementation team, but the general community should be able to use “Grievance Book”/ register to see the status of their complaints.

e. Grievance procedure shall be communicated to the people, the process for recording their complaints and the timelines for redress. Communication shall be done through a community meeting involving the resettled community. Pamphlets outlining the procedures and commitments of the grievance mechanism should be distributed to all households.

f. Grievances shall be raised at the regular implementation team meeting for discussion. Some resolutions will require coordination/ interaction with the local authorities, which the GO should follow up, while some would require intervention from Good Life Foundation and the partner ministry in Charge of grievance field.

Provide a regular update on the status of grievances via the database, including reasons for delay, if any. This update shall be provided on a weekly basis. Also, clearly define grievances that will not be entertained by the GO. These could be related to issues other than those linked to the resettlement and rehabilitation process.

14.13 THE FUNDER'S GRIEVANCE REDRESS MECHANISM-RGM

14.13.1 GRS DEFINITION AND PURPOSE

The GRS is the Funder's easy way to provide to communities an avenue to bring their complaints directly to the attention of Funder's Management. The project-level GRM will remain the primary tool to raise and address grievances in funder-supported operations except issues that cannot be resolved at the project level. The GRS facilitates corporate review and resolution of grievances by registering and screening complaints and referring them to the responsible Task Teams/Managers. The GRS undertakes the follow functions within defined time frame:

- a. Receives complaints from stakeholders;
- b. Evaluates and determines their eligibility and category
- c. Refers complaints to appropriate Task Teams/Managers;
- d. Follows up with Task Teams to ensure complaints are resolved;

14.13.2 SUBMITTING A COMPLAINT TO GRS

Complaints may be submitted by one or more individuals, or their representatives, who believe they are adversely affected directly by an active (i.e., not closed) funder-supported operation. A complaint may be submitted in the French or local language. Processing complaints not submitted in French will require additional processing time due to the need for translation.

A complaint can be submitted to the funder GRS through the following channels:

By email:

By fax:

The complaint must clearly state the adverse impact(s) allegedly caused or likely to be caused by the funder-supported operation. This should be supported by available documentation and correspondence where possible and appropriate. The complainant may also indicate the desired outcome of the complaint, i.e., how it may be resolved. The complaint should have the identity of complainants or assigned representative/s, and address contact details.

Table 9: Grievance Registration Form

Grievance Registration Form	
Reference No (Determined by subproject site Contractor):	
Can you please fill in your contact information. Your information will be handled with confidentiality; and if you would wish to remain anonymous, please enter your comment/Grievance in the box below without indicating any contact information. Your view will still be finding consideration.	
Full name of grieved person:	
Anonymous submission:	
Please indicate by which means you would like to be contacted:	By telephone..... By email.....
Please indicate in which language you are communicating the grievance	* French yes [] * English yes [] Or by your National Language.....
Please describe the grievance/what happened?
Date the grievance happened	
Frequency of the grievance	The grievance happened one time, yes [] The grievance happened two times, yes [] The grievance happened three times []
What would you like to be done as solution	

15. PEST MANAGEMENT PLAN (PMP)

One of the sounding steps to increase food production in the project area is the reduction of current yield losses caused by pests, pathogens, and weeds in the field and during storage. The activities funded under the GCCE-QIP#1-DRC Component 3 (Environment Protection Educational Colonies EPECs and Medical Study and Drugs Fabric Plant Construction MSDP) shall attract support to veterinary care, agriculture and forestry activities involving use of pesticides & acaricides in minimal quantities. To ensure these issues are managed in an integrated manner and are mainstreamed across the sub-projects and to comply with national legislation and funder Safeguard Policies, it is appropriate to have in place an effective and sustainable Pest Management Plan (PMP). This simplified Pest Management Plan (PMP) within this ESMF is prepared for the GCCE-QIP#1-DRC project to be used when applicable. The purpose of the PMP is to describe a Plan by which the project can promote and support safe, effective, and environmentally sounding pest management. This Pest Management Plan in this framework is thus meant to enhance food production under GCCE-QIP#1-DRC. It outlines, the policy and legal frameworks for which this plan work with, provides main crop and disease and pesticides management in same country, procurement processes for the pesticides, institutions mandated and monitoring of usage etc. as explained in the sub subsequent sections.

15.1 KEY LAWS, REGULATIONS AND POLICIES THAT SHALL GUIDE THIS PLAN INCLUDE

Nationally, in DRC pests are controlled by below described laws:

- Decree No. 05/162 of November 18, 2005, on phytosanitary regulations in the Democratic Republic of Congo; Decree 05/162 addresses plant health and sets guidelines for preventing and controlling plant pests;
- **Law on Protection of the Nature (No. 14/003):**

This law provides a legal basis for biodiversity conservation and protection of endangered species;

- Pest control is primarily regulated through agricultural and environmental laws and regulations, including the Law No. 011/2002 on basic principles of agriculture. Forest Code and related decrees and ministerial orders. This overarching law provides the foundation for agricultural practices, including pest management, within the DRC;
- Specifically, Decree 05/162 on phytosanitary regulations and preliminary drafts of phytosanitary and surveillance laws provide a legal framework for managing plant pests. Additionally, the constitution emphasizes the

protection of the environment and sustainable resource management, indirectly influencing pest control practices;

Pests are primarily regulated through Law No. 011/002 on Basic Principles agriculture.

- Additionally, the constitution itself, particularly Article 123, addresses environmental protection, which includes the sustainable management of natural resources and the protection of vulnerable groups, indirectly relating to pest control.

Internationally:

- The Democratic Republic of Congo (DRC) is a party to the International Plant Protection Convention (IPPC), an international treaty aimed at protecting the world's plants and agricultural resources from pests. The DRC has also ratified the United Nations Convention on Biological Diversity (CBD). Additionally, the DRC signed the Convention on International Trade in Endangered Species (CITES) in 1976, which regulates international trade in certain plant and animal species.
- International Conventions including; Basel Convention, Rotterdam Convention, The International Maritime Dangerous Goods (IMDG) Code, The FAO International Code of Conduct on the Distribution and Use of Pesticides⁷⁸, The Safety and Health in Agriculture Convention and International Plant Protection Convention etc.

16.CONSTRUCTION MANAGING AND MITIGATION OF SITE ADVERSE IMPACT

15.1 In the Eastern Region of DRC

The construction will concern the eastern region of DRC which lost educational and health infrastructure within the 3 decades of war timeline from 1996 up to date and whose effects negatively impacted advancement of children and youths. The project will implement 9 Environmental Protection Educational Colonies (EPECs) within the 3 provinces including Ituri, North-Kivu and South-Kivu. 3EPECs will be constructed in each of the three provinces, they are modern schools, established on 10 hectares of land each, out of which 2 hectares serve for construction of school infrastructure, 3 hectares for school woodlot and 5 hectares for school agribusinesses; the school woodlots are especially apiary projects whose plants are herbs, fruits, vegetables, bushes, clover, flowers, shrubs, blossoming etc. The EPECs will be fully equipped to primary school and

secondary school standards. The agribusinesses in EPECs are shaped by accuracy of technology and good farming practices, each of the 15 hectares in each province will produce 4-6 tons of produce in a season; a total of 180 tons out of the overall hectarage across the 9 EPECs of GCCE-QIP#1-DRC, and the farm are demonstration sites for livelihoods upskilling of students and of the project beneficiary communities. The project aims as well at constructing a mini-drugs fabric plant which will collect honey yield from the apiary projects, process it for drug production against CO2 toxicity in human therapeutics. The drug fabric plant will be constructed in South-Kivu preferably. The strategy will groundbreakingly spur an innovation explosion for youth empowerment and development of science, research as project impact.

16.2 Statewide

Additionally, this project will positively impact living standards of communities by implementing construction of 3 Physical Market Halls (PMHs) in each of the 26 provinces with a total of 78 at nationwide. Each PMHs will be subdivided into 50 business squats as the total accounts for 3,900 squats which will benefit innovations engaged in LPG equipment trading and developing.

Identification of EPECs in Ituri, North-Kivu and in South-Kivu, PMHs and MSDP

The project will go on ground, involve grassroot leaders, community members, other stakeholders and governmental sector professionals to identify the beneficiary existing schools which by any disaster including demolition during war- armed groups attacks caused loss of school infrastructure.

Table: 10 ENVIRONMENT PROTECTION EDUCATIONAL COLONY APPRAISAL CHECKLIST

Mandatory requirements					
Checklist	Response		ESMP checked non-risky		Recommended to GEECE for further screening
	Yes	Non	Yes []	Non []	
Owned properties					Tick []
Legally established and registered with National Ministerial Title (NMT) Dated of not less than 10 years of existence					

Possessing qualifying land, enough or less than 10 hectares					
Accessible by road infrastructure					
Covering required school area population;					
Marking high rate of girl- students enrollment					
Opening education to youths from both communities without either segregation or discrimination					
Appraisal team					
1.					
2.					
3					
4					
5					

Table 11: CONSTRUCTION APPRAISAL OF PHYSICAL MARKET HALL (PMHs)

The project will pivotally base on full involvement of community members and stake holders to select the site which fill out the below yardstick:

Requirements	Response		Checked non-risky by ESMP
	Yes	Non	Yes, ticking is mandatory
An empty place being property of the government			
Has 1 hectare as agrarian measurements			
Accessible by road infrastructure			
Connected to energy resources (water and electricity)			
Not associated to any kind of land conflict whether in past or in present times			
Not associated to any kind of land conflict whether in past or in present times			
Land not restricted to any cultural practices locally.			

1.
2.
3.
4.
5.

Table 12: CONSTRUCTION APPRAISAL OF MEDICAL STUDY AND DRUGS FABRIC PLANT

Mandatory Requirements			
	Yes response	Non response	Comments
Presence of Governmental Land			
Land capacity minimum 3 hectares			
Connected to hydraulic resources			
Connected to electric resources			
Available access to road infrastructure			
Located in South-Kivu			
Landscape survey conducted			
Subproject passed ESMP screening			
EPECs constructed			
Woodlots existing			
Apiary projects present			
Apiary project yielding honey			
Community consent expressed			
Community readiness to own and manage this Sub-project			
Appraisal team			
1.			
2.			
3			
4.			
5.			

16.3 Environment harming effects by construction activities.

The project recognizes the obviousness for environmental hazards during times works are going on and their consequences on human lives and environment health, thus (i) dust can provoke infectious disease, pollute the air; (ii) the operated machines in plowing, the cartage in transportation of construction materials will damage roads and grasses while stocking places are as well

negatively impacted and such destruction will result into nature degradation which in turn endangers the biodiversity. Furthermore, these works are planned to take place on school sites with presence of students, on public places supposed to host observers and curious trespassing people, they may attract wounding circumstances by inattention.

16.4 Mitigation of environmental effects across all construction sites.

For addressing by prevention, the hazards, the project anticipates: (1) symbolized community awareness alerting the mass about no go zones on each site.



(2) the project ensures that all staff and community members engaged in implementation of construction activities wear Personal Protective Items (PPI) for their safety.



(3) Environmental restoration by reestablishing woodlots, trees and grass planting with rubbish collecting facilities to guarantee safer ecosystem management and roads rehabilitation will be made duty of the project benefiting government.



(4) Apiary subprojects under the GCCE-QIP#1-DRC will be hosted by the environmental established woodlots with modern beehives and the entire school land fenced by barbed wire. The apiary sub-projects will operate modern beehives as presented in below image:



17. SOLAR POWERED SOLUTION TO DRAUGHT IN DEMOCRATIC REPUBLIC OF CONGO SPSPD

21.8 million people are interfacing acute hunger caused by draught due to climate change impact resulting basically from permanent deforestation trending as producer plant of wood fuels including charcoal [1], fire wood [2] and timbers -logs [3]. Deforestation plays correlative impact on rain shortfall which exacerbates yield scarcity on cash crops and plantations; a factor that pulls down the economy of the Democratic Republic of Congo incurring loss of opportunities involving 60-70% of its population; equivalent to 73.5 million as population employed by agriculture industry. Across DRC, rain harvest has down peaked to one month out of 6 months of agricultural season. During the recent assessment on draught in Environment Protection Monitoring Data, farmers largely explained in normal times rained was expected each 2nd day of September every year; the day of school opening and highlighted how rare rain became; lightly raining around November and such situation renders agriculture unreliably field of despair.

Given the above rain trends, the project aims at dissolving the rain shortfall by [i] constraining deforestation by introducing Gas Clean Cooking strategy, [ii] supporting the government of DRC on environmental protection policy enforcement and aims at leveraging solar powered system in irrigation as reliable factor applicable in modern farming to increase crop yielding and sustain food security at countrywide.

17.1 Methodology applied by this project to achieve successful solar powered irrigation.

To resolve the draught pattern , the project planned a triple set of stratagems including: (1) provision of Solar equipment to the project pilot subprojects under component 3 to facilitate crops yielding to the production benchmark quoted herein, (2) the project will select performing substantial and commercial farmers across the country and issue trainings on solar powered irrigation system, then send irrigation technical team on ground to ignite the community by pragmatic experience,(3) conduct massive campaigns in which farmers, motorcycle drivers, grassroots leaders and project stakeholders stand together and implement community awareness at countrywide. This method is strengthened and empowered by media and social media awareness through national radio and television station, it is major contributable element to awareness and sensitization of the community to which farmers belong. The benefits under component 4 is community skilling on necessary technology increasing farms yielding capacity and create motivating stimulus to national population which learns experience on the model subprojects.

Appendix No. 2: Action Plan of the GCCE- QIP-#1- DRC (2026-2028)

No	Specific objective	Target	Strategy	Activity	Responsible entity	Timeline	Cost
1	Increase public and Institutional awareness by conducting state-wide campaigns on use of Gas Clean cooking Solutions	Communication, awareness and sensitization plan has been prepared on use of Gas Clean Cooking.	Start of plan implementation.	Procurement of a consultant of national communication strategy on use of LPG Clean Cooking Solutions.	GOLF	Q1	306,000
2	Provide start up LPG - Gas Cooker Cylinders to households at statewide level.	Households of disabled and poorest of poor and distribution plan elaborated	Execution of distribution plan to reduce pressure on environmental resources.	Purchase procurement and distribution of LPG cylinders to beneficiaries.	GOLF- IST-SS	Q2	2,600,000
3	Harness livelihoods resilience by creation of enterprises for disabled households to sustain project long term development .	Literacy Training, implementation, funding of plan for Households Representatives Businesses. Creation of enterprises for disabled and poorest of poor to sustain use of Gas clean cooking Solutions.	Plan's implementation Reception of funds by Households Representatives	Recruitment of trainers and fund disbursement to accounts Households Representatives	GOLF, IST	Q2	13,000,000

		Constructi- on of Environme ntal Colonies	Model environmental- agribusinesses innovations	Constructor procuremen t	GOLf -IST and SS	Q2	2,700,000
		Medical Study Drug Fabric Plant constructio n.	Enhancement of Medical research against CO2 and Gas effects(intoxicati ons)	Procuremen t of a constructor.	IST and SS		1,500,000
4	Facilitate environmental protection Policies, Laws, Regulations and Guidelines’ adoption by community compliance on clean cooking solutions	Cooperatio n with institutions and security services to educate the community members.	National-wide sensitization plan carried- out	Signing regulation's memorandu m on strict restriction over wood fuels consumptio n in cooking.	Governme nt of DRC with GOLf	Q3	500,000
5	Promote investments in Gas Clean Cooking by establishing Community Physical Market Halls at state-wide level.	Creation of innovations motivating communiti es to own the Gas clean cooking solutions.	Expanded economic opportunities for community through non- tradition livelihoods investment mitigating environmental resources consumption. Generate income to invest in purchase of cooking Gas.	Procuremen t of constructor of the Physical Market Halls at national wide and construction	GOLf	Q3, Q3	5 460 000
6	Build capacity of implementer s of clean	Train workers, beneficiarie s,	Preparedness of trainings plan.	Procuremen t of Gas Clean Cooking	GOLf	Q2	300,000

	cooking projects.	implementing partners on use of Gas clean cooking solutions.		solutions Consultant.			
7	Broaden capacity of research and innovations in technologies related to cooking solutions	Increase number of community members compliance to use of Gas clean cooking solutions.	Non-beneficiary community members at national wide level.	Implementation of research		Q3	200,000
8	Enhance food production by solar irrigation solutions	Launch mass awareness campaigns.	Awareness plan targets farmers.	Implementation of awareness campaigns		Q4	400,000
9	Incorporate gender equality issues in the clean cooking value chain.	Increase number of female beneficiaries to majority.	Verify percent scored by female gender promotion.	Conduct assessments		Q5	200,000
10	Strengthen good governance in clean cooking	Place women on top levels of decision making in Gas clean Cooking Solutions.	Women are integrated in beneficiaries and among implementors	Verification of indicators by assessments		Q6	200,000

18. PROJECT CONCLUSION

18.1. Project activities

The project will support interventions designed to improve livelihoods and access to basic LPG Clean Cooking solution equipment and socioeconomic services in the Democratic Republic of Congo. Under component 1, the project will provide LPG equipment, under component 2, it will create enterprises analytically suiting the prospect of long-term project sustainability through Gas refilling by beneficiaries HR strategy. Activities related to component 3 targets

Social and Economic Investments which entail civil works – construction of Environmental Protection Educational Colonies (EPECs), Medical Study for Drug Fabric (MSDP) Physical Markets Halls (PMHs). Activities under Component 1, 2, 3 and 4 aim at sustainable environmental management activities which will be identified based on: (a) analysis/mapping/typing and prioritizing of environmental degradation, (ii) developing options for remediation/restoration approaches and methodologies, including cost intensity; (iii) selection of intervention areas, considering demand/priority, and available techniques/budget. For example, some remediation would consist of constructing or rehabilitating biological measures like afforestation/woodlots establishment in EPECs. Component 3: Livelihoods Program will support the development and expansion of non-traditional livelihoods of the poorest of poor and disabled people and vulnerable households to build productive assets generating incomes. A thorough mapping of existing productive livelihoods including agricultural, agropastoral and pastoral, will be undertaken based on consultations with target households accompanied by a technical and market analyses to understand the potential for each of the major livelihoods, the opportunities along the value chain and required inputs in terms of the information, finance, technology, tools, and technical assistance. impacts.

The core goal of the project is to address deforestation, draught, hunger and promote to Social Risk Management: Through all these components, there will be a strong element of enhancing a systemic approach to the mitigation of social risks with emphasis on GBV and VAC. Given the precarious contexts in which the project beneficiaries live, the project also intends to mitigate social risks--with emphasis on GBV and VAC associated with project implementation. Recognizing that GBV is a complex and multifaceted problem that cannot effectively be addressed from a single vantage point, the GCCE-QIP#1-DRC project seeks to support the : 1) integration of activities aimed at reducing exposure to GBV and VAC as a result of the project activities or within the community; 2) promotion of norms that foster long-term social and cultural change toward gender equality (e.g. ensuring leadership and active engagement of women and girls, along with men and boys, in community-based groups related to the project area/sector); and 3) facilitation of assistance for survivors through referrals to safe and ethical care by existing service providers

18.2 Positive project Impacts of GCCE-QIP#1-DRC Implementation.

Adoption of LPG Clean Cooking solution at nationwide.

The GCCE-QIP#1-DRC alone outputs 82,580 households adopting compliance to Gas clean cooking solution against deforestation; scoring 6.5% of success

compared to 1 million households of disabled people in DRC and these are community members who will have decisively committed efforts to wood fuels cooking disruption, after benefiting from any out of the numerous opportunities this project will have offered. The project embeds largely sounding voice at nation spectrum, preaching change by creating igniting innovations which empower by transforming poverty-stricken, not only for the poorest of poor but also the vulnerable, disabled people to be positioned to dignified similarly as how other advantaged citizens are. The project ranks at top level of change - maker project in field on fostering community living standards; it creates groundbreaking solutions giving lesson avenues to the government and other stakeholders in DRC to purposely initiate or develop further the present ideation to evolved planning covering the total number of disabled and poorest people. The project impact in component 1 is completed by impact in component 2.

18.3 Food security at household levels.

The project will unleash income generating enterprises, they are source of financial resources to be used to meet households living cost. These enterprises are generated under component 2 as businesses established to sustain project requirements in project Gas equipment post-funding for Gas refilling episodes. 2600 new enterprises will be created.

The project, under component 3, will operate 45 hectares of farming in EPECs subprojects, the strategy alone will scale-up 180 tons of produces seasonally in the eastern region of DRC, a territory laminated by hunger under the thirty years of economic terrorism (war); the project will top up 2,9 tons of honey yield from apiary sub-projects. The project potentializes this capacity to meet local market standards and participate into feeding of communities. The project establishes value chains that span out modern norms of human feeding, these value chains are demonstration sites for livelihoods skilling of youths and disadvantaged women by economic opportunities and the segregationist employment that undermine female willingness to venture into mastery of female auto-dependance and development.

18.4 Social Economic infrastructure

DRC benefits of improved infrastructure targeting to mitigate schools' destruction that occurred in attacks by rebels during war timeframe. 9 schools including primary and secondary levels will be constructed in Eastern part of DRC, they are schools, food production sites, environmental protection colonies, with woodlots hosting apiary subprojects. The infrastructure has also a Medical Study Drug Fabric Plant structure that will process medicines production out of

honey. Meanwhile, the project establishes 78 Physical Market Halls, constructed across the country, they are measured with 20 meters long, 8 meters wide and 4 meters height and generate 3,900 squats to use by entrepreneurs dealing with LPG equipment. Construction of school facilities will have large positive impact in the delivery of education services and improvement of learning environment. The host districts are constrained in terms of education facilities leading to overcrowding in classrooms amongst others. For instance, In Goma, North -Kivu, Democratic Republic of Congo, the student-to-teacher ratio in some areas exceeds 70:1, significantly higher than the recommended 40:1 by UNESCO. This disparity highlights a need for more resources and potentially more teachers in the region. Thus, building new schools will add into the available teaching space a reduced child to classroom ratio and improve quality of learning environment. Construction of new schools will increase the capacity of the eastern region of DRC to absorb new enrolled students motivated by the government's mobilization providing free primary education. School constructed space will solve the existing congestion issues and thus, likely to increase enrolment numbers in schools. To enhance the project benefits, there will be need to carry out regular joint schools' inspection visits to monitor attendance, punctuality, sanitation, and conduct teacher support supervision. Every year, 4860 students whom 60% are girls will benefit quality of high-performance education throughout the 9 Environmental Protection Educational Colonies; their education will be coupled with innovative skilling to ensuring graduating population enabled to master the technical aspect required to the Development of the DRC.

Additionally, this project will create national wide economy up-warding trends for becoming hub for 82,580 Innovative Households (beneficiaries) paying in refilling charges to the Gas suppling private sector countrywide within each two months period.

The same number will boost transportation businesses by the flux of navigations taking the equipment to Gas selling stations each 2 months.

82,580 beneficiaries' new businesses /enterprises will be started and viably operating, scaling up monetary yield in terms of profits which guarantee money circulation at state-wide. The project will expand banking institutions' markets, partnership and community supporting.

Media companies find larger partnership opportunities with this project. The beneficiary country is made busy corridor for such number of enterprises that by post-graduation phase will be tax payers to the public treasury.

18.5 Improved environmental and eco-system services.

The project entails upheavals culminating into massive adoption of Gas Clean Cooking solution, which likely reduces sensitively pressure that has been being put on environment in situations only wood fuels were looked at to be cooking means by communities. While in the eastern region of DRC, the project will be addressing wood fuels cooking, woodlots will be established and will constitute supplementary procedures for CO2 sequestration as minor strategy to the Congo Basin. The project will contribute to promotion and development of regional tourism. The objective of Component 1,2 and 3 is to ensure that environmental and natural resources are carefully and sustainably managed to support current and future needs and livelihoods. Demand side interventions will aim to reduce the unsustainable exploitation of natural resources, including mitigation of risks and other challenges faced by nature especially in the region being battlefield for decades. The project will save income, time and energy of women and children and of some men who used to spend on wood fuels purchase, walk to long distances to fetch fire hood. It is a tool of complex protective advantages as it even curbs physical, sexual and emotional assaults which longer endangered the women and girls during exercises of collecting wood fuels in non-gazetted or uncontrolled areas. To the maximum summation up on community's adoption of Gas Clean Cooking solution, the expects 82,580 households twisting off from wood fuels to LPG Clean Cooking solution.

18.6 Income to material/equipment suppliers and contractors

The planned small-scale construction/civil works will require procurement of equipment, construction materials and services which will be sources of income to suppliers of such materials.

16.7 Creation of employment opportunities

The GCCE-QIP#1-DRC is a set of assets set to settle positive opportunities interlinked through the five components and whose end is creation of productive value chains generating for communities' temporary employment and business opportunities during the construction phase of various infrastructure facilities, including revenues from the sale of food and other consumable goods to workers. It is expected that some jobs will be available during construction of the different subprojects for the local population, mainly as casual workers. However, these employment opportunities are expected to be temporary and

benefit the community in the short term only. After constructed infrastructure handover, there will be lots of positive impact on employment, considering that most of subprojects and funded businesses will run for ever; a good number of local people is likely to be permanently employed; they include school personnel, agronomists, veterinarians, agriculturists, medical personnel, researchers and other scientists.

The project endowment, matched with responsible implementation throughout the five outlined fields of interventions will purposely work out significant positive change for communities, though environmental policing sector in DRC has not exceeded its embryonic phase. It is thus far, invictus for breaking poverty patterns characterizing lives of disabled and poorest of poor at nationwide; it discards the weaknesses their households encountered, making them fail to undertake Gas Clean Cooking Solution. The project goes on to voicing by converting vulnerability into strength, business holding, entrepreneurship, food producer, alongside medico research and drugs manufacturing and suppresses pressure to the government of DRC which, naturally would struggle to take on such liability. The project endeavours to protect world population, the universal planet's climate by protecting the World second largest ecosystems' lung which is secondarily CO2 buffer. The success of this massively complex impacts project in DRC will induce the model therapy against climate change and environmental degradation in other African countries to better African continent and world 's safety.

18.8 Ecosystems Protection Impact

The ecological footprinted impact of this project alone is reduction of CO2 emissions in the Democratic Republic of Congo to 43.3 % through {1} suppression of 82,580 sacks of charcoal and firewood in households cooking on monthly basis, {2} establishment of 27 hectares of woodlot in 9 EPECs, {3} nationally conducted strategized public and institutional awareness, {4} Gas Clean Cooking adoption enforcement by Specialized Police Unit.