#### **GREENING DECENT EMPLOYMENT OPPORTUNITIES FOR KENYA'S YOUTH**

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#### ABSTRACT

Unemployment of youth in any nation thwarts social fabrics and identity of young potential labor force globally. This results in less effective and inefficient economic support from the most vibrant members of the community. Greening is the process of creating a friendlier environment and better systems by the government and organizations towards job creation leading to improved lives and livelihoods as well as transformation in life styles. The purpose of the study was to train and mentor unemployed youth to exploit soft and hard skills. The study sought to promote goat rearing in the target communities to stimulate start-up of viable youth enterprises; revitalize cage fishing towards greening of youth employment opportunities and growth; enhance ICT skills and Innovation and train on on-line jobs towards youth empowerment. This research adopted participatory action research design (PAR) to mitigate the depriving factors that have impacted negatively on the youth and to enhance effective community ownership through sensitization seminars and workshops for value creation and exchange for the identified projects such as Goat rearing, Cage fishing, ICT and Innovation, online jobs, so that the projects meet the standard as anticipated and change the attitude of the youth. The study employed simple random sampling for selection of the sample. Anonymous and self-administered questionnaires and interview guides were distributed to 1000 respondents. Secondary data was collected through review of records, reports, journals and books. The data was analyzed using thematic analysis. The results for objectives 1-4 were based on qualitative data analysis showing that employment opportunities significantly followed goat rearing, cage fishing, ICT Skills and Innovations and on-line jobs. For example the youth are more willing to engage in these activities to better their lives than is commonly assumed from the evidence adduced. The research also found that value chain interventions across all the objectives potentially increases employment, alleviates poverty and impacts on the lives of the youth despite the existing challenges which we recommend should be addressed for better outcomes.

Keywords: Greening, Soft Skills, Employment, Youth and Innovation

#### **1.1 Background of the Study**

Green jobs are decent employment that contribute to preserve or restore the environment, be they in traditional sectors such as manufacturing and construction, or in new, emerging green sectors such as renewable energy and energy efficiency (ILO 2014). According to ILO, green jobs should be decent jobs, employment in production of green products and services as well as employment in environmentally friendly processes. Unemployment is a devastating state of life for all human beings globally. Youth unemployment presents a challenge in labor market experience. World unemployment and underemployment rate is 30 percent in many non-industrialized countries, while in developed countries it is typically 4 percent to 12 percent. In Africa, unemployment and underemployment continue to pose difficulty in achieving full utilization of human capital, despite strong youth growth over the last decade. Tertiary institutions annually graduate more youths than the job market can absorb. The bulk of the unemployed youth fall within primary level of education at 90% while on the other hand highest level of education still places the youths in vulnerable jobs which border on crime. Sustainable economic and social systems and the interaction with the environment are the only means for creating more resilient societies, according to ILO on decent work for sustainable development, transformation towards sustainable and resilient societies (ILO 2018). A friendlier environment and better systems towards job creation will lead to better lives and livelihoods as well as transformation in life styles through linkages and competencies in greening and ICT.

Kenya is one of African countries which is experiencing high unemployment rate of her youth in the region. Majority of the unemployed are aged 20-24 and are represented at 25% percent, out of which 12.6 % are female and 13.6% male gender respectively. Further, there are substantial variations in unemployment rates in Urban and Rural setups. National census (2009) reports that urban youth unemployment was 11.00%. Jahoda (1982) reported that unemployment deprivation theory pinpointed out that work does not only explicitly bring a salary but implicitly helps to establish social ties to family and neighborhood. Gallie (1999) in his study on effects of unemployment on the structure of social relationship postulates that unemployed people especially women have social activities mainly at home, unemployment affects quality of social relationship as it creates social segregation and isolation. From the foregoing it can be noted that social support, innovation and greening are still limited in addressing the youth unemployment, however little intervention attempts have been made in Kenya. The multidisciplinary mission analyzed and gave recommendation on a report titled "employment, income creation" and referred to as informal Sector. The report considered informal sector instrumental in creating employment and income generation (ILO, 1972). ILO noted that informal sector activities were largely ignored, rarely supported and sometimes actively discouraged by Government despite the sectors resilience. The informal sector in Kenya has grown, and currently employs about 81 percent of workers. The notable interventions were sessional paper No.2 of 1992 on Small Enterprises and Jua Kali development in Kenya and Sessional Paper No.2 of 1997 of development of Micro and Small Enterprises (MSE) for wealth and employment creation, poverty reduction which puts more emphasis on Youth and Women. The other intervention measures initiated by Government of Kenya included Youth Enterprise Fund which provides

loans and support the youth enterprises and Uwezo funds which provides grants and interest free loans to Women and Youth groups, however, no impact evaluation reports have been made public to establish the success and outcome of greening on youth employment rate based on these intervention measures, furthermore little is known on the influence of green jobs on employment opportunity for youth groups in Kenya.

# **1.2** Problem Statement

Youth unemployment is a global problem that escalates lawlessness in communities, promotes crime and sustains poverty in households. In Kenya the formal sector job creation falls below the country's urgency to create decent jobs for the youth (ILO, 2018). Many households hosting these youths live under one dollar per day. Poverty is associated with a series of problems such as crime, death, hunger, malnutrition, kwashiorkor, unemployment, children dropping out of school before acquiring employable skills. Green decent employment for the youth in such fields as construction, public relations, carpentry, energy engineering, project engineering, audit and sustainability have not adequately addressed the issue of unemployment in Renya. Decent jobs, employment in production of green products and services, employment in environmentally friendly processes are either lacking or very minimal among the Kenyan youth. New ideas and methods on decent job creation such as goat rearing, cage fishing, ICT skills and Innovation, on-line jobs if implemented well could provide a lasting solution to the problem and this is the ground for anchoring this study. Therefore the purpose of this project was to train and mentor unemployed youth to exploit soft and hard skills gained in formal education to establish green decent employment through entrepreneurial venturing.

# 1.3. Objectives of the Study

The main purpose of the study was to train and mentor unemployed youth to exploit soft and hard skills gained in formal education to establish gainful employment through entrepreneurial venturing. The aim was to equip the target youth with skills and competencies to access, manage and utilize their natural resources and technological applications efficiently to reduce youth unemployment sustainably.

# 1.3.1 Specific Objectives of the Study

- i) Promotion of goat rearing in the target communities to stimulate start-up of viable youth enterprises to reduce youth unemployment index.
- ii) Revitalization of cage fishing towards greening of youth employment opportunities and growth.
- iii) Enhancement of ICT skills and Innovation training to facilitate financial access by the vulnerable and unemployed youth.
- iv) Training on on-line jobs towards youth empowerment

### **1.4 Scope of the Study**

The study was conducted in Kenya. A projection of 1, 000 youths of ages (16-35years) drawn from Kenya was randomly selected from amongst 10 million youth from the Country and focused on greening decent employment opportunities.

## 1.5 Significance of the Study

This research project addressed the requisites of unveiling the youths' skills for green decent employment creation. It nurtured creativity and innovation through integrated training, research, community outreach and a wide range of entrepreneurial ventures. The findings of this research will be of use in such fields as Entrepreneurship and Agri-business. It will be significant to scholars, policy makers, regulators, research institutions, governments, communities and collaborating strategic organizations (KARI, CDC, local CBOs, NGOs and FBOs).

### **1.6 Research Gaps**

The proposed project intervention is designed to mitigate the depriving factors that have impacted negatively on the youth. The research has identified the prevailing gaps as the need to venture into Goat rearing project, Cage fishing, online jobs, ICT and Innovation.

#### **1.7 Conceptual Framework**

The study was guided by the Green theory. Greening decent employment was the independent variable, youth empowerment dependent variable with intervening variables being culture, values and possible interferences from the local administration.

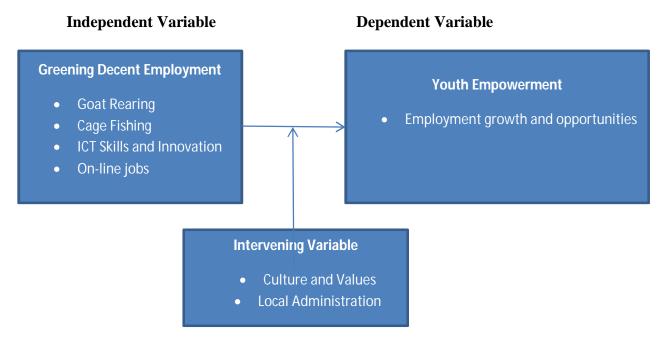


Figure 1.1 Relationship between greening decent employment and youth empowerment Source: Self conceptualization (2019)

# 2.0 LITERATURE REVIEW

This chapter reviewed theoretical literature and empirical studies. It focused on the foundation on which the study was built.

## 2.1 Theory of the Study

The study was based on the Green theory which uses case studies of people living on land to better understand economy. The public as workers is critical to the Green theory. The greening of the labor market, work place and industry enhances economic growth of a nation.

# 2.2 The Concept of Career Greening

Green jobs, according to the Bureau of Labor Statistics, are classified as, "jobs in business that produce goods or services that benefit the environment or conserve natural resources" or "jobs in which workers' duties involve making their establishment's production processes more environmentally friendly or use fewer natural resources". It categorizes Green Jobs into: Water conservation, Sustainable forestry, Biofuels, Geothermal energy, environmental remediation, Sustainability, Energy auditors, Recycling, Electric Vehicles, Solar power, and Wind energy. These definitions include jobs which seek to use or develop renewable forms of energy (i.e. wind, hydropower, geothermal, wind, landfill gas and municipal solid waste) as well as increase their efficiency. Under the green jobs domain education, training, and public awareness are also included. These jobs seek to enforce regulations, support education, and increase public influence for the benefit of the environment. Innovation increases labor productivity and wages, energy and environmental production efficiency.

# 2.3 Decent Employment Opportunities

Although employment and social relationships have attracted many scholars, knowledge building of the young people has not been fully captured. Unemployed people lost their social ties and attend few community activities (Jahoda, lazarsfeld & Zeisel, 2002). Previous studies focused on effects of unemployment but with little attention to possible active responses of unemployed youth. Data on youth unemployment in the formal and informal sectors are scanty. Youth unemployment has both threats and opportunities; the opportunities are contained in diversity of hard and soft skills the youth have while the threat is in local communities' inability to release the youths' potentials gainfully. The communities share the challenge to create decent jobs for the youth with institutions of higher learning from where these youths gain both soft and hard skills on which they can gainfully free their potentials to create jobs in self-employment. Youth unemployment has far reaching negative effects in Kenya where most households live on less than a dollar a day.

# 2.3.1 Promotion of goat rearing

Goat rearing is the process of raising and breeding of domestic goats (FAO, 2010). Goats can be raised for both commercial and domestic use. Its products include meat, milk, fibre and skin. Goat farming can effectively respond to the challenges of creating productive and sustainable employment opportunities, promoting economic growth and poverty reduction in the country. This has since not been achieved in Kenya. This research project put appropriate mechanisms in place to increase participation of youth and vulnerable groups in goat rearing activities. In addressing the financial constraints facing youth and women entrepreneurs particularly start-up capital, the project initiated a one person one goat concept (**Appendix I**). By the end of the project each person had 30 goats through breeding and acquisition.

# 2.3.2 Cage fishing

Fisheries management and Ecology (2018) defines cage fishing as a system that confines the fish in a mesh enclosure in a pond, river, open ocean, estuaries or lake. The mesh retains the fish making it easier to feed, observe and harvest. The mesh also allows the water to pass freely between the fish and surrounding water source thus maintaining good water quality and removing wastes (SRAC, 2017). Cage fishing is a promising venture that may increase productivity, offer employment and enhance economic well-being (Okechi, 2018). This research was based along various beaches in lake Victoria, the second largest fresh water lake in the world (**Appendix II** and III).

## 2.3.3 ICT skills and Innovation training

According to Kenya Climate Innovation Center (2016), world over damages to the environment are already reaching to scales that are threatening livelihoods and the quality of life. This research project examined green employment through ICT and innovation as a solution to insecurity and vulnerability. It addressed key challenges such as poverty, unemployment and inequality to promote sustainable infrastructure; build resilience; social inclusion and sustainable livelihoods.

## 2.3.4 Training on on-line jobs towards youth empowerment

In response to high unemployment and a distressed economy, this research identified skills and mentorship programs and engaged the youth on on-line job search training. This empowered the youth who engaged in income generating activities through on-line engagement.

# 3.0 MATERIALS AND METHODOLOGY

The study was guided by participatory action research design (PAR) which is a qualitative research method to train and mentor unemployed youth and to identify the surplus youth skills and competencies which could be harnessed and nurtured to create self-employment for the youth. Qualitative features of individuals' views, feelings, patterns, culture, history, local context and social relationships were freely examined and the researchers worked with communities to create change.

The study area was Kenya. Cluster and simple random sampling were used to select 1000 youth of ages 16-35 years in Kenya which is a country in East Africa lying in the latitudes and longitudes of  $4^{\circ}N$  and  $4^{\circ}S$  and  $34^{\circ}E$  and  $42^{\circ}E$  respectively. These sampling techniques were considered as suitable because they gave all the youth a chance to be selected for this study.

The study used both primary and secondary data. Primary data was collected from original sources while secondary data was obtained through documentary review. Questionnaires, interview schedule, group discussions, surveys and observation methods were used to collect data from the respondents.

Pretesting was conducted for reliability. Reliability of data collection instrument was assured using the Cronbach's alpha formula. Pilot test was conducted on 100 youth from Kenya that was not included in the main study. Validity was conducted by exposing the data collection instruments to research experts to critique for clarity and ability to collect intended data.

#### 4.0 RESULTS AND DISCUSSIONS

The study found the following results in line with the objectives:

### 4.1: Promotion of goat rearing in the target communities:

10 farmers' groups in 10 counties of Kenya keeping over 30,000 bucks, crossbred and purebred goats, employing 100 youth from each of the 10 counties compared to one year ago when such venture never existed were recruited, trained and engaged in goat rearing. The youth who were the beneficiaries of this program have formed associations to continue with the process after the end of the project. They intend to reinvest their incomes from goat sales to purchase more goats. They also intend to get value added products such as cheese, ice cream, fudge, yogurt, butter and sausages from the goat products. It is expected that if implemented well unemployment will reduce by 20% in the next 10 years and enhance entrepreneurship engagements by young people in Kenya. The research found that the participants were more resilient and their livelihoods had improved than before joining the program. Their incomes had improved through sale of mature goats. Goats were bought at Kshs: 2,000 and sold at between Kshs: (5500 and 6000) after three months of feeding. The participants were trained on financial management and marketing skills. Table I: Shows the goat rearing methods in different counties with a variety of agro-ecological factors. The main method was zero grazing across the counties. The goats depended on grazing and supplements. The main challenges were diseases, theft, predators, drought and water scarcity. Appendix I shows goat rearing in Kisumu County. It provides a look alike of other sites and locations of chosen for goat rearing.

County	Production	Products	Average	Agro-ecological factors
	system used		monthly	
			rainfall (mm)	
Siaya	Zero grazing	Milk, Meat	250	Shrubs, bushes, water
Kisumu	Zero grazing	Milk, Meat	300	Shrubs, bushes, water
Homabay	Zero grazing	Milk, Meat	350	Shrubs, bushes, water
Kisii	Zero grazing	Milk, Meat	550	Shrubs, bushes, water
Kericho	Zero grazing	Milk, Meat	600	Shrubs, bushes, water
Bomet	Zero grazing	Milk, Meat	570	Shrubs, bushes, water
UasinGishu	Zero grazing	Milk, Meat	560	Shrubs, bushes, water
Nyamira	Zero grazing	Milk, Meat	550	Shrubs, bushes, water
Kakamega	Zero grazing	Milk, Meat	500	Shrubs, bushes, water
Bungoma	Zero grazing	Milk, Meat	450	Shrubs, bushes, water

Table I: Cour	nties piloted	for goat	rearing
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## 4.2: Revitalization of cage fishing towards greening of youth employment:

10 farmers' groups in 10 beaches of Kenya keeping over 300 cages within the lake along the beaches, employing 100 youth from each of the 10 beaches compared to two year ago when such venture never existed were recruited, trained and engaged in cage fishing. The youth who were the beneficiaries of this program have formed associations to continue with the process after the end of the project. They intend to reinvest their incomes from fish farming to purchase and built more fish cages. They also intend to get value added products such as barbecue, fish oil and fish fillets from the fish products. It is expected that if implemented well unemployment will reduce by 15% in the next 10 years and enhance entrepreneurship engagements by young people in Kenya. The research found that the participants were more resilient and their livelihoods had improved than before joining the program. Their incomes had improved through sale of mature fish. Fish is harvested after every 5-7 months of feeding. Fish were sold at between Kshs: (200 and 600) to the middle men and local consumers. The middlemen would in turn sell the fish at between kshs: (600 and 1000) depending on the purchase price. The participants were trained on financial management and marketing skills. Table II: Shows the cage fishing methods in different beaches with a variety of agro-ecological factors. The main method was caging across the beaches. The fish depended on algae, duckweeds, cotton seed or groundnut cake. The main challenges were finances, diseases, theft and predators. Appendix II shows the youth engaged in fishing in lake victoria using local boats to feed and take care of the fish cages while Appendix III shows the youth having brought the catch to the ground for sale to both the middlemen and local consumers.

Beach	Production	Products	Average	Agro-ecological factors
	system used		daily feeding	
			program	
Kotieno	Caging	Fish, fillet	twice	Lake, algae, duckweeds
Dunga	Caging	Fish, fillet	twice	Lake, algae, duckweeds
Homabay	Caging	Fish, fillet	twice	Lake, algae, duckweeds
Usenge	Caging	Fish, fillet	twice	Lake, algae, duckweeds
Misori	Caging	Fish, fillet	twice	Lake, algae, duckweeds
Mbita	Caging	Fish, fillet	twice	Lake, algae, duckweeds
Sori	Caging	Fish, fillet	twice	Lake, algae, duckweeds
Kendubay	Caging	Fish, fillet	twice	Lake, algae, duckweeds
Osiri	Caging	Fish, fillet	twice	Lake, algae, duckweeds
Asembobay	Caging	Fish, fillet	twice	Lake, algae, duckweeds

Table II: Kenyan beaches piloted for cage fishing

## 4.3: Enhancement of ICT skills and Innovation training:

4 ICT centers at 4 Public Universities in Kenya were identified to train 1000 youth, with each center training 250 youth for a period of one year. The youth who were the beneficiaries of this program have formed whatsapp groups to continue with the process of learning, training and mentorship after the end of the project. They intend to use the skills acquired to look for jobs, engage in small business ventures like training others in Information technology, type setting and record keeping. It is expected that if implemented well unemployment will reduce by 10% in the next 10 years and enhance entrepreneurship engagements by young people in Kenya. The research found that the participants were more resilient and their livelihoods had improved than before joining the program. Their incomes had improved through business start-ups in computer services. Table III: Shows the ICT centers and the training offered. The main challenges were finances, availability of the participants, language barriers.

ICT Centre	Production	Products	Average	Considerations
(University)	system used		annual	
			attendance	
JOOUST-	Computer Lab	Microsoft Word,	12	Ability, Availability
Bondo		Excel		
JOOUST-	Computer Lab	Microsoft Word,	12	Ability, Availability
Kisumu		Excel		
Maseno-	Computer Lab	Microsoft Word,	12	Ability, Availability
Tom Mboya		Excel		
Masinde	Computer Lab	Microsoft Word,	12	Ability, Availability
Muliro-		Excel		
Kakamega				

Table III: Kenyan ICT centers used for ICT and Innovation training

# 4.4: Training on on-line jobs towards youth empowerment:

4 ICT centers at 4 Public Universities in Kenya were identified to train 1000 youth, with each center training 250 youth for a period of one year. The youth who were the beneficiaries of this program can now work from home as they enjoy absolute freedom and convenience. They are paid according to their talents as they continue with the process of learning, training and mentorship even after the end of the project. They intend to use the skills acquired to look for jobs on-line. It is expected that if implemented well unemployment will reduce by 10% in the next 10 years and enhance entrepreneurship engagements by young people in Kenya. The research found that the participants were more resilient and their livelihoods had improved than before joining the program. Their incomes had improved through on-line jobs as they were

trained on application methods, most convenient payment methods and salary get paid two times in a month. Table III: Shows the ICT centers and the training on-job offered. The main challenges were finances, availability of the participants, language barriers and application challenges, identification of suitable jobs and acceptance of applications.

ICT Centre	Production	Products	Average	Considerations
(University)	system used		annual	
			attendance	
(JOOUST)-	Computer Lab	Essay writing,	12	Ability, Availability
Bondo		research writing,		
		academic writing,		
JOOUST-	Computer Lab	Essay writing,	12	Ability, Availability
Kisumu		research writing,		
		academic writing,		
Maseno-	Computer Lab	Essay writing,	12	Ability, Availability
Tom Mboya		research writing,		
		academic writing,		
Masinde	Computer Lab	Essay writing,	12	Ability, Availability
Muliro-		research writing,		
Kakamega		academic writing,		

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### **APPENDIX I: Goat Rearing in Kisumu County**





# APPENDIX II: Fish farming at Kotieno Beach in Lake Victoria



# APPENDIX III: Fish farming at Kotieno Beach in Lake Victoria