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MASTER THESIS DISSERTATION

SUSTAINABILITY OF RURAL DEVELOPMENT PROJECTS: CASE STUDY

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DECLARATION

I hereby testify with my own signature, this Diploma Thesis “Sustainability of Rural Development Projects: Case Study” was written by myself using books, articles, of which all sources used are properly referenced. Based on the author’s efforts, this Diploma Thesis was supervised by Ing. Bohuslava Boučková, Csc. from the very beginning.

Prague, 30th March 2015.

Author’s Signature

.....

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Udržitelnost projektů rozvoje venkova: Případová studie

Sustainability of Rural Development Projects: Case Study

Souhrn

Cílem diplomové práce je vymezení faktorů, udržitelnosti projektu rozvoje venkova, zejména se zaměřením na vesnici Belo ležící v severozápadním Kamerunu. V této souvislosti organizace RUDEC – Rural Development Centre usilovně pracuje na konkrétních rozvojových projektech, které byly úspěšně implementovány a mají dlouhodobý přínos pro místní komunitu. Rural Development Centre slouží jako institucionální příklad. Autorka práce analyzovala projekty uplatňované v současné době ve vesnici Belo, a použila je jako sekundární data. Základní metodologickou součástí práce je analýza údajů získaných prostřednictvím dotazníkového šetření. Toto šetření bylo zaměřeno na 50 domácností z vesnice Belo a slouží též jako nástroj k vyhodnocení situace místní komunity. Participativní posuzování venkova proběhlo pomocí 4 nástrojů - History timeline, Participatory Mapping - Village Resource Mapping, Matrix Scoring and Ranking, a Problem-Cause-Effect-Solution Trees. Výsledky ukázaly, že lidé z vesnice Belo se potýkají zejména se socio-ekonomické problémy, mezi které patří nedostatek jídla, nezaměstnanost a nepříznivé environmentální podmínky. Práce rovněž hodnotí organizaci RUDEC jako udržitelnou instituci, má dostatek finančních prostředků k dosažení svých cílů.

Summary

The purpose of the Diploma Thesis is to determine what factors would make a rural development projects sustainable and most especially in a North-Western Cameroonian village called Belo. Within this context, a not for profit organization named RUDEC-Rural Development Centre has been working hard to see specific development projects implemented successfully and yielding long lasting results for its Community. The Rural Development Centre served as an institutional example. The author reviewed its ongoing projects in Belo Village which served as secondary data. The main findings of this research were derived from the analysis of the primary data collected through a questionnaire

research targeting 50 households in Belo and which served as a Community Needs Assessment tool. A Participatory Rural Appraisal was also conducted through four main tools namely: History timeline, Participatory Mapping - Village Resource Mapping, Matrix Scoring and Ranking, and Problem-Cause-Effect-Solution Trees. The results revealed that the people of Belo battle mainly with socio-economic challenges such as food insecurity, unemployment and unfavourable environmental conditions. It revealed RUDEC as a fairly sustainable institution which simply lacks sufficient resources to achieve its goals.

Klíčová slova: Rozvoj venkova, IFAD, severozápadní Kamerun, vesnice Belo, udržitelnost, implementace a design projektu, RUDEC

Keywords: Rural Development, IFAD, North- West Cameroon, Belo Village, Sustainability, Project Design and Implementation, RUDEC

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LIST OF ACRONYMS

- 1. IFAD:** International Fund of Agricultural Development
- 2. RUDEC:** Rural Development Centre
- 3. BERUDA:** Belo Rural Development Association- adjust in thesis.
- 4. MIFACIG:** Mixed Farming Common Initiative Group
- 5. AFDB:** African Development Bank
- 6. MINADER:** Ministry of Agriculture and Rural Development.
- 7. MINIFO:** Ministry of Forestry and Wildlife
- 8. MINEP:** Ministry of Environment and Protection of Nature
- 9. MINEPIA:** Ministry of Livestock, Fisheries and Livestock Industries
- 10. HH:** Household Heads
- 11. M&E:** Monitoring and Evaluation
- 12. CFA:** CFA stands for Coopération financière en Afrique central (Financial Cooperation in Central Africa)
- 13. CZK:** Czech Koruna
- 14. ACP-EU:** African, Caribbean and Pacific Group of States - European Union
- 15. BTI:** Bertelsmann Stiftung- German Organization
- 16. NGO:** Non- governmental Organization
- 17. SIBADEF:** Society for Initiatives in Base Development Foundation

1. INTRODUCTION

1.1 Background of the Study

Sustainability is what is sought by most organizations throughout the world including rural organizations that operate in less developed countries like Cameroon. In Cameroon, it is the aim of rural developments practitioners to see their daily efforts yield long lasting results and this is also the desire of members and elders of every rural community. Since 1970, the rural world plays a key role in Cameroon's economy. Nearly 75 percent of the overall Cameroonian population lives in rural areas, and it is this portion of the population that supplies most agricultural products to urban areas. The Belo village which is located in the Boyo Division of Cameroon and its devoted Rural Development Centre have served as the case study for this research. Both Belo and RUDEC's detailed descriptions are mentioned in the fourth chapter of this paper.

1.2 Aims of the study

The aims of this research were to 1) determine what factors would make a project sustainable in the North western Cameroonian and in Belo to be much precise. The author sought to 2) know to what extent the lessons learned by rural development organizations such as IFAD and their recommendations regarding rural development project sustainability could be applied to a narrower context which is Belo still. 3) Hopefully the results obtained through this research are to help the Rural Development Centre, an organization based in Belo to improve its strategies with recommendations on how to design and implement sustainable projects that would cause impact far beyond the present generation. The author also desired 4) the results of this thesis research to be applicable on a daily basis and serve rural development practitioners in North-west Cameroon.

1.3 Hypotheses

In this research it was assumed that:

- 1) Every stage of the project cycle namely Design, Implementation, Supervision and Monitoring and Evaluation needs to be taken into account in order to achieve sustainability.
- 2) Development models leading to sustainability must be responsive to the operating environment.
- 3) Existing community assets and structures should be prioritized over the existence of new ones.
- 4) Incorporating Risk Management approaches by promoting household resilience is essential.
- 5) Environmentally Sustainable systems must maintain a stable resource base and avoid Overexploitation of renewable resources and preserve Biodiversity.
- 6) The empowerment of the poor and marginalized household, the active and unbiased participation of community members in the realization of the rural development projects' goals would cause long lasting results.

1.4 Rationale and Significance of the study

Designing and implementing sustainable rural development projects, has been a challenging goal to achieve for most Development Non-Governmental Organizations around the world. IFAD whose tagline is 'INVESTING IN RURAL PEOPLE' contributed to the conceptualization of what a sustainable rural development project would be like in its occasional paper entitled "*Sustainability of rural development projects Best practices and lessons learned by IFAD in Asia*" published in 2009 and written by Tango International, which served as a cornerstone and a main reference for this dissertation. Findings on 'Sustainable Rural Development Projects' are few indicating that not much scholarly research has been published on this specific topic.

Sustainability is a currently discussed topic in the field of rural development and economics but it is still very difficult to measure and achieve. This is because its results can only be assessed within a long time scale and requires a lot of hard work, collaboration,

involvement and patience. Despite all this, sustainability needs to be considered in order for true success to be achieved and this need does not exclude Cameroonian villages. Like most sub-Saharan area, the Cameroonian North-West rural region is faced with challenges such as limited social facilities and infrastructure, a lack of basic needs, vulnerability, livelihood, un-sustainability and social exclusion. Moreover, rural developments activists in developing countries most often lack the required skills, expertise and tools to see that their objectives are met and that their hard work affects the future of their communities in the long run and in a positive way.

2. RESEARCH METHODOLOGY

2.1 The scope and site of the study

The study covered the rural communities based in Belo village which is based in the North-west part of Cameroon. The research was carried out among the people of this village and its leaders, e.g.: heads of households. The people included the village women and men that are heads or members of a household or community without any bias regarding their social background. Further information was also acquired from government staff, rural project staff, and business owners all depending on their willingness to participate in this research.

2.2 The Purposive Sampling Method

The author is used the purposive sampling method in the research. In the Purposive Sampling, individuals units are chosen on the basis of some judgement criteria, (Hoddinot, 2002). In this case the sample design will target households' breadwinners or leaders: the Household Heads-HH. The author assumed that household breadwinners and leaders are much more aware of the true needs of their families and communities; being themselves responsible for the provision of these needs. Still based on personal own judgement, the author considered a sample of 50 households to be a reasonable sample size for this qualitative research.

2.3 Community Needs Assessment Questionnaire

This questionnaire helped to give a more or less detailed presentation of the Belo population through inferences from the selected sample. This questionnaire helped to gather important information about Belo regarding people's level of education, their ability to take decisions and their ability to meet up with basic needs and cope with shocks, their contribution to environmental sustainability and their level of social involvement. It helped reveal the village's current state and therefore assess whether or not their needs are mainly what the Rural Development Centre in Belo is seeking to meet in one way or the other.

2.4 Participatory Rural Appraisal

Participatory Rural Appraisal and Planning (PRAP) is a methodology which permits to

identify community problems and to come up with solutions with the participation of community members. More especially, the PRAP allows for:

- A descriptive analysis of the community and its context
- An Identification of problems and potential solutions and
- Project Design and the organization of activities for project implementation

“First the characteristics and condition of a community are analysed by its members. Then the problems and possible solutions are identified. This methodology facilitates the identification, preparation and design of community projects based on the reality and criteria of the inhabitants themselves. This promotes and supports self-reliance and sustainable development” (Feldstein and Jiggins, 1994, p.2.)

As mentioned before, the four PRA tools used within this research are: History timeline, Participatory Mapping- Village resource mapping, Matrix Scoring and Ranking and Problem-Cause-Effect-Solution Trees.

2.5 Data sources and Analysis

The main data were derived from the questionnaires and the Participatory Rural Appraisal meeting that was held with 6 village residents. These data were analysed through statistical tools such as SPSS Statistics and Excel. And the secondary data were derived from International Development Organizations reports/journals and reports from RUDEC in Belo, Cameroon.

2.6 Selected Sustainability Indicators

IFAD 2009, has identified Sustainability indicators that helped practitioners in Asia, the author carefully selected some of those indicators coupled with some PRA tools to facilitate the research.

Table 1: Sustainability Indicators

Institutional Sustainability	Household Resilience	Participatory Rural Appraisal
<p>Project designs incorporating institutional analysis and risk analysis;</p> <p>Collaboration with existing national and sub national institutions</p> <p>Investment in institutional capacity development</p>	<p>Income diversification:</p> <p>Investing in quality: Education</p> <p>Propensity to save</p> <p>Joint decision making with spouse</p> <p>High value placed on education</p>	<p>History timeline</p> <p>Participatory Mapping- Village resource mapping</p> <p>Matrix Scoring and Ranking</p> <p>Problem-Cause-Effect- Solution Trees</p>

(Source: Tango International, 2009; Author's selection)

2.7 Limitation of the study

This research did not get deeply into the environmental aspect of sustainability because the analytical indicators that ought to be used such as the measures of soil fertility - measures of soil moisture, genetic diversity and crop yields are quite complex to measure and required additional amounts of time and resources. Delving into a consistent environmental analysis would have been biased seeing the author would have been able to draw results

from personal observation of Belo's environment and get into the details required. However, these limitations helped the author to focus on aspects of sustainability (economic and social) which are not the most popular but are of an undeniable importance as far as Sustainable Rural Development concerned.

3. LITERATURE REVIEW

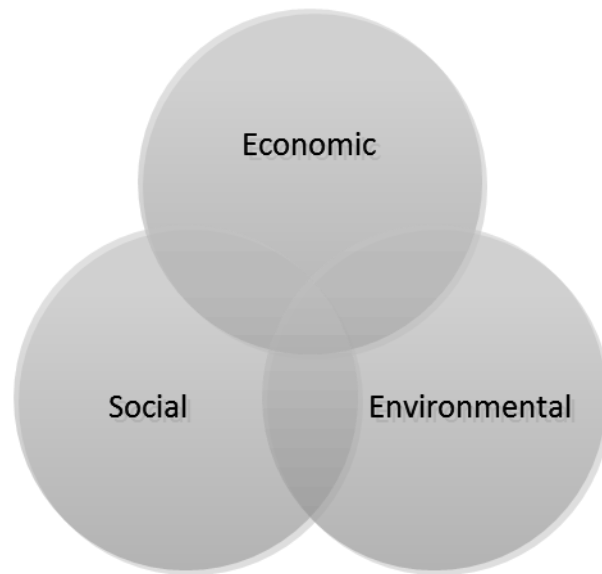
3.1 The concept of Sustainability and Sustainable Development

The topics of 'sustainability' and 'sustainable development' have been important topics of discussion for some decades now. It became alarming for humans around the world to notice the fast degradation of the environment, the disappearance of species and the pollution of the air. This raised an awareness about the environment which is why the term 'sustainability' is first referred to as an effort to preserve the natural environment for takeover by the generations that are yet to come. The expression 'Sustainable Development' became popular after the Bruntland Commission- previously the World Commission on Environment and Development released a report entitled 'Our Common Future' where it defines Sustainable Development as one that: *“meets the needs of the present generation without compromising the ability of future generations to meet their own needs”* (Bruntland Report, 1987, p.16). Here is a trustworthy definition and in practice, the journey towards sustainability is not easy to embark on.

The Oxford Dictionary, 1989, primarily defines the adjective 'sustainable' as *“Able to be maintained at a certain rate or level”* and the Cambridge Dictionary, 1995, offers even two richer definitions: *“able to continue over a period of time and, causing little or no damage to the environment and therefore able to continue for a long time”*. We can therefore say that Sustainability does not only have to do with achieving good results but improving these good results and preserving them over time.

On the other hand Development is defined by the Cambridge Dictionary, 1995, as *“the process in which someone or something grows or changes and becomes more advanced”*. As mentioned before, a sustainable system should show improvement, durability and stable growth. As illustrated in the figure below, Sustainable Development has three main aspects (Harris, 2003).

Figure 1: The three main dimensions of Sustainability



(Source: Harris, 2003)

The majority of scholars will agree that an economically sustainable system is to produce goods and services in a continuous way, and “*maintain manageable levels of government and external debt, and to avoid extreme sectoral imbalances which damage agricultural or industrial production*” (Harris, 2003).

An environmentally sustainable system on the other hand should be able to preserve its environment, avoid overexploitation and mismanagement of resources. According to Harris, 2003, this entails the “*maintenance of biodiversity, atmospheric stability, and other ecosystem functions not ordinarily classed as economic resources*”.

A socially sustainable system should promote fairness and equity as far as the allocation of resources is concerned, it should provide necessary social services such as healthcare facilities and education, gender equality, and political accountability and participation (Harris, 2003)

According to Baker, 2007, p.1, “Sustainability often seems to be primarily concerned with protecting the environment from acts of human beings rather than protecting human beings and human organizations from the environment.” The environment we live in is quite dynamic and it will be inadequate not to seek to protect the members of our society from natural risks they are exposed to everyday. Men and Women are battling with uncertainty and cannot know for sure whether their environment is safe or not. Baker,2007, p.1, further explained that “Sustainability can therefore be more properly thought of as an effort to sustain the social and economic development of society, combined with an effort to protect the natural environment”.

The motives to protect our present environment should not be prioritize over those of protecting the people that live in it or those of improving societal welfare but there should be a balance of both aims in order to achieve Sustainability.

3.2 The concept of Rural Development

In a general point of view, rural areas are often deserted, have low population density levels, a lot of natural resources and arable lands compared to urban areas. Agriculture or agro-pastoral activities are generally the main occupations of rural residents. Labour is often cheaper in rural areas compared to urban areas and this is because employment opportunities are very limited and the rural people are most often marginalized and discriminated against. This is much more of a critical issue in developing countries because the rural people constitute the majority of the population “*despite their critical role in determining food security and environmental sustainability, considering that agriculture is the primary interface between humanity and the environment*” (Avila and Gasperini, 2005).

According to Avila and Gasperini, 2005, Sustainable rural development could be understood as a process towards a constant change and transformation of the rural areas covering good governance, investment in the agricultural industry, the development of rural infrastructures and the development of rural institutions.

The goal of rural development, most especially in developing countries has mainly been to achieve “*community development, small farm development, integrated rural development,*

market liberalization, participatory development, human development, sustainable livelihoods, poverty reduction strategies, food security programmes, sustainable agriculture and rural development. Each model has particular strengths in that it focuses attention on strategic resources, constraints and challenges, or desired objectives in rural development” (Avila and Gasperini, 2005). All these have also been the centre of attention for most rural development workers who have mostly been incorporating these aspects into their rural projects’ designs.

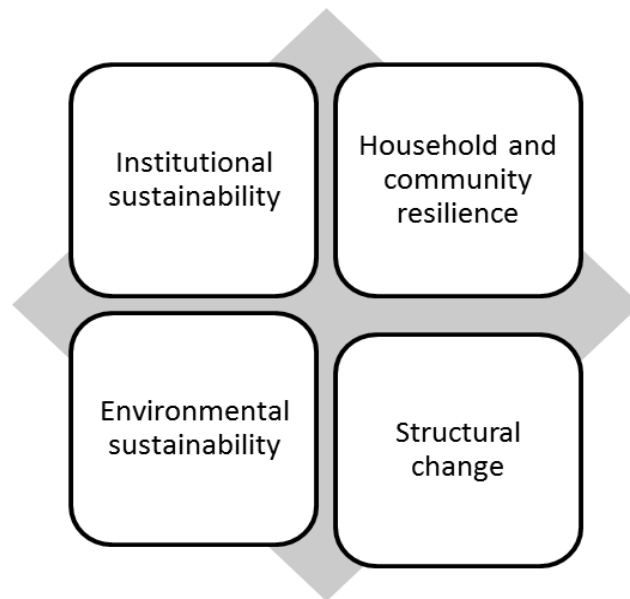
3.3 Sustainability of Rural development Projects according to IFAD

IFAD- International Fund of Agricultural Development is a greatly experienced sub-organization of the United Nations that specializes in rural development issues around the world and this is stated by its vision which aims at: **INVESTING IN RURAL PEOPLE**. IFAD also contributed to the conceptualization of what a sustainable rural development project should be like in its 2009 published occasional paper entitled “*Sustainability of rural development projects Best practices and lessons learned by IFAD in Asia*” written by Tango International which identified four main dimensions for project sustainability.

3.3.1 Dimensions of projects sustainability in field operations

According to Tango International, to add value and practicality to the concept of sustainability, it is important to take some dimensions into account which were identified as Institutional Sustainability, Household and Community Resilience, Environmental Sustainability and Structural Change (See figure 2).

Figure 2: Four dimensions of Project Sustainability



(Source: Tango International, 2009; Author's Illustration)

Institutional sustainability which is the first dimension entails the functional institutions will be self-sustaining after the project ends. According to Tango International still, “*Critical steps in promoting institutional sustainability include:*

- *promoting institutional ownership of project activities;*
- *supporting capable existing institutions rather than establishing new ones;*
- *securing successful transfer of decision-making to low administrative levels in line with decentralization policy building sufficient follow-through capacity within key institutions (e.g. within governmental and community-based organizations); and*
- *building capacity to adapt to change” (2009, p.16)*

The second dimension is building **Household and Community Resilience**. This is about empowering households and communities to handle dynamic and unexpected changes (usually referred to as shocks) without collapsing. Resilience has to do with the ability to handle and cope with the shocks once they occur be it positive or negative. Resilience also refers to a person's or a community's ability to recover after adversity or hard times and to be capable of building positively on the lessons learned and past experiences. Most especially, “*resilient communities are readily able to anticipate and adapt to change (i.e. natural disaster, climate change, market volatility, etc.) through clear decision-making*

processes, collaboration, and management of resources internal and external to the community” (Tango International, 2009, p.17).

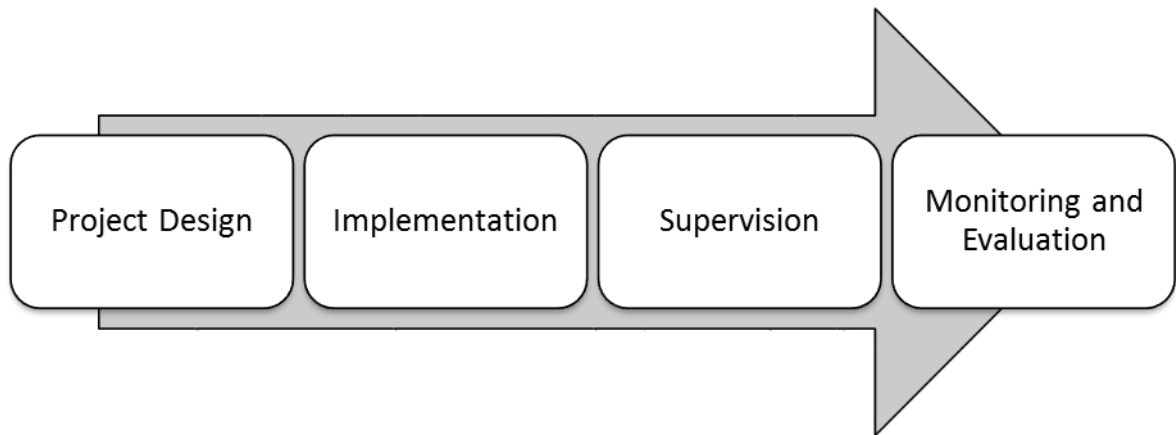
Environmental Sustainability, the third dimension of sustainability involves the establishment of environmentally sustainable systems. Given the dependence of most rural communities on a limited natural resource base, environmental sustainability is critical to rural communities’ welfare. According to Tango International, environmental sustainability is not likely to be achieved without well functioning institutions being put in place. An environmentally sustainable system must “*avoid overexploitation of renewable resources and preserve biodiversity*”. The conservation of natural resources is an essential aspect of this dimension (Tango International, 2009).

The fourth dimension of sustainability which is **Structural Change** is not easy to define or achieve, involves addressing poverty issues in a structural way that will reduce social and economic inequalities. It involves empowering poor individuals and marginalized rural households to overcome poverty through skills’ improvement and access to social services. In order to overcome structural poverty, development organizations should act as facilitators that work to empower marginalized individuals or groups and encourage their participation in planning and decision-making (Tango International, 2008).

3.3.2 Sustainability through out the project’s lifecycle

It is necessary to set the goal of sustainability as a priority not only at a given part of the project cycle but throughout all stages of the project. These stages include: **Project design, Implementation, Supervision, and Monitoring and Evaluation.**

Figure 3: Project Development Stages



(Source: Tango International, 2009; Author's Illustration)

Sustainability must be addressed from the first stage of the project cycle of the **Project Design**. According to Tango International, “*project designs should explicitly address institutional capacity needs and should actively cultivate effective policy and strategy linkages between governmental and nongovernmental institutions*”. Sustainable project designs are simply clear and flexible. They should build on both local and national implementation systems in order to minimize costs (Tango International, 2009). While designing a rural project, it is important to consider the collaborating institutions that will help in one way or the other during the life-cycle of the project.

The second stage to be considered is **Implementation**; this involves putting elaborated plans and decisions into effect. The way a project is implemented can have considerable influence on its long-term sustainability. This stage can be well accomplished by promoting participatory strategies, remaining flexible towards challenges, and encouraging stakeholders' ability to plan and manage future actions. “*There is a need for the expected net benefits not to be maintained only but to exceed over the life of the project and to be sustained after project completion*” (Tango International, 2009).

Within IFAD, **Supervision** which is the third stage in a project cycle is defined as the administration of loans and grants, also the management of human resources. Supervision and Implementation go in hand and entails “*technical support, policy dialogue and programme or project design adjustments to ensure the desired objectives are met. It is*

important that assigned supervisors clearly raise issues related to sustainability at the earliest stage of project cycle". This entails the identification of community capacity-building needs, the establishment of platforms to empower vulnerable communities, the identification and usage of best practices for sustainability depending on the sector and the usage of risk management strategies (Tango International, 2008).

The fourth stage: **Monitoring and Evaluation** is important because it is within this stage that sustainability criteria are identified and methods for measurement are identified. It should also be the source of information to keep track of progress towards proper implementations. Tango International, 2009, also emphasised all *"M&E plans should primarily include specific indicators that measure each of the four aforementioned dimensions of sustainability – institutional sustainability, community and household resilience, systemic environmental change, and community empowerment."*

3.3.3 Enabling factors in achieving Project Sustainability

Table 2: Project Sustainability enabling factors

1	Effective linkages between project components
2	Community Participation
3	Flexible Design
4	Institutional Analysis
5	Longer project cycle
6	Risk Assessment
7	Consideration of Environment and Appropriateness

8	Building and existing assets and knowledge
9	Consistent and objective Monitoring and Evaluation

(Source: Tango International, 2009; Author's Illustration)

3.4 The Concept of Risk Management

Even though Risk Management is not the central concern of this research, the author found it important to stress its importance when desiring to achieve Sustainability. The World Bank, 2014 defines Risk as *“The possibility of loss”* and Opportunity as *“The possibility of gain”*. Every human is exposed to opportunity cost or to trade-offs as classical economics makes us understand, this is enough to conclude that every human is exposed to the risk of making wrong choices, investments and having these wrong choices cost them a lot. Besides, risks can also be out of a human's control when they involve natural disasters (earthquakes or tornadoes) the only remedy would be to equip our communities to better prepare for risk. According to the World Bank, 2014 *“some people may be vulnerable—that is, especially susceptible to losses from negative shocks—as a result of their exposure, internal conditions, and risk management.”* It is important also to know that risk management is not only meant at discussing the opportunity of loss but also the opportunity of gain, there is also a need to know how to manage 'positive shocks' once they occur.

4. CAMEROON, BELO AND RUDEC IN A NUTSHELL

4.1 Essential information about Cameroon

The Republic of Cameroon is a country located at the centre of Africa and is bordered by Nigeria on the west, Chad on the North, the Central African Republic on the east, Gabon, Equatorial Guinea and the Republic of Congo on the South and the Atlantic Ocean on the South East, (See image below).

Images 1: Cameroon Map and bordering countries



Source: <http://www.bbc.com/news/world-africa-13146029>

4.1.1 Brief History

One of the commonly told portion of Cameroon's history is that of the Portuguese explorer Fernando Poo who visited the area in 15th century and was stunned by the abundance of shrimp he found in the Wouri river located at the economic capital of Cameroon- Douala. He therefore named Cameroon 'Rios dos Camaroes' which literally means 'River of Shrimps', Cameroon therefore owe its name to this historical scenario. Before the colonial period Cameroon was made up of small ethnic groups or dynasties. After the First World War, it was colonized by the Germans and was split into two colonies after the Second World War, one colony administered by the United Kingdom and the other by France. Cameroonians acquired their independence from French and English Colons in 1960 and 1961 respectively.

4.1.2 Socio-Political Presentation

Cameroon is politically led by His Excellency Paul Biya since 1982 who holds the executive power in the county. The legislative power is held by the National Assembly and a senate which was established only 2 years ago. The Cameroon area is divided into 10 provinces that share 475,650 kilometre square of land area and all together house a population of 20,386,799. (See table 3).

Cameroon along with Canada, constitute the only 2 bilingual countries in the world where French and English are the official languages. Apart from the above mentioned languages there are also 242 local languages which are spoken in this country. Cameroon is a highly culturally diverse country.

4.1.3 Current Economic Situation

Cameroon has encountered several severe economic crises which include the devaluation of its currency in 1994. This situation led to a very high unemployment rate, decrease in GDP and aggregate consumption over time. Despite huge potentials in the young, educated population, natural resources endowment, Cameroon is still struggling to achieve a sustainable economic level of growth. The known drawbacks have been Corruption, budget deficits, smaller production level against high demands, bureaucracies and a shrink in foreign investments. Cameroon's goal is to become a developing country by 2035. Recently, the Government has developed the formulation of a long-term development Vision for Cameroon. The elaborated Vision, which portrays a desired image of the country for up to 2035, aspires to make Cameroon a democratic emerging country, united in its diversity. Specifically, the Vision aims at: *“(1) reducing poverty to a socially acceptable level; (2) reaching middle-income country status; (3) becoming a newly industrialized country; (4) consolidating the democratic process and (5) strengthening national unity while respecting the country’s diversity”* (African Development Bank, 2009).

Table 3: Recent UN Economic Indicators

Basic facts		
Region	Middle Africa	
Currency	CFA Franc (XAF)	
Surface area (square kilometres)	475650	
Population in 2012 (estimated, 000)	21700	
Population density in 2012 (per square kilometre)	45.6	
Capital city and population in 2011 (000)	Yaoundé (2432)	
United Nations membership date	20 th September, 1960	
Economic Indicators		
GDP: Gross domestic product (million current US\$)	2012	26094
GDP: Growth rate at constant 2005 prices (annual %)	2012	5.3
GDP per capita (current US\$)	2012	1202.5
GNI: Gross national income per capita (current US\$)	2012	1134.2
Employment in industrial sector (% of employed)	2010	12.6 Age group 10 years and over.
Employment in agricultural sector (% of employed)	2010	53.3 Age group 10 years and over.
Labour force participation, adult female pop. (%)	2012	63.6
Labour force participation, adult male pop. (%)	2012	76.7

Social and Environmental Indicators		
Population growth rate (average annual %)	2010-2015	2.5
Urban population growth rate (average annual %)	2010-2015	3.2
Rural population growth rate (average annual %)	2010-2015	0.9
Urban population (%)	2013	53.2
Population aged 0-14 years (%)	2013	43.0
Population aged 60+ years (females and males, % of total)	2013	5.2/4.5
Sex ratio (males per 100 females)	2013	100.0
Life expectancy at birth (females and males, years)	2010-2015	56.0/53.7
Infant mortality rate (per 1,000 live births)	2010-2015	73.5
Fertility rate, total (live births per woman)	2010-2015	4.8
Contraceptive prevalence (ages 15-49, %)	2006-2012	23.4
Education: Government expenditure (% of GDP)	2006-2012	3.2
Education: Primary-secondary gross enrolment ratio (f/m per 100)	2006-2012	75.2/86.5
Education: Female third-level students (% of total)	2006-2012	42.2
Threatened species	2013	639
Forested area (% of land area)	2011	41.7
CO ₂ emission estimates (000 metric tons and metric tons per capita)	2010	7229/0.4
Energy consumption per capita (kilograms oil equivalent)	2010	121.0

(Source: <http://data.un.org/CountryProfile.aspx?crName=cameroon>)

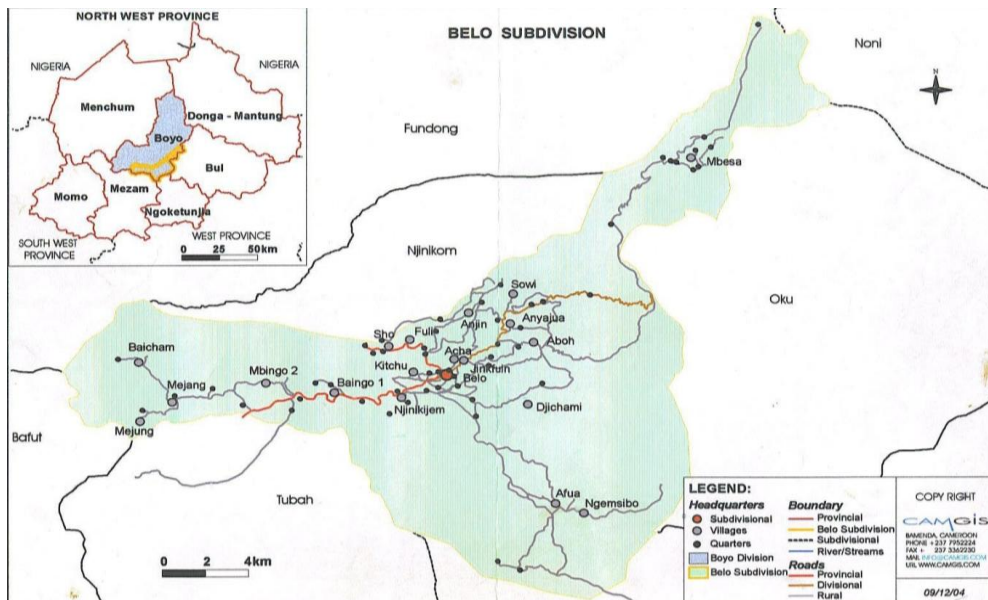
4.2 The Study Context: Belo village

Belo is located in the North-western region of Cameroon which is one of the main Anglophone regions. The city of Bamenda is the Headquarter of this particular region. Belo is a small village of 88,664 inhabitants and 346 kilometre square area (SIBADEF Report, 2011, p.1).

4.2.1 Socio- Political presentation

In the Belo Municipality in Cameroon, there are five ethnic groups which are: “*The Koms, Mbessas the Fulanis, the Mejungs and the Mejangs. The dialects spoken are the Kom, Mbessa, Mejang, Mejung, Baicham and Fulani languages.*” Pidgin English or Broken English is the language of daily communications. A part of the population which speak English language, mostly constitute the literate class and there is also a bunch of people who speak French (SIBADEF Report, 2011, p.1).

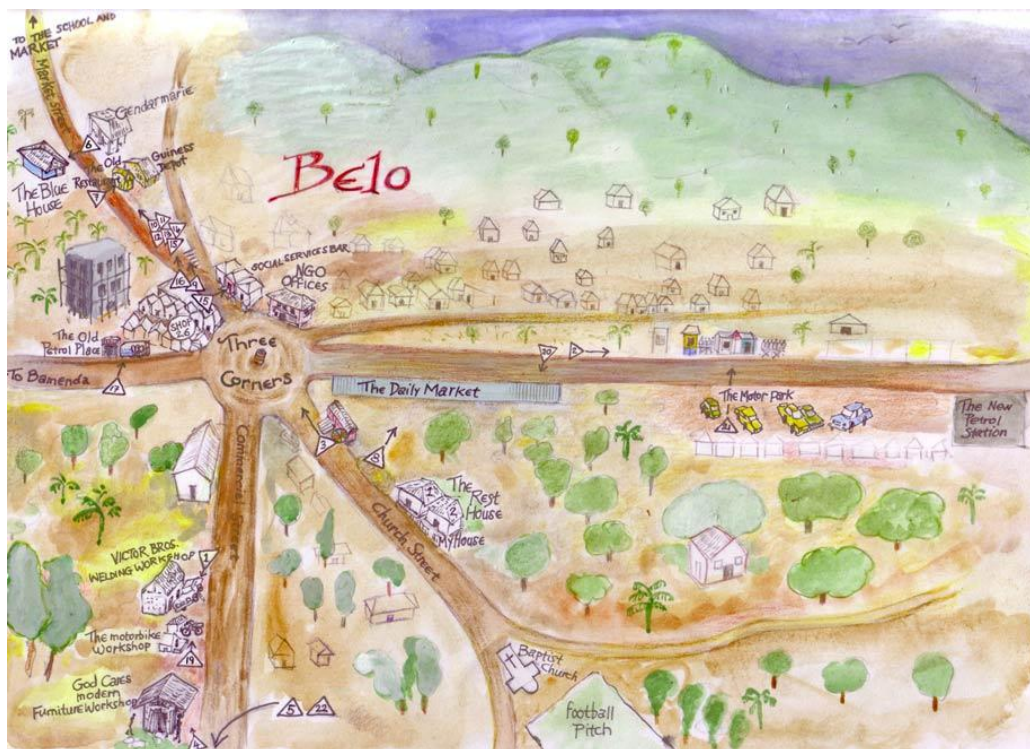
Images 2: Map of Belo



(Source: Belo Council Report, 2011)

Belo is small beautiful village and have been attracting visitors from around the globe, one of the tourists took the time to make a representative painting of the village (Image 3).

Images 3: Painting of Belo by Anthony Pilley



Source: <http://www.summerhouse-editions.com/beloeng.html>

4.2.1 Current Economic Situation

Like every region in the world, Belo has potentials and resources that could help them achieve a sustained economic growth. Some of these are listed on the table below:

Table 4: Main potentials and resources of the region

Potentials	Resources
Cold tropical climate with distinct varied micro-climate	High, medium, low altitude areas

Varied landscape features	Plateau areas (Ndawara), Mejung deep valley, Mbi Crater, Ijim Mountain Forest and Plan Life Sanctuary
Dark Volcanic soils and minerals	Granite and Basalt stone pits
Streams and rivers on hillsides	Mughom, Mufua and Mejang rivers
Varied vegetation	Montane/gallery forests, Savannah grass for grazing, eucalyptus plantations
Active dynamic youth population	Large Youth population
Local based development actors	Local NGOs (BERUDEP, MIFACIG), Belo Area Cooperative Association Ltd...
Urban and inter village markets and motor parks	Belo Market and motor park

(Source: SIBADEF's Report, 2011)

Most economic dynamics in these rural areas are only a reflection of Cameroon's overall economic performance. It should be noted that most rural decision makers do not have their voices heard at the higher level of national administration. When the Cameroonian economy is not healthy the consequences are even higher in its villages. Unemployment is higher, manufactured goods are much more expensive but yet there are strong income redistribution policies to alleviate the pain incurred by the rural poor.

4.3 The Rural Development Centre in Belo: RUDEC

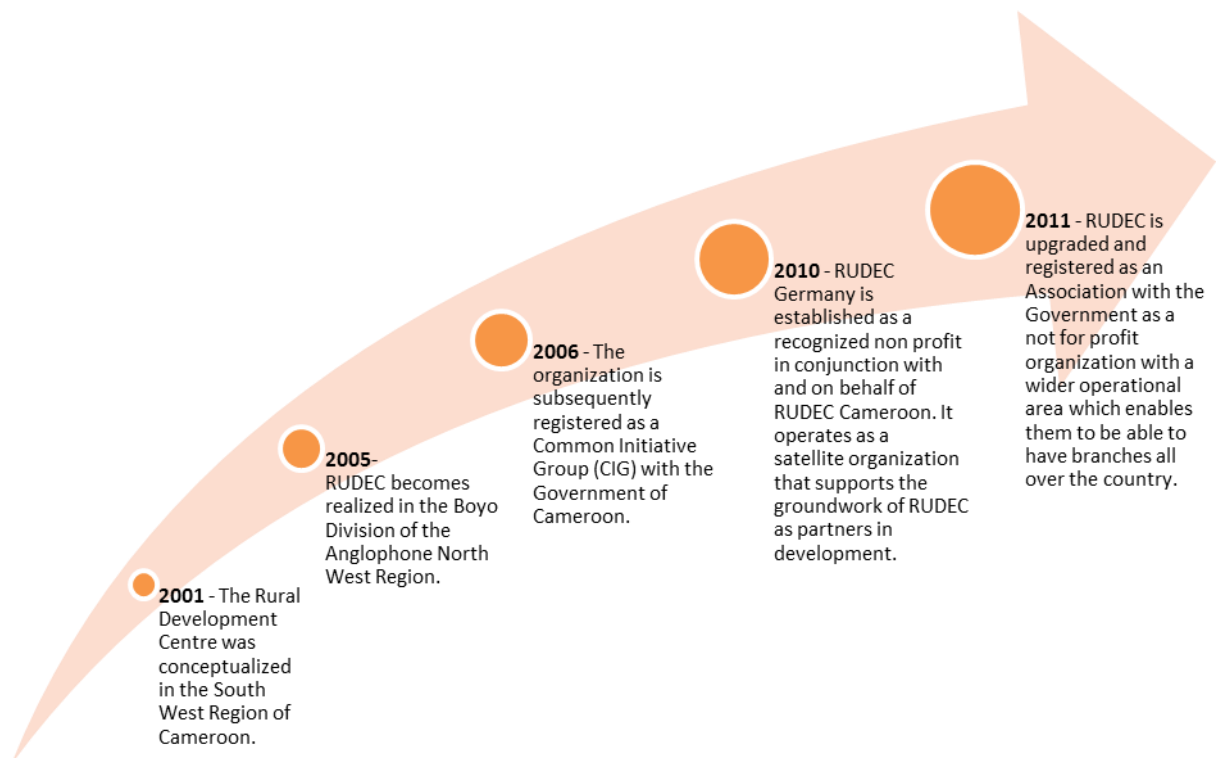
In the scope of this research, the Rural Development Centre in Belo served as an institutional example and it is important to give the reader an overview of why this Organization exists- its vision, mission and aims and the projects it has chosen to implement in the Case Study area.

4.3.1 Brief History

The vision of a Rural Development Centre (RUDEC) came to Chiamba Joshua Anjeah's mind in 2001 when he was based in the South-west region of Cameroon but only became a reality in the North-west region and was legally registered in 2006. Mr Chiamba saw the

need of suffering and vulnerable children in his community, the need to support women whose rights were not kept, and to focus on key environmental issues. He believed that a centre such as RUDEC could empower and benefit his local communities, and more especially the ones at the Belo village.

Figure 4: RUDEC's history



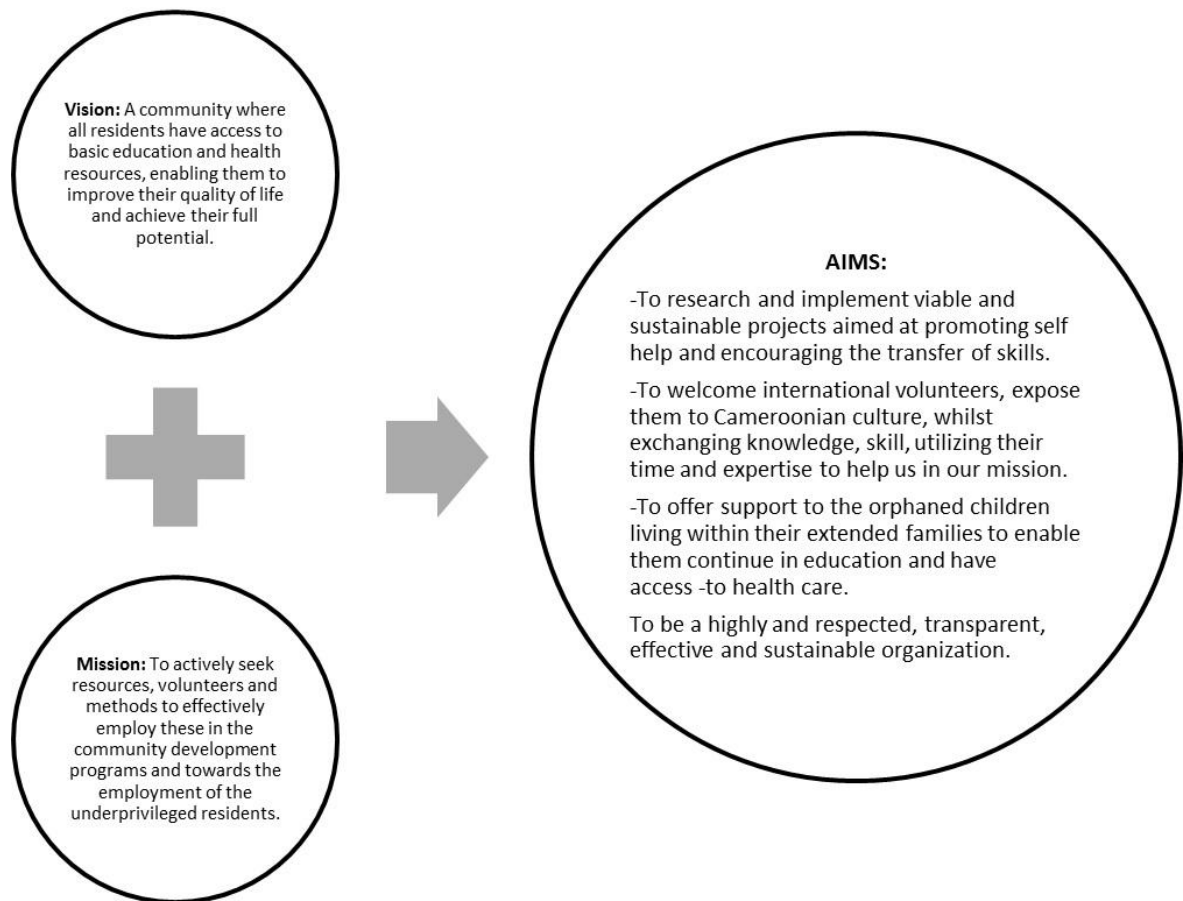
(Source: <http://www.rudec.org/about> ; Author's Illustration)

4.3.2 Main goals

RUDEC works to identify opportunities, locate resources and establish appropriate partnerships to provide solutions to communities. RUDEC operates a participatory strategy whereby communities identify local needs and consult RUDEC on solutions and strategies for addressing needs. RUDEC believes that local people know their community's best and success is greatest when they are empowered. It aims to serve the neediest members of the rural communities of Cameroon's Boyo Division through the creation of education, social

and economic empowerment projects.

Figure 5: RUDEC’s Vision, Mission and Aims



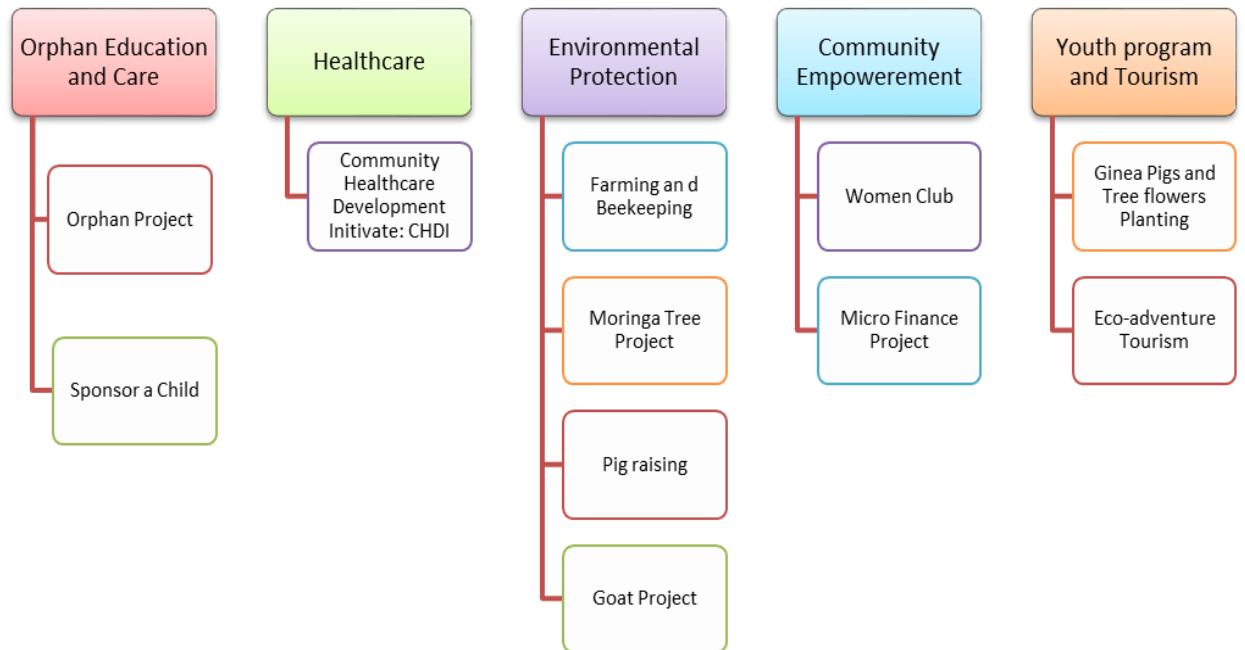
(Source: <http://www.rudec.org/about> ; Author’s Illustration)

4.3.3 Present ongoing projects

The projects currently monitored by RUDEC can be grouped in 5 main categories: Orphan education, Healthcare, Environmental protection, Community empowerment and Youth Program and Tourism. These main projects and their objectives are highlighted in the table

below.

Figure 6: RUDEC's ongoing projects



(Source: <http://www.rudec.org/about> ; Author's Illustration)

4.3.4 Financing Strategies

RUDEC's main source of funds is donations from registered volunteers, partners and individuals. The organization has been registered as a Non Governmental Organization since 2006. The balance sheet picture below is to give the reader a brief idea of the Organization's financial activities but doesn't necessarily reflect the Organization's current situation.

Images 4: Funding Strategy



RURAL DEVELOPMENT CENTER (RUDEC)
CONSOLIDATED STATEMENT OF FUND BALANCES AND EXPENSES
For the Fiscal Year October 2007 - September 2008
Amount in FRANCS CFA

FUND SOURCES

RUDEC FUND	64,000	
SPANISH DONORS FUND	46,004	
FRENCH DONORS FUND	150,200	
JOSHUA FUND	388,950	
BELO RURAL COUNCIL FUND	25,000	
VOLUNTEERS FUND	250,550	
FARMERS FUND	20,000	
OTHERS <i>(Please see attached working paper for details)</i>	809,100	
TOTAL FUNDS	1,753,804	1,753,804

EXPENSES

General Operating and Long Term Expenses (GOLTE)	(309,000)	
Bee Keeping Project Expenses (BKPE)	(48,050)	
Ecotourism Project Expenses (EPE)	(190,600)	
Environmental Protection Project Expense (EPPE)	(94,200)	
Animals for the Community Project Expenses (ACPE)	(197,850)	
Volunteer Teacher Program Expenses (VTPE)	(637,500)	
Help for Orphans and Destitute Children Program Expenses (HODCPE)	(261,604)	
TOTAL EXPENSES	(1,738,804)	(1,738,804)

TOTAL FUND BALANCES 15,000

Prepared by:

R. V. Rebong
 Finance Associate Volunteer

Noted by:

Chiamba Joshua Anyeah
 Founder and Chief Officer

(Source: <http://www.rudec.org/about> ; Author's Illustration)

4.4 Two International Rural Development Actors in Cameroon and their ongoing programmes in the North-west region

Besides RUDEC, there are other actors that are currently implementing rural development projects in North-Western Cameroon. The sections below give an overview of the projects implemented by IFAD and AFDB which are the biggest Organizations currently at work in the region as far as sustainable rural development is concerned.

4.4.1 The International Fund of Agricultural Development (IFAD)

Since 1981, IFAD has financed nine rural development programmes and projects in Cameroon. The IFAD intervention strategy in Cameroon (2007-2017) aimed at enhancing the conditions of rural poor people by focusing on the following objectives:

- *“Building the organizational capacity and bargaining power of poor rural people and their organizations;*
- *Achieving sustainable improvements in the prospects for income-generating on-farm and off-farm activities of poor rural people, particularly women and young people”.*

There are currently 2 projects implemented by IFAD in the North-west Cameroon and in other selected regions. The first project titled **Commodity Value Chain Development Support Project (PADFA)** aims to fight rising food prices. Its main goal is to reduce rural poverty and increase food security through the sustainable development and competitiveness of the rice and onion production sectors nationally and internationally. It intended to achieve these by improving conservation, processing and marketing of these products as well as build technical and organizational capabilities of rice and onion producers (IFAD, February 2012).

The second project partly implemented in the North-west region is **Rural Microfinance Development Support Project (PADMIR)**. Its goal is reduce the poverty of the target group through increased incomes and enhanced food security. The project goes in line with Cameroon’s microfinance policy. It will serve as a support mechanism to finance family farms in their efforts to improve agricultural productivity and diversify their livelihoods.

Table 5: Current IFAD projects in north-west Cameroon

	Commodity Value Chain Development Support Project (PADFA)	Rural Microfinance Development Support Project (PADMIR)
Total Cost	US\$24.3 million	US\$22.5 million
IFAD Loan	US\$19.2 million	\$13.73 million
Duration	2010-2018	2010-2016
Implementation Area	far-north, north and north-western and western regions	Central, far-north, northern, north-western and western regions
Directly benefiting	134,000 households	12,400 households

(Source: IFAD, 2012; Author's selection)

4.4.2 African Development Bank (AFDB)

The Bank's strategy for the 2010-2014 periods considered the lessons drawn from implementing the previous strategy. Its aim was to contribute to creating the enabling conditions for taking greater advantage of Cameroon's strengths and opportunities, in particular, by easing the constraints relating to weak governance and inadequate infrastructure. The main rural project currently approved and implemented by the African Development bank is **The Rural Infrastructure and Participatory Development Support Project, Phase II (Grassfield II)**. This project's purpose is to help improve agricultural production and the income of the beneficiary communities by creating rural infrastructure and building the capacity of rural actors. Added to that, the project will help to build the capacity of cooperatives, agricultural professional associations and regional

and local technical administrations. *“The expected results are an increase agricultural production by about 37,000 tonnes in the intervention area. The project economic rate of return is a satisfactory 19.3% with a net present value of CFAF 15.745 billion. The beneficiaries will participate through the planning, implementation and management of different activities”* (OSAN Department, 2013).

5. FINDING AND RESULTS

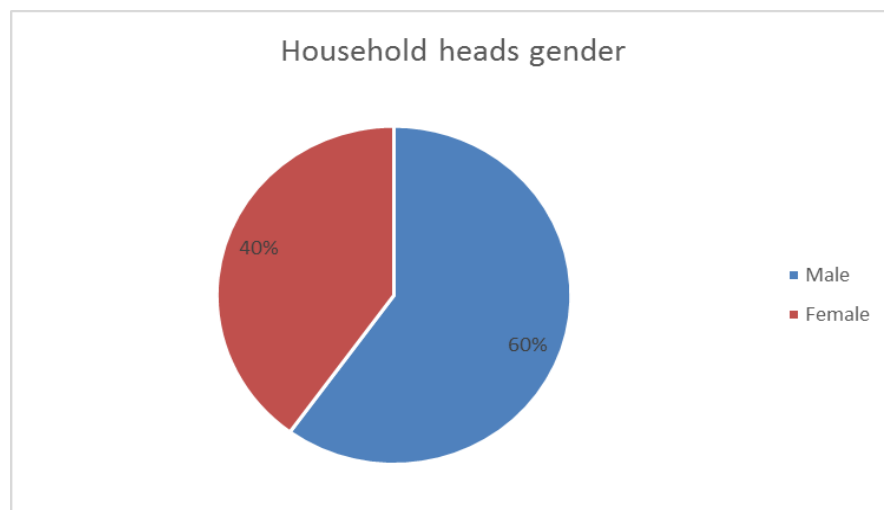
5.1 Belo Community Needs Assessment results

Before delving into what would determine the sustainability of a project in the Belo context, it was important to seek to understand the Community itself. A questionnaire research was conducted with the purpose of profiling the Belo Community, and identifying their main needs.

5.1.1 Belo Community Profile

In the context of this research, the respondents revealed a fair rate of gender diversity. The sample can help us have an idea of the demographic structure of the Belo village. 40% of the Head of Households or village main decision makers were female and 60% male as illustrated on graph below.

Graph 1: Gender Structure of Belo's Household Heads

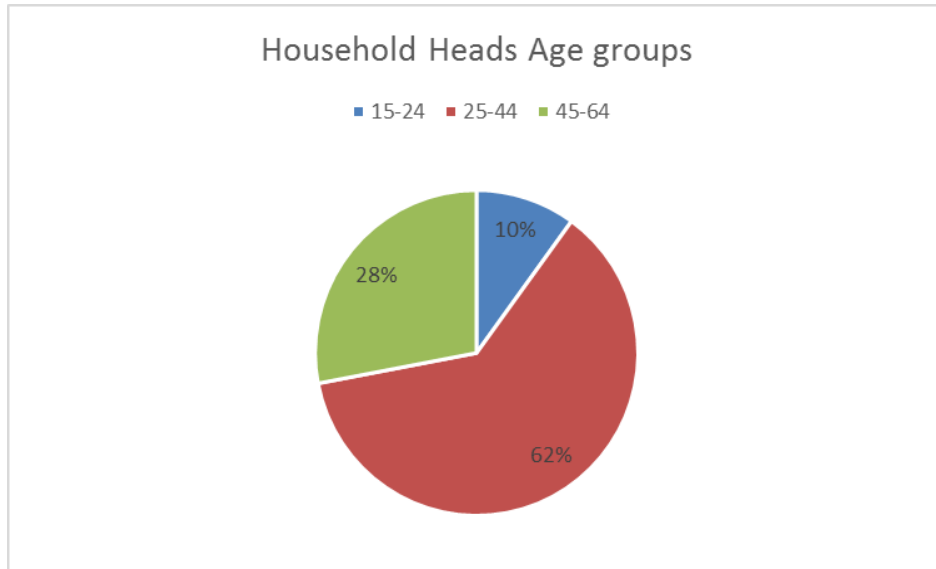


(Source: Author)

It was also important to have an estimate of the village's household heads' age group and the questionnaire response revealed that up to 62 % of the population would be within the 25-44 age range. The population's decision makers are majorly made up of relatively young people and also have 28 % of household heads that fall within 45-64 age range and

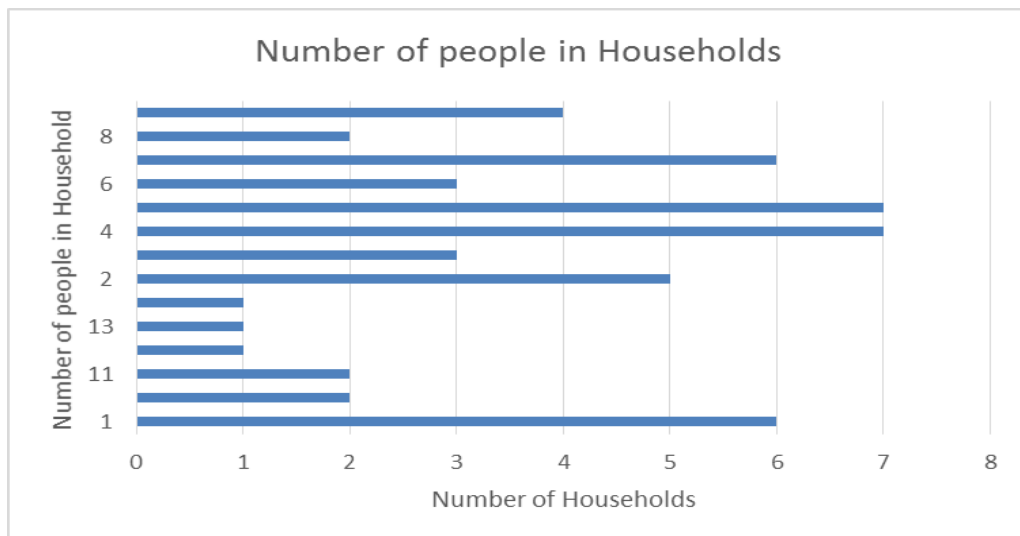
10 % that are even much younger within the 15-24 age range. This is a strong asset for Belo, people are sustainability enablers and it is strength to have a young and healthy people in any community.

Graph 2: Household Heads age groups



(Source: Author)

Graph 3: Number of people living in Households



(Source: Author)

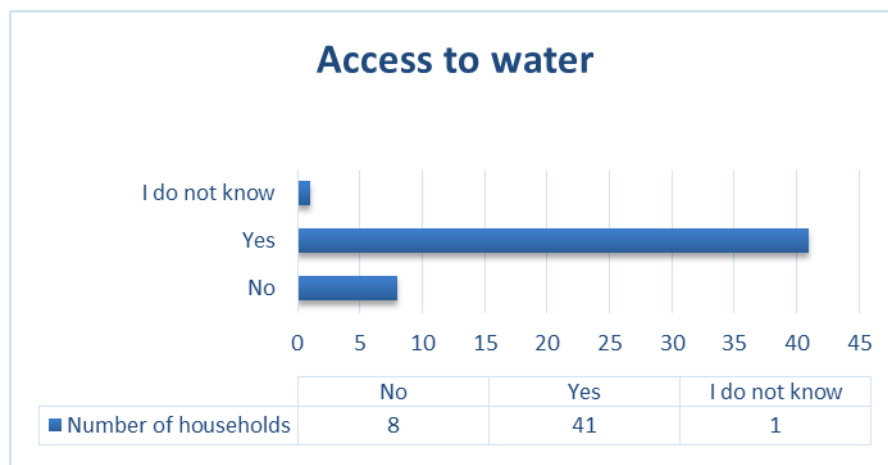
According to the graph above, Belo households have an average of 7.5 people living under their roofs which is a very high number providing the low level of incomes and the food insecurity threats the villages is encountering.

5.1.2 Households' primary needs

The Primary needs that the authors sought to find were categorised into 3 groups namely water, food and shelter.

5.1.2.1 Wash

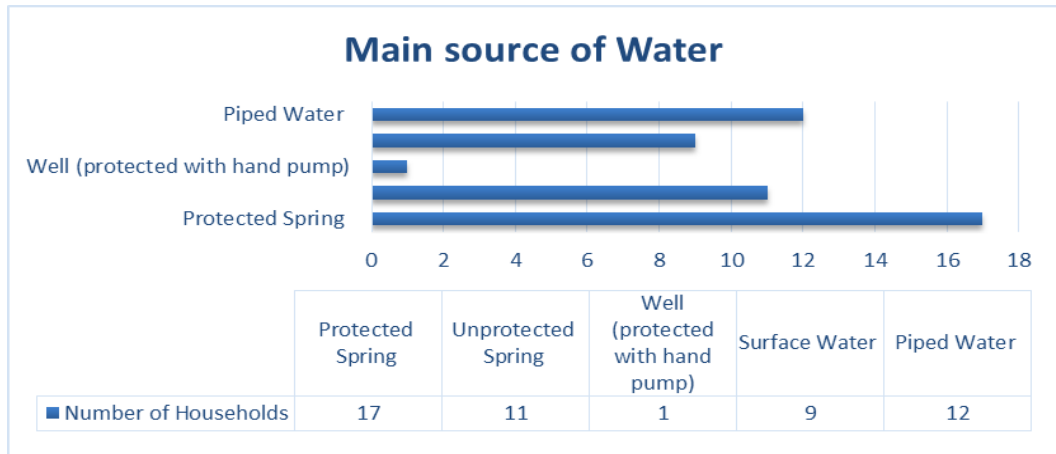
Graph 4: Access to water



(Source: Author)

In Belo, up to 82 % of the sampled population reported to have access to water and this may prompt us to a fast conclusion but as far as sustainability is concerned, it is important to question the quality of the water accessed and its maintenance.

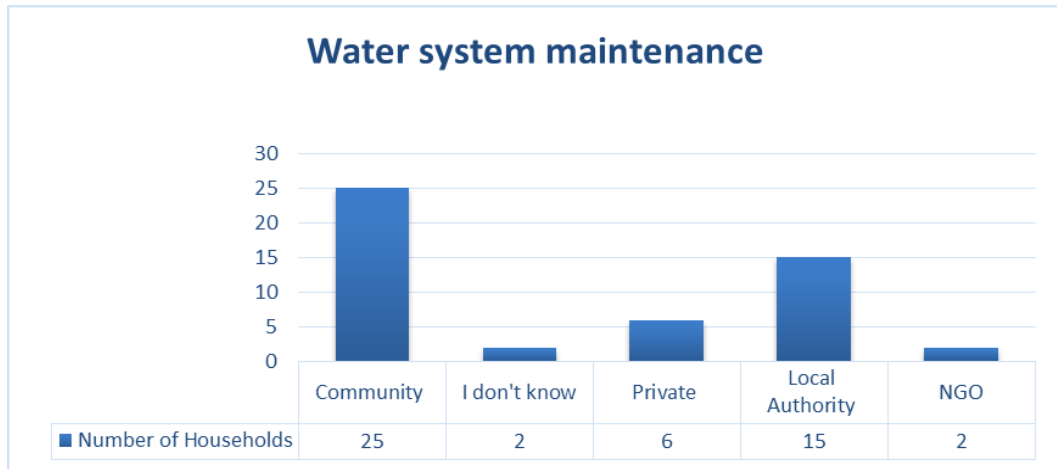
Graph 5: Main source of water



(Source: Author)

Through this graph we see the water used by Belo residents mainly come from protected strings, unprotected spring, piped water and surface water. This report is enough to question the safety of the water accessed in the village and if the water system is not improved the Community health will be endangered. The findings also revealed that up to 50% of the water system is maintained and operated by the Community not by relevant professionals. Up to 22 % of the sampled population reported to have had darrhea incident in the past 2 weeks. It is also important to note that 74 % of the population pay to have access to water and it is paid for even though it is mainly derived from natural protected or unprotected non treated water.

Graph 6: Water system maintenance

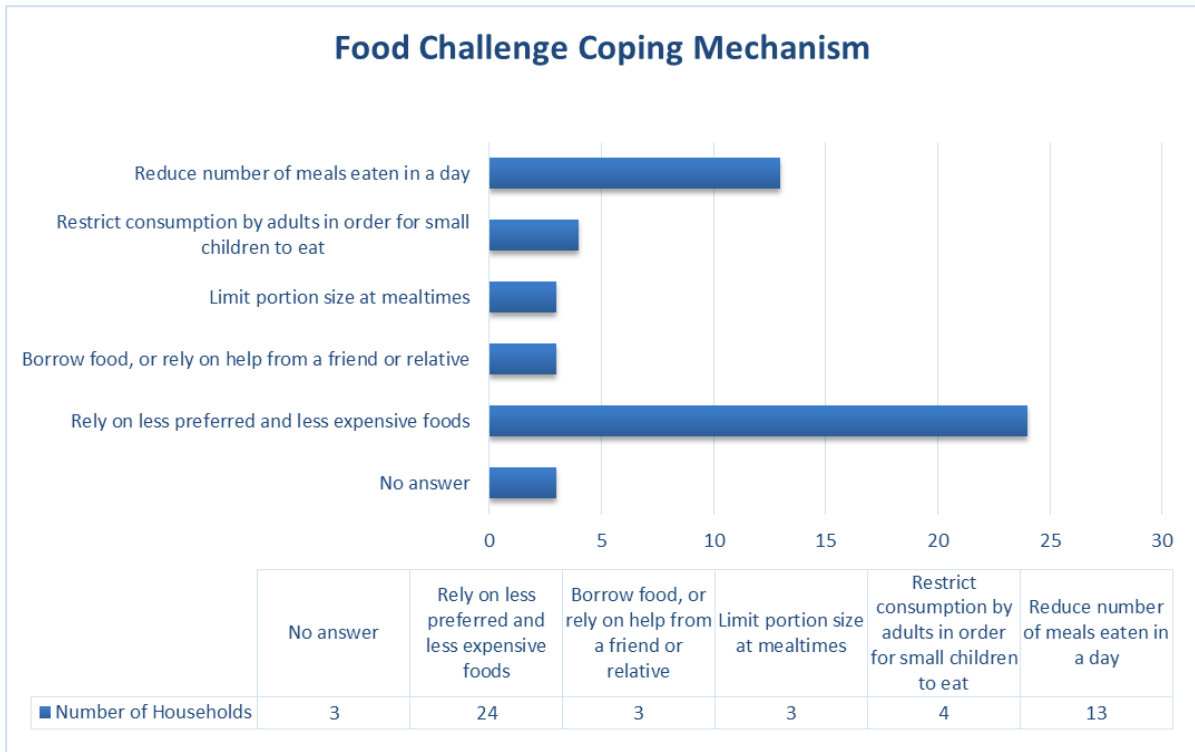


(Source: Author)

5.1.2.2 Food

The findings at first sight reveals that food is not an alarming issue in Belo, the Households are able to access from the local market even though in smaller portion portions or in lesser quality than necessary. These communities are relatively poor compared to those living in urban areas. In their food challenge the community has come up with coping mechanisms described on the graphs below:

Graph 7: Food Challenge Coping Mechanism

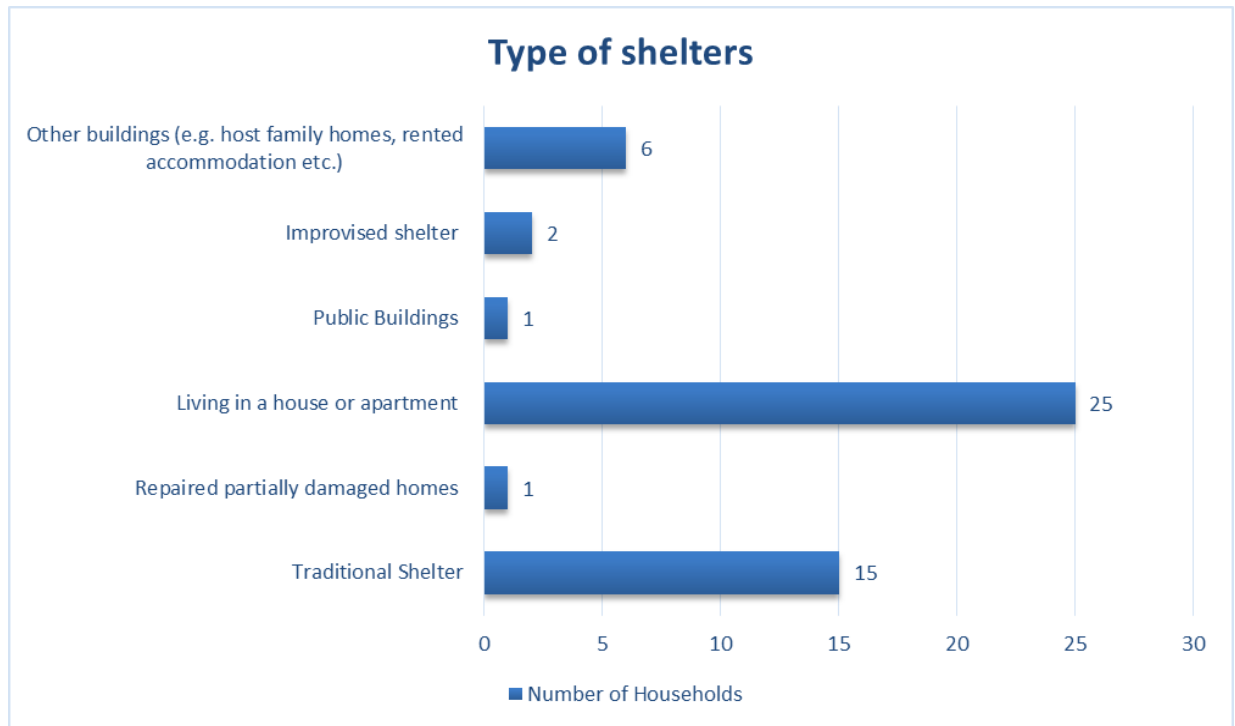


(Source: Author)

To cope with food challenges most households rely on less preferred or less expensive food and reduce a number of meals eaten in a day. The village is at the verge of food insecurity which in this case is caused by insufficient purchasing power: low or no income available as reported by the Belo residents.

5.1.2.3 Shelter

Graph 8: Type of Shelters



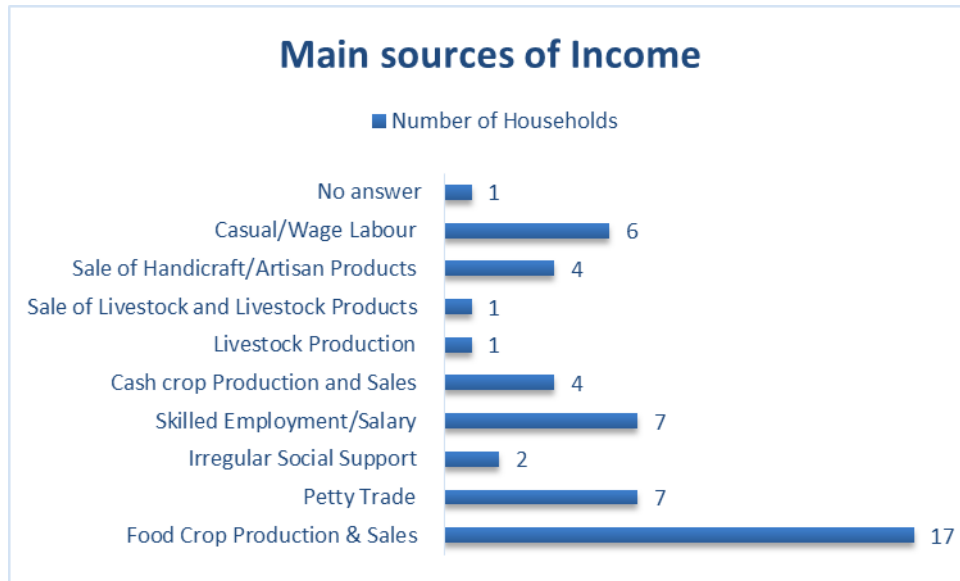
(Source: Author)

According to findings, half of Belo residents live in a houses or apartments, which in average are not of very good quality in Cameroon as a whole. 30% live in a traditional shelter which is often locally made out of red mud. If the Belo Community will one day attain Sustainability there is still much that needs to be done because the quality of shelter people live in do matter a lot and will determine the community's ability to cope with negative environmental shocks. Shelters that are not made properly will hardly stand natural disaster or will be totally torn out with time.

5.1.3 Income and Health

The households of Belo mainly derive their income from food crop production/sales, casual wage labour and skilled employment salaries.

Graph 9: Main source of Income



(Source: Author)

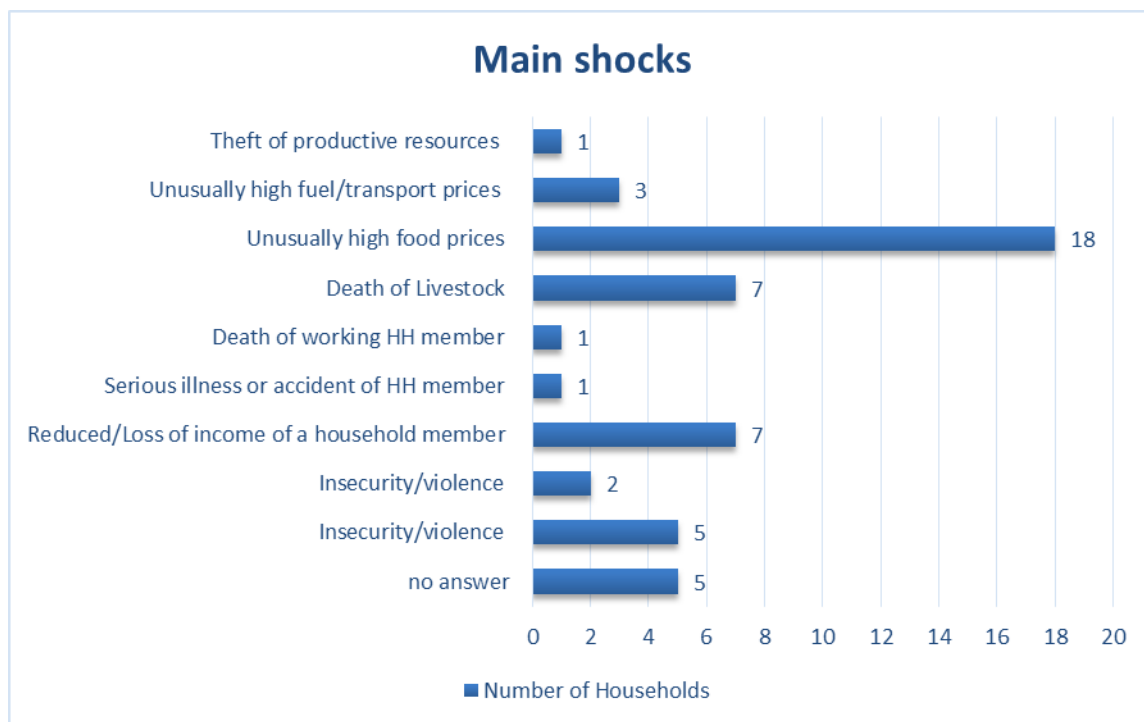
With Cameroon being a sub-Saharan country, with mainly a tropical dry and wet climate, malaria still remains a health threat to the community. The findings revealed that up to 42% of Households have had a case of malaria in the past 2 weeks. The Households mainly receive Health Education through the radio and TV.

5.1.4 Access to Protection and Information

According to the author's findings, security doesn't seem to be an issue in the village and up to 84 % of the households interviewed feel safe in their community even though there is a minority that reported having been victims of harassment, robbery, gender based violence, combats or clashes between armed groups, arrests and detention, domestic violence, maltreatment of the population (e.g. extortion, forced labour, physical abuse, torture). It is also important to note that some of these issues are sensitive and in a closed culture such as that of the Anglophone Cameroon, many people will prefer not to say what they are truly going through. The main security mechanisms in place are the police and the national armed forces.

The Households also showed some level of vulnerability towards identified shocks that threaten the Community's welfare.

Graph 10: Main Shocks



(Source: Author)

The people of Belo reported to mainly access information through Radio and Television. Radio and TVs seemed to be available in most households even though there is still a major challenge of insufficient light energy or electrical energy in the village which is a drawback to the people's awareness. When asked about the most important information to them, the respondents pointed to information on communication with family members, information on relief operations (food, water provision, etc.) and Health advice and treatment. From the graph above, it is seen that most households feel threatened by unusual high food prices, death of livestock, reduced/loss of income of a family member and insecurity violence.

To conclude this session on need assessment what the respondents identified as the most urgent needs were temporary learning facilities, employment, animal support, medical support, sanitation and drinking water.

5.2 IFAD Sustainability dimensions applied to the Belo context

There are couple of organizations that are implementing rural development projects in Belo village. But the focus of this research just as mentioned above has been the North-Cameroon based Rural Development Centre- RUDEC. The author interviewed its founder and staff in order to assess the organization's institutional sustainability based on some indicators proposed by IFAD. To access RUDEC's institutional sustainability the author considered Institutional and Risk Analysis, Collaboration, resources evolvement over time, access to recurrent funding and project priorities.

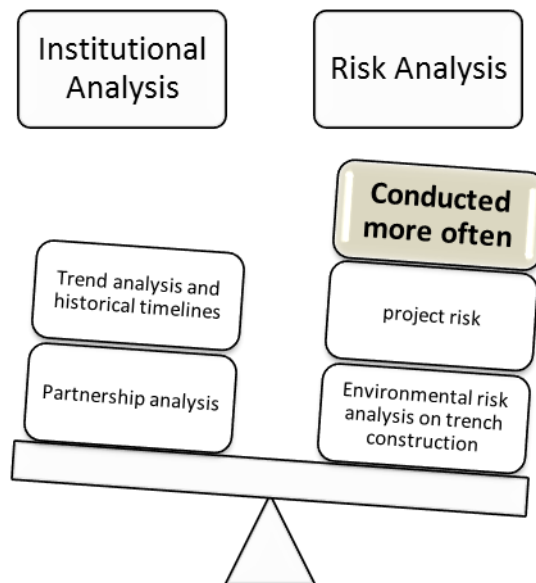
5.2.1 Institutional Sustainability

This section is describing RUDEC's state regarding institutional sustainability in the light of the main indicators that were identified by IFAD which include Institutional and Risk Analysis, Collaboration among others.

5.2.1.1 Institutional and Risk Analysis

The author interviewed the founder and some members of the staff of RUDEC to assess institutional sustainability based on some indicators determined by IFAD. The result of this interview were amazingly positive and revealed that the Organization has been using some of the tools recommended by IFAD in order to achieve institutional sustainability to an extent despite its limited resources. Some of the tools from IFAD are Institutional Analysis and Risk Analysis shown on the graph below.

Figure 7: Institutional Analysis and Risk Analysis tools conducted by RUDEC



(Source: Author)

RUDEC and its staff use Institutional Analytical tools such as Trend analysis and historical timelines and Partnership analysis but not quite often. This is important because it is only by keeping track of past failures or successes that an organization can get better over time. In the industry of Non-Profit organizations, healthy partnership and no competition is necessary for achieving sustainability. If such organizations within a community is competition rather than cooperating with each other, such a situation will cause great harm to the community they ought to serve. RUDEC also uses Risk Analytical tools such as Environmental Risk Analysis of trench construction and project risks analysis. Contrarily to Institutional Analysis, Risk Analysis is conducted very often by the Organization and both are essential to a good project design and Monitoring and Evaluation.

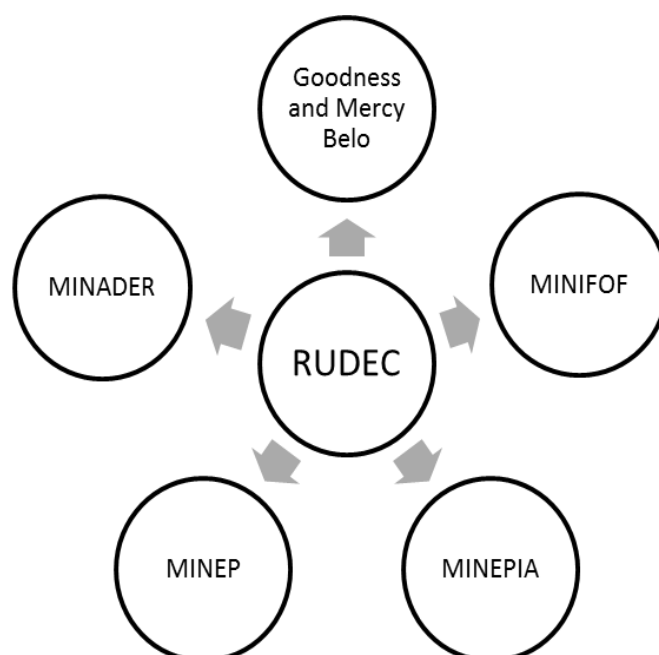
Reports from the interviews also showed that RUDEC has been conducting Follow-up, continued support and supervision of newly established project teams; its vision is known and shared among all its members. The rules and norms of the group are known by everyone and sanctions are enforced when needed. Regular meetings are held, and members can use their skills to conduct meetings and solve conflicts. Women feel more confident to participate in public activities. These aspects are relevant and necessary as far as Project Implementation and Supervision are concerned. Additionally, there is growth of the common

fund through member participation in savings and credit activities; RUDEC reported to have the capacity to manage savings, credit disbursement and credit repayment programmes. All these aspects help to reveal RUDEC scores a very good mark in aspect of Institutional Sustainability.

5.2.1.2 Collaboration

According to IFAD, one of the ways to assess whether a non-governmental institution is sustainable or not is to see if this institution has a healthy relationship with institutions established by the local authorities. Such collaboration is meant to reduce inconsistency of the projects implementation and foster unity and harmony for greater results. RUDEC is in collaboration with some local institutions as mentioned on the figure below.

Figure 8: Local Entities collaborating with RUDEC



(Source: Author)

RUDEC mainly collaborates with the organizations above mentioned among others. The founder and his staff affirmed they are implementing projects together and consult each other on environmental protection issues.

5.2.1.3 RUDEC's Priority assessment

The table below show the projects that are currently implemented by RUDEC with its 2 projects identified as being the most important highlighted in grey. Mr Chiamba, the founder, mentioned that Orphan Education and Care and Farming and Beekeeping were the Organization's priority the most vital to his community's wealth fare and gave a much detailed overview of these two projects.

Table 6: Two most important project according to RUDEC

1= Orphan Education and Care	6= Goat Project
2=Sponsor a Child	7= RUDEC Community Empowerment Women Club
3=Programme for Youth : Guinea Pigs and Tree and Flowers Planting	8= Micro Finance project
4=Community Healthcare Development Initiative (CHDI)	9= Pig Raising
5=Farming and Beekeeping	10= Other:

(Source: Author)

Below, are the reasons given by Mr Chiamba, the founder, to justify why the above- highlighted projects have been identified as been the most important.

Table 7: Orphan Education and Care, Farming and Beekeeping justified importance

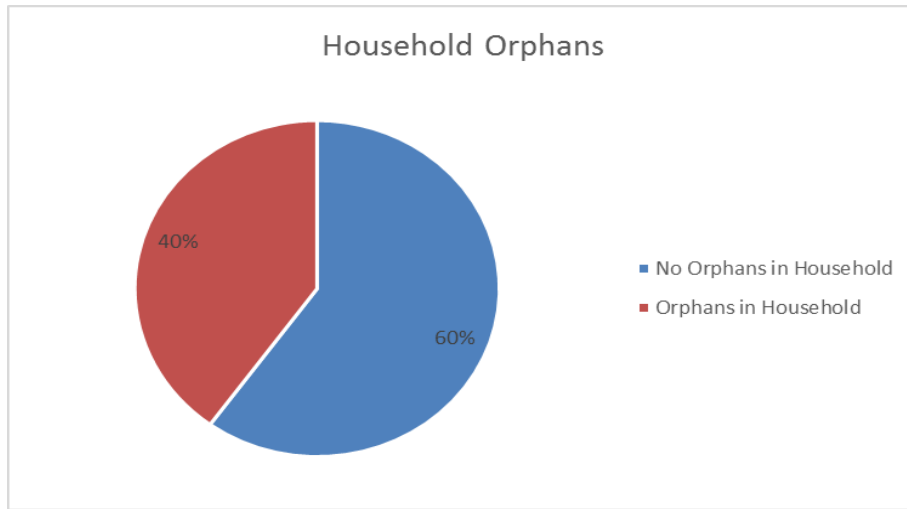
	Orphan Education and Care	Farming and Beekeeping
Goal	Educate children to provide them with self-employment	Improve Farming through Organic Farming and foster Environmental Protection
Funding	Donations from volunteers, families and volunteer fees.	International donations
Community's Eagerness regarding the project	Very eager	Very eager
Risks Involved	Insufficient funds and children running away from schools and precocious pregnancies.	Bees abscond easily and Climate change affect crops and harvest
Contribution of National and Sub national Institutions	Moral and Technical Support	Moral and Technical Support
Project Team evolvment in the past 12 months	Increased Much	Increased Much

(Source: Author)

The Household questionnaire results revealed an alarming percentage of orphans in the community. Almost half (40%) of the households interviewed had orphans living under their roofs: see Graph 11.

The priority laid on the first project is justified seeing that findings revealed that almost half households reported to have orphans under their roofs.

Graph 11: Household Orphans

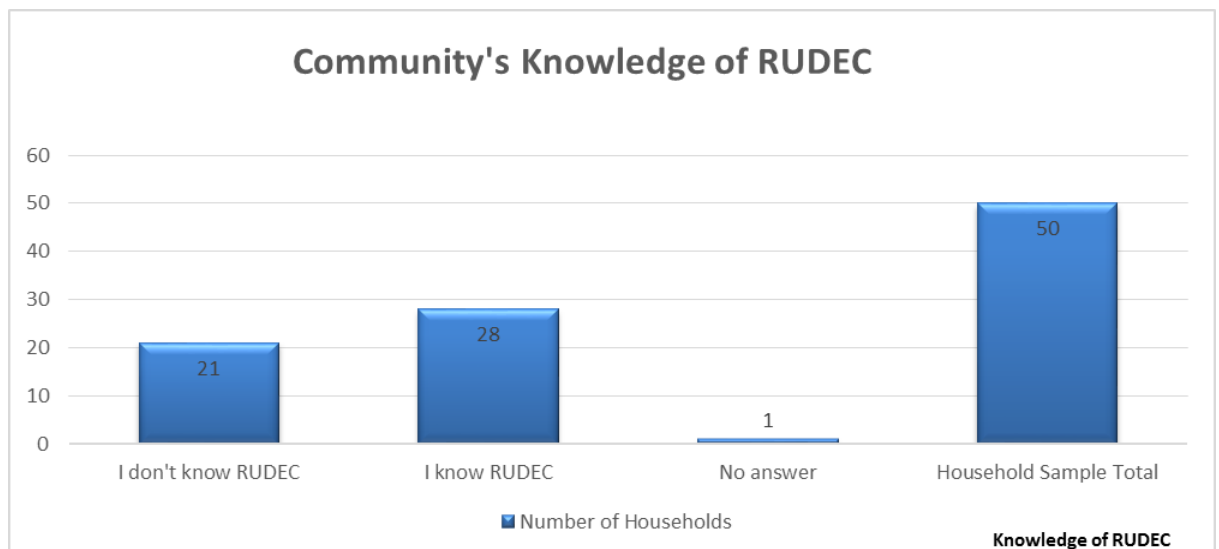


(Source: Author)

5.2.1.4 The community's participation in RUDEC's goal

Among the 50 households interviewed through the questionnaire research, 28 household's heads out of 50 affirmed they had knowledge of the Organization as shown on the graph below.

Graph 12: The Community's Knowledge of RUDEC

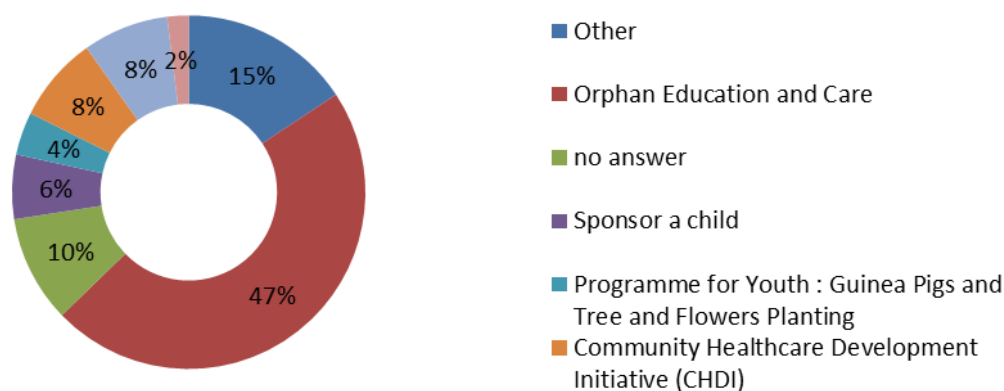


(Source: Author)

Also 56 % of Belo’s sampled population indicated to have knowledge of RUDEC and some of them even gave a quite accurate description of the organization. Some described RUDEC as ‘an NGO working with orphans, environmental protection, ecotourism, supporting community projects’, ‘ NGO that helps the poor and needy, produce honey, assist orphans’, that ‘ take care of orphans’ or ‘that assists orphans’. The redundant opinion of the heads of households regarding RUDEC was related to the Organization’s commitment to help orphans. This is very important in terms of Institutional sustainability because it is important that any Rural Organization implements projects that reflect their community true needs. Notice in table 6 that RUDEC mentioned that the Orphans Education and Care as being the most important project for its community and in this way shared the opinion of some village Household Heads. One of the major challenges in Belo is the high percentages of orphans in Households as revealed by the sample of 50 homes.

Graph 13: Most Important Projects according to the Community

Most Useful Projects according to the heads of Households



(Source: Author)

Many household heads showed an interest in volunteering with RUDEC although these pointed out lack of time and money to help. Some were willing to offer help to teach, buy books, provide necessary information if need arise, moral support, and some respondents

affirmed in their own words *'I love to participate in community development'*, *'help orphans with donations and sustainable farming'* and an individual was even willing to be a member of RUDEC. The main constraints the households heads pointed out for their non-participation was lack of time, busyness with their job and lack of money

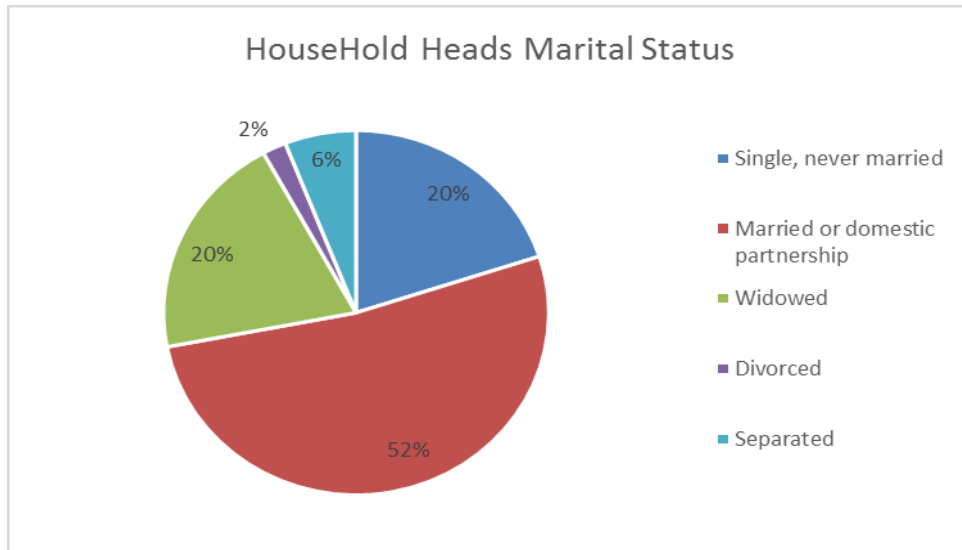
5.2.2 Household and Community Resilience

To answer the question whether Belo's Community or households are resilient and can therefore cope with unexpected societal, environmental and economic shocks, it was important to assess their propensity to save, the ability of household heads to take decisions with their spouses and their investment in quality. Their attitude towards this was to help us understand whether the future is taught of or some major changes that lie far beyond the control of the village's residents are anticipated. The Community Resilience indicators taken into account in this research were Value placed on Education, Joined decision with spouse and propensity to save. According to IFAD, some of the ways to assess a Community and Household resilience is by determining the value people place on education, their propensity to save and whether they equally make decisions with their spouses.

5.2.2.1 Decision Making in Household

As seen on the graphs below, 52 % of the Household heads in Belo are either married or living in a domestic partnership which make the question of shared decision making in households relevant.

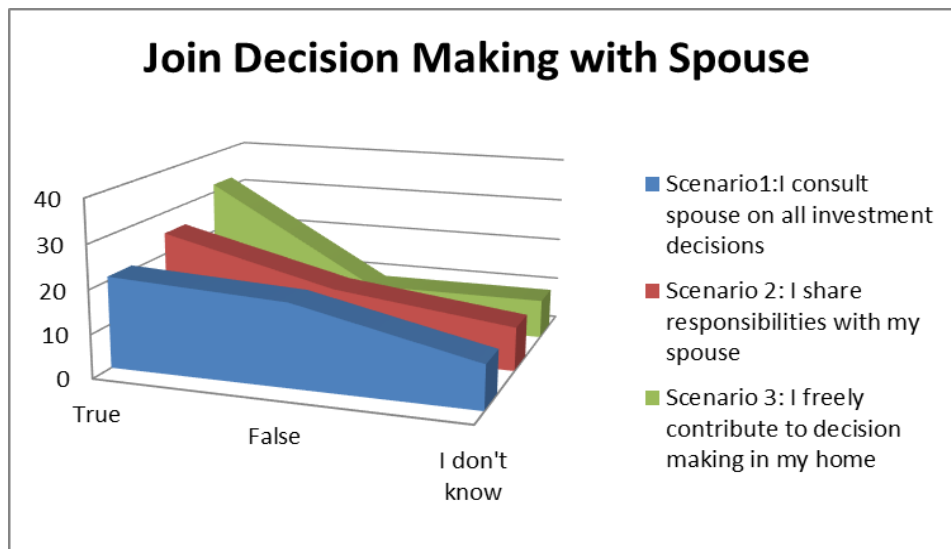
Graph 14: Household Heads Marital Status



(Source: Author)

This indicates 32 out of 50 household heads affirmed to freely contribute to decision making in their homes and 50% affirmed to share responsibilities with their spouses and 19 out of 50 do not consult their spouses on all investment decisions.

Graph 15: Join Decision with Spouse

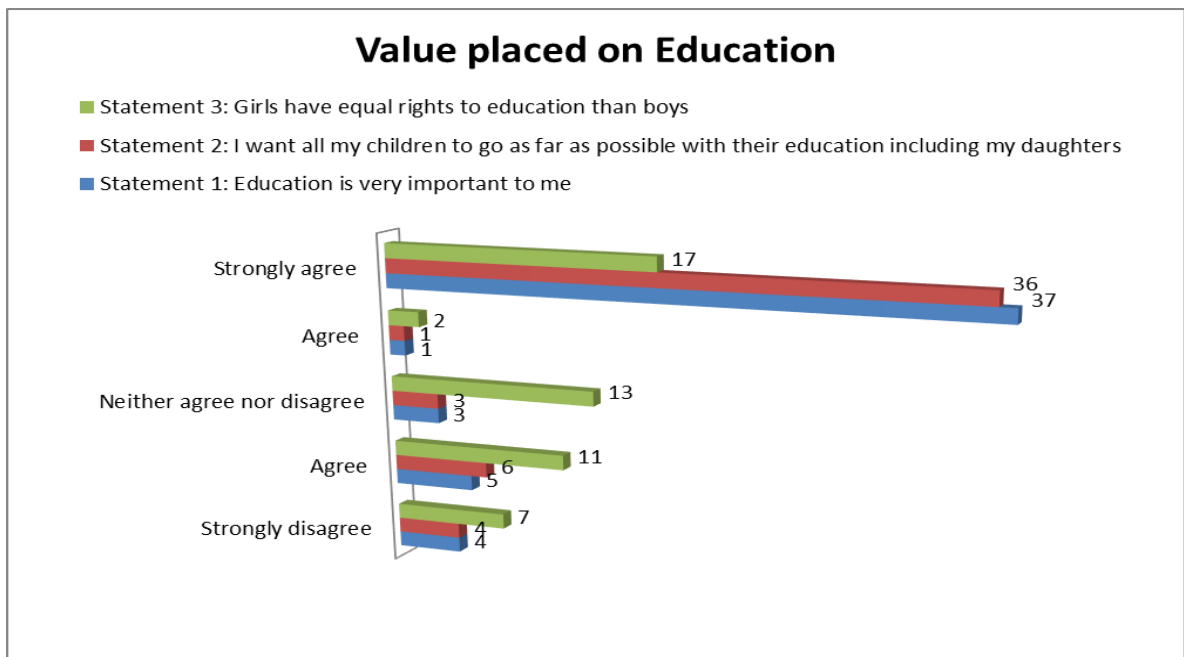


(Source: Author)

5.2.2.2 Value placed on Education

The graph below describes the value the Belo Household heads place on value by determining the extent, to which education is important to them, how far they desire their children to be educated including their daughters and their view on gender equality.

Graph 16: Value placed on Education



(Source: Author)

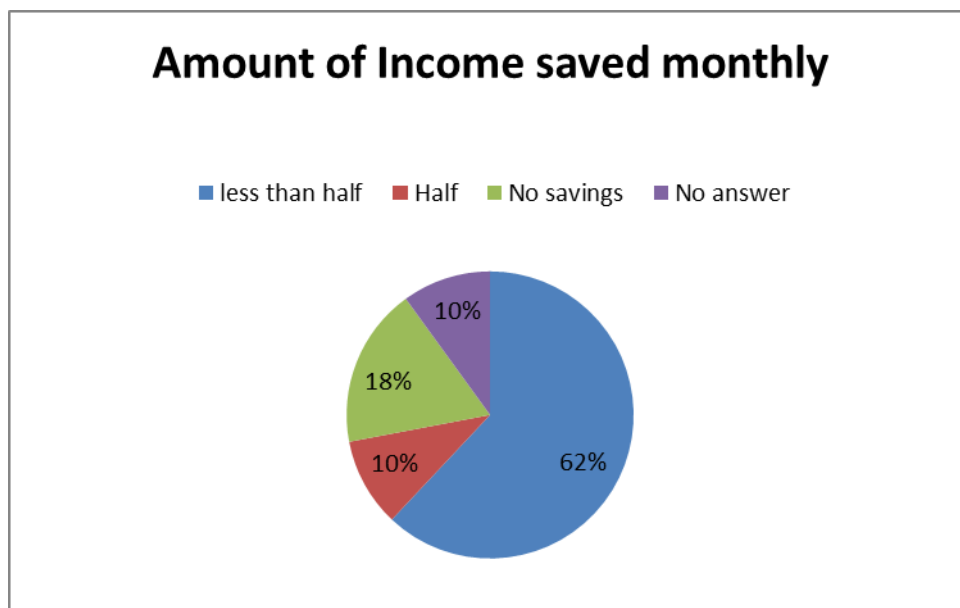
Most household heads strongly agreed to the importance of education, desired to see their children go as far as possible with school including their daughter and the majority also affirmed girls have equal right to education with boys. But there is a minority of the population that did not necessarily agree with the aforementioned statements and this minority mostly disagreed to equal rights to education being attributed to boys and girls. Providing healthy educational system should be one of the main goals of any economic policies. An educated community will achieve development in a long run because it would acquire a strong economic asset and human capital. The key to development of any rural communities are its people. The more equipped these are with knowledge, relevant information, skills, the less they will rely on temporary donations and the better they will be. This is to

reaffirm that the existing community assets and structures should be prioritized over the existence of new ones.

5.2.2.3 Propensity to save

Most household breadwinners (62%) reported to save less than half of their income in a month. And these savings were majorly either made monthly (42%) or rarely (20%).

Graph 17: Amount of income saved monthly

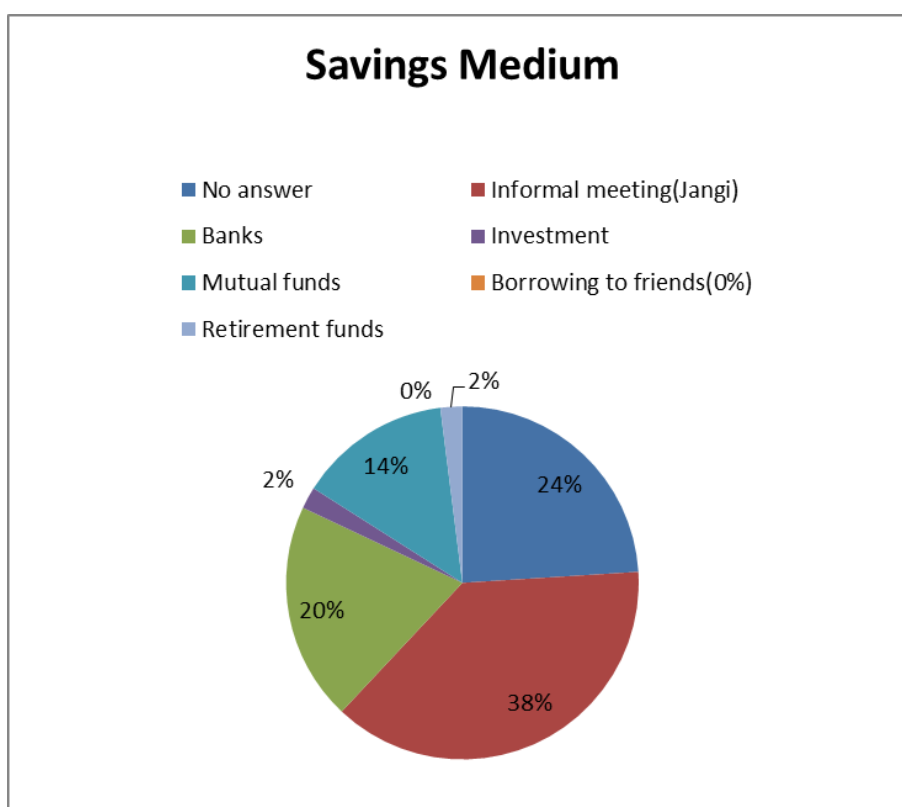


(Source: Author)

Most household save less than half from their income which is acceptable because income is mainly made for consumption to keep the economy moving not only savings. It is not a surprise that most savings are done through informal meeting which is locally and nationally known in Cameroon as 'Jangi'. Jangi, is not classified as a formal financial institution but does contribute a lot more than what people think in economic development in Cameroon. Jangi consist of monthly or periodical meetings of groups of people which are in most cases familiar to each other. The meeting can engage married women from the same tribe or men from the same region or the same job. These men or women therefore commit to

contribute a fixed amount of money every month and each person has a month to collect the whole sum of the money. For example, if in a group of 50 people, each contribute 25000 CZK- 1047 CZK approx., the person chosen to collect the sum of the money in a given month will receive 1.250.000 CFA- 52.398 CZK approx., an amount which can be of great help to start a business especially in Belo where the standard of living is not so high.

Graph 18: Savings Medium

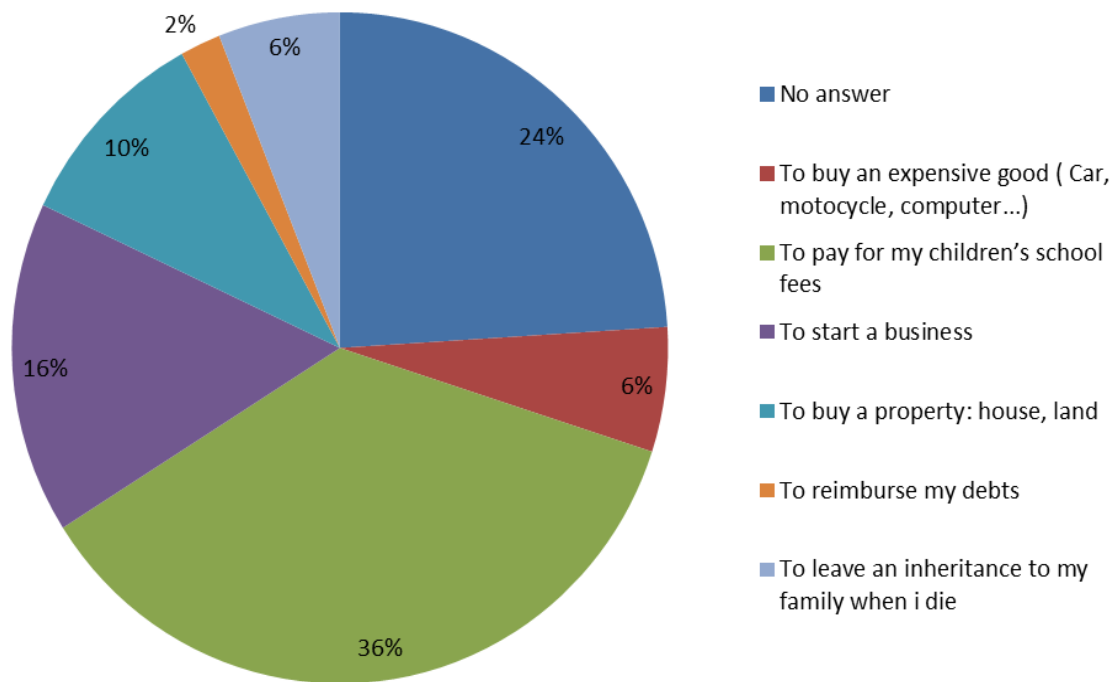


(Source: Author)

The main reasons why the people of Belo save or engage in such information savings meeting are mostly to pay their children school fees (36%), buy an expensive good such as a motorcycle, car or agricultural utensils (24%) and to start a business (16%). There is also a minority who save to reimburse their debt (2%) and to leave an inheritance to their children (6%).

Graph 19: Reason for savings

Reason for savings



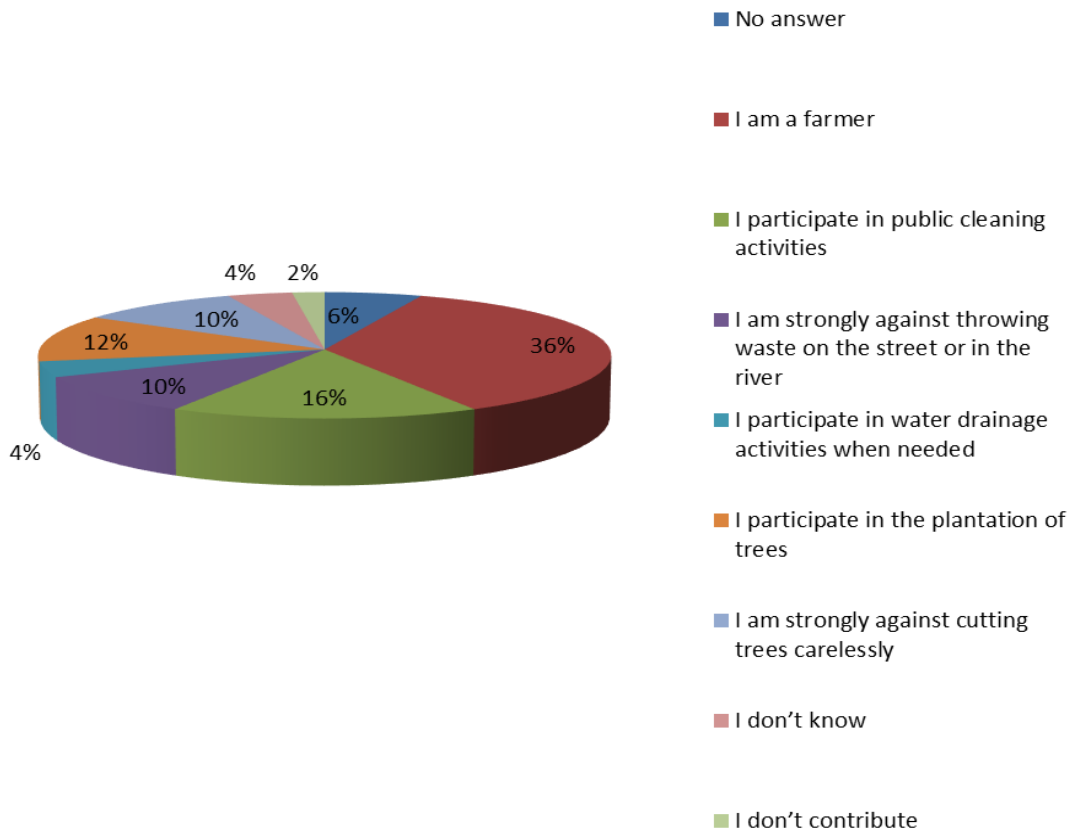
(Source: Author)

5.2.3 Environmental Sustainability

As mentioned before, an environmentally sustainable system must avoid overexploitation of renewable resources and preserve biodiversity. This diversity is key to ecologically resilient systems that can respond effectively to climatic disturbances. Conservation of natural capital is an essential aspect of this dimension. It also important to note the residents of a community are the main people responsible to maintain the environment surrounding them. The preservation of the environment is not external to the Belo people's desire for their community as we will later notice in the structural change- PRA section of this paper.

Graph 20: Contribution to Environmental Maintenance

Contribution to Environmental Maintenance



(Source: Author)

According to findings, 36 % of Belo population are farmers and in this way contribute to the maintenance of their fertile soils, 16% participate in public cleaning activities, 10 % are against cutting trees carelessly and another 10 % against throwing waste in on the street or in the river. Also 4% participate in water drainage when needed and 12 % in the plantation of trees and it is also important to note 2% of the HH who sincerely admitted they don't contribute to environmental maintenance and another 4% who simply don't know what it is all about.

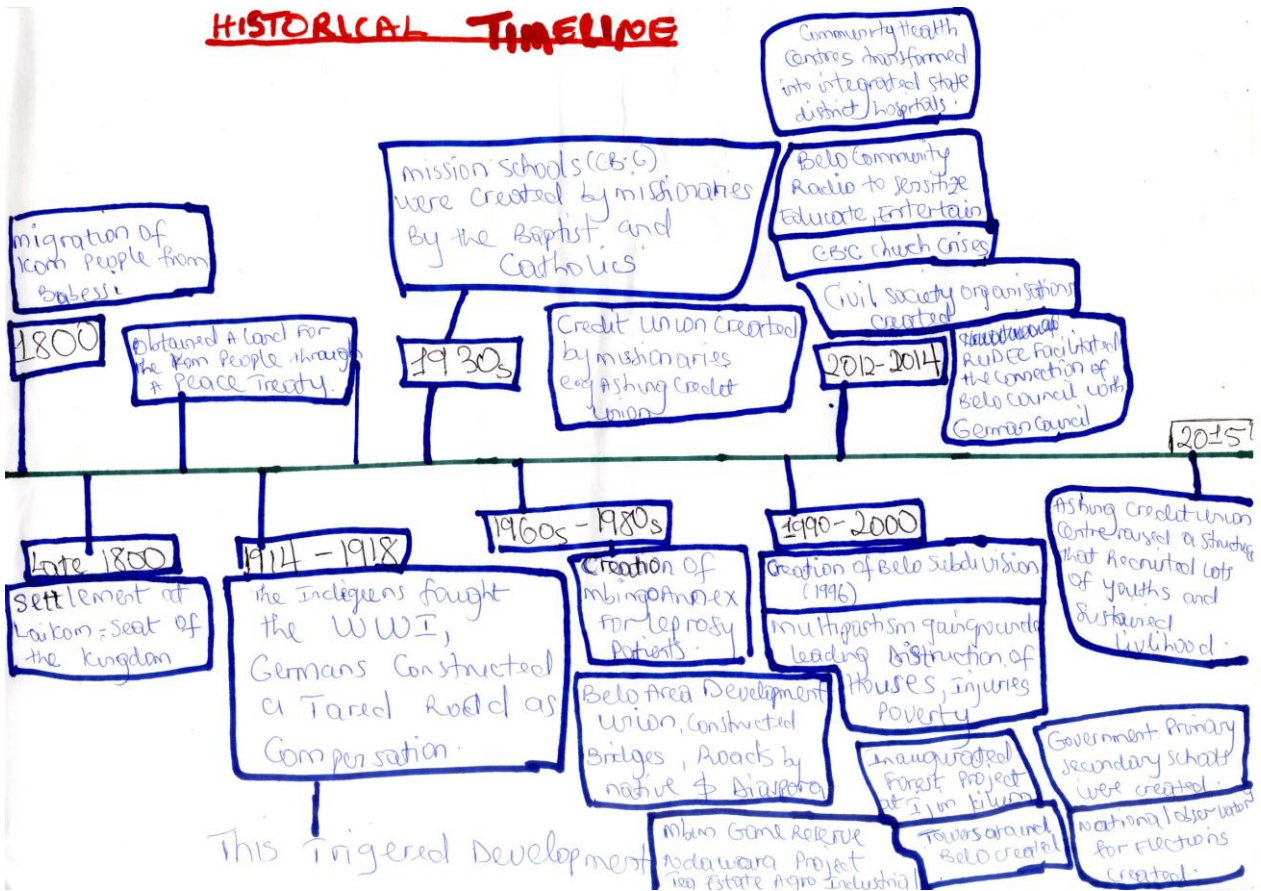
5.2.4 Structural change: Participatory Rural appraisal.

In order to assess the level of structural change in Belo, the author used Participatory Rural Appraisal as the a core method. As mentioned above four main PRA tools were selected by the author in order to collect the people's opinion or view about their village, the problems they identified as being the most important and the solutions they are suggesting in order for a sustainable development to be achieved. All tools were designed and illustrated by a group of 6 residents in Belo who participated in the Rural Appraisal Workshop, see appendices for more details.

5.2.4.1 Historical Timelines

The first PRA tool used as seen on the image below was the Historical Timeline which helped to reveal how knowledgeable the people of Belo are of their community and reaffirm they are the main motors to drive sustainable development in their community.

Images 5: Historical Timeline



(Source: PRA workshop; Community's Illustration)

The history of Belo started in the 1800s with the migration of the Kom people from Babessi; around late 1800s, they settle at Laikom- the seat of their kingdom, four subdivisions of the Boyo division were under the rule of the Kom kingdom. Also Kejem and Nkwen villages were conquered and driven by the Kom people, Kejem and Kom signed a peace treaty because the Kom people were in need of land.

In the early 1900s between 1914 -1918 the Kom community fought the First World War, they defeated the Germans, so the Germans constructed tarred roads as compensation – this triggered development

In the 1930s, missionaries from the Cameroon Baptist Convention (CBC) AND Roman Catholics created missions schools as community schools which later on were taken over by the Government

Between 1960 and 1980, Mbingo annex was created as a leprosy centre given by the Fon-Chief of Kom with claim he did not want the villagers to be contaminated with leprosy. Credit unions were created by missionaries and an example the Ashing credit union. The Mbim Game Reserve was also created; the Ndawara Tea Estate Agro Industrial project was also established at this time. Also, Belo Area Development Union was created to coordinate socio economic development in the entire Kom land. The villages, in partnership with those of the Diaspora, constructed bridges, roads to promote their culture. Due to the weakness of the Belo Area Development Union, different quarters came out the development unions. Community water was created also.

From 1990 to 2000, the Belo subdivision in 1994 after a political growth and council were created in 1996. As a result, state administration was brought closer to the people through ministry delegations. Positively this created political awareness and freedom of choice. Electricity was then made available. The Ijim Kilum forest project was inaugurated around the same period. Also community health centres transformed into integrated state district hospitals.

From 2000 to 2012, national elections observatory was created; towers around Belo were constructed; Government primary, secondary schools and social amenities were created. Also Belo faced a Church crisis such that the people fell self-marginalized from the Cameroon Baptist convention.

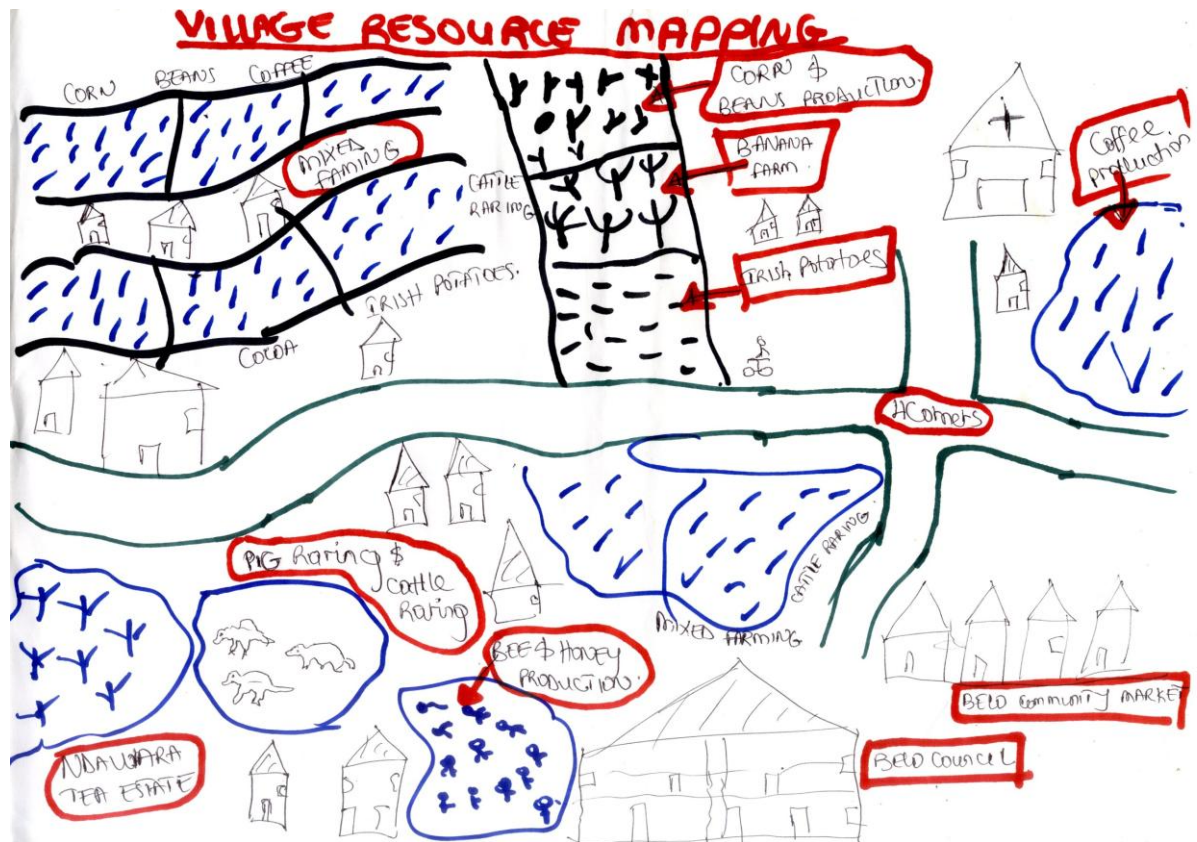
Between 2012 and 2014, the Belo Community radio was developed; this helped so much in the sensitization in health, education and entertainment. Also RUDEC facilitated the connection between the Belo council and the German council called HOBB. It was also at this time the Belo council structure was built.

In 2015, the Ashing credit union centre began putting up a structure and is recruiting lots of youths.

5.2.4.2 Village Resource Mapping

The Village Resource Mapping gives an overview of the main resources the village is endowed with.

Images 6: Village Resource Mapping



(Source: PRA workshop; Community's Illustration)

The Belo community has a wide range of resources which if fully exploited will foster socio-economic development. The main activities that characterize Belo are farming and livestock production with major agricultural productions such as coffee, corn, beans, Irish potatoes, banana plantations, cocoa productions. Livestock farming include: bee and honey production, pig raring, cattle raring scattered all over the community as seen on the charts. Belo is also blessed with a great tea estate at Ndawara. As seen on the chart above, the village is mostly blessed with agricultural resources. Nothing is said of gold, mineral oil, etc. in Belo, but the people commented that “maybe it is yet to be discovered” (PRA workshop, 2015).

5.2.4.3 Matrix Scoring and Ranking

This section gives an assessment of the village micro-industries according to its people's opinion.

Images 7: Matrix Scoring and Ranking

Matrix Scoring and Ranking

Activity	Score	Comments
Forestry	3/10	
Farming	10/10	Should be highly mechanised
Livestock	10/10	Better Facilities
Petty trade	9/10	Reduce taxes
Bike Riding	5/10	
Photography	5/10	Improve lightening
Call Box	8/10	
Carpenters	7/10	
Tailoring	9/10	
Painters	9/10	

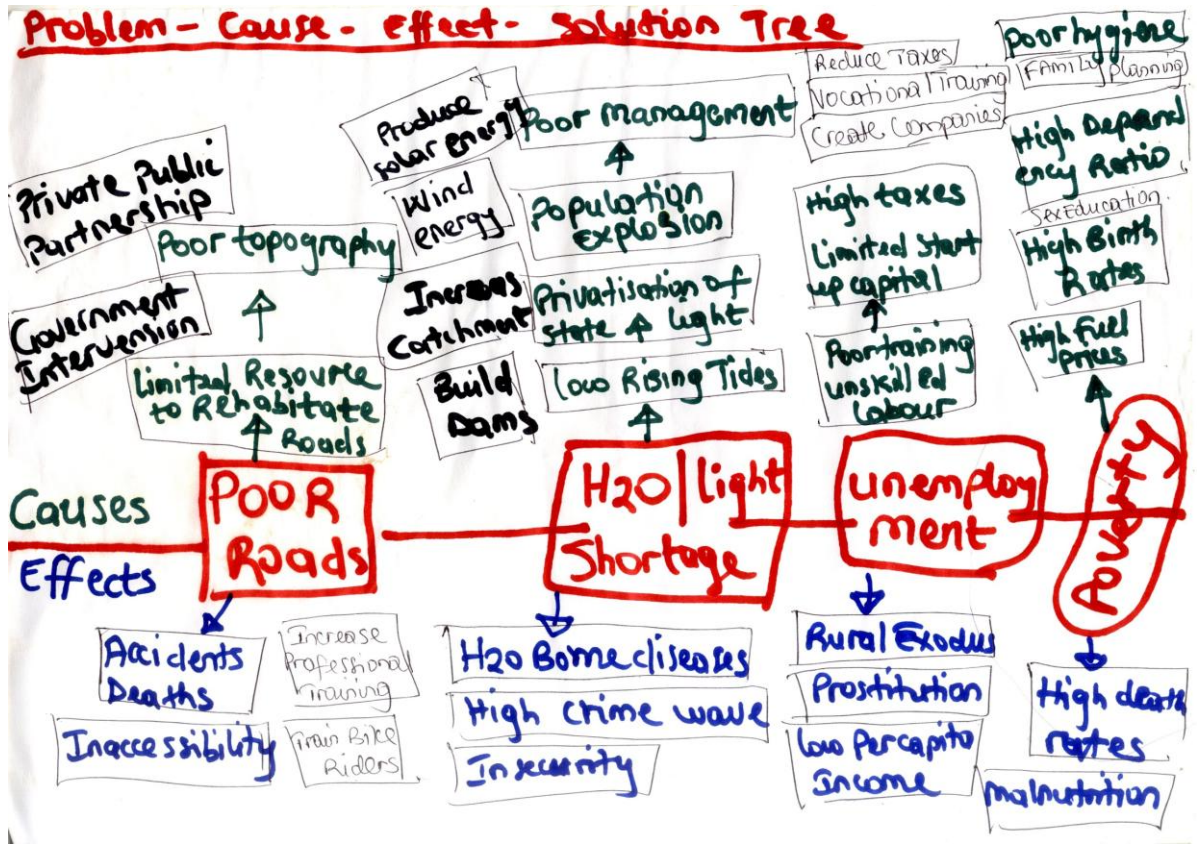
(Source: PRA workshop; Community's Illustration)

The major activities carried out in Belo are on the chart above. Each activity was rated on 10 points based on their importance and income generation. The different participants gave their ratings, and then an average of all ratings was computed. By the side, are additional comments given by the people about some activities. Regarding petty trade the people suggested that since it is a very important activity in their community taxes should really be reduced.

5.2.4.4 Problem- Cause- Effect- Solution tree

This tool helped to identify what the residents of Belo see as impediment to their economic development and social welfare.

Images 8: Problem –Cause-Effect – Solution tree



(Source: PRA workshop; Community's Illustration)

As seen on the image above, the main problems identified by Belo's Community are:

- **Poor roads:** caused by limited resource to rehabilitate the roads, poor topography, the effects of these include: accidents and deaths, inaccessibility
- **Water, electricity or light shortage:** caused by: low rising tides, privatization of state electricity generatin, population explosion, poor management; this has resulted to water borne diseases, high crime wave, insecurity
- **Unemployment:** caused by poor training and unskilled labour, high taxes for small size entrepreneurs, limited startup capital, consequently leading to rural exodus, prostitution, low per capita income.
- **Poverty:** caused by high fuel prices, high birth rates, high dependency ratios, poor hygiene, effects of thses are: high death rates, malnutrition.

These solutions were proposed by the Community to relief each problem.

- **Poor roads:** government intervention, private public partnership, train bike riders.
- **Water and light shortage:** build dams, increase water catchmnets, produce Solar and Wind energy.
- **Unemployment:** reduce taxes, provide vocational training, and create companies which will employ youths, increase professional training.
- **Poverty:** educate the people on family planning and sexual health issues.

6. CONCLUSION AND RECOMMENDATIONS

6.1 Conclusion

Belo, like most villages in sub-Saharan Africa is facing major challenges such as food insecurity, high unemployment, and inadequate environmental conditions – poor maintenance of the natural resource base, high price volatility among others. This research helped to identify these above mentioned challenges and reveal their implications for the Belo Community's socio-economic sustainability. The Cameroon's Boyo division based organization – has been meeting up with the challenges by being an institutional structure raising awareness locally and internationally, and providing a platform for Belo people to corporate and air their point of view regarding their community.

RUDEC, despite its financial drawbacks was found to have achieved sustainability to an extent within the 4 stages of the project cycle. Its projects design highly reflects its operating environment. It has good reports from members of its community and is allowing them to participate in its projects implementation. However a lot much still needs to be done regarding supervision, monitoring and Evaluation. Some Belo residents – around 20% of the sampled people acknowledged not knowing RUDEC or what they are doing. Seeing that RUDEC does not have up to 10 local volunteers, it would be irrelevant to conclude existing assets – Belo residents and structures are prioritized over the new ones. Indeed, RUDEC as an institution is sustainable because its prioritized project reflects the community's true needs which showed they were designed with Belo people's opinions being taken into account. The organization could even do more if it had adequate support from its community, the government and any individual around the world that will be willing to help in any way possible. Households at Belo have shown a fair level of resilience or preparation for risks or opportunities. The majority of people in Belo save less than half of their income monthly, mainly to pay their children's tuition. This alone is a good sustainable risk management practice. The environment that surrounds Belo is mainly maintained by independent farmers and not by special bodies. The water system in the village is mainly maintained by local residents and comes from springs whose safety is highly questionable. Overexploitation is a national issue in Cameroon which can only extend to affect smaller regions which includes Belo. A lot of effort still is needed regarding the empowerment of women, the orphans and the poorest households. In a

typical masculine society such the North-west Cameroon it is still not regarded noble for a woman to share her point of view in public. However, the Households heads interviewed in Belo constituted 40% of female and all the leaders regardless of gender did place very high value on education of children in their community.

6.2 Recommendations

The author recommends that RUDEC works harder building fruitful relationship and partnerships with its community members. It could create a well designed local volunteering program that will encourage further community participation and motivate them to be much more involved. Relying on international donations mostly is not enough because it will make the organization short of cash flow and such donations are received infrequently or periodically. The local community can be a great source of fund for RUDEC's projects, for example 5,000 people can contribute only 100 CFA (price of a loaf of bread), this will make up to half a million CFA and will be enough money to sponsor small farmers and entrepreneurs. What if these same 5,000 people were committed to contribute a 100 CFA monthly or even weekly? This will solve the issue of limited access to recurrent funding and RUDEC can serve as a non profit financial institution that will commit to redistribution of income in the village. This requires high ethical standards to be achieved by RUDEC and its staff so the people's contributions are not abused or mismanaged. It will also be a challenge for RUDEC to gain the trust of the people in its community seeing the level of corruption in the society high. However, there is no harm for RUDEC to try this funding strategy.

As far as international volunteering is concerned, the institution could seek to launch Teacher Volunteering Programs, through which it can attract independent teachers from various fields to come and offer industry-specific, entrepreneurship training, aiming at helping the people improve their skills. Conduct a project need assessment and organize Participatory workshops open to the public before any project is designed or launched. Let the Communities do the project design, if they know they have been involve from the very beginning then they will be involved with Implementation, Supervision, Monitoring and Evaluation as well. The people are any society's greatest assets, not its nature, neither its riches nor its advanced technologies.

7. BIBLIOGRAPHY AND REFERENCES

Avila, M. and L. Gasperini. (2005) The MDGs and Sustainable Rural Development in sub-Saharan Africa: Challenges and Implications for Education for Rural People. Available online at http://www.fao.org/sd/dim_kn2/kn2_051101_en.htm

Baker, Charles R. Prof. (2007) “Sustainable Development” Versus “Sustainability”. Unpublished manuscript

Bertolini, P., Pisano, E., Sivini, S., & Scaramuzzi, S. (2008) Poverty and social exclusion in rural areas. European Commission

Brundtland, Report. (1987) Our Common Future. United Nations World Commission on Environment and Development. Available online at <http://www.un-documents.net/our-common-future.pdf>

Feldstein, H and Jiggins, J. (1994) Tools for the field: methodologies handbook for gender analysis in agriculture. West Hartford. ISBN: 1565490282 9781565490284

Hoddinot, J. (2002) Food Security in Practice: Methods for rural development projects. Washington DC: International Food Policy Research Institute. ISBN 0-89629-713-6

Loayza, Norman; Otker-Robe, Inci. (2013) World development report 2014: risk and opportunity - managing risk for development. World development report. Washington, DC : World Bank Group. Available at <http://documents.worldbank.org/curated/en/2013/01/18362593/risk-opportunity-managing-risk-development>

Osan, Department. (2013) Project Appraisal Report, Project : Grassfield, Rural Infrastructure and Participatory Development Support Project, Phase ii (Grassfield ii) Country: Cameroon. African Development Fund.

Available at http://www.afdb.org/fileadmin/uploads/afdb/Documents/Project-and-Operations/Cameroon_-_Grassfield_Rural_Infrastructure_and_Participatory_Development_Support_Project-Phase_II_Grassfield_II_-_Appraisal_Report.pdf

Regional Department Centre. (2009) Country strategy Paper 2010-2014 Cameroon. African Development Bank. Available at http://www.afdb.org/fileadmin/uploads/afdb/Documents/Project-and-Operations/CAMEROON_2010-2014%20COUNTRY%20STRATEGY%20PAPER.pdf

Rashid Solagberu, Adisa. (2012) Rural Development in the Twenty-First Century as a Global Necessity, Rural Development - Contemporary Issues and Practices, Dr. Rashid Solagberu Adisa (Ed.), ISBN: 978-953-51-0461-2, InTech, DOI: 10.5772/49098. Available at: http://www.intechopen.com/books/rural-development-contemporary-issues-and-practices/introductory_chapter_rural_development_in_the_twenty_first_century_as_a_global_necessity

Shepherd, A. (1998) Sustainable Rural Development. Macmillan.

SIBADEF, Report. (2011) Belo Council Development Plan. Belo Council.

Sumner, J. (2005) Sustainability and the Civil Commons: Rural Communities in the Age of Globalization. University of Toronto Press. ISBN: 0-8020-7999-7

Tango, International. (2009) Sustainability of rural development projects, Best practices and lessons learned. IFAD Asia. ISBN: 978-92-9072-0624-5

The Courier ACP-EU. (2002) Sustainable Development, Country Report Cameroon. The Directorate General for Development, European Commission. Brussels. ISSN: 1606-2000

8. APPENDIX

Appendix 1 : PRA Workshop participants

PRA Workshop Pictures



Facilitator:
Mary Immaculate Ngelah

Participants:
Joshua, Belinda, Pa Sam, Luis, Protus, Anto Rada, Michael and Belinda.

Appendix 2 : How to help RUDEC



VOLUNTEER

- **As a teacher**
- **As a student**
- **A Rural Development Specialist**

DONATE

- **To Orphans' Education and Care**
- **To environmental protection**

SPONSOR A CHILD

SHARE

- **Ideas**
- **Resources**
- **Key contacts**
- **Recommendations**

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"Services for a healthy environment and people"