



ITAU AUDITORS LTD



**RWANDA ENVIRONMENT MANAGEMENT
AUTHORITY**

**Evaluation of National Environment Youth
Project(NEYP)**

Final Draft Report

ITAU AUDITORS LTD

Kigali, January 2013

CONTENTS

CONTENTS.....	2
LIST OF TABLES	5
LIST OF FIGURES	6
EXECUTIVE SUMMARY	7
CHAPTER ONE: INTRODUCTION.....	9
1.1 PURPOSE OF THE EVALUATION	9
1.2. KEY ISSUES ADDRESSED	9
1.3. METHODOLOGY	10
1.3.1. Secondary Data collection	10
1.3.2. Primary Data collection.....	10
1.3.3. Group Discussions and Survey	11
1.3.4 Sampling.....	12
1.3.5 Survey Questionnaire.....	13
1.3.6 Data collection organizational	13
1.3.7 Data Collection.....	14
1.3.8 Physical Measurement of Project Outputs	15
1.3.9 Data Processing.....	15
1.3.10 Data Validation and Tabulation	16
1.3.11 Report Structure	16
CHAPTER TWO: THE PROJECT AND ITS DEVELOPMENT CONTEXT.....	17
2.1. PROJECT START AND DURATION	17
2.2. PROBLEMS THAT THE PROJECT SEEKS TO ADDRESS.....	18
2.3. IMMEDIATE AND DEVELOPMENT OBJECTIVES OF THE PROJECT	18
2.4. KEY STAKEHOLDERS	19
2.5 SIGNIFICANCE OF THE PROJECT	20
2.6. EXPECTED RESULTS	22
CHAPTER THREE: EVALUATION FINDINGS	23
3.1. ECONOMIC IMPORTANCE OF THE PROJECT	23
3.2. PROJECT SUPPORT TO THE LIVELIHOOD OF BENEFICIARIES.....	24
3.3. PROJECT PHYSICAL MEASUREMENTS BY DISTRICT	28
3.3.1 MUSANZE District	28
3.3.2. GAKENKE District.....	29
3.3.3. RULINDO District.....	30
3.3.4. GICUMBI Disttict	30
3.3.5. HUYE District	31
3.3.6. NYAMAGABE District	31

3.3.7. NYARUGURU District.....	32
3.3.8. GISAGARA District	32
3.3.9 NYANZA District	32
3.3.10. MUHANGA District.....	33
3.3.11. RUHANGO District.....	33
3.3.12. KAMONYI District	34
3.3.13. GASABO District	34
3.3.14. NYARUGENGE District	34
3.3.15. KICUKIRO District	35
3.3.16. BUGESERA Ditrect	35
3.3.17. Afforested Surface Area.....	36
3.3.18. Protected Rivers.....	36
3.3.19. Protection of planted trees.....	39
3.3.20. Project benefits and weaknesses.....	40
3.3.21 Protection of the river against water hyacinth	42
3.4. REALIZED VS PLANNED ACTIVITIES BY DISTRICT	42
3.4.1. NYARUGENGE	43
3.4.2. GASABO.....	46
3.4.3. KICUKIRO	49
3.4.4. KAMONYI.....	52
3.4.5. MUHANGA	56
3.4.6. RUHANGO	59
3.4.7. NYANZA.....	63
3.4.8. HUYE.....	66
3.4.9. GISAGARA.....	69
3.4.10. NYARUGURU	72
3.4.11. NYAMAGABE	76
3.4.12. RULINDO	79
3.4.13. GAKENKE	82
3.4.14. GICUMBI.....	86
3.4.15. MUSANZE	90
3.4.16. BUGESERA.....	94
3.5. EFFECTIVENESS OF THE PROJECT	97
3.6. PROJECT EFFICIENCY	99
CHAPTER FOUR: SUSTAINABILITY, LESSONS LEARNED AND NEYP EXIT	
STRATEGY.....	103
4.1 Project Design, Management and Implementation.....	103
4.2. SUSTAINABILITY OF PROJECT ACHIEVEMENTS	107
4.3. LESSONS LEARNT.....	109
4.4. NEYP EXIT STRATEGY.....	110
CHAPTER FIVE: CONCLUSIONS AND RECOMMENDATIONS	111
APPENDICES.....	113
Appendix 1: Unstructured questionnaire	113

Appendix 2: Structured questionnaire.....	114
Appendix 3: List of respondents	118
Appendix 4: Amount of money paid in total to job beneficiaries.....	121
Appendix 5: Photos taken during the physical measurement activity	122
Appendix 6: Maps showing the protected areas	127

LIST OF TABLES

Table 1: Sample size per District	12
Table 2: Brief presentation of the project	17
Table 3: Role played in project activities by sex	23
Table 4: Role played in project activities by education level.....	24
Table 5: Percentage of persons who received their money in total.....	26
Table 6: Physical measurement for Musanze district.....	28
Table 7: Physical measurement in Gakenke District.....	29
Table 8: Physical measurement in Rulindo District	30
Table 9: Physical measurement in Gicumbi District	30
Table 10: Physical measurement in Huye District	31
Table 11: Physical measurement in Nyamagabe District.....	31
Table 12: Physical measurement in Nyaruguru District.....	32
Table 13: Physical measurement in Gisagara District.....	32
Table 14: Physical measurement for Nyanza district.....	33
Table 15: Physical measurement in Muhanga District	33
Table 16: Physical measurement in Ruhango District.....	33
Table 17: Physical measurement in Kamonyi District.....	34
Table 18: Physical measurement in Gasabo District.....	34
Table 19: Physical measurement in Nyarugenge District	35
Table 20: Physical measurement in Kicukiro District.....	35
Table 21: Surface area afforested per District.....	36
Table 22: Protection of the planted trees and bamboos.....	38
Table 23: Gains from the project	40
Table 24: Project weaknesses	41
Table 25: Protection of the rivers against water hyacinth.....	42
Table 26: Activities undertaken to fight against water hyacinth.....	42

Table 27: Project budget.....	100
Table 28: Budget Execution	101
Table 29: Amount per capita received and budgeted	103

LIST OF FIGURES

Figure 1: Percentage of jobs created per project activity.....	25
Figure 2: Percentage of persons who worked a certain number of days.	25
Figure 3: Percentage of persons who were paid a certain amount per day.....	25
Figure 4: Percentage of persons who used the money for a specified activity.	27
Figure 5: Percentage of persons who invested in a certain activity	27
Figure 6: Percentage of persons who chose a specified business activity.....	28
Figure 7: Protected rivers.....	37
Figure 8: Reasons for selecting the river.....	37
Figure 9: Used ways to protect river banks	38
Figure 10: Destroyers of set infrastructures	39
Figure 11: Strategies used to protect set up infrastructures.....	40
Figure 12: Project benefits	41

EXECUTIVE SUMMARY

1. BRIEF DESCRIPTION OF THE PROJECT

The NEYP project focuses on protecting the banks and catchment areas of Nyabarongo river system from land degradation and waste pollution while creating employment opportunities for the youth in both rural and urban Districts.

2. CONTEXT OF THE EVALUATION

This evaluation was commissioned by REMA and UNDP_RWANDA and it was conducted according to the guidance, rules and procedures they set.

The overall objective of this evaluation is to:

- review progress towards the achievement of the project objectives and outputs,
- identify strengths and weaknesses in implementation,
- assess the likelihood of the program achieving its objectives and delivering its intended outputs, within the current timeframe.

3. KEY RESULTS, LESSONS LEARNED and RECOMMENDATIONS

The study found out that some infrastructures were built alongside Nyabarongo River and its affluent. Different types of trees were planted. Progressive terraces were also built where appropriate. The banks of Nyabarongo River were protected through improved management of the river buffer zone, even though floods destroyed a great deal of the set **infrastructure**.

The evaluation revealed that the project budget had been executed at **30%** of the total allocated budget and that all committed budget was not released.

The following table highlights some activities done by the NEYP project. These activities are categorized by project knowledge area and descriptions, impacts, and recommendations are provided for consideration on **future similar construction projects**. It is important to note that apart from the weaknesses, the successes are also included.

Category	Issue Name	Weakness/Success	Impact	Recommendation
Human resources	Education level of employed persons	The highest education level, found by the study, is secondary school	Their environment issue management skills are limited	Experts or persons with skills in environment are needed
Other players	Similar projects, leading to the multiplication of efforts.	Efforts can be conjugated.	Division of work can bring a greater positive impact.	The harmonization of related activities for example by STRABAG, AGRO, VUP, DEAR, PAPSTA, PADSEC, PADAB, PAM, PAREF, VIE Life, CARE World Vision, RDF, and PAREC.
Project linked production	No market for the project products.	Lack of the market for the project products can discourage members of groups involved in the project.	This can lead to poor maintenance of infrastructure. On the other hand, if project beneficiaries are aware of possible market for their products (bamboos...) they can be more motivated.	Relevant institutions should intervene and address this issue.
Project achievements	Nyabarongo River banks protection	Various achievements in protecting Nyabarongo River	Different types of trees were planted and progressive terraces were built where appropriate.	The set infrastructures need to be maintained to get value for money.
Job creation	Employment	Jobs were created mostly by the tree-planting activity.	Unemployment rate reduction.	The project should increase budget consumption.
Awareness	Local leaders may devalue the NEYP's activities.	In GAHANGA Sector, the cattle damaged some reeds and bamboos but the local leader didn't care.	Destruction of protective planted trees.	Local leaders should be sensitized and urged to cooperate in protecting the set infrastructure.

CHAPTER ONE: INTRODUCTION

1.1 PURPOSE OF THE EVALUATION

The purpose of this evaluation report is to review the achievements of the project objectives and outputs, identify strengths and weaknesses in implementation, and draw lessons for the identification, formulation and implementation of future similar projects. This report contains also recommendations to sustain the infrastructure that the project established in its lifetime.

1.2. KEY ISSUES ADDRESSED

This report presents an assessment of the project design, scope, and implementation. It also puts forward what has to be done to sustain its outputs. Furthermore, the report presents and analyzes lessons learned and best practices obtained during the project implementation to take into consideration in future environmental protection projects. Specifically, the report sheds light on the following project expected outcome indicators:

1. The youth and communities in the project area are using the built capacity for sustainable management of environment and natural resources along Nyabarongo river system.
2. Nyabarongo river system waters are clean and free from water hyacinth.
3. Kigali city and towns along Nyabarongo river are clean due to improved solid waste management.
4. The youth and communities in the Districts along the Nyabarongo river system have enhanced their livelihoods through sustainable management of environment and natural resources.
5. Improved productivity restored to previously degraded land.
6. Project effectively managed, monitored, evaluated and reported.

1.3. METHODOLOGY

In evaluating the project, primary and secondary data were gathered. In addition, physical achievements of the project were quantified.

1.3.1. Secondary Data collection

These data were collected from the following sources:

1. Project documents with quantified and cost outputs
2. List of all stakeholders to facilitate the development of our methodology
3. All produced reports
4. All minutes of project meetings
5. Management system of the project
6. Disbursed amount per activity
7. Documents from donors containing the pledged and disbursed amount.

1.3.2. Primary Data collection

This research was exploratory because the **researcher** knew little about the subject. It was therefore very useful to resort to unstructured questionnaires that were addressed to Districts authorities, REMA Staff, National Youth Council members, Sectors, and opinion leaders along Nyabarongo river and representatives of youth cooperatives.

From these group discussions of 8 to 12 persons at the Districts Headquarters, we designed a structured questionnaire to be used in this survey.

During the discussions, the research was explanatory. The researcher was looking for a cause and effect relationship.

However, once we started the survey, the research was mostly descriptive. At this point, the objective was to describe the intervention of the project without explaining why; because the ‘why’ was clarified in group discussions.

Normally the researcher has to decide which method to apply between the two approaches of *deduction* or *induction*.

In this research we used both approaches. For the deductive approach, we started with what is stated in the project documents. This allowed us to create a framework for the research process and then verify on the field if the theory is valid. Then, the inductive method was used to develop a theory of how future projects should be designed, formulated and implemented

It is also worthwhile to note that this study has both qualitative and quantitative data. Group discussions gathered most qualitative information whereas quantitative data were obtained from the survey.

1.3.3. Group Discussions and Survey

Meetings were organized to discuss the unstructured questionnaire. This is the only reliable way to get qualitative data and to make reasonable structured questions. Discussions were held at the Districts where NEYP operates namely in Muhanga, Kamonyi, Ruhango, Nyanza, Nyamagabe, Huye, Nyaruguru, Gisagara, Musanze, Gakenke, Rulindo, Gicumbi, Nyarugenge, Gasabo, Kicukiro, and Bugesera Districts.

The following participated in the groups discussions:

- The steering Committee members, REMA,
- The in charge of environment in the District,
- The in charge of Agriculture in the District,
- 3 representatives of youth associations,
- Executive secretaries of sectors along Nyabarongo,
- Executive secretaries of cells along Nyabarongo,
- The population along the river,
- A representative of Youth Council at the District level or the in charge of youth at the District level, and
- Permanent executive Secretary of JADF.

Discussions were held with each group using the unstructured questionnaire (See Appendix 1). After the analysis of answers from these consultative meeting, a structured questionnaire was developed (See Appendix). This contained closed questions and its processing gave quantitative data. The structured questionnaire was addressed to different persons who benefited from the jobs created by the project.

1.3.4 Sampling

The project worked with cooperatives totaling to 41. The developed questionnaire intended to assess the socio-economic importance of the project; it was designed for the project beneficiaries. Then the researchers in agreement with NEYP managers found not necessary to interview all the cooperative members and convened that cooperative leaders would give all the required information. For the selection of the cooperatives to interview, this task was done by NEYP staff; researchers were guided by NEYP staff about which cooperative leader to interview per District. Let us notice that in Nyamagabe District there is no cooperative and NEYP helped to identify the suitable persons who used to be the project beneficiaries to answer the research questions. The table below details the sample size per District.

Table 1: Sample size per District

District	Name of the cooperatives contacted	Number of Cooperative leader interviewed
	TOTAL	85
RUHANGO	KOTUKI	3
GISAGARA	COEUR DE L'ENVIRONNEMENT & KUAMU	9
NYARUGURU	IMBARAGA & TUBUNGABUNGE IBIDUKIKIJE RUBYIRUKO	7
HUYE	TUBUNGABUNGE ISIKO YA NIL (NAME OF 2 COOPERATIVES IN DIFFERENT SECTORS)	9
NYARUGENGE	UMUTAKO	3
GICUMBI	INKWAKUZI & COOPEM	7
RULINDO	ABIYEMEJE GUKORA	3
GASABO	TUBYUMVEKIMWE	5
KICUKIRO	IZIKUIGA	2
BUGESERA	COPEBRA & COVAKINTA	7
NYANZA	TUBUNGABUNGE IBIDUKIKIJE	3
MUSANZE	COPROMU & EJO HEZA	7
MUHANGA	KIIRU	5
GAKENKE	COJEPEN & IMBONI Z'IBIDUKIKIJE	6
KAMONYI	IMPARIRWAKURUSHA	3
NYAMAGABE	-	6

This type of sampling technique was the most appropriate as it was difficult to access the target population and some cooperative members are thought to be better (more knowledgeable, more willing, etc.) than others to interview especially those with authority position like cooperative presidents, vice presidents...

Consequently a total of 85 cooperative members were interviewed from 34 cooperatives out of 41. The sample was divided into four groups: youth associations, NGOs, local leaders, and project coordinators. It was realized that one person can belong to more than one group. Thus, we interviewed 78 members of youth associations, 72 from NGOs, 34 local leaders and 32 project coordinators (See Appendix or click the icon below).



Microsoft Office
Excel 97-2003 Works

1.3.5 Survey Questionnaire

In view of the evaluation objectives, the questionnaires were designed in English (see Appendix). The unstructured questionnaire were designed for districts, project steering committee members, particularly National Youth Council members, public Institutions, sectors, and opinion leaders along Nyabarongo river and representatives of youth cooperatives.

Group discussions made of 8 to 12 persons each were held at the Districts Headquarters, from which we designed a structured questionnaire to be used in this survey.

1.3.6 Data collection organizational

A. Steering Committee

The steering Committee is made of representatives from the two organizations participating in the survey, REMA and ITAU Auditors Ltd. The Survey manager attends the Steering Committee meetings so as to report on the work progress in a regular basis. The Final version of the questionnaire as well as the work plan were discussed and endorsed by the Steering Committee.

B. Survey Manager

Being the survey implementing Agency, ITAU has appointed one of its senior staff to be the survey manager with a mandate to supervise and follow up the survey execution in all its stages.

C. Survey Coordinator

A survey coordinator has been appointed to assist the Survey Manager in a full-time basis. He was responsible of the technical side (Technical Coordinator) and the administrative side (Administrative Coordinator).

D. Field Work Teams

A team made of REMA, ITAU, District and concerned Sector staff members was established to collect data. Initially, one team had to be assigned one District. However, two teams or even more were assigned more districts depending on the volume of work in such large districts. The team leader from ITAU was requested to provide a weekly progress report to his/her field supervisor.

1.3.7 Data Collection

To avoid omissions and/or duplications, the enumerators followed a rigorous approach in inspecting a selected sector. A thorough and systematic canvassing of the whole sector was performed by the enumerators before completing the Survey questionnaires putting emphasis on the banks of Nyabarongo River. The following three steps were followed:

Step 1

On the first working day, the enumerator started with identification of the sector boundaries and illustration of a sketch map showing these boundaries using GPS. This indicated whether one or two banks are in the sector.

Step 2

Boundaries are then allocated a number, with the first being selected in such a way that the whole village is located on the right hand side. Whilst walking along this boundary, the enumerator lists the NEYP activities along the right bank, infrastructure names and addresses. If

both banks of the boundary are in the sector, the enumerator returned on the boundary to count the infrastructure on the other bank of the boundary.

Step 3

Once infrastructures along the boundary are listed, the enumerator goes to the first affluent in this sector from the boundary, observing all infrastructures on the right bank followed by the infrastructures on the left bank. After counting, listing and locating on the sketch map each of the set infrastructures on the affluent number one, the enumerator goes to the first sub-affluent on the right hand side following the same process, and then carries the same for all other sub-affluents. When all affluents and sub-affluents related to the first boundary are finished, the enumerator continues the process to the next boundary.

It has to be noted that before any field activity, the consultants met with the project management team and UNDP to be given relevant information and a list of important documents to consult.

1.3.8 Physical Measurement of Project Outputs

Using GPS, we produced exact surface areas covered in tree planting; terraces constructed as well as the length covered in protecting the river.

1.3.9 Data Processing

The following activities were done:

- (i) Coding,
- (ii) Data entry,
- (iii) Data processing,
- (iv) Data cleaning and
- (v) Tabulation.

In Coding, specific variables like geographical identification variables were assigned codes to translate alpha numeric variables into numeric variables.

Regarding data entry, a data entry application software was developed based on the questionnaire and data from all questionnaires were transcribed to an electronic data file, raw data were backed up in different storage media and then were used while cleaning. A specialized software called” Cspro: Census and Survey processing System” was used to develop both data entry application and data cleaning program while a set of syntax was written using SPSS and STATA softwares for rechecking the data, quality control and for producing tables. At the time of data cleaning, a data editing program was developed. Once data were cleaned we had to back up cleaned data. Finally, in tabulation, SPSS and STATA were used to produce tables based on the study requirement.

1.3.10 Data Validation and Tabulation

Machine data editing were continuously performed during and after data entry phase for the purpose of detecting out-of-range and/or inconsistent data values. Appropriate actions were taken to cope with any doubtful data and to introduce necessary corrections. In many cases, follow up contacts with the surveyed sectors were made in order to verify previously reported data. Upon producing the clean data file, statistical tabulations were generated. The subsequent chapters present the survey tabulations.

1.3.11 Report Structure

This report has the following chapters as per the terms of reference:

- Chapter One: Introduction
- Chapter Two: The Project and its Development Context
- Chapter Three: Findings and Conclusions
- Chapter Four: Sustainability, Lessons Learned and NEYP Exit Strategy
- Chapter Five: Recommendations

CHAPTER TWO: THE PROJECT AND ITS DEVELOPMENT CONTEXT

2.1. PROJECT START AND DURATION

This project, executed through National Execution (NEX) process by Rwanda Environmental Management Authority (REMA), with support from UNDP commenced activities in 2008 with a budget of 6 million USD with an expected execution period of three years.

Table 2: Brief presentation of the project

Project Name	National Environment Youth Project (NEYP)									
Project Number	00060880									
Parent Ministry	MINIRENA									
Executing Agency	REMA									
Implementing Agency	UNDP									
Management Arrangement	National execution (NEX)									
Funding sources	The project funding is summarized in the table below: <table><tr><td>Source of funds</td><td>Amount in US\$</td></tr><tr><td>GoR (in kind)</td><td>402,000</td></tr><tr><td>UNDP</td><td>5,298,000</td></tr><tr><td>Total</td><td>6,000,000</td></tr></table>		Source of funds	Amount in US\$	GoR (in kind)	402,000	UNDP	5,298,000	Total	6,000,000
Source of funds	Amount in US\$									
GoR (in kind)	402,000									
UNDP	5,298,000									
Total	6,000,000									
Project duration/period	The project started in December 2008 and was expected to run until December 2011									
Reporting organisation and physical address	Rwanda Environment Management Authority (REMA) Kacyiru District Kigali City Rwanda B.P 7436 Kacyiru									

Project outcomes	<p>The project stated outcomes are the following:</p> <ul style="list-style-type: none"> • Building and Strengthening capacity of youth associations, CBOs/NGOs and other local entities to undertake conservation of Nyabarongo River System; • Conserving and Managing the Nyabarongo River System using appropriate technologies; • Waste and water hyacinth management in Kigali and Towns along the Nyabarongo River System; • Support to livelihood activities through Natural Resources And Environment Management; • The project management.
------------------	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

2.2. PROBLEMS THAT THE PROJECT SEEKS TO ADDRESS

The Environment Youth Project is intended to address the most significant, yet manageable environment problems within the country by providing experience and employment opportunities for an age group with a disproportionate number entering the labor force.

The Project aims at rehabilitating degraded lands, collection of rubbish and its consolidation in designated areas for soil composting and recycling of materials creating employment and generating income for the youth, removing the youth from crime, and eradicating poverty among the affected communities.

2.3. IMMEDIATE AND DEVELOPMENT OBJECTIVES OF THE PROJECT

The development goal of the project is to achieve a level of sustainable management of natural resources and solid waste while improving the living standards of youth and communities at large along the Nyabarongo River System. The overall project objectives are:

- Creating tangible mechanisms whereby persons can participate directly in creating a more healthy environment, raise moral and respond to local and national environmental problems;

- Enhancing opportunities for young people of participating in activities, which will increase their skills and improve their prospects of employment through on-the-job training and vocational trainings;
- Educating the youth on the importance of environmental conservation. This means the project will increase the number of young persons with basic training in natural resource management and conservation in Rwanda by training them as trainers, or making them ‘contact persons’ on environmental issues;
- Providing labor for conservation work, which would otherwise be unavailable;
- Enhancing awareness of the importance of conservation and natural resources management needs;
- Providing more opportunities in conservation and natural resource management at the village level;
- Curtailing rural-urban youth migration;
- Building indigenous capacities in the area of natural resource management at the village level; and
- Improving welfare of the youth through the promotion of youth initiatives and income generating activities.

2.4. KEY STAKEHOLDERS

The project main stakeholders are the Ministry of Natural Resources (MINIRENA), Ministry of Agriculture (MINAGRI-RAB/RADA), Ministry of Local Administration (MINALOC), Ministry of Infrastructure (MININFRA), Kigali City, National Youth Council, Local NGOs and Community Based Organizations (CBOs) and UNDP, Districts, Sectors and the population alongside the Nyabarongo River and its affluents.

MINIRENA has a strong grip and leverage in policy matters related to management of resources. Nevertheless, there are other key players in resource management and sustainable land use management both at central and decentralized levels.

At the central level, there are MINAGRI in charge of agriculture and livestock, MINALOC, responsible for decentralization and community development activities, MINECOFIN, in charge of finance and economic planning. The Rwanda Environment Authority (REMA), a semi-

autonomous agency under MINIRENA, is a key player in its regulatory and supervisory role in all matters related to land degradation and environmental protection in general.

The local authorities at the decentralized administrative levels are responsible for all activities of planning, implementing, coordinating and monitoring of environment related activities in their areas. Furthermore, the Youth Association is involved in awareness raising and mobilization of youth to join the project. Beside, the Youth Association in Districts prepares small projects within the framework of the project and those small projects are submitted to the project headquarter at REMA where they are screened and approved before being submitted to UNDP for fund release to youth committees. The UNDP is also an important stakeholder in the project.

2.5 SIGNIFICANCE OF THE PROJECT

The NEYP project focus is to protect the banks and catchment areas of Nyabarongo river system from land degradation and solid waste pollution while creating employment opportunities for the youth in both rural and urban Districts. The project aims, especially, at enabling the youth to play a key role in employing techniques which add value to the environment through income generating activities in order to clearly improve their living conditions.

The project intended to build youth capacities and organize the unemployed youth around terracing, tree planting, rehabilitation of degraded areas, solid waste collection, sorting and recycling to make fertilizers for agriculture sector and briquettes for cooking to reduce using firewood and contribute to environment protection. In this regard, the project mission is to mitigate causes and negative effects of land degradation on ecosystems through sustainable land management practices contributing to the improvement of livelihoods of rural populations and their economic well-being.

The identified project objectives are very relevant to the Rwandan development context as environment degradation and youth unemployment are critical issues, which can negatively affect the country. In addition, the project objectives are well aligned to the Government of Rwanda strategies and initiatives as highlighted in Vision 2020 and EDPRS. In fact, the Vision 2020 of Rwanda calls for sustainable development, protection and management of the environment, poverty reduction and investment promotion. The main objectives of the Vision 2020 are the reduction of households depending primarily on agriculture from 90% to less than 50%, reduce the share of wood in the national energy balance from 94% to 50%. By this, the

Government wants to build a nation where the pressure on natural resources such as land, water, forests and biodiversity is considerably streamlined and the process of pollution and environmental degradation reversed. Environment is both an implementation sector and a cross-cutting issue of EDPRS.

Several laws related to natural resources management were adopted and thus contributing to the promotion of sustainable land management. The most important are:

- **Organic law No. 04/2005 of 08/04/2005 determining the modalities of protection, conservation and promotion of environment in Rwanda;**
- **Organic law No. 8 / 2005 of 14/07/2005 on land tenure in Rwanda;**
- **Organic law No 47/88 of 05/12/19 on the forest regime 88;**
- **Organic law No 62/2008 of 10/09/2008 on rules of use, conservation, protection and management of water resources;**
- **Act No 37/2008 of 11/08/2 for mining and quarrying 008;**
- **Presidential decree No 54/01 of 12/10/2006 on the organization, powers, functioning and composition of property committees.**

This national legal and regulatory framework is doubled by the international conventions that Rwanda ratified including the UNCCD, the UNCCC and the UNCBD.

Thus, this project implements the international convention objective which is "to undertake effective measures to fight against desertification and mitigate the effects of drought at all levels as part of an integrated approach and in accordance with the terms of international cooperation and partnership in the process of sustainable development " Indeed, to achieve this goal, the convention recommends that it is necessary that countries affected by land degradation problems develop the long term integrated and inter-sectoral strategies to increase the productivity of land, the re-establishment and preservation of sustainable natural resources to improve the living conditions of local persons.

At the national level, the project's objectives are especially aligned with major national policies including the Vision 2020, the EDPRS, and the agriculture sector Strategy and the Environment and Natural Resources Sector Strategic Plan. The project also should contribute to the improvement of land productivity and agricultural production through the soil erosion and environmental protection.

By focusing on the issues of environment protection and the inadequate knowledge and skills on best practices for technicians, the project was supposed to build capacities for sustainable environment protection and related actions were planned in collaboration with land owners and users with technical support from central and local government.

2.6. EXPECTED RESULTS

The expected results of the project are as follows:

- The Nyabarongo River System catchment lower altitude areas are terraced with progressive terraces and planted with grass/pasture for management of soil conservation.
- The banks of Nyabarongo River System are protected through improved management of the river buffer zone.
- The capacity of youth and CBOs/NGOs in sustainable environmental management is strengthened;

CHAPTER THREE: EVALUATION FINDINGS

3.1. ECONOMIC IMPORTANCE OF THE PROJECT

In order to assess the capacity of youth associations and local authorities to undertake environmental conservation along Nyabarongo River, we carried out a survey to identify if those groups were trained and if they participated in the activities aimed at protecting this river.

After showing the different roles played in the society, we wanted to specifically identify what exactly our target population did in various activities implemented by the project. The interviews revealed that respondents played different roles in the project activities: supervision, man-power, technicians, cooperative leaders and support services. The table below illustrates how the project activities were performed by category and sex.

Table 3: Role played in project activities by sex

Roles played in the Project Activities	Male	Female	Total	Roles shares	Frequency
Total	66%	34%	100%	100%	85
Cooperative Leader	62%	38%	100%	78%	66
Supervisor	80%	20%	100%	12%	10
Technician	80%	20%	100%	6%	5
Support Services	67%	33%	100%	4%	3
Casual laborer	100%	0%	100%	1%	1

The table shows that 78% were cooperative leaders among whom 38% were female. Support services follows in employing more female members 33%. On average 34% of those who participated in the project activities were female.

It is derived from the above findings that if the project activities were well done, the beneficiaries would have got the skills of carrying out those activities effectively. On the question of whether NEYP built their capacities, the findings reveal that 95.2% of the sample received various trainings and equipments. Trainings received were concentrated on cooperative and environmental issue management.

Given the theoretical and practical trainings received by the majority of respondents, it was noticed that beneficiaries acquired modern technologies and techniques to protect the Nyabarongo River Banks. According to the respondents, technologies used were appropriate.

They were mostly related to tree planting, removing water hyacinth from the river, and making tradable goods out of it.

Researchers wanted to know if there were other beneficiaries of the project capacity building initiatives. We realized that ex-combatants benefited from this capacity building and they were selected through a formal procurement system of bidding.

Table 4: Role played in project activities by education level

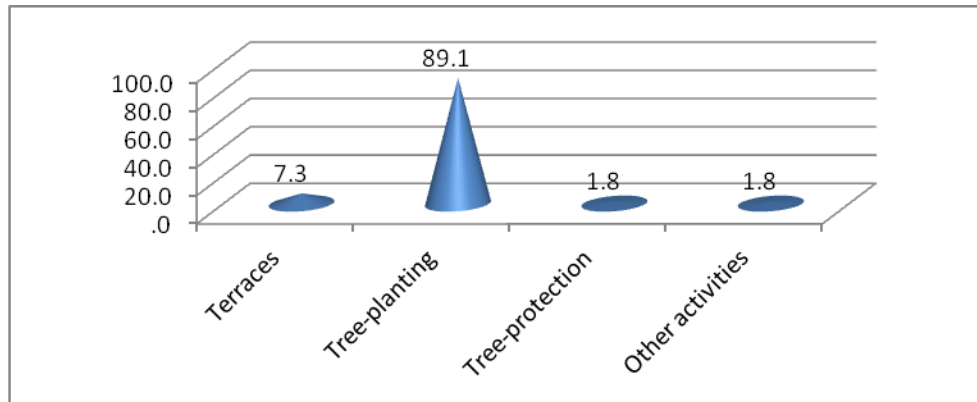
Roles played in Project Activities	Primary education level	Secondary education level	Total	Frequency
Total	75%	25%	100%	85
Cooperative Leader	79%	21%	100%	66
Supervisor	60%	40%	100%	10
Technician	80%	20%	100%	5
Support Services	67%	33%	100%	3
Casual laborer	100%	0%	100%	1

The table above shows the distribution of the players by education level. It is clear that the highest education level of most of the respondents is secondary education. Supervisors, Support services and cooperative leaders are the ones with secondary education; 40%, 33%, and 21% respectively. On average 25% of respondents have secondary education level. Note that the secondary education level was assigned to anyone who attended any secondary school class.

3.2. PROJECT SUPPORT TO THE LIVELIHOOD OF BENEFICIARIES

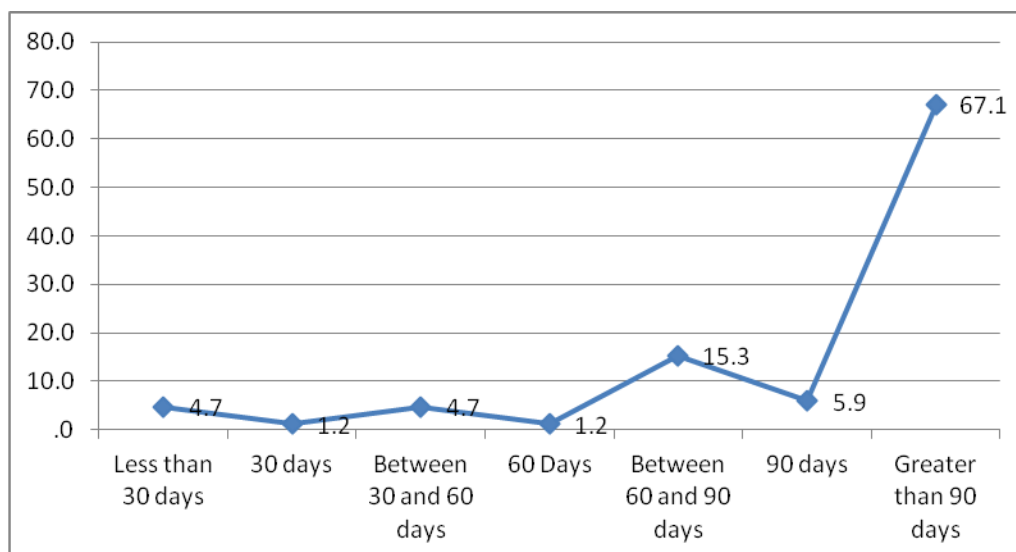
In order to assess the improvement in the livelihood of the project beneficiaries, aspects considered were those of the types of created jobs, the income generated from these activities and its use. Results show that most of the jobs created are from tree-planting activity (89.1%). The following figure presents the proportions of jobs created per project activity.

Figure 1: Percentage of jobs created per project activity



It is worth noting that 1.8% of jobs were created by both tree protection and other activities. As getting a job is not enough to determine the level of income earned, we inquired about the number of days they worked. The results are presented in the following chart.

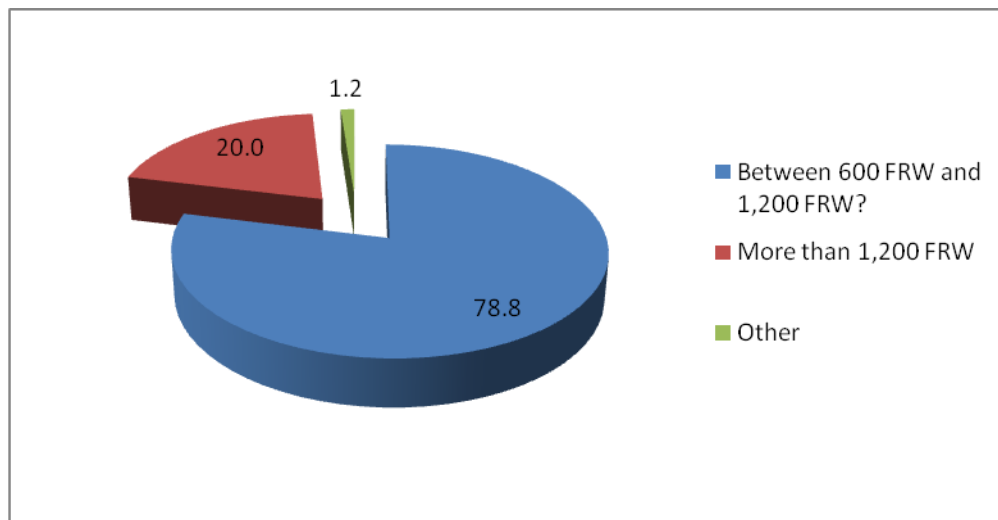
Figure 2: Percentage of persons who worked a certain number of days.



Most of the job beneficiaries (67.1%) worked more than 90 days. In addition, the study revealed how much money they were paid per day. The following chart shows that most of them were paid between 600 RWF and 1,200 RWF per day.

As far as the total amount received, 9 top earners got 60,000 RWF and 5 earners got 30,000RWF. For more details see Appendix 3.

Figure 3: Percentage of persons who were paid a certain amount per day



83 persons out of 85, the size of our sample, answered the question about total amount received. The results show that the minimum amount got by a beneficiary is 6,000RWF; while the maximum is 560,000 RWF. The average amount received by beneficiaries is 127,400 RWF. The study findings exhibit also how important the project was for them as it has paid a total amount of 5,987,800 RWF as salary to the surveyed respondents.

Bank transfer system was used by the project as the method of payment. 96.5% of interviewees have reported that they got their money through their bank accounts.

In the next table, information about retaining some amount on beneficiaries' salary for saving is presented.

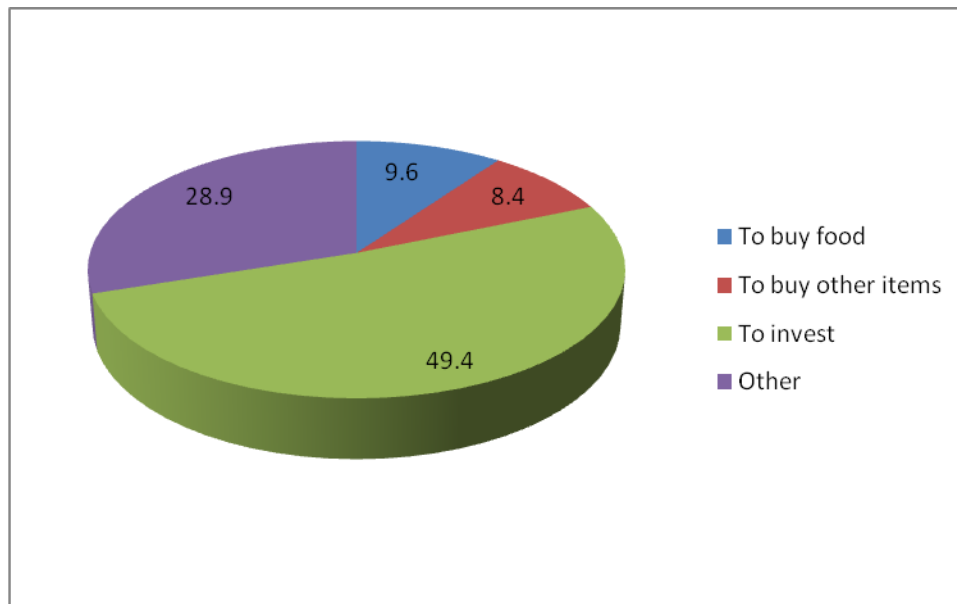
Table 5: Percentage of persons who received their money in total

Total payment	Frequency	Percent
Yes	52	61.2
No	33	38.8
Total	85	100

The question was answered by all the respondents. Among them 61.2% said that they were paid their total salaries whereas 38.8% were partially paid. The partial payment was due to different reasons like school construction deduction, unknown reasons, and insufficient project funds.

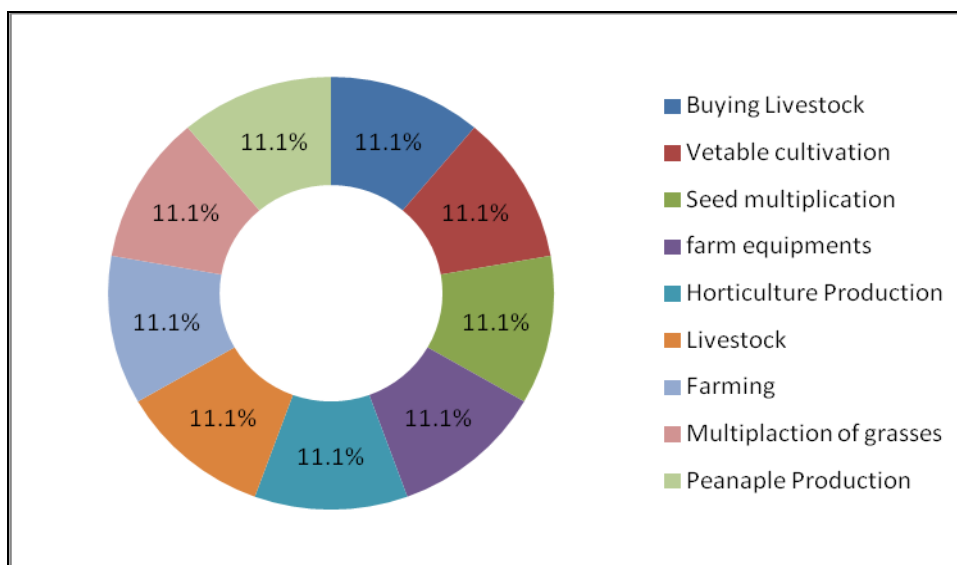
Researchers were also interested in knowing how the received money was spent. The answers are found in the following chart.

Figure 4: Percentage of persons who used the money for a specified activity.



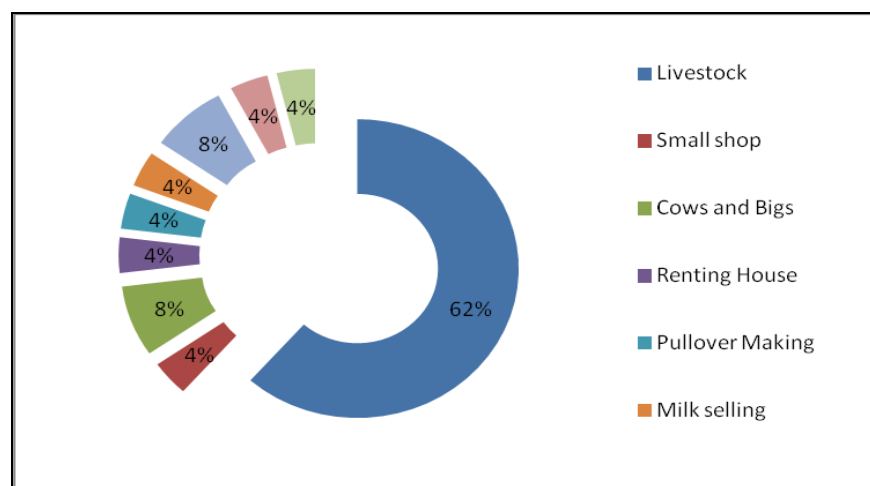
The chart reveals that most of the money was invested (49.4%) mostly to acquire livestock, to pay school fees, to build houses and to pay the health insurance fees. Some farmers invested in various income generating activities like agriculture. The following chart shows the investment destination of project beneficiaries' money.

Figure 5: Percentage of persons who invested in a certain activity



Business activities are shown in the following chart.

Figure 6: Percentage of persons who chose a specified business activity



The chart shows clearly that most of the beneficiaries chose livestock activities.

3.3. PROJECT PHYSICAL MEASUREMENTS BY DISTRICT

This section presents the project physical realization by district as far as the implementation of the project activities is concerned.

3.3.1 MUSANZE District

In Musanze district, the project was implemented in the sectors of Rwaza and Muko.

Physical measurements were conducted in Rwaza. A few planted seedlings are growing well. 91 bamboos are available out of 5,460 planted and 288 Cameroons out of 1,233 planted (Table 6).

Table 6: Physical measurement for Musanze district

Planned		Realized		Destroyed		Available			Planting area	Total distance(km)
Planting trees Bamboos	Agro-forestry trees	Bamboos Realized	Agro-forestry trees	Destroyed trees (bamboos)	Destroyed trees (F.C)	Available REEDS (%)	Available trees Bamboos	available F Agro-forestry trees		
5,460	5,460	3,453	1,233	3,393	5,172	60	91	288	17.08	27.3

As from the table above, there is poor performance due mainly to floods that carried away some planted trees alongside Mukungwa River banks. Also, some farmers are still cultivating crops on

the river banks and there are farmers who still raise their cattle there. Note that the planted area and the total distance were measured by the enumerators.

In some areas, the Mukungwa River banks experienced floods that carried away some planted trees, like bamboos, though the reed marsh seedlings are growing well (60% are in good shape). Note also that the planted distance is 27.3 km.

3.3.2. GAKENKE District

In Gakenke District, project activities were implemented in the Sectors of Muzo and Mugunga. Physical measurements were conducted in Muzo. The planted seedlings grow well. 228 bamboos out of 985 planted are available and 732 Agro-forestry trees out of 1,654 planned (Table 7).

Like in Musanze District, the destruction of planted trees was due mainly to floods that carried away some planted trees alongside the River banks and to men's activities.

Table 7: Physical measurement in Gakenke District

Planting trees Bamboos planned (planned)	Agro-forestry trees	Planting trees(bamboos)	Destroyed Planting trees(Bamboos)	REEDS (%)	Available trees Bamboos	available Agro-forestry trees	Planting area	Total distance(km)
2,286	1,654	985	757	70	228	732	10.06	12.43

In some areas, the River banks experienced floods that carried away some planted trees, like bamboos, even though the planted seedlings are growing well (70% are in good shape). The total planted distance is 12.43 km.

3.3.3. RULINDO District

In Rulindo District, the project works in Shyorongi Sector. Bamboos, Agro-forestry and reed marsh seedlings are growing well. Out of 1,160 bamboos planted by youth associations, 85% are in good shape and 939 Bamboos were planted by the RDF. Details are in Table 8 below.

Table 8: Physical measurement in Rulindo District

Planting trees Bamboos (planned)	Planting Agro-forestry trees	Planting trees(BAMBOOS)	Destroyed trees	REEDS (%)	Available trees Bamboos (youth association)	Available trees Bamboos(RDF)	available Agro-forestry trees	Planting area	Total distance(km)
2,486	2,486	1,452	292	70	1,160	939	732	10.06	12.43

3.3.4. GICUMBI Distrtict

In Gicumbi District, activities were implemented in the Sectors of Mutete and Nyamiyaga. Physical measurements were conducted in Nyamiyaga Sector where 721 bamboos are growing out of 2,916 planned.

Table 9: Physical measurement in Gicumbi District

Planting trees Bamboos (planned)	Planting Agro- forestry trees	Planting trees	Destroyed trees	REEDS (%)	Available trees Bamboos (youth association)	available Agro- forestry trees	Planting area	Total distance(km)
2,916	0	1,032	311	70	721	0	12.05	14.58

The planted seedlings are growing well (70% are in good shape), but others were damaged by floods and farmers' activities. In some areas, the MWANGE River banks were damaged by the floods and they carried away some reeds about 30% planted on them.

3.3.5. HUYE District

In Huye District, activities were implemented in Maraba and Kigoma Sectors. Physical measurements were conducted in Maraba sector (See Table 10).

Table 10: Physical measurement in Huye District

Planting trees: Bamboos (planned)	Planting Agro- forestry trees	Planting trees	Destroyed trees (bamboos)	REEDS (%) In good shape	Available trees Bamboos (youth association)	available Agro- forestry trees	Planting total area	Total distance(km)
3610	3610	3610	3446	20	164	377	10.15	18.05

Bamboos seedlings are growing well (164 are in good shape). For Agro-forestry trees, only 377 out of 3,610 planted are in good shape. All planted seedlings are not well. Some were damaged by floods.

3.3.6. NYAMAGABE District

In Nyamagabe District, activities were carried out in Kibirizi Sector. Planted seedlings are growing well. In some areas, some farmers cultivated crops near the river banks. For more details about physical measurement see Table 11 below.

Table 11: Physical measurement in Nyamagabe District

Planting trees Bamboos (planned)	Planting Agro- forestry trees	Planting trees	Destroyed trees (bamboos)	REEDS (%) In good shape	Available trees Bamboos (youth association)	available Agro- forestry trees	Planting area	Total distance(km)
3,724	3,724	2,332	2,329	1	3	0	9.50	18.62

3.3.7. NYARUGURU District

In Nyaruguru District, activities were carried out in Munini and Kivu Sectors. Physical measurements were conducted in Munini Sector where 78 Bamboos were found in good shape and 157 Agro-forestry trees were available (Table 12).

Table 12: Physical measurement in Nyaruguru District

Planting trees Bamboos (planned)	Planting Agro- forestry trees	Planting trees realized(bamboos)	Destroyed trees	REEDS (%) In good shape	Available trees Bamboos	available Agro- forestry trees	Planting area	Total distance (km)
3,600	1,234	1,550	1,472	20	78	157	8.07	18.0

3.3.8. GISAGARA District

In Gisagara District, activities were carried out in Mukindo and Muganza Sectors. Physical measurements were conducted in Mukindo Sector. The available number of bamambo trees was 1,375 (Table 13).

Table 13: Physical measurement in Gisagara District

Planting trees Bamboos (planned)	Planting Agro- forestry trees	Destroyed trees	Available trees Bamboos (youth association)	Planting area	Total distance(km)
4,784	1,618	243	1,375	12.93	23.92

3.3.9 NYANZA District

In Nyanza, activities are implemented in Rwabicuma sector. Trees in good conditions: reeds: 30; Agro-forestry trees: 66 (Table 14).

Table 14: Physical measurement for Nyanza district

Planting trees Bamboos (planned)	Planting Agro- forestry trees	Planting trees bamboos	Destroyed trees	Available trees (bamboo)	REEDS (%) In good shape	Available Agro-forestry trees	Planting area	Total distance(km)
2,150		30	30	0	30	66	8.82	10.75

3.3.10. MUHANGA District

In Muhanga District, activities were carried out in Rugendabari Sector. In this Sector, 200 bamboos, 308 Agro-forestry trees, and 80 Reeds are in good shape.

Table 15: Physical measurement in Muhanga District

Planting trees Bamboos (planned)	Planting Agro- forestry trees	Destroyed trees	REEDS (%) In good shape	Available trees bamboos	Available Agro- forestry trees	Planting area	Total distance (km)
4,248	4,248	4,048	80	200	308	12.83	21.24

3.3.11. RUHANGO District

In Ruhango District, activities were carried out in Kinihira Sector where about 60 bamboos are available (Table 16).

Table 16: Physical measurement in Ruhango District

Planting trees Bamboos (planned)	Planting Agro-forestry trees	Planting trees	Destroyed trees	REEDS (%) In good shape	Available trees bamboos	Available Agro-forestry trees	Planting area	Total distance(km)
4,200	4,200	4,200	4,140	65	60	103	11.60	21

3.3.12. KAMONYI District

In Kamonyi District, the project was carried out in Kayenzi Sector. (Table 17). There, 1,294 Bamboos, 281 Agro-forestry trees and 65 reeds were found in good shape.

Table 17: Physical measurement in Kamonyi District

Planting trees Bamboos (planned)	Planting Agro- forestry trees	Planting trees	Destroyed trees (bamboos)	REEDS (%) In good shape	Available trees bamboos	Available Agro- forestry trees	Planting area	Total distance(km)
3,562	1,205	3,415	2,121	65	1,294	281	12.81	17.81

3.3.13. GASABO District

In Gasabo District, activities were implemented in Jabana Sector (Table 18). Planted Bamboos are growing well.

Table 18: Physical measurement in Gasabo District

REEDS (%) in good shape	Available trees bamboos	Available Agro- forestry trees (youth associatio	Planting area	Total distance (km)
65	1,294	281	11.60	21

In this sector, 281 Agro-forestry trees are available out 1,294 bamboos.

3.3.14. NYARUGENGE District

In Nyarugenge District, activities were implemented in Kigali Sector (Table 19). Planted Bamboos are growing well.

Table 19: Physical measurement in Nyarugenge District

Planting trees	Ha planned	Destroyed trees planting (%)	Bamboo area (km)	Available trees planting (%)	Non bamboos area (km)	Total distance damaged by floods
12,500	18.07	10	16.4	90.7	0.28	1.39

In Kigali Sector, bamboos are planted on 16.4 km, and 90.7% of all planted trees are available.

3.3.15. KICUKIRO District

In Kicukiro District, activities were implemented in Gahanga Sector. 78.3% of planted trees were destroyed by floods. There were 1,562 planted bamboo trees and 12,500 trees in general (Table 20).

Table 20: Physical measurement in Kicukiro District

Planting trees Bamboos (planned)	Planting trees	Ha planned	Destroyed trees (%)	Bamboo area (km)	Available trees planting (%)	Non bamboos area(kms)
1,562	12,500	8.7	78.3	1.87	21.7	7.81

3.3.16. BUGESERA District

The activities in this district were mainly to fight against the hyacinth in AKAGERA River and especially in Mwogo sector. Therefore, there was no physical measurement conducted in Bugesera. The removed plant was later used in handicrafts.

3.3.17. Afforested Surface Area

The following table shows the surface area afforested by the project.

Table 21: Surface area afforested per District

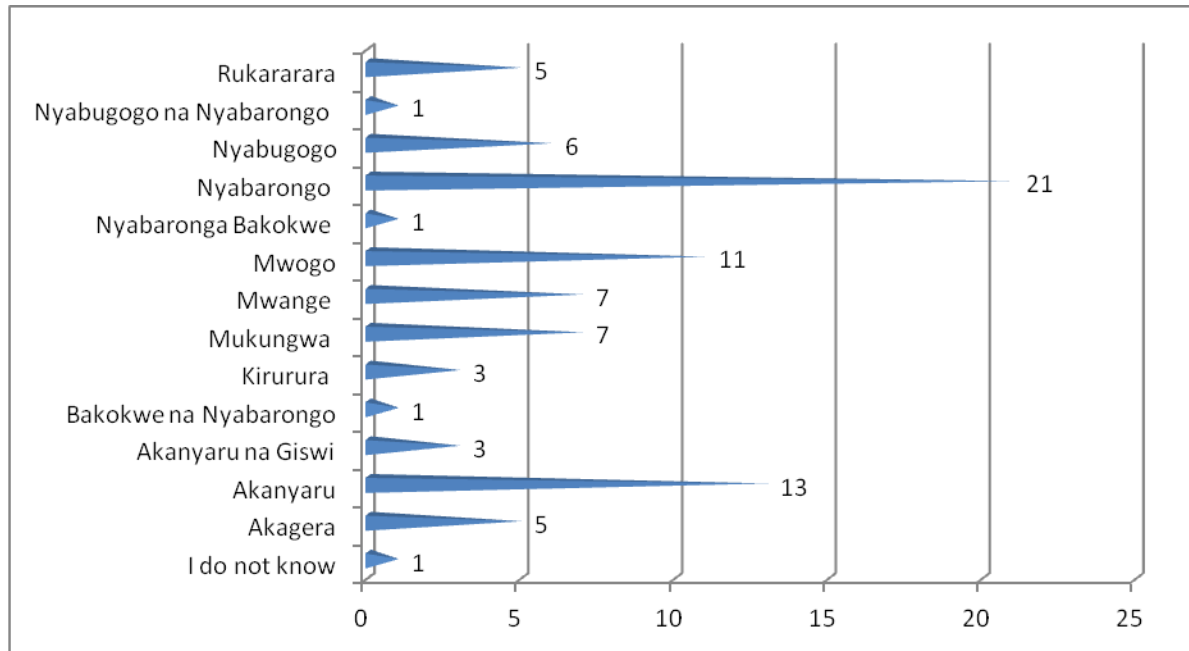
#	DISTRICT	SECTOR	AREA(ha)	DISTANCE (km)
	TOTAL		151.43	234.2
1	RULINDO	SHYORONGI	25.53	30.50
2	MUSANZE	RWAZA	17.08	27.3
3	GISAGARA	MUKINDO	12.93	23.92
4	MUHANGA	RUGENDABARE	12.83	21.24
5	RUHANGO	KINIHIRA	11.60	21
6	NYAMAGABE	KIBIRIZI	9.50	18.62
7	HUYE	MARABA	10.15	18.05
8	NYARUGURU	MUNINI	8.07	18.0
9	KAMONYI	KAYENZI	12.81	17.81
10	GICUMBI	NYAMIYAGA,RUTARE	12.05	14.58
11	GAKENKE	MUZO	10.06	12.43
12	NYANZA	RWABICUMA	8.82	10.75

From this table, it is clear that the project was more efficient in Shyorongi, Rwaza, Mukindo, Rugendabare, and Kinihira Sectors in protecting river banks; 30.5 km, 27.3 km, 23.92 km, 21.24 km, and 21 km respectively. The largest afforested surface area was in Shyorongi (25.53 ha) whereas Munini Sector lags behind with only 8.07 ha.

3.3.18. Protected Rivers

The following chart illustrates the number of respondents by protected rivers.

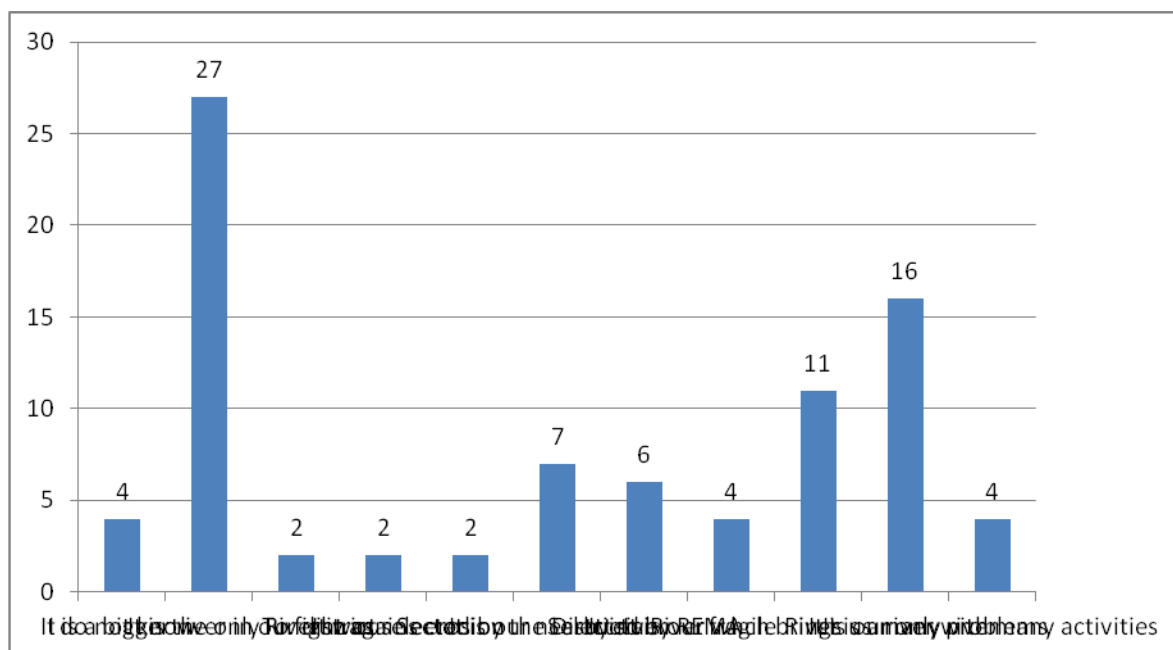
Figure 7: Protected rivers



The respondents told us that Akanyaru as well as Nyabarongo rivers and some of their affluents are protected.

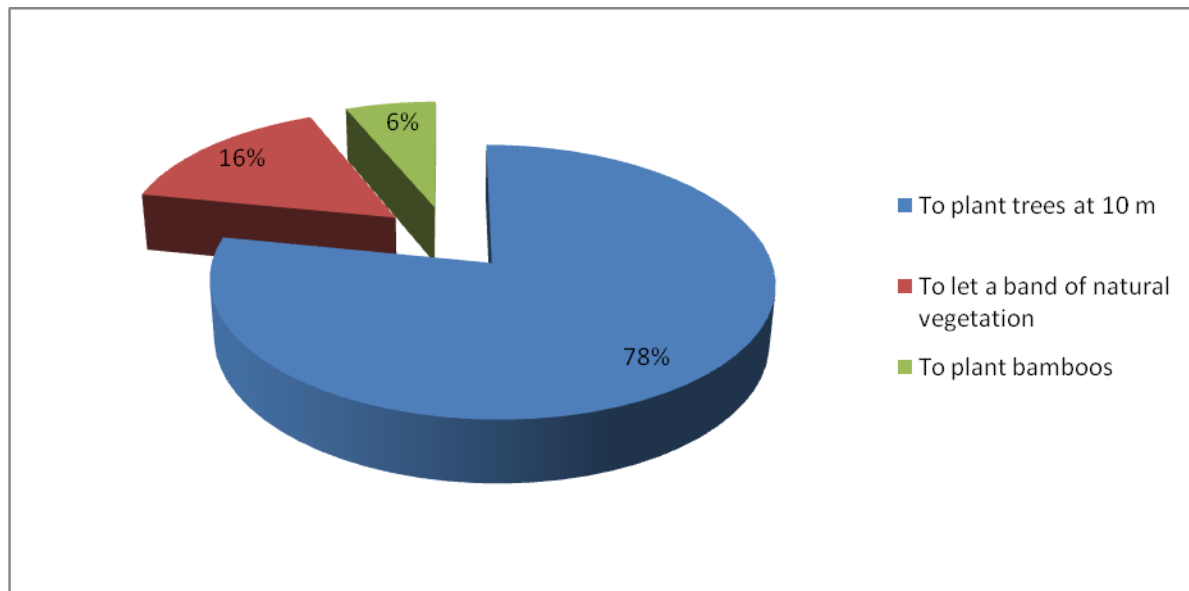
After identifying those protected rivers, we wanted to know if our respondents knew why they were selected. Their answers are presented in the following chart.

Figure 8: Reasons for selecting the river



The respondents did not know the reasons why the project was protecting Nyabarongo river and its affluents. Most of our interviewees said that the protected river in their area was selected because of its size. It is also worth noting that the respondents informed us that most of the river banks were protected by planting trees at 10 m from the banks (78%). The next chart shows the various ways used to protect the river banks.

Figure 9: Used ways to protect river banks



As far as protection of those infrastructure is concerned, the majority of the sample said that the infrastructure are not protected. 83.5% answered that nothing is done to protect the infrastructure as shown in the table below.

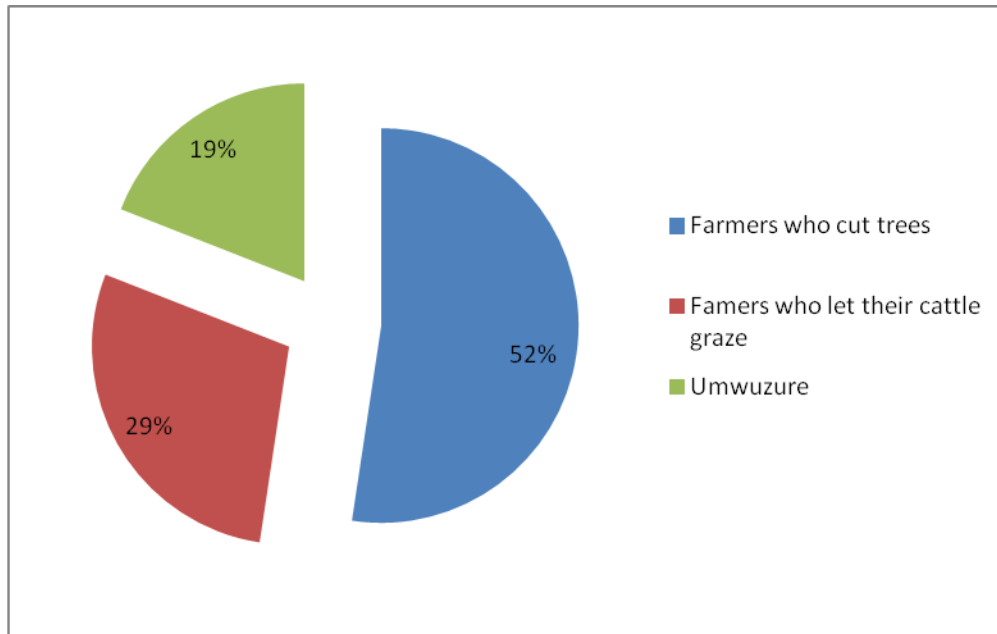
Table 22: Protection of the planted trees and bamboos

Protection of infrastructures	Frequency	Percent
Yes	14	16.5
No	71	83.5
Total	85	100.0

According to the above table, only 16.5% of our respondent said that the plantations are protected whereas 83.5% of the respondents asserted that they are not protected.

After realizing that the protection is not ensured, the common destroyers of those trees and vegetations were identified. The following chart details the results.

Figure 10: Destroyers of set infrastructures



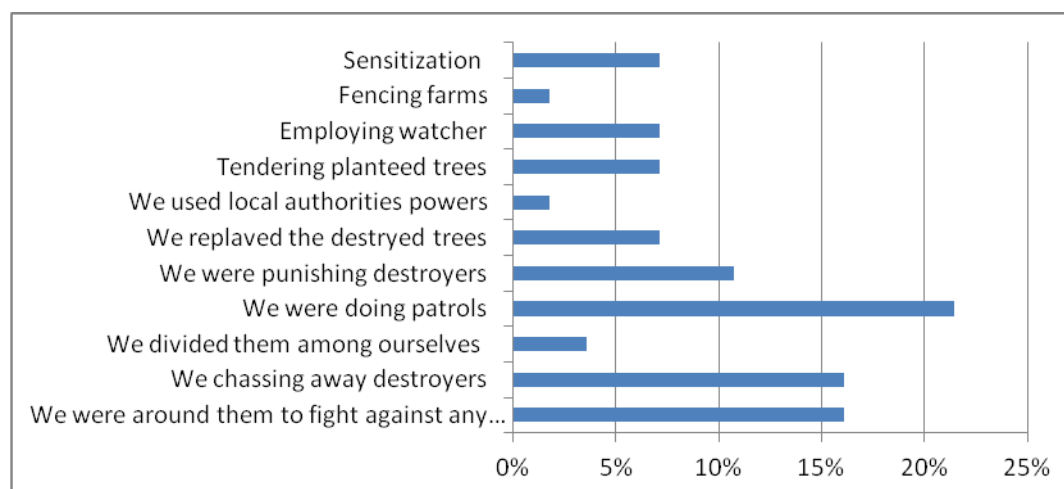
52% of the respondents said that the trees are destroyed by farmers themselves and 29% reported that they are destroyed by cattle grazing.

3.3.19. Protection of planted trees

In the same framework, a question to know whether respondents know the importance of protecting the river banks was asked. It was found that 67% of them tried to do something whereas 33% did not.

For those who did something revealed what they really did. The following chart illustrates what they did to protect the set up infrastructures.

Figure 11: Strategies used to protect set up infrastructures



Most of the infrastructures were protected through organized patrols.

3.3.20. Project benefits and weaknesses

We identified also how the population perceives the gains from the project. The results to this question are presented in the following table.

Table 23: Gains from the project

Project gains	Percent
Some trees survived	24%
Trainings	12%
No gain	12%
Persons have risen their income	7%
Reduction of erosion	6%
The project created jobs	4%
Youth Associations got opportunity to meet	4%
French Cameroon Production	4%
Protection of the river banks	4%
Products from Bamboos	4%
Bamboo survived	3%
Cooperative were formed and training provided	3%
Some trees planted trees are harvested	3%
Reduction of floods	3%
Water hyacinth has given production	1%
Opening of Bank Accounts	1%
Increase of agricultural production	1%

As shown in the table, beneficiaries of the project are thankful for the project for the planted trees at the river banks, training received and income from created jobs. When asked the project weaknesses, the following answers were given:

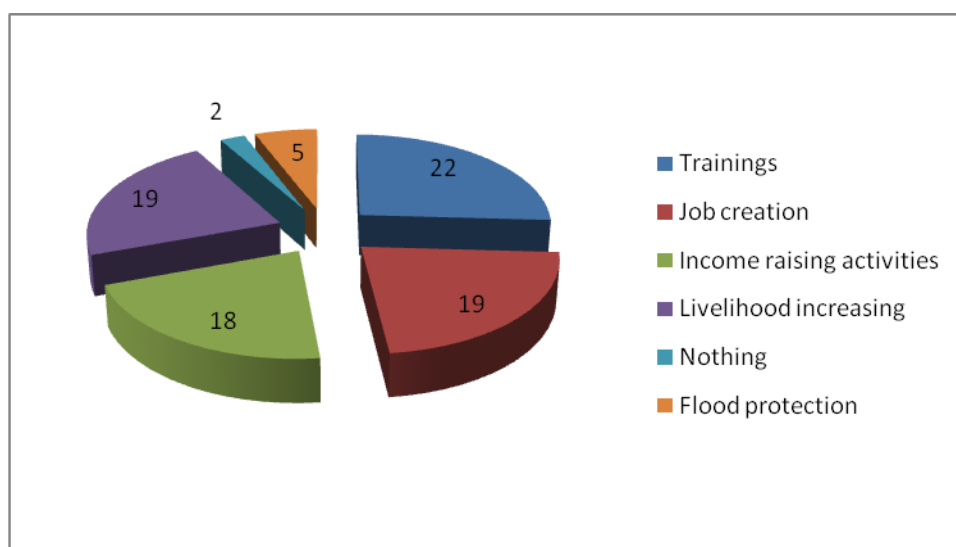
Table 24: Project weaknesses

Weaknesses	Percent
Some trees failed to survive	31%
Persons were paid little	18%
Bad monitoring	16%
Avocado trees failed to survive	8%
Destruction of some infrastructures	8%
Mango trees failed to survive	4%
Bad practices from REMA and District	4%
Lack of sufficient seedlings	4%
Lack of the market for the production	2%
No Calliandra planted	2%
All was fine	2%
Total	100%

The table shows that the respondents regretted that some trees failed to survive but also they complained about their payments. According to them, the project still owes some of them some money.

Project benefits were categorized as shown in the following chart.

Figure 12: Project benefits



The chart shows that beneficiaries mostly appreciated jobs created by the project and income from the project activities.

3.3.21 Protection of the river against water hyacinth

The project undertook activities aimed at protecting rivers against water hyacinth as shown in the table below.

Table 25: Protection of the rivers against water hyacinth

Answer	Frequency	Percent
Yes	10	11.8
No	75	88.2
Total	85	100.0

88.2 % of our respondents asserted that the project did not protect the river against water hyacinth. However, 11.8% told us that some activities were done to protect the rivers against water hyacinth. Therefore, we wanted to know what kinds of activities were undertaken to fight against water hyacinth. The answers are presented in the table below.

Table 26: Activities undertaken to fight against water hyacinth

Activity	Frequency	Percent
Water hyacinth was uprooted	4	40%
Bamboo and tree planting	3	30%
Water hyacinth was uprooted and used in production	2	20%
Water hyacinth was uprooted using a ship	1	10%
Total	10	100%

The strategies used consisted of uprooting water hyacinth (40%) and planting trees and bamboos (30%) according to the study results.

3.4. REALIZED VS PLANNED ACTIVITIES BY DISTRICT

This section compares the planned against realized activities as well as the budget execution.

Ruhango District is taken as an example. However, data from the other 15 districts are presented in the appendices

3.4.1. NYARUGENGE

In Nyarugenge District, NEYP intervened in the following sectors: (i) Kigali, (ii) Kanyinya, and (iii) Mageragere. Each sector has one cooperative with 50 members each. Those cooperatives are: UMUTAKO for Kigali sector, CIKPRE in Kanyinya Sector and ABIZERANYE for Mageragere sector. The table below gives information related to cooperative member beneficiaries of the project planned and accomplished activities as well as financial information.

No	COMPONENT	EXPECTED OUTPUT	INDICATOR	PLANNED ACTIVITIES	ACTIVITIES DONE	PLANNED QUANTITY	ACTIVITIES DONE/REALIZED	% OF ACTIVITIES EXECUTION	BUDGET PLANNED IN THE PRODOC	BUDGET RECEIVED FROM REMA	Budget used	% BUDGET EXECUTION
	NYARUGENGE								26,421,954	16,956,641	18,467,781	108.9%
1	Building and strengthening capacity of youth association, CBOs/NGOs and other local entities to undertake conservation of the Nyabarongo River System.	Raise awareness, train young people and the population of the areas concerned	Youth and population were sensitised and informed	Sensitization of the youth and people concerned.	Sensitization of the youth and people concerned.	150	150	100%	241,000	8,746,621	10,038,500	114.8%
				Equipment purchased	Equipment purchased				1,038,998			
				Training of youth association	Training of youth association	150	150	100%	495,000			

No	COMPONENT	EXPECTED OUTPUT	INDICATOR	PLANNED ACTIVITIES	ACTIVITIES DONE	PLANNED QUANTITY	ACTIVITIES DONE/REALIZED	% OF ACTIVITIES EXECUTION	BUDGET PLANNED IN THE PRODOC	BUDGET RECEIVED FROM REMA	Budget used	% BUDGET EXECUTION
		Follow up of the execution activities	Comment on the activities	Follow up of the execution activities	Follow up of the execution activities				1,201,000			
2	Conserving and managing the Nyabarongo River System using appropriate technologies	Preparing and planting agro-forestry trees on the river banks on 4m*40km, after 2m of natural reserve.	Number of plantes were prepared	Preparing and planting agro-forestry trees on the river banks on 4m*40km, after 2m of natural reserve.	Avoc trees planting and which produced fruits	16,000	16,000	100%	2,794,667	8,210,020	8,429,281	102.7%
		Planting on Banks of 4m*40kms of reeds of the type pennissetum French Cameroun	40 ha Nyabarongo river banks were protected	Planting on Banks of 4m*40kms of reeds of the type pennissetum French Cameroun	passiparum 2.4 tones were planted	156,200	156,200	100%	7,900,000			
		Bamboos planted on 40kms	Number of bamboos were planted	Bamboos planted on 40kms	Bamboos 5000 planted	5,000	5,000	100%	8,168,889			
		Reeds and agro-forestry were weed up ang	% reeds and Agro-forestry were	Reeds and agro-forestry were weed up ang protected	Reeds and agro-forestry were weed up ang protected				4,582,400			

No	COMPONENT	EXPECTED OUTPUT	INDICATOR	PLANNED ACTIVITIES	ACTIVITIES DONE	PLANNED QUANTITY	ACTIVITIES DONE/REALIZED	% OF ACTIVITIES EXECUTION	BUDGET PLANNED IN THE PRODOC	BUDGET RECEIVED FROM REMA	Budget used	% BUDGET EXECUTION
		protected	replaced.									

In Nyarugenge District, NEYP funded activities related to two components namely: (i) Building and strengthening capacity of youth association, CBOs/NGOs and other local entities to undertake conservation of the Nyabarongo River System and (ii) Conserving and managing the Nyabarongo River System using appropriate technologies. Nyarugenge District had requested Frw 26,421,954 to implement planned activities but the project released Frw 16,956,641. However, in order to achieve its objectives, the District utilized Frw 18,467,781; which means that it had to use District resources to implement the project activities budget.

Activities funded by the project in Nyarugenge District are:

- Sensitize youth and people concerned.
- Purchase equipment
- Train youth association
- Follow up of the execution activities
- Plant Avocado
- Plant 2.4 tones of Passparum
- Plant 5000 Bamboos
- Plant and protect reeds and agro-forestry trees

Currently on the ground we can find the avocado trees, trained cooperatives are functional and their members have opened bank accounts and 80% of Bamboos and trees are still alive. **However passiparum does no longer exist.** It was not well taken care of. While **agro-forestry trees have been damaged by floods, cattle keeping, and local leaders' irresponsibility at 95 per cent; only 5 per cent are still alive.**

3.4.2. GASABO

In Gasabo District, NEYP intervened in the following sectors: (i) Jabana, (ii) Nduba, (iii) Rutunga, (iv) Gatsata, and Gisozi. Each sector had one cooperative with 50 members for TUBYUMVEKIMWE in Jabana sector and 50 members for RIWI in Nduba Sector, as well as 50 members for Gatsata, and Gisozi each. Rutunga sector has no cooperative.

The table below gives information related to **cooperative member beneficiaries of the project** planned and accomplished activities as well as financial information.

No	COMPONENT	EXPECTED OUTPUT	INDICATOR	PLANNED ACTIVITIES	ACTIVITIES DONE	PLANNED QUANTITY	ACTIVITIES DONE/ REALIZED	% OF ACTIVITIES EXECUTION	BUDGET PLANNED IN THE PRODOC	BUDGET RECEIVED FROM REMA	Budget used	% BUDGET EXECUTION
	GASABO								27,404,120	24,663,708	24,095,740	98%
1	Building and strengthening capacity of youth association, CBOs/NGOs and other local entities to undertake conservation of the Nyabarongo River System.	Raise awareness, train young people and the population of the areas concerned	Youth and population were sensitized and informed	Raise awareness, train young people and the population of the areas concerned	Raise awareness, train young people and the population of the areas concerned	200	200	100%	1,874,400	10,625,940	17,345,700	
		Follow up of the execution activities	Comment on the activities	Follow up of the execution activities	Follow up of the execution activities				1,997,200			
2	Conserving and managing the Nyabarongo River System using appropriate technology	Preparing and planting agro-forestry trees on the river banks on 4m*40km, after 2m of natural	Number of plantes were prepared	Preparing and planting agro-forestry trees on the river banks on 4m*40km, after 2m of natural	Preparing and planting agro-forestry trees on the river banks on 4m*40km, after 2m of natural reserve.	14,879	14,879	100%	3,029,333			

No	COMPONENT	EXPECTED OUTPUT	INDICATOR	PLANNED ACTIVITIES	ACTIVITIES DONE	PLANNED QUANTITY	ACTIVITIES DONE/ REALIZED	% OF ACTIVITIES EXECUTION	BUDGET PLANNED IN THE PRODOC	BUDGET RECEIVED FROM REMA	Budget used	% BUDGET EXECUTION
	es	reserve.		reserve.								
		Planting on Banks of 4m*40kms of reeds of the type pennissetum French Cameroun	40 ha Nyabaron go river banks were protected	Planting on Banks of 4m*40kms of reeds of the type pennissetum French Cameroun	Planting on Banks of 4m*40kms of reeds of the type pennissetum French Cameroun	250,000	250,000	100%	4,450,000	14,037,768	6,750,040	
		Bamboos planted on 40kms	Number of bamboos were planted	Bamboos planted on 40kms	Bamboos planted on 40kms	12,834	12,834	100%	11,366,667			
		Reeds and agro-forestry were weed up ang protected	% reeds and Agro-forestry were replaced.	Reeds and agro-forestry were weed up ang protected	Reeds and agro-forestry were weed up ang protected				4,686,520			

In Gasabo District, NEYP funded activities related to two components namely: (i) Building and strengthening capacity of youth association, CBOs/NGOs and other local entities to undertake conservation of the Nyabarongo River System and (ii) Conserving and managing the

Nyabarongo River System using appropriate technologies. Gasabo District had requested Frw 27,404,120 to implement planned activities but the project released Frw 24,663,708 of which an amount of only Frw 24,095,740 was used to implement the project activities.

Activities funded by the project in Gasabo District are:

- Raise awareness, train young people and the population of the areas concerned
- Follow up the execution activities
- Plant agro-forestry trees on the river banks on 4m*40km, after 2m of natural reserve.
- Plant on Banks of 4m*40kms reeds of the type pennissetum French Cameroun
- Plant Bamboos on 40kms
- Plant and protect reeds and agro-forestry

Currently planted agro-forestry trees have been destroyed by floods. 65% of reeds and 90% of bamboos are still alive. Floods, cattle grazing, and local leaders' irresponsibility contributed mainly on this destruction.

Note that project beneficiaries have opened bank accounts in the framework of NEYP which is a good sign of progress in its targeted area.

3.4.3. KICUKIRO

In Kicukiro District, NEYP intervened in the following sectors: (i) Gahanga, (ii) Masaka, and (ii) Kanombe. Each sector had one cooperative with 50 members each. The table below gives information related to cooperative member beneficiaries of the project planned and accomplished activities as well as financial information.

No	COMPONENT	EXPECTED OUTPUT	INDICATOR	PLANNED ACTIVITIES	ACTIVITIES DONE	PLANNED QUANTITY	ACTIVITIES DONE/ REALIZED	% OF ACTIVITIES EXECUTION	BUDGET PLANNED IN THE PRODOC	FUNDING NEYP/ REMA	BUDGET RECEIVED/EXECUTED	% BUDGET EXECUTION
	KICUKIRO								23,816,640	21,049,080	21,004,261	100%
1	Building and strengthening capacity of youth association, CBOs/NGOs and other local entities to undertake conservation of the Nyabarongo River System.	Raised awareness, trained young people and the population of the areas concerned	Youth and population were sensitised and informed	Raise awareness, train young people and the population of the areas concerned	Raise awareness, train young people and the population of the areas concerned	150	150	100%	895,440	10,701,800	14,083,540	132%
				To buy DNYC centre equipments	DNYC centre equipments bought				1,500,000			
				To purchase labour materials					392,000			
				Field equipments					352,800			
		Monitoring and evaluation of activities		Follow up of the execution activities	Follow up of the execution activities				1,664,800			
2	Conserving and managing the Nyabarongo River System using appropriate	Stabilize 10m of Nyabarongo river banks		Reeds of pennissetum or French Cameroun types planted	Preparing and planting agro-forestry trees on the river banks on 4m*40km, after 2m of natural	15,625	15,625	100%	6,912,500			

No	COMPONENT	EXPECTED OUTPUT	INDICATOR	PLANNED ACTIVITIES	ACTIVITIES DONE	PLANNED QUANTITY	ACTIVITIES DONE/ REALIZED	% OF ACTIVITIES EXECUTION	BUDGET PLANNED IN THE PRODOC	FUNDING NEYP/ REMA	BUDGET RECEIVED/EXECUTED	% BUDGET EXECUTION
	technologies				reserve.							
				Planted agro-forestry plants	Planted agro-forestry plants	22,400	22,400	100%	1,176,000	10,347,280	6,920,721	67%
				Protected area of 35000mX10m by bamboos	Protected area of 35000mX10m by bamboos	7,000	7,000	100%	7,157,500			
				Replacement of unsuccessful planted seeds					3,765,600			

In Kicukiro District, NEYP funded activities related to two components namely: (i) Building and strengthening capacity of youth association, CBOs/NGOs and other local entities to undertake conservation of the Nyabarongo River System and (ii) Conserving and managing the Nyabarongo River System using appropriate technologies. Kicukiro District had requested Frw 23,816,640 to implement planned activities but the project released Frw 21,049,080 of which an amount of only Frw 21,004,261 was used to implement project activities.

Activities funded by the project in Kicukiro District are:

- Raise awareness, train young people and the population of the areas concerned
- Equip DNYC centre

- Follow up of the execution activities
- Plant agro-forestry trees on the river banks on 4m*40km, after 2m of natural reserve.
- Plant agro-forestry
- Protect area of 35000mX10m by bamboos

Currently planted agro-forestry trees were destroyed by cattle, 50% of reeds and 20% of bamboos are still alive.

3.4.4. KAMONYI

In Kamonyi district the Project related activities are being implemented in two sectors which are Kayenzi and Ngamba comprising each a youth cooperative with a total cooperative members of 100 (50 in Kayenzi and 50 in Ngamba). The Kayenzi youth Cooperative is called Imparirwakurusha.

The table below presents the project implementation status in Kamonyi District.

N o	Component	EXPECTED OUTPUT	INDICATOR	PLANNED ACTIVITIES	ACTIVITIES DONE	PLANNED QUANTITY	ACTIVITIES DONE/ REALIZED	% OF ACTIVITIES EXECUTION	BUDGET PLANNED IN THE PRODOC	BUDGET RECEIVED FROM REMA	Budget used	% BUDGET EXECUTION
	KAMONYI								11,084,158	24,889,156	24,889,156	100%
1	Building and strengthening capacity of youth association	Raise awareness, train young people and the population of	Youth and population were sensitized and informed	Raise awareness, train young people and the population of the areas concerned	Raise awareness , train young people and the	100	100	100%	2,592,158	3,377,338	3,377,338	100%

o	N	Component	EXPECTED OUTPUT	INDICATOR	PLANNED ACTIVITIES	ACTIVITIES DONE	PLANNED QUANTITY	ACTIVITIES DONE/ REALIZED	% OF ACTIVITIES EXECUTION	BUDGET PLANNED IN THE PRODOC	BUDGET RECEIVED FROM REMA	Budget used	% BUDGET EXECUTION
		CBOs/NGOs and other local entities to undertake conservation of the Nyabarongo River System.	the areas concerned			population of the areas concerned							
			Follow up of the execution activities	Comment on the activities	Follow up of the execution activities	Follow up of the execution activities				900,000			
2		Conserving and managing the Nyabarongo River System using appropriate technologies	Stabilising and protecting 10m from Nyabarongo river.		Field preparation	Preparation of field				4,936,000			
					Planting on Banks of Nyabarongo river bamboos on 40 km	Planting bamboo on Banks of Nyabarongo river along 40 km	8,000	10,000	125%	222,000			

o N	Component	EXPECTED OUTPUT	INDICATOR	PLANNED ACTIVITIES	ACTIVITIES DONE	PLANNED QUANTITY	ACTIVITIES DONE/ REALIZED	% OF ACTIVITIES EXECUTION	BUDGET PLANNED IN THE PRODOC	BUDGET RECEIVED FROM REMA	Budget used	% BUDGET EXECUTION
				Panting agro forestry tree on 40 km along Nyabarongo river	Panting agro forestry tree on 40 km along Nyabarongo river	25,600	25,600	100%				
		Planting on Banks 40kms of reeds of the type pennisetum French Cameroun.	Nyabarongo river banks were protected	Planting on 40 km of reeds of the type pennisetum French Cameroun along Nyabarongo river.	Planting on 40kms of reeds the type pennisetum French Cameroun along Nyabarongo river.	250,000	250,000	100%		21,511,818	21,511,818	100%
				Watcing over planted seeds	Watching over planted trees and reeds				1,200,000			
		Reeds and agro-forestry were weed up and protected	Damaged reeds and Agro-forestry replaced.	Maintaining and protecting planted area	Maintainin g and protecting planted area				1,234,000			

As presented in the above table, only two components of the entire project components are being implemented in Kamonyi district. 100 youth members of the cooperatives have been sensitized and trained on environment protection, the importance of being in cooperatives and how to

prepare seeds. Training modules were produced and distributed to the trainees and all have opened bank accounts in COOJAD, this has increased the access to financial services in the district especially for Youth. Both cooperatives are now operational.

The planned office equipments, like computer and others, to facilitate the project management was provided to the representative of the National Youth Council in the district who is also in charge of following up on the daily basis the project implementation.

With regard to the second project component, 25 600 agro-forestry trees were planted on 40 ha in total. Planted trees are calliandra, calothyrsus and Leucaena diversifolia. 250 000 reeds of the type of pennissetum and French Cameroun were also planted along Nyabarongo river on 40 ha and 10 000 bamboo seeds were also planted on the area of 40 ha. all these activities have been realized by youth in cooperatives.

To implement the environment project in Kamonyi District required a budget of 11,084,158 Rwf, however 24,889,156 Rwf was availed by REMA and was executed 100%.

Although the project has achieved a lot, there has been some challenges: cooperatives were not monitored or followed up to ensure how the implementation of it is impacting the livelihood of cooperative members through income generating activities created from the support they got from the project, lack of ownership by the district authorities, especially the in charge of youth and cooperatives, floods have destroyed most of the agro-forestry trees planted, only 60% of them are remaining, planted bamboos and reeds have also been destroyed and the current area covered by these is respectively 80% and 60% of the area planted.

among other solutions to ensure the sustainability of the project there should be to raise awareness of district authorities to get them more engaged and to request them to replace the destroyed realizations through monthly community work (Umuganda) and mobilising youth who have conducted these activities. project results should be handed over to district and district environment officer to ensure the sustainability of these results.

3.4.5. MUHANGA

In Muhanga District, the Project operated in seven sectors which are Mushishiro, Rugendabari, Nyarusange, Kibangu, Nyabinoni, Rongi and Kiyumba comprising each a youth cooperative with 420 cooperative members in total. The table below presents the project implementation status in Muhanga District.

No	COMPONENT	EXPECTED OUTPUT	INDICATOR	PLANNED ACTIVITIES	ACTIVITIES DONE	PLANNED QUANTITY	ACTIVITIES DONE/ REALIZED	% OF ACTIVITIES EXECUTION	BUDGET PLANNED IN THE PRODOC	BUDGET RECEIVED FROM REMA	BUDGET USED	% BUDGET EXECUTION
	MUHANGA								22,601,200	47,094,652	43,262,619	92%
1	Building and strengthening capacity of youth association, CBOs/NGOs and other local entities to undertake conservation of the Nyabarongo River System.	Raise awareness, train young people and the population of the areas concerned	Youth and population were sensitised and informed	Raise awareness, train young people and the population of the areas concerned	Raise awareness, train young people and the population of the areas concerned	420	420	100%	1,065,000			
			Purchase materials of labour	Purchased materials of labour	Purchased materials of labour				392,000			
		Follow up of the execution activities	Comment on the activities	Follow up of the execution activities	Follow up of the execution activities				1,320,000			

No	COMPONENT	EXPECTED OUTPUT	INDICATOR	PLANNED ACTIVITIES	ACTIVITIES DONE	PLANNED QUANTITY	ACTIVITIES DONE/ REALIZED	% OF ACTIVITIES EXECUTION	BUDGET PLANNED IN THE PRODOC	BUDGET RECEIVED FROM REMA	BUDGET USED	% BUDGET EXECUTION
			Purchase equipment of DNYC centre	Purchased equipment	Purchased equipment				300,000			
2	Conserving and managing the Nyabarongo River System using appropriate technologies	Preparing and planting agro-forestry trees on the river banks on 4m*60km, after 2m of natural reserve.	Number of plants realized	Preparing and planting agro-forestry trees on the river banks on 4m*60 km after 2m of natural shrubs.	Preparing and planting agro-forestry trees on the river banks on 4m*60 km, after 2m of natural shrubs.	44,800	19,920	44%	2,016,000			
				Planting on Banks of Nyabarongo river bamboos	Planting on Banks of Mukungwa river bamboos	16,688	16,688	100%	12,270,000			
		Planting on Banks of 4m*28kms of reeds of the type pennissetum French Cameroun	Nyabarongo river banks were protected	Planting on Banks of 4m*28kms of reeds of the type pennissetum French Cameroun	Planting on Banks of 4m*60kms of reeds of the type pennissetum French Cameroun	437,500	437,500	100%	1,185,000			
		Reeds and agro-forestry were weed	Damaged reeds and Agro-forestry	Maintaining protected area by weed up	Reeds and agro-forestry were weed				4,053,200			

No	COMPONENT	EXPECTED OUTPUT	INDICATOR	PLANNED ACTIVITIES	ACTIVITIES DONE	PLANNED QUANTITY	ACTIVITIES DONE/ REALIZED	% OF ACTIVITIES EXECUTION	BUDGET PLANNED IN THE PRODOC	BUDGET RECEIVED FROM REMA	BUDGET USED	% BUDGET EXECUTION
		up and protected	replaced.	and replacing degraded trees and reeds.	up and protected							

Like for Kamonyi district, the above table indicates that only two components of the project components are being implemented in Muhanga district. 420 youth cooperative members have been sensitized and trained on environment protection, importance of being in cooperatives and seeds preparation. **Training modules were produced and distributed to the trainees and all have opened bank accounts in COOJAD, this has increased the access to financial services in the district especially for Youth. Both cooperatives are now operational.**

The planned office equipments, like computer and others, to facilitate the project management was provided to the representative of the National Youth Council in the district who is also in charge of following up on the daily basis the project implementation.

With regard to the second project component, 19,920 agro-forestry trees were planted on 70 ha in sectors of Mushishiro, Nyarusange, Rugendabali, Kibangu and Nyabinoni. Planted trees are calliandra, calothyrsus and Leucaena diversifolia. 437,500 reeds of the type of pennissetum and French Cameroun were also planted in the same sectors on 70 ha and 16,688 bamboo seeds were also planted on the area of 32,643 ha in the sectors of Kiyumba and Rongi. All these activities have been realized by youth in cooperatives.

The project intended to consume a total amount of 47,094,652 Rwf for its implementation at the district level and it was implemented at 92%; that is 43,262,619 Rwf.

As good results of the project implementation is that farmers are no more cultivating at 10m from the river and youth cooperatives are all operational. However, agro-forestry trees have been destroyed either by domestic animals, floods or farmers. The area covered by these trees is now estimated at 40% of the planted area while it is 65% for reeds and 72% for bamboo. Floods have destroyed 28% of the planted trees.

As in the other districts, youth cooperatives were not sufficiently monitored or followed up to ensure that the project implementation impacted the livelihood of cooperative members through income generating activities created from the project. Lack of ownership by the district authorities, especially the one in charge of youth and cooperatives, farmers in search of feeds for their livestock and floods have contributed negatively to the success and sustainability of the project achievements in the district, farmers have destroyed the planted reeds at their early stage.

Local authorities' awareness should be increased to ensure the ownership of such achievements. Destroyed infrastructures should be replaced through community work and engaging youth who have participated in establishment of those infrastructures. Handing over the management of these infrastructures to youth cooperatives could ensure the sustainability of the achievements.

3.4.6. RUHANGO

In Ruhango District, the Project is being implemented in two sectors of Kinihira and Kabagali comprising each a youth cooperative with 100 cooperative members in total. The table below presents the project implementation status in Ruhango District.

No	COMPONENT	EXPECTED OUTPUT	INDICATOR	PLANNED ACTIVITIES	ACTIVITIES DONE	PLANNED QUANTITY	ACTIVITIES DONE/REALIZED	% OF ACTIVITIES EXECUTION	BUDGET PLANNED IN THE PRODOC	FUNDING NEYP/REMA	BUDGET RECEIVED/EXECUTED	% BUDGET EXECUTION
	RUHANGO								30,072,753	24,348,558	24,464,082	100.5%
1	Building and strengthening capacity of youth association, CBOs/NGOs and other local entities to undertake conservation of the Nyabarongo River System.	Capacity of youth and population in river protection were reinforced	150 youth and local community members sensitized	Raise youth and local population awareness on the protection of Akanyaru and Mukunguri rivers	Raise youth and local population awareness on the protection of Akanyaru and Mukunguri rivers	100	100	100%	661,000	11,645,060	12,118,682	104%
		Youth center equipped	Computer			1	1	100%				
			Digital Camera			1	1	100%	1,038,988			
		Pamphlets distributed	Pamphlet			150	150	100%	75,000			
		Training of trainers							224,000			
		M&E							1,485,900	1,485,900	460,000	31%
2	Conserving and managing the Nyabarongo River System using appropriate technologies	Preparing and planting agro-forestry trees on the river banks on		Planter sur une bande de 5 m French Cameroun	Planter sur une bande de 5 m French Cameroun	25,600	25,600	100%	2,794,667			

No	COMPONENT	EXPECTED OUTPUT	INDICATOR	PLANNED ACTIVITIES	ACTIVITIES DONE	PLANNED QUANTITY	ACTIVITIES DONE/REALIZED	% OF ACTIVITIES EXECUTION	BUDGET PLANNED IN THE PRODOC	FUNDING NEYP/REMA	BUDGET RECEIVED/EXECUTED	% BUDGET EXECUTION
		40km										
		Planting reeds and monitor planted materials		15,625 reeds planted on 40 Ha	15,625 reeds planted on 40 Ha	15,625	15,625	100%	9,551,000	11,217,598	11,885,400	106%
		Plant 8,000 bamboos on 40 Ha and tendering the planted materials		8,000 bamboos were planted on 40 Ha in Kinihira and Kabagari sectors	8,000 bamboos were planted on 40 Ha in Kinihira and Kabagari sectors	8,000	8,000	100%	12,451,289			
		IBIHOHO activity							1,790,909			

The above table indicates that only two components of the project components are being implemented in Ruhango district. 100 youth cooperative members have been sensitized and trained on environment protection, importance of being in cooperatives and ways to prepare seeds. Training modules were produced and distributed to the trainees and all have opened bank accounts in COOJAD, this has increased the access to financial services in the district especially for Youth. Both cooperatives are now operational.

The planned office equipments, like computer (1) and digital camera (1), to facilitate the project management was provided to the representative of the National Youth Council in the district who is also in charge of following up on the daily basis the project implementation.

25,600 agro-forestry trees were planted on 40 ha. Planted trees are calliandra, calothyrsus and Leucaena diversifolia. 15,625 reed seeds and 8,000 bamboo trees were also planted on the same area, 40 ha each. likewise all of these have been realized by youth who are working in cooperatives.

However, youth cooperatives were not monitored or followed up enough to ensure how the project implementation is impacting the livelihood of cooperative members through income generating activities created from the support they got from the project.

The district has planned to use 30,072,753 Rwf for its implementation, it has received 24,348,558 Rwf as transfer from REMA. The project budget execution rate in Ruhango district is 100%. However the project achievements are not sustainable, in fact, farmers and floods have destroyed planted agro-forestry trees, reeds and bamboo; the remaining area covered by agro-forestry trees is estimated to be 50% while it is 55% and 60% respectively for reeds and bamboo.

Lack of ownership by the district authorities, especially the in charge of youth and cooperatives and representative of national youth council in the district, farmers in search of feeds for their livestock and floods have contributed negatively to the success and sustainability of the project achievements in the district, farmers have destroyed the planted reeds at their early stage.

Local authorities awareness should be increased to ensure the ownership of such achievements. Destroyed infrastructures should be replaced through community work and engaging youth who have participated in establishment of those infrastructures. Handing over the management of these infrastructures to youth cooperatives could ensure the sustainability of the project achievements.

3.4.7. NYANZA

In Nyanza District, the Project is being implemented in two sectors which are Cyabakamyi and Rwabicuma comprising each a youth cooperative with 100 cooperative members in total. The table below presents the project implementation status in Nyanza District.

o n	COMPONENT	EXPECTED OUTPUT	INDICATOR	PLANNED ACTIVITIES	ACTIVITIES DONE	PLANNED QUANTITY	ACTIVITIES DONE/REALIZED	% OF ACTIVITIES EXECUTION	BUDGET PLANNED IN THE PRODOC	BUDGET RECEIVED FROM REMA	Budget used	% BUDGET EXECUTION
	NYANZA								25,561,000	20,158,272	11,166,500	55%
1	Building and strengthening capacity of youth association, CBOs/NGOs and other local entities to undertake conservation of the Nyabarongo River System.	Raise awareness, train young people and the population of the areas concerned	Youth and population were sensitised and informed	Mobilization	Regroup the potential youth in teams	100	100	100%	600,000	9,358,272	8,886,500	
				Training	Youth trained	100	100	100%	4,629,150			
		Follow up of the activities execution	Comments on the activities	Follow up of the activities execution	Follow up of the activities execution				2,100,000			

o N	COMPONENT	EXPECTED OUTPUT	INDICATOR	PLANNED ACTIVITIES	ACTIVITIES DONE	PLANNED QUANTITY	ACTIVITIES DONE/REALIZED	% OF ACTIVITIES EXECUTION	BUDGET PLANNED IN THE PRODOC	BUDGET RECEIVED FROM REMA	Budget used	% BUDGET EXECUTION
2	Conserving and managing the Nyabarongo River System using appropriate technologies	Progressive terracing on 100Ha at Nyagisozi, Rwabicuma, and Cyabakamyi sectors	Progressive terracing on 100Ha at Nyagisozi, Rwabicuma, and Cyabakamyi sectors	Progressive terracing on 100Ha at Nyagisozi, Rwabicuma, and Cyabakamyi sectors	Progressive terracing on 100Ha at Nyagisozi, Rwabicuma, and Cyabakamyi sectors				16,431,850	10,800,000	2,280,000	
		125,600 agro-forestry plants on 40Ha	125,600 agro-forestry plants on 40Ha	125,600 agro-forestry plants on 40Ha	125,600 agro-forestry plants on 40Ha	125,600	125,600	100%				
		250,000 reeds planted on 40Ha	250,000 reeds planted on 40Ha	250,000 reeds planted on 40Ha	250,000 reeds planted on 40Ha	250,000	250,000	100%				
		Bamboo's plantation of 3000 stumps on 15km	Bamboo's plantation of 3000 stumps on 15km	Bamboo's plantation of 3000 stumps on 15km	Bamboo's plantation of 3000 stumps on 15km				1,800,000			

Only two components of the project components are being implemented in Nyanza District. 100 youth cooperative members have been sensitized and trained on environment protection, on importance of being in cooperatives and how to prepare seeds. **Training modules were produced and distributed to the trainees and all have opened bank accounts in COOJAD, this has increased the access to financial services in the district especially for Youth.** However these youth cooperatives established at sector level are no longer operational.

The planned office equipments, like computer and digital camera to facilitate the project management was not provided to the representative of the National Youth Council in the district who is also in charge of following up on the daily basis the project implementation.

Youth cooperatives have been used to plant 90% of the planned agro-forestry trees (25,600 in total) on 40 ha in sectors of Rwabicuma and Cyabakamyi and, 250,000 reed seeds were planted on an area of 40 ha in the sectors of Mukindo, Mugombwa and Muganza. progressive terraces were created at 100 ha

However, youth cooperatives were not monitored or followed up enough to ensure how the project implementation is impacting the livelihood of cooperative members through income generating activities created from the support they got from the project.



The district has planned to use 325,561,000 Rwf for the implementation of the project, it has received 220,158,272 Rwf as transfer from REMA and has consumed so far 11,166,500 Rwf be it 55%. The low execution rate is mainly due by the long bureaucracy processes especially with regard to tender processes, delays in paying service providers and project beneficiaries. The budget execution is such that, about 95% (8 886,500 Rwf) of the total budget (9,358,272 Rwf) allocated to component one of youth mobilization and training was consumed while it is only 21% (2,280,000 Rwf) of the total budget (10,800,000) allocated to component two of conservating the Nyabarongo river banks and affluents. This shows how much the process of delivering the key component of the project was slow.

Project achievements are not sustainable, in fact, farmers and floods have destroyed planted agro-forestry trees and reeds; the remaining area covered by agro-forestry trees is estimated at 10% while remaining area covered by reeds is at 30%.

Lack of ownership by the district authorities, especially the in charge of youth and cooperatives and representative of national youth council in the district, farmers in search of feeds for their livestock and floods have contributed negatively to the success and sustainability of the project achievements in the district, farmers have destroyed the planted reeds at their early stage.

Local authorities' awareness should be increased to ensure the ownership of such achievements. destroyed infrastructures should be replaced through community work and engaging youth who have participated in establishment of those infrastructures. Handing over the management of these infrastructures to youth cooperatives could ensure the sustainability of the project achievements.

3.4.8. HUYE

The National Environment and Youth Project in Nyanza District is being implemented in two sectors which are Maraba and Kigoma comprising each a youth cooperative with 100 cooperative members in total. The table below presents the project implementation status in Nyanza District.

o N	COMPONENT	EXPECTED OUTPUT	INDICATOR	PLANNED ACTIVITIES	ACTIVITIES DONE	PLANNED QUANTITY	ACTIVITIES DONE/REALIZED	% OF ACTIVITIES EXECUTION	BUDGET PLANNED IN THE PRODOC	BUDGET RECEIVED FROM REMA	Budget used	% BUDGET EXECUTION
	HUYE								26,721,954	26,004,467	25,910,049	99.6%
1	Building and strengthening capacity of youth association, CBOs/NGOs and other local entities to undertake conservat	Raise awareness, train young people and the population of the areas concerned	Youth and population were sensitised and informed	Sensitization of the youth and people concerned.	Sensitization of the youth and people concerned.	100	100	100%	241,000			

o N	COMPONENT	EXPECTED OUTPUT	INDICATOR	PLANNED ACTIVITIES	ACTIVITIES DONE	PLANNED QUANTITY	ACTIVITIES DONE/REALIZED	% OF ACTIVITIES EXECUTION	BUDGET PLANNED IN THE PRODOC	BUDGET RECEIVED FROM REMA	Budget used	% BUDGET EXECUTION
	ion of the Nyabaron go River System.											
				Equipment purchased	Equipment purchased				1,038,998	13,861,938	12,452,000	89.8%
				Training of youth association	Training of youth association	100	100	100%	495,000			
		Follow up of the execution activities	Comment on the activities	Follow up of the execution activities	Follow up of the execution activities				1,501,000			
2		Preparing and planting agro-forestry trees on the river banks on 4m*40km,after 2m of natural reserve.	Number of plantes were prepared	Preparing and planting agro-forestry trees on the river banks on 4m*40km,after 2m of natural reserve.	Preparing and planting agro-forestry trees on the river banks on 4m*40km,after 2m of natural reserve.	25,600	25,600	100%	2,794,667			
		Planting on Banks of 4m*40kms of reeds of the type pennissetum French	40 ha Nyabarongo river banks were protected	Planting on Banks of 4m*40kms of reeds of the type pennissetum French	Planting on Banks of 4m*40kms of reeds of the type pennissetum French	244,900	244,900	100%	7,900,000	12,142,529	13,458,049	110.8%

o N	COMPONENT	EXPECTED OUTPUT	INDICATOR	PLANNED ACTIVITIES	ACTIVITIES DONE	PLANNED QUANTITY	ACTIVITIES DONE/REALIZED	% OF ACTIVITIES EXECUTION	BUDGET PLANNED IN THE PRODOC	BUDGET RECEIVED FROM REMA	Budget used	% BUDGET EXECUTION
		Cameroun		Cameroun	Cameroun							
		Bamboos planted on 40kms	Number of bamboos were planted	Bamboos planted on 40kms	Bamboos planted on 40kms	6,151	6,151	100%	8,168,889			
		Reeds and agro-forestry were weed up ang protected	% reeds and Agro-forestry were replaced.	Reeds and agro-forestry were weed up ang protected	Reeds and agro-forestry were weed up ang protected				4,582,400			

Two components of the project components are being implemented in Nyanza District. 100 youth have been sensitized and trained on environment protection, importance of being in cooperatives and how to prepare seeds. **Training modules were produced and distributed to the trainees and all have been organized into cooperative, one by sector, and have opened bank accounts in COOJAD, this has increased the access to financial services in the district especially for Youth.** These youth cooperatives established at sector level are operational and, the one of Maraba sector has been legally registered.

The planned office equipments, like computer, digital camera and other, to facilitate the project management was provided earlier on to the representative of the National Youth Council in the district who is also in charge of following up on the daily basis the project implementation.

Youth cooperatives have been used to plant 25,600 agro-forestry in the sectors of Maraba and Kigoma, 244,900 of reed seeds and 6,151 of bamboo seeds all on 40 ha each. good enough for this project is that the total budget allocated to the conservation of Nyabarongo river and its affluents have been consumed.

Project achievements are not sustainable, in fact, farmers and floods have destroyed planted agro-forestry trees and reeds; the remaining area covered by agro-forestry trees is estimated at 20% while remaining area covered by reeds is 20% and 40% for the bamboo.

Lack of ownership by the district authorities, especially the in charge of youth and cooperatives and representative of national youth council in the district, farmers in search of feeds for their livestock and floods have contributed negatively to the success and sustainability of the project achievements in the district, farmers have destroyed the planted reeds at their early stage.

Local authorities awareness should be increased to ensure the ownership of such achievements. Destroyed infrastructures should be replaced through community work and engaging youth who have participated in establishment of those infrastructures. Handing over the management of these infrastructures to youth cooperatives could ensure the sustainability of the project achievements.

3.4.9. GISAGARA

The National Environment and Youth Project in Gisagara District is being implemented in two sectors which are Mukingo, Mugombwa and Muganza comprising each a youth cooperative with 150 cooperative members in total, 50 persons each. The table below presents the project implementation status in Nyanza District.

o N	COMPONENT	EXPECTED OUTPUT	INDICATOR	PLANNED ACTIVITIES	ACTIVITIES DONE	Indicator	PLANNED QUANTITY	ACTIVITIES DONE/REALIZED	% OF ACTIVITIES EXECUTION	BUDGET PLANNED IN THE PRODOC	BUDGET RECEIVED From REMA	Budget used	% BUDGET EXECUTION
	GISAGARA									4,595,150	20,435,156	5,959,044	29%
1	Building and strengthening capacity of youth association, CBOs/NGOs and other local entities to undertake conservation of the Nyabarongo River System.	Capacity of youth and population in river protection were reinforced	150 youth and local community members sensitized.	Raise youth and local population awareness on the protection of Akanyaru and Mukunguri rivers	Raise youth and local population awareness on the protection of Akanyaru and Mukunguri rivers			150		1,147,520	17,194,349	2,368,635	14%
2	Conserving and managing the Nyabarongo River System using appropriate technologies	Planted reeds	Planted reeds	Planted reeds	Planted reeds	Cuttings	725,000	725,000	100%	725,000	3,240,807	3,590,409	111%
		Planted agroforestry species	Planted agroforestry species	Planted agroforestry species	Planted agroforestry species	Seedlings	996,000	996,000	100%	996,000			
		Planted Bamboos	Planted Bamboos	Planted Bamboos	Planted Bamboos	Cuttings	2,200,600	2,200,600	100%	1,850,000			

Two components of the project components are being implemented in Gisagara District. 150 youth cooperative members have been mobilized, sensitized and trained on environment protection, importance of being in cooperatives and how to prepare seeds. Training modules were produced and distributed to the trainees and all have opened bank accounts in COOJAD, this has increased the access to financial services in the district especially for Youth. Youth cooperatives established at sector level are operational. However more efforts are still needed to strengthen them.

The planned office equipments, like computer (1) and digital camera (1) to facilitate the project management was provided to the representative of the National Youth Council in the district who is also in charge of following up on the daily basis the project implementation.

Youth cooperatives have been used to plant the planned agro-forestry trees (25,600 in total), 250,000 reed seeds were planted and 8,000 bamboo seeds were planted on 40 ha each in the sectors of Mukindo, Mugombwa and Muganza.

Youth cooperatives are not strengthened enough to ensure how the project implementation is impacting the livelihood of cooperative members through income generating activities created from the support they got from the project.

The district has planned to use 24,595,150 Rwf for the implementation of the project, it has received 20,435,156Rwf as transfer from REMA and has consumed so far 5,959,044 Rwf be it 29%. The low execution rate is mainly due by the long bureaucracy processes especially with regard to tender processes, delays in paying service providers and project beneficiaries. The budget execution is such that, only 14% (2,368,635Rwf) of the total budget (17,194,349 Rwf) allocated to component one of youth mobilization and training was consumed while it is more than 100% (3,590,409 Rwf) of the total budget (3,240,807 Rwf) allocated to component two of conservating the Nyabarongo river banks and affluents

Project achievements are not sustainable, in fact, farmers and floods have destroyed planted agro-forestry trees and reeds; the remaining area covered by agro-forestry trees is estimated at 20% while remaining area covered by reeds is 10% and 80% for bamboo.

Lack of ownership by the district authorities, especially the in charge of youth and cooperatives and representative of national youth council in the district, farmers in search of feeds for their livestock and floods have contributed negatively to the success and sustainability of the project achievements in the district, farmers have destroyed the planted reeds at their early stage.

Local authorities awareness should be increased to ensure the ownership of such achievements. destroyed infrastructures should be replaced through community work and engaging youth who have participated in establishment of those infrastructures. Handing over the management of these infrastructures to youth cooperatives could ensure the sustainability of the project achievements.

3.4.10. NYARUGURU

The National Environment and Youth Project in Nyaruguru District is being implemented in six sectors which are Kivu, Mata, Munini, Muganza, Kibeho, and Cyahinda comprising each a youth cooperative with 300 cooperative members in total, 50 persons each. The table below presents the project implementation status in Nyaruguru District.

No	COMPONENT	EXPECTED OUTPUT	INDICATOR	PLANNED ACTIVITIES	ACTIVITIES DONE	PLANNED QUANTITY	ACTIVITIES DONE/REALIZED	% OF ACTIVITIES EXECUTION	BUDGET PLANNED IN THE PRODOC	BUDGET RECEIVED FROM REMA	Budget used	% BUDGET EXECUTION
	NYARUGURU								25,063,900	25,052,758	24,553,360	98%
1	Building and strengthening capacity of youth association, CBOs/NGOs and other local entities to undertake conservation of the Nyabarongo River System.	Raise awareness, train young people and the population of the areas concerned	Youth and population were sensitised and informed	Raise awareness, train young people and the population of the areas concerned	Trained young people and the population	300	300	100%	540,000	22,567,410	22,439,810	
					Youth sensibilization	300	300	100%	71,800			
				Communication	Communication				120,000			
					Training materials (150 brochures)				75,000			
		Follow up of the execution activities	Comment on the activities	Follow up of the execution activities	Follow up of the execution activities				681,600			

N o	COMPONENT	EXPECTED OUTPUT	INDICATOR	PLANNED ACTIVITIES	ACTIVITIES DONE	PLANNED QUANTITY	ACTIVITIES DONE/REALIZED	% OF ACTIVITIES EXECUTION	BUDGET PLANNED IN THE PRODOC	BUDGET RECEIVED FROM REMA	Budget used	% BUDGET EXECUTION
2	Conserving and managing the Nyabarongo River System using appropriate technologies	Preparing and planting agro-forestry trees on the river banks on 4m*40km, after 2m of natural reserve.	Number of plantes were prepared	Preparing and planting agro-forestry trees on the river banks on 4m*40km, after 2m of natural reserve.	Preparing and planting agro-forestry trees on the river banks on 4m*40km, after 2m of natural reserve.	25,700	25,700	100%	10,910,500	2,485,348	2,113,550	
				Equipment	Equipment				994,000			
		Planting on Banks of 4m*40kms of reeds of the type pennissetum French Cameroun	40 ha Nyabarongo river banks were protected	Planting on Banks reeds of the type pennissetum French Cameroun	purchaese d reeds .		250,000	18%	1,375,000			
		Bamboos planted on 40kms	Number of bamboos were planted	Bamboos 8800 planted on 40kms	purchaese d bamboos .	12,834	12,834	100%	10,296,000			

Two components of the project components are being implemented in Nyaruguru District. 300 youth have been mobilized, sensitized and trained on environment protection, importance of being in cooperatives and preparation of seeds. Training modules were produced and distributed to the trainees and all have been organised into cooperative, one by sector, and have opened bank accounts in COOJAD, this has increased the access to financial services in the district especially for Youth. These youth cooperatives have been established at sector level but are no longer operational.

The planned office equipments, like computer, digital camera and other, to facilitate the project management were not provided to the representative of the National Youth Council in the district who is also in charge of following up on the daily basis the project implementation.

Youth cooperatives have been used to plant 25,700 agro-forestry, 275,000 of reed seeds and 8,000 of bamboo seeds all on 40 ha each. Project achievements are not sustainable, in fact, farmers and floods have destroyed planted agro-forestry trees, bamboo and reed planted seeds; the remaining area covered by agro-forestry trees is estimated at 20% while remaining area covered by reeds is also 20% and 30% for the bamboo. They have been a service provider who supplied bamboo seeds of bad quality and these have not grown up.

Lack of ownership by the district authorities, especially the in charge of youth and cooperatives and representative of national youth council in the district, farmers in search of feeds for their livestock and floods have contributed negatively to the success and sustainability of the project achievements in the district, farmers have destroyed the planted reeds at their early stage.

Local authorities' awareness should be increased to ensure ownership of such achievements. Infrastructures should be rehabilitated through community work, engaging youth who have participated in their establishment. Handing over the management of these infrastructures to youth cooperatives could ensure the sustainability of the project achievements; any service provider who have supplied bad quality of seeds should reimburse the consumed funds.

3.4.11. NYAMAGABE

The National Environment and Youth Project in Nyamagabe District is being implemented in two sectors which are Kibirizi and Kibumbwe comprising each a youth cooperative with 100 cooperative members in total, 50 persons each. The table below presents the project implementation status in Nyamagabe District.

o N	COMPONENT	EXPECTED OUTPUT	INDICATOR	PLANNED ACTIVITIES	ACTIVITIES DONE	PLANNED QUANTITY	ACTIVITIES DONE/REALIZED	% OF ACTIVITIES EXECUTION	BUDGET PLANNED IN THE PRODOC	BUDGET RECEIVED FROM REMA	Budget used	% BUDGET EXECUTION
	NYAMAGABE								24,723,500	21,151,982	20,940,725	99%
1	Building and strengthening capacity of youth association, CBOs/NGOs and other local entities to undertake conservation of the Nyabarongo River System	Raise awareness, train young people and the population of the areas concerned	Youth and population were sensitised and informed	Raise awareness, train young people and the population of the areas concerned	Raise awareness, train young people and the population of the areas concerned	100	100	100%	3,658,800	11,213,362	12,609,525	
				Purchased materials of labour	Purchased materials of labour				365,000			
				Purchased equipment of DNYC	Purchased equipment of DNYC				1,200,000			
		Follow up of the execution activities	Comment on the activities	Follow up of the execution	Follow up of the execution				2,288,100			

o n	COMPONENT	EXPECTED OUTPUT	INDICATOR	PLANNED ACTIVITIES	ACTIVITIES DONE	PLANNED QUANTITY	ACTIVITIES DONE/REALIZED	% OF ACTIVITIES EXECUTION	BUDGET PLANNED IN THE PRODOC	BUDGET RECEIVED FROM REMA	Budget used	% BUDGET EXECUTION
				activities	activities							
2	Conserving and managing the Nyabarongo River System using appropriate technologies	Preparing and planting agro-forestry trees on the river banks on 4m*35km, after 2m of natural reserve.	Number of plantes were prepared	Preparing and planting agro-forestry trees on the river banks on 4m*35 km after 2m of natural shrubs.	Preparing and planting agro-forestry trees on the river banks on 4m*35 km, after 2m of natural shrubs.	22,400	22,400	100%	1,176,000	9,938,620	8,331,200	
				Planting on Banks of Nyabarongo river bamboos	Planting on Banks Rukarara river bamboos	7,000	7,000	100%	7,157,500			
		Planting on Banks of 4m*28kms of reeds of the type pennisetum French Cameroun	Nyabarongo river banks were protected	Planting on Banks of 4m*35kms of reeds of the type pennisetum French Cameroun	Planting on Banks of 4m*35kms of reeds of the type pennisetum French Cameroun	78,125	78,125	100%	5,112,500			
		Reeds and agro-forestry were weed up and protected	Damaged reeds and Agro-forestry replaced.	Maintaining protected area by weed up and replacing degraded	Reeds and agro-forestry were weed up and protected				3,765,600			

o n	COMPONENT	EXPECTED OUTPUT	INDICATOR	PLANNED ACTIVITIES	ACTIVITIES DONE	PLANNED QUANTITY	ACTIVITIES DONE/REALIZED	% OF ACTIVITIES EXECUTION	BUDGET PLANNED IN THE PRODOC	BUDGET RECEIVED FROM REMA	Budget used	% BUDGET EXECUTION
				trees and reeds.								

Two components of the project components are being implemented in Nyamagabe District. 100 youth have been mobilized, sensitized and trained on environment protection, importance of being in cooperatives and how to prepare seeds. Training modules were produced and distributed to the trainees and all have been organised into cooperative, one by sector, and have opened bank accounts in COOJAD, this has increased the access to financial services in the district especially for Youth. These youth cooperatives have been established at sector level but are no longer operational.

The planned office equipments, like computer, digital camera and other, to facilitate the project management were provided earlier to the representative of the National Youth Council in the district who is also in charge of following up on the daily basis the project implementation.



Youth cooperatives have been used to plant 22,400 agro-forestry, 78,125 of reed seeds and 7,000 of bamboo seeds all on 35 ha each. Project achievements are not sustainable, in fact, farmers and floods have destroyed planted agro-forestry trees, bamboo and reed planted seeds; the remaining area covered by agro-forestry trees is estimated at 10% while remaining area covered by reeds is also 20% and 20% for the bamboo.

Lack of ownership by the district authorities, especially the in charge of youth and cooperatives and representative of national youth council in the district, farmers in search of feeds for their livestock and floods

have contributed negatively to the success and sustainability of the project achievements in the district, farmers have destroyed the planted reeds at their early stage.

Local authorities awareness should be increased to ensure the ownership of such achievements. destroyed infrastructures should be replaced through community work and engaging youth who have participated in establishment of those infrastructures. Handing over the management of these infrastructures to youth cooperatives could ensure the sustainability of the project achievements; serious application of the law to protect river banks (10m).

3.4.12. RULINDO

In Rulindo District, NEYP intervened in Shyorongi sector and worked with 50 young persons. The table below gives information related to cooperative member beneficiaries of the project planned and accomplished activities as well as financial information.

o n	COMPONENT	EXPECTED OUTPUT	INDICATOR	PLANNED ACTIVITIES	ACTIVITIES DONE	PLANNED QUANTITY	ACTIVITIES DONE/REALIZED	% OF ACTIVITIES EXECUTION	BUDGET PLANNED IN THE PRODOC	BUDGET RECEIVED FROM REMA	Budget used	% BUDGET EXECUTION
	RULINDO								13,290,760	13,560,158	15,126,968	112%

o n	COMPONENT	EXPECTED OUTPUT	INDICATOR	PLANNED ACTIVITIES	ACTIVITIES DONE	PLANNED QUANTITY	ACTIVITIES DONE/REALIZED	% OF ACTIVITIES EXECUTION	BUDGET PLANNED IN THE PRODOC	BUDGET RECEIVED FROM REMA	Budget used	% BUDGET EXECUTION
1	Building and strengthening capacity of youth association, CBOs/NGOs and other local entities to undertake conservation of the Nyabarongo River System.	Raise awareness, train young people and the population of the areas concerned	Youth and population were sensitised and informed	Sensitization and trained of the youth and people concerned	Sensitization and trained of the youth and people concerned	50	50	100%	320,000	7,318,550	11,356,638	155%
				Communication fees	Communication fees				80,000			
2	Conserving and managing the Nyabarongo River System using appropriate technologies	Preparing and planting agro-forestry trees on the river banks on 4m*28km, after 2m of natural reserve.	Number of plantings were prepared	Preparing and planting agro-forestry trees on the river banks on 4m*39km, after 2m of natural reserve.	Field preparation by cultivated and planted	14,080	14,080	100%	9,059,000	6,241,608	3,770,330	60%

o n	COMPONENT	EXPECTED OUTPUT	INDICATOR	PLANNED ACTIVITIES	ACTIVITIES DONE	PLANNED QUANTITY	ACTIVITIES DONE/REALIZED	% OF ACTIVITIES EXECUTION	BUDGET PLANNED IN THE PRODOC	BUDGET RECEIVED FROM REMA	Budget used	% BUDGET EXECUTION
		Planting on Banks of 4m*28kms of reeds of the type pennissetum French Cameroun	41.125ha Nyabarongo river banks were protected	Planting on Banks of 4m*39kms of reeds of the type pennissetum French Cameroun	Planting on Banks of 4m*39kms of reeds of the type pennissetum French Cameroun	137,500	137,500	100%	1,035,760			
		Bamboos planted on 20kms	Number of bamboos were planted	Bamboos planted on 39kms	Bamboos planted	4,000	4,000	100%	2,796,000			

In Rulindo District, NEYP funded activities related to two components namely: (i) Building and strengthening capacity of youth association, CBOs/NGOs and other local entities to undertake conservation of the Nyabarongo River System and (ii) Conserving and managing the Nyabarongo River System using appropriate technologies. Rulindo District had requested Frw 13,290,760 to implement planned activities but the project released Frw 13,560,158. However, in order to achieve its objectives, the District utilized Frw 15,126,968; which means that it had to use District resources to implement the project activities budget.

Activities funded by the project in Rulindo District are:

- Sensitize and train youth and people concerned
- Plant on Banks of 4m*39kms reeds
- Plant Bamboos

Currently on the ground we can find 50 young persons with bank accounts. In plus, 20% of agro-forestry trees and 80% of bamboos are still alive. All planted reeds have disappeared.

3.4.13. GAKENKE

In Gakenke District, NEYP intervened in the following sectors: (i) Muzo, (ii) Mugunga, (iii) Ruli, (iv) Coko, (iv) Muhondo, (v) Minazi, and (vi) Mataba which have 50 members each while Coko, Ruli, and Muhondo have 68; 64; and 36 respectively.

No	COMPONENT	EXPECTED OUTPUT	INDICATOR	PLANNED ACTIVITIES	ACTIVITIES DONE	PLANNED QUANTITY	ACTIVITIES DONE/REALIZED	% OF ACTIVITIES EXECUTION	BUDGET PLANNED IN THE PRODOC	BUDGET RECEIVED FROM REMA	BUDGET USED	% BUDGET EXECUTION
	GAKENKE								100,000,000	32,732,242	32,135,780	98%
1	Building and strengthening capacity of youth association, CBOs/NGOs and other local entities to undertake conservation of the Nyabarongo River System.	Raise awareness, train young people and the population of the areas concerned	Youth and population were sensitised and informed	Raise awareness, train young people and the population of the areas concerned	Raise awareness, train young people and the population of the areas concerned	368	368	100%	-	16,554,635	24,292,310	
		Follow up of the execution activities	Comment on the activities	Follow up of the execution activities	Follow up of the execution activities				1,224,000			

No	COMPONENT	EXPECTED OUTPUT	INDICATOR	PLANNED ACTIVITIES	ACTIVITIES DONE	PLANNED QUANTITY	ACTIVITIES DONE/REALIZED	% OF ACTIVITIES EXECUTION	BUDGET PLANNED IN THE PRODOC	BUDGET RECEIVED FROM REMA	BUDGET USED	% BUDGET EXECUTION
2	Conserving and managing the Nyabarongo River System using appropriate technologies	Purchase materials of labour	Purchase materials of labour	Purchased materials of labour	Purchased materials of labour				675,000	16,177,607	7,843,470	
		Preparing and planting bamboos on the river banks on 7m*110km, after 3m of natural shrubs.	Number of bamboos were prepared	Preparing a strip of 7m*110 km after 3m of natural shrubs.	Preparing a strip of 7m*110 km after 3m of natural shrubs.	110	110	100%	23,650,000			
		Purchased bamboos	Purchased bamboos	Purchased bamboos	Purchased bamboos stumps	44,001	44,001		71,283,000			
		Planting on Banks of Nyabarongo river bamboos	Planting on Banks of Nyabarongo river bamboos	Planting on Banks of Nyabarongo river bamboos	Planting on Banks of Nyabarongo river bamboos	16,688	16,688		528,000			
		Planting on Banks of 4m*28kms of reeds of the type pennisetum French	Nyabarongo river banks were protected	Planting on 28kms of reeds of the type pennisetum French Cameroun	Planting on 28kms of reeds of the type pennisetum	15,625	15,625	100%				

No	COMPONENT	EXPECTED OUTPUT	INDICATOR	PLANNED ACTIVITIES	ACTIVITIES DONE	PLANNED QUANTITY	ACTIVITIES DONE/REALIZED	% OF ACTIVITIES EXECUTION	BUDGET PLANNED IN THE PRODOC	BUDGET RECEIVED FROM REMA	BUDGET USED	% BUDGET EXECUTION
		Cameroun			French Cameroun							
		Planting agro forestry trees	Planting agro forestry trees	Planting agro forestry trees	Planting agro forestry trees	17,920	17,920	100%				
		Reeds and agro-forestry were weed up and protected	Damaged reeds and Agro-forestry replaced.	Maintaining protected area.	Maintaining protected area.				2,640,000			

In Gakenke District, NEYP funded activities related to two components namely: (i) Building and strengthening capacity of youth association, CBOs/NGOs and other local entities to undertake conservation of the Nyabarongo River System and (ii) Conserving and managing the Nyabarongo River System using appropriate technologies. Gakenke District had requested Frw 100,000,000 to implement planned activities but the project released Frw 32,732,242 of which an amount of only Frw 32,135,780 was used to implement the project activities.

Activities funded by the project in Gakenke District are:

- Raise awareness, train young people and the population of the areas concerned
- Follow up of the execution activities
- Purchase materials
- Prepare a strip of 7m*110 km after 3m of natural shrubs.

- Purchase bamboos stumps
- Plant on Banks of Nyabarongo river bamboos
- Plant on 28kms of reeds of the type pennissetum French Cameroun
- Plant agro forestry trees
- Maintain protected area.



Currently 60% of bamboos, 50% of reeds and 40% of planted agro-forestry trees are alive. The responsible of the damaged part of activities are farmers and floods even though 20 m are have been respected. The photo shows that farmers have cultivated near the river.

3.4.14. GICUMBI

In Gicumbi District, NEYP intervened in the following sectors: (i)Kageyo, (ii) Nyamiyaga, (iii) Mutete and (iv) Rutare. Each sector had one cooperative with different cooperative members. Cooperatives in Gicumbi and their members are:

- COODEKA in Kageyo sector has 50 members
- INKWAKUZI in Nyamiyaga sector has 55 members
- COODEMU in Mutete sector has 50 members
- IZERE in Rutare sector has 50 members

The table below gives information related to cooperative member beneficiaries of the project planned and accomplished activities as well as financial information.

No	COMPONENT	EXPECTED OUTPUT	INDICATOR	PLANNED ACTIVITIES	ACTIVITIES DONE	PLANNED QUANTITY	ACTIVITIES DONE/REALIZED	% OF ACTIVITIES EXECUTION	BUDGET PLANNED IN THE PRODOC	BUDGET RECEIVED FROM REMA	Budget used	% BUDGET EXECUTION
	GICUMBI								13,181,000	11,862,900	2,857,000	24%
1	Building and strengthening capacity of youth association, CBOs/NGOs and other local entities to undertake conservation of the Nyabarongo River System.	Raise awareness, train young people and the population of the areas concerned	Youth and population were sensitised and informed	Sensitization of theyouth and people concerned.	Sensitization of theyouth and people concerned.	205	205	100%	145,000	9,116,100	2,823,000	31%
				Equipment purchased	Equipment purchased				1,460,000			
				Training of youth association	Training of youth association	205	205	100%	552,000			
		Follow up of the execution activities	Comment on the activities	Follow up of the execution activities	Follow up of the execution activities				1,157,000			
2	Conserving and managing the Nyabarongo River System using appropriate technologies	Preparing and planting agro-forestry trees on the river banks on 4m*28km,after 2m of	Number of plantes were prepared	Preparing and planting agro-forestry trees on the river banks on 4m*28km,after 2m of natural	Fence grazing farms	15,625	15,625	100%	7,650,000	2,746,800	34,000	1%

No	COMPONENT	EXPECTED OUTPUT	INDICATOR	PLANNED ACTIVITIES	ACTIVITIES DONE	PLANNED QUANTITY	ACTIVITIES DONE/REALIZED	% OF ACTIVITIES EXECUTION	BUDGET PLANNED IN THE PRODOC	BUDGET RECEIVED FROM REMA	Budget used	% BUDGET EXECUTION
		natural reserve.		reserve.								
		Planting on Banks of 4m*28kms of reeds of the type pennissetum French Cameroun	41.125ha Nyabarong o river banks were protected	Planting on Banks of 4m*28kms of reeds of the type pennissetum French Cameroun	Planting on Banks of 4m*28kms of reeds of the type pennissetum French Cameroun	15,625	15,625	100%	1,725,000			
		Bamboos planted on 20kms	Number of bamboos were planted	Bamboos planted on 20kms	Bamboos planted				492,000			

In Gicumbi District, NEYP funded activities related to two components namely: (i) Building and strengthening capacity of youth association, CBOs/NGOs and other local entities to undertake conservation of the Nyabarongo River System and (ii) Conserving and managing the Nyabarongo River System using appropriate technologies.

Gicumbi District had requested Frw 13,181,000 to implement planned activities but the project released Frw 11,862,900 of which Frw 2,857,000 were used to implement project activities.

Activities funded by the project in Gicumbi District are:

- Sensitize the youth and people concerned.
- Purchase equipment
- Train youth association
- Follow up of the execution activities
- Fence grazing farms
- Plant on Banks of 4m*28kms of reeds of the type pennissetum French Cameroun
- Plant Bamboos

Currently, 205 young people have account numbers. 90% of agro-forestry trees and 70% of reeds are still alive. However 100% bamboos are no longer there. Few areas are damaged by farmers and livestock.

3.4.15. MUSANZE

In Musanze District, NEYP intervened in the following sectors: (i) Rwaza ,Nkotsi, Gacaca and (ii) Muko. Each sector had one cooperative with 50 cooperative members. The table below gives information related to cooperative member beneficiaries of the project planned and accomplished activities as well as financial information.

N o	COMPONENT	EXPECTED OUTPUT	INDICATOR	PLANNED ACTIVITIES	ACTIVITIES DONE	PLANNED QUANTITY	ACTIVITIES DONE/REALIZED	% OF ACTIVITIES EXECUTION	BUDGET PLANNED IN THE PRODOC	BUDGET RECEIVED FROM REMA	Budget used	% BUDGET EXECUTION
	MUSANZE								13,212,934	14,033,269	12,150,275	87%
1	Building and strengthening capacity of youth association, CBOs/NGOs and other local entities to undertake conservation of the Nyabarongo River System.	Raise awareness, train young people and the population of the areas concerned	Youth and population were sensitised and informed	Raise awareness, train young people and the population of the areas concerned	Raise awareness, train young people and the population of the areas concerned	200	200	100%	815,700	8,583,860	10,503,440	122%
			Purchase materials of labour	Purchased materials of labour	Purchased materials of labour				616,000			
			Purchase equipment of DNYC centre	Purchased equipment	Not Purchased				1,060,000			

o n	COMPONENT	EXPECTED OUTPUT	INDICATOR	PLANNED ACTIVITIES	ACTIVITIES DONE	PLANNED QUANTITY	ACTIVITIES DONE/REALIZED	% OF ACTIVITIES EXECUTION	BUDGET PLANNED IN THE PRODOC	BUDGET RECEIVED FROM REMA	Budget used	% BUDGET EXECUTION
		Follow up of the execution activities	Comment on the activities	Follow up of the execution activities	Follow up of the execution activities				851,000			
2	Conserving and managing the Nyabarongo River System using appropriate technologies	Preparing and planting agro-forestry trees on the river banks on 4m*40km, after 2m of natural reserve.	Number of plantes were prepared	Preparing and planting agro-forestry trees on the river banks on 4m*2800m after 2m of natural shrubs.	Preparing and planting agro-forestry trees on the river banks on 4m*2800m, after 2m of natural shrubs.	17,920	17,920	100%	2,090,667	5,449,409	1,646,835	
				Planting on Banks of Mukungwa river bamboos	Planting on Banks of Mukungwa river bamboos	16,625	8,000	48%				
		Planting on Banks of 4m*28kms of reeds of the type pennissetum French Cameroun	28 of Mukungwa river banks were protected	Planting on Banks of 4m*28kms of reeds of the type pennissetum French Cameroun	Planting on Banks of 4m*40kms of reeds of the type pennissetum French Cameroun	16,625	16,625	100%	5,355,000			
		Reeds and agro-forestry were weed up and	% reeds and Agro-forestry were	Maintaining protected area by weed up and	Reeds and agro-forestry were weed up and ang protected				2,424,567			

o n	COMPONENT	EXPECTED OUTPUT	INDICATOR	PLANNED ACTIVITIES	ACTIVITIES DONE	PLANNED QUANTITY	ACTIVITIES DONE/REALIZED	% OF ACTIVITIES EXECUTION	BUDGET PLANNED IN THE PRODOC	BUDGET RECEIVED FROM REMA	Budget used	% BUDGET EXECUTION
		protected	replaced.	replacing degraded trees and reeds.								

In Musanze District NEYP funded activities related to two components namely: (i) Building and strengthening capacity of youth association, CBOs/NGOs and other local entities to undertake conservation of the Nyabarongo River System and (ii) Conserving and managing the Nyabarongo River System using appropriate technologies.

Musanze District had requested Frw 13,212,934 to implement planned activities but the project released Frw 14,033,269 of which Frw 12,150,275 were used to implement project activities budget.

Activities funded by the project in Musanze District are:

- Raise awareness, train young people and the population of the areas concerned
- Purchase materials
- Follow up of the execution activities
- Planting agro-forestry trees on the river banks on 4m*2800m, after 2m of natural shrubs.
- Plant on Banks of Mukungwa river bamboos
- Plant on Banks of 4m*40kms of reeds of the type pennissetum French Cameroun
- Plant and Protect reeds and agro-forestry

Currently, actively cooperatives are the ones of Rwaza and Muko sectors. Available are: 40% of agro-forestry trees, 40% of bamboo and 60% of reeds other plantations were damaged by floods and farmers. The following photo shows a goat grazing in the protected area.



3.4.16. BUGESERA

In Bugesera District, NEYP intervened in the following sectors: (i) Ntarama, (ii) Mwogo, (iii) Juru, (iv) Gashora and (v) Musenyi. Each sector had one cooperative with 50 members each. Those cooperatives are: COOVENTA for Ntarama sector, COOPEBRA in Mwogo Sector, KODUNEJU in Juru sector, COOJEGA in Gashora sector and KOSUMU for Musenyi sector. The table below gives information related to cooperative member beneficiaries of the project planned and accomplished activities as well as financial information.

N o	COMPONENT	EXPECTED OUTPUT	INDICATOR	PLANNED ACTIVITIES	ACTIVITIES DONE	PLANNED QUANTITY	ACTIVITIES DONE/REALIZED	% OF ACTIVITIES EXECUTION	BUDGET PLANNED IN THE PRODOC	BUDGET RECEIVED FROM REMA	Budget used	% BUDGET EXECUTION
	BUGESERA								29,417,400	97,942,914	82,973,120	85%
1	Building and strengthening capacity of youth association, CBOs/NGOs and other local entities to undertake conservation of the Nyabarongo River System.	Raise awareness, train young people and the population of the areas concerned	Youth and population were sensitised and informed	Raise awareness, train young people and the population of the areas concerned	Raise awareness, train young people and the population of the areas concerned	250	250	100%	592,800			
				Planting 10,000 agroforestry trees on 32 Ha	10,000 planted agroforestry trees on 32 Ha	10,000	10,000	100%				

o n	COMPONENT	EXPECTED OUTPUT	INDICATOR	PLANNED ACTIVITIES	ACTIVITIES DONE	PLANNED QUANTITY	ACTIVITIES DONE/REALIZED	% OF ACTIVITIES EXECUTION	BUDGET PLANNED IN THE PRODOC	BUDGET RECEIVED FROM REMA	Budget used	% BUDGET EXECUTION
				Planting 230,000 reeds on 32 Ha	230,000 reeds planted on 32 Ha	230,000	230,000	100%				
				Planting 10,000 bamboos	10,000 bamboos planted	10,000	10,000	100%				
				Training on how to treat the hyacinth	Training carried out	250	250	100%	15,512,000			
		Follow up of the activities execution	Comments on the activities	Follow up of the activities execution	Follow up of the activities execution				507,600			
2	Conserving and managing the Nyabarongo River System using appropriate technologies	Hyacinth pulled out	River banks free of hyacinth	Hyacinth pulled out	Operating cooperatives	5	5	100%	6,665,000	1,702,800		
3	Waste management in Kigali and towns along Nyabarongo River System	Made chairs, hats, baskets,.. from the hyacinth	Made chairs, hats, baskets,.. from the hyacinth	Made chairs, hats, baskets,.. from the hyacinth	Operating cooperatives that make chairs, hats, baskets,.. from the hyacinth	5	5	100%	6,140,000			

In Bugesera District, NEYP funded activities related to two components namely: (i) Building and strengthening capacity of youth association, CBOs/NGOs and other local entities to undertake conservation of the Nyabarongo River System and (ii) Conserving and managing the Nyabarongo River System using appropriate technologies.

Bugesera District had requested Frw 29,417,400 to implement planned activities but the project released Frw 97,942,914 of which Frw 82,973,120 were used to implement project activities.

Activities funded by the project in Bugesera District are:

- Raise awareness, train young people and the population of the areas concerned
- Plant 10,000 agroforestry trees on 32 Ha
- Plant 230,000 reeds on 32 Ha
- Plant 10,000 bamboos
- Train cooperative members
- Follow up of the activities execution

The materials purchased are still now available. All youth cooperatives located are active. All planted reeds have been destructed by farmers and termites and only 10 per cent of agro-forestry are available. The available planted bamboos are 10% because of planted bad variety.

3.5. EFFECTIVENESS OF THE PROJECT

This section analyzes the project's effectiveness in achieving expected results. An overview of the main achievements of the project as well as the unexpected achievements of the project and the review of risk management and mitigation measures for the implementation of the project are presented. Conclusions are based on a review of project documents and interviews with key informants. The Project key achievements by outputs are as follows:

Outcome 1: Building and Strengthening capacity of youth associations, CBOs/NGOs and other Local entities to undertake conservation of Nyabarongo River System

The key achievements for the above output are:

- Development of training manual for youths and CBOs of the Districts along the Nyabarongo river;
- 3,132 youth from different districts were mobilized and sensitized;
- 61 youth cooperatives legally or provisionally registered were established, one per sector,
- 3,132 youth cooperative members were trained in cooperative principles, sustainable environment management and agro-forestry nursery development;
- Promoting youth financial literacy by facilitating 3,132 youth to open bank accounts in various financial institutions;
- The project created jobs for the youth surrounding the Nyabarongo river and working in cooperatives as established by sector

Outcome 2: Conserving and Managing the Nyabarongo River System using appropriate technologies

The following are key achievements for the above output:

- 1992.643 ha of the Nyabarongo river buffer zone were protected through environmental sustainable management by plantings reeds, agro-forestry trees and bamboos; among them; 561 ha protected by agro-forestry trees (327 604 seeds planted), 578 ha by reeds (2,124,901 cuttings), and 853.79 by bamboo (487,673 bamboo seedlings).
- 100 ha of progressive terraces were established in Nyanza District;
- Nyabarongo, Akanyaru, Mwogo, Nyabugogo, Mwange, Rukarara, Akagera, Mukungwa rivers were protected

Outcome 3: Waste and water hyacinth management in Kigali and towns along Nyabarongo River System

The following are the key achievements for this output:

- 500 tones of water hyacinth uprooted from the Nyabarongo River in Bugesera District;
- Several handcraft products (baskets, harts, sandals, etc.) were made from water hyacinth;
- Organic fertilizers were produced by youth cooperatives for their kitchen gardens.

Outcome 4: Support to livelihood activities through natural resources and environment management

The following are the key achievements for this output:

- An income generating project design was developed;
- Training sessions for youth cooperatives in the development of income generating projects were conducted;
- Youth cooperative members and beneficiaries of the project services started cows and pigs husbandry projects, sewing and carpentry projects, ...
- Financial literacy has increased, cooperative members have opened account banks and payments are being done through bank transfers.

Outcome 5: Project effectively managed, monitored, evaluated and reported

The following are the key achievements for this output:

- The Project Management Unit was established and staffed;
- A regular monitoring of the implementation of the project was conducted in all areas of the project zones;
- The Project Steering Committee meetings were regular conducted;
- The annual action plans and reports were developed and approved by the project steering committee and UNDP.

Although the project has achieved a lot, the comparison between what was planned and what was achieved showed that the project did not implement many of its planned activities, in fact, activities like radical terracing and one cow per family was found not being project priorities since their being implemented by other projects under MINAGRI.

3.6. PROJECT EFFICIENCY

The project budget was USD 6,000,000. The UNDP contribution was USD 5,598,000 and the Government of Rwanda had to contribute USD 402,000. The following table presents a project summary budget per project outcome.

Table 27: Project budget

Components		2008	2009	2010	2011	Budget USD	Ex.rat	Budget Rwf	2012 budget USD	Exch.rate	2012 budget Rwf	Total Budget Rwf
		235,531	2,744,854	1,857,067	1,162,549	6,000,000	573	3,435,600,000	278,361	626	174,253,986	3,609,853,986
1	Building and strengthening capacity of youth associations, CBOs/NGOs and other local entities to undertake conservation of Nyabarongo river system	57,543	337,189	100,715	38,457	533,903		305,713,030	35,403	626	22,162,278	327,775,308
2	Conservating and managing the Nyabarongo river system	-	1,841,865	1,405,783	844,690	4,092,338		2,343,272,905	80,496	626	20,390,496	2,363,663,401
3	Waste management in Kigali and towns along Nyabarongo river system	-	110,405	68,806	30,826	210,038		120,267,530	-	626	-	120,267,530
4	Support to livelihood activities through natural resources and environment management	69,908	209,000	88,313	101,931	469,151		268,635,926	53,313	626	33,373,938	302,009,864
5	Project implementation Unit (PMU) in place and strengthened	108,081	246,395	193,450	146,643	694,570		397,710,610	109,149	626	68,327,274	466,037,884

Table 28: Budget Execution

#	Components	Total Budget Rwf	Released Amount	Released rate	Component shares in the total released amount
		3,609,853,986	1,094,019,485	30%	
1	Building and strengthening capacity of youth associations, CBOs/NGOs and other local entities to undertake conservation of Nyabarongo river system	327,75,308	135,352,139	41.4%	12%
2	Conservating and managing the Nyabarongo river system	2,363,663,401	500,468,654	21.2%	46%
3	Waste management in Kigali and towns along Nyabarongo river system	120,267,530	81,989,440	68%	7%
4	Support to livelihood activities through natural resources and environment management	302,009,864	97,773,938	32%	9%
5	Project implementation Unit (PMU) in place and strengthened	466,037,884	278,435,314	60%	25%

The project budget was executed at 30 % of the total budget, 41.4% of the available fund was allocated to youth trainings and sensitisation, 21.2% for component 2, 68% for component 3, 32% for component 4 and 60% for component 5 regarding the establishment and functioning of the project monitoring unit. Regarding the efficiency of the project, the limited data available in terms of budget execution has made it difficult to conduct any cost effectiveness analysis. The lack of detailed implementation and the budget execution reports from districts have hindered this cost effectiveness analysis.

the total budget released up to 2011 is 919,765,499 RWF equivalent to USD 1,606,279 at the exchange rate of 572.6; in 2012 the release amount was 278 361 USD. The total amount release is USD 1,884,658 equivalent to 31.4% of the total project budget.

The table shows that 68% of the released budget was for the waste management component followed by the project implementation Unit (60%) and Capacity building (41.4%). in terms of the component shares in the total of released budget, conservating and managing the Nyabarongo river comes first with 46% followed by project implementation unit (25%). This shows how much the released budget was more allocated to the project administration rather than project activity implementation.

CHAPTER FOUR: SUSTAINABILITY, LESSONS LEARNED AND NEYP EXIT STRATEGY

4.1 Project Design, Management and Implementation

National Environment Youth Project has a project document. In the latter, there are presented project objectives, components, outputs, management, funding and monitoring and evaluation.

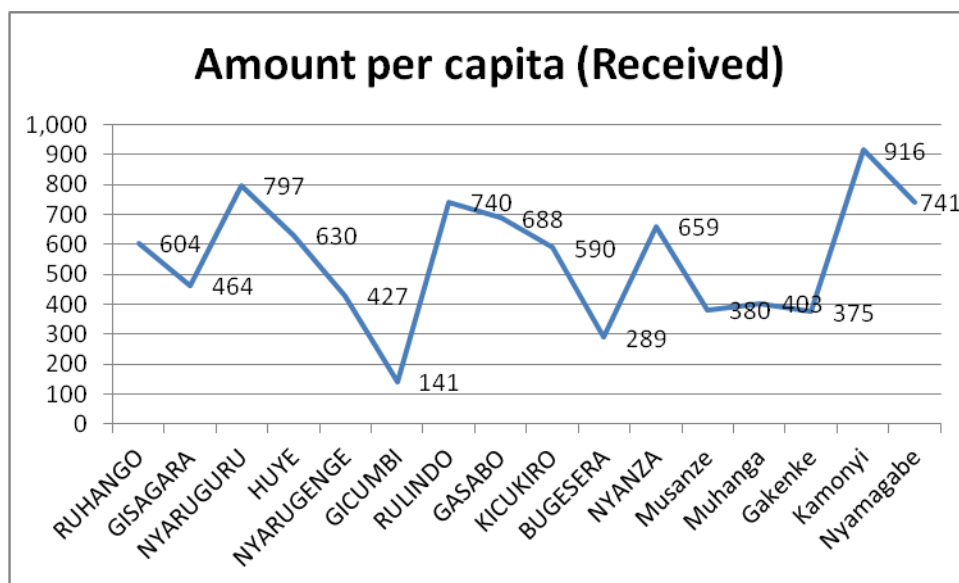
However, nothing is shown how output targets were established. For example, in the project document, there is a target of training 1,395, 600 but when we take the total population of the sector beneficiaries it is only 726,113 according to the 2002 statistics. Another issue to be raised is how the budget was allocated. Criteria to allocate budget to various districts were not clear. As the project had one of the objectives to train youth, one of the criteria should have been to take into account the population size. Yet there is no relationship as show in the below table.

Table 29: Amount per capita received and budgeted

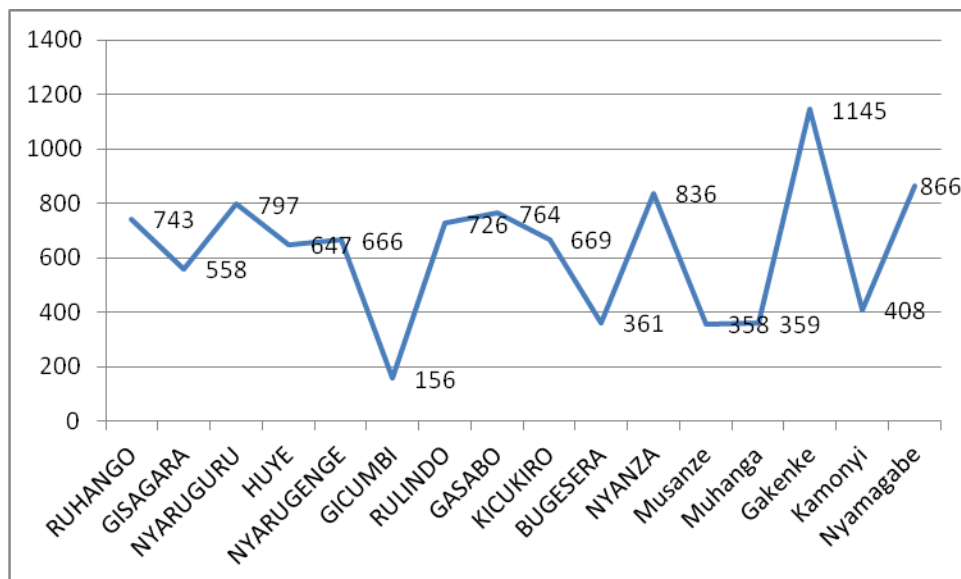
	Population of the District	Population in Sectors Beneficiaries	Budget received from REMA	Amount per capita (Received)	Budget requested by District	Budget per Capita (requested)
RUHANGO	245,833	40,479	24,464,082	604	30,072,753	743
GISAGARA	262,128	44,076	20,435,156	464	24,595,150	558
NYARUGURU	231,496	31,440	25,052,758	797	25,063,900	797
HUYE	265,446	41,281	26,004,467	630	26,721,954	647
NYARUGENGE	236,990	39,701	16,956,641	427	26,421,954	666
GICUMBI	359,716	84,309	11,862,900	141	13,181,000	156
RULINDO	251,266	18,319	13560158	740	13,290,760	726
GASABO	320,516	35,853	24,663,708	688	27,404,120	764
KICUKIRO	207,819	35,620	21,004,261	590	23,816,640	669
BUGESERA	266,775	81438	23,525,550	289	29,417,400	361
NYANZA	225,209	30,573	20,158,272	659	25,561,000	836

MUSANZE	307,078	36,906	14033269	380	13,212,934	358
MUHANGA	287,219	63017	25,414,431	403	22,601,200	359
GAKENKE	322,043	87,369	32,732,242	375	100,000,00 0	1145
KAMONYI	261,336	27,175	24,889,156	916	11,084,158	408
NYAMAGABE	280,007	28,557	21,151,982	741	24,723,500	866
	4,330,877	726,113	345,909,03 3	476	407,095,67 0	561

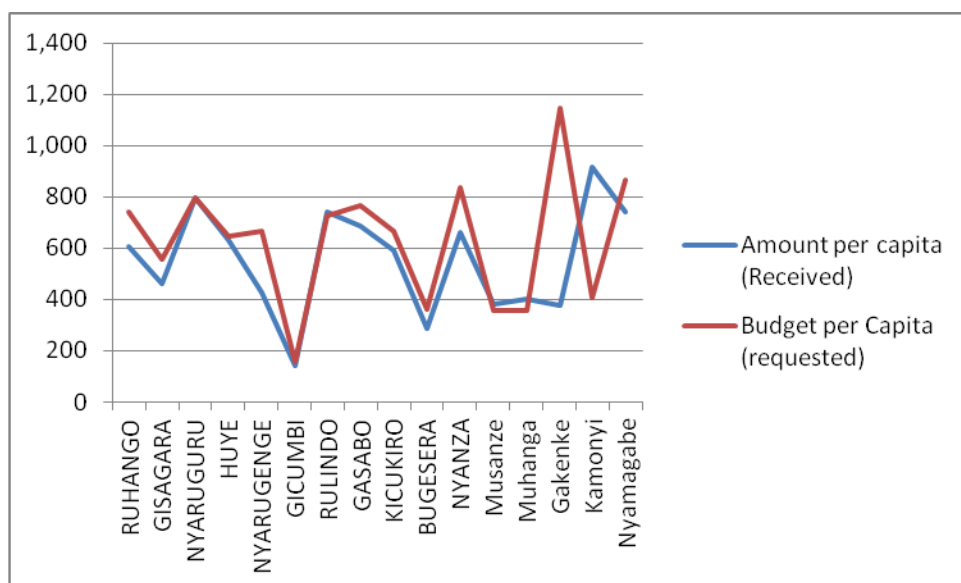
The table reveals that an inhabitant of Kamonyi got a big share of Frw 916 whereas in Gicumbi the received budget per capita is Frw 141 only. The figure below shows how the money was allocated per capita.



The below figure shows how much was requested by District and per capita.



To assess if the project was using the demand driven approach, let us put those two figures together to see if there is a positive correlation between the requested and allocated amounts. The figure below gives that information.



As it is easily remarked, the requested amount does not explain how much to be received. Further analysis shows that the correlation coefficient is 0.43 only. If those amounts were perfectly positively correlated, that coefficient should have been 1. As it is less than one, then a

District could have been given per capita more than what it requested like Kamonyi District or less than what it requested like Gakenke District.

Normally each project document should result from a study with at least technical, financial and institutional components.

The technical part of a feasibility study of a project addresses the following:

- Technology and life of project
- Quantities of inputs by type needed for investment and operation
- Labor required by type and time
- Input prices and sources of supply

Assessing the technical aspect in the project document, it was found that some elements were omitted. As examples, the document does not explain why terraces were the best infrastructure to protect soils against erosion and in which Districts radical terraces or progressive ones were to be developed. Therefore, the project evaluators cannot give their inputs if the used technologies to protect soils against erosion were the best ones. In plus, the lack of the baseline data did not permit the researchers to carry out cost-effectiveness analysis.

If the project had a feasibility study, we could have information related to the beneficiaries, the areas to be protected and how the budget was to be allocated to achieve the project objectives. In plus the technical part of the study should have shown the species to be planted and why beside the technical ways of planting including the spacing between trees. Evaluators have not been able to assess if the project implementers used or not the right techniques as well as if they planted the right species. However, it is not very easy why we had different spacing in agroforestry, reeds and Bamboo planting.

In agro-forestry, the average spacing was m 4.15, the maximum was observed in Muhanga with m 5.93 whereas the minimum spacing between planted trees was m 3.75 in Rulindo District. For reeds, the maximum spacing was m 5.06 in Ruhango, the minimum was m 1.18 in Bugesera and the average was m 2.84. Regarding bamboo plantation, the spacing between plants in average was m 6.05, the maximum found in Huye was m 8.06 and the minimum was m 1.26 in Nyanza District.

The financial part of a feasibility study aims at forecasting quantities and real prices for life of the project and Taxes, tariffs, subsidies, public regulations. When we look at the project document, it is presented the budget and general gains but nothing is told about the importance of the project in the Economy of the Country or even potential revenues from the project outputs like the sales of French Cameroon to the cattle keepers or even revenues from bamboo in the future.

For the institutional framework, the project is clear about the organizational structure which was a flat one, but seeing that activities were related to socio and agronomic issues, the evaluators asked themselves if really the structure was complete enough to achieve its outputs. We have also remarked that all the staffs were not hired as mentioned in the project document because liaison officers in the Districts were not recruited. Moreover, the project had to undertake some activities under other ministries and no clear way of collaboration was in the project document.

It should also be noticed that the project document should have been improved in the way the logical framework was written mostly nothing is written to take on the area reserved to assumptions. However, if that column was filled, the project management unit should have ways to explain the poor achievements in some components like the construction of radical terraces where the execution rate is 0%.

4.2. SUSTAINABILITY OF PROJECT ACHIEVEMENTS

The section focuses on the probability of the current impact on the long run and on the sustainable land management strategies. This means achieving the overall objective of the project.

In order for a project to be successfully implemented and to achieve its project development objective, considerable effort needs to be put into project design. NEYP was formulated without a feasibility study and then some planned activities did not take place. In plus some outputs cannot be measured like the economical benefits of the project. In the project document, nothing was told about expected financial and economical performances of the project like the Economic Rate of Return stated as a criterion to be used in the Public Investment Policy adopted by the Cabinet in 2009.

The land on catchment areas of Nyabarongo river system is owned by smallholder farmers. These areas were highly degraded with low fertility and productivity. The project demonstrated that good practices for protection and conservation of land can lead to fertility and increased productivity. It was expected that better environment conservation and management had to improve the living conditions of local land users and have a positive socio-economic impact.

One of the challenges the project faced is lack of population's and districts' ownership. Another challenge was low disbursement rate of funds required to implement the best practices of the project.

The local authorities at decentralized administrative levels were responsible for all activities of planning, implementing, coordination and monitoring of environment related activities. However, due to lack of ownership of project activities, NEYP management team at national level dealt every time and directly with youth cooperatives. Furthermore, the National Youth Council (NYC) in charge of supporting and regularly following up youth cooperative activities did not fulfill their responsibility and role due to lack of staff. This contributed to not fully achieving the project objectives.

The sustainability of NRM should therefore be built on institutional and individual system, its integration into national policies and strategies as well as district development plans. Although the number of trainees is good and despite the development in terms of capacity building, the training sessions are still needed. The Central and local governments in collaboration with partners should mobilize more funds for this purpose.

The development of NRM and its related income generating projects requires a closer follow up of project activities to better monitor the projects infrastructures and strengthen the community outreach approach. This will therefore allow youth cooperatives to maintain this infrastructure and replace the ones destroyed by different circumstances.

Specifically the following strategies if undertaken could maintain the achievements of the project:

- The District management should continue helping cooperative members in terms of trainings like those related to the development and implementation of income generating activities. This will bring cooperative members to be linked with financial institutions and then to continue

keeping their bank account and benefiting from financial services as it is easier to get a loan when people are in cooperative;

- Ways should be put in place to be near cooperatives which have already started to produce handcraft from water hyacinth. The support should be in line with the improvement of the quality of their products, advertising their production nationally and internationally, helping them to distribute their products even overseas and to find for those young cooperatives the highest price which could permit them to get financial benefits;

- For infrastructures created near the rivers, the proposed strategies are to privatize them either to cooperatives or to farmers who will be required to take care of them because he/she will benefit from the fruits at the harvesting time;

- To set up strategies related to water shed management like construction of radical terraces, trenches, creation of progressive terraces, tree planting, etc. on the hillsides;

- To reinforce the application of the Environment Law which request everyone to take care of our Environment.

4.3. LESSONS LEARNT

The following are some good lessons learnt:

- The results from the beneficiaries indicated that young entrepreneurs are eager to make more profit. It was found that NEYP permitted youth to be employed in labor intensive activities funded by the project but the sustainable income generating activities are not very many,
- Project beneficiaries were grouped into cooperatives and these are the government priority for development;
- The expertise acquired coupled with the enhanced collaboration and supervision from both central and local government is crucial;
- In fact, the project led a foundation stone for institutional and individual capacity building in terms of implementation of NEYP activities;
- Willingness of youth surrounding the Nyabarongo river to undertake the environment activities and the protection of river banks;
- Awareness in protecting the environment along rivers in accordance with the organic law;
- Establishment and collaboration of Youth Cooperatives with the project;

- Promoting youth financial literacy: Opening of accounts in various financial institutions;
- Environmental friendly technology for transforming water hyacinth into handicraft products;
- The feasibility study with technical, financial and management components is very important before the budget mobilization and the implementation on any environmental project;
- Institutional arrangement did not take care of all project stakeholders who could have implemented some project activities;
- It is very crucial for project managers to be informed in advance that a project evaluation will be carried to help them fine-tuning their filing system;
- The reporting system was very weak on the side of the Districts;
- The lack of the liaison officers at the District level and the low ownership of project activities by District managers had a negative impact on the project achievements.

4.4. NEYP EXIT STRATEGY

The ability to assess whether a project is on track to achieve its objectives requires a functional and usable monitoring and evaluation strategy. M&E is a core component of project design and it is intended to concisely map out the desired outcomes, outcome indicators and outputs to be produced through the project and related activities and inputs. During implementation M&E needs to be a dynamic exercise with the monitoring and evaluation of results feeding back into project management strategies for achieving the project objectives.

The following are some possible exit strategies that can be exploited:

- The next project will have to build strong partnership and monitoring and evaluation mechanisms to ensure ownership and full respect of commitments;
- At the end of the project, the remaining budget can be used in sustaining the set infrastructures;
- Alternative sources of funds could be the NEYP's revenue generating activities;
- Diversifying different income generating projects such as cows and pig husbandry projects, sewing & carpentry projects by youth cooperatives;
- Liaising with NGOs interested in environment protection and the Government of Rwanda to support future sustainability of NEYP's achievements.

CHAPTER FIVE: CONCLUSIONS AND RECOMMENDATIONS

It was realized that the project budget had been executed at 30% of the total allocated budget and all committed budget was not released.

The study results showed that the project beneficiaries played different roles namely supervision, man-power, technicians, cooperative leaders and support services. It was found that 78% of the manpower were cooperative leaders and 38% of them were female. Support services follows in employing more females at 33%. On average, 34% of those who participated in the project activities were females. In addition, those who attended at least one year in secondary education were occupying cooperative leadership, supervision, and support services positions.

The results demonstrated that most jobs were created by the tree-planting activity (89.1%).

The study revealed that infrastructures were established alongside Nyabarongo River and its affluents. Different types of trees were planted. Progressive terraces were put where appropriate in only Nyanza District. The banks of Nyabarongo River System were protected through improved management of the river buffer zone, even though floods destroyed a great deal of the set infrastructures.

Furthermore, the study found that the project realizations are not fully sustained and that it is necessary to continue protecting the set infrastructure by monitoring related activities and strengthening the trainings on environment sustainability.

Based on the study findings, the following recommendations can be put forward:

- To continue awareness at local levels of the application of the environment law;
- When planning for the project local communities should be involved;
- The market for the project products is required;

- The main focus of the follow-on project should be to consolidate the progress made and scale up the lessons learned with particular emphasis on environment protection ;
- The cooperatives currently assisted by NEYP should be able to consolidate their activities and become financially viable. New cooperatives may be added - and would be up and running faster;
- The remaining active youth groups should be sensitized that there is the potential for them to be involved in new projects which will better serve their personal needs as well as the needs of the country;
- The next phase of strengthening cooperatives and their management should be a priority. To do so a detailed analysis of the challenges, sustainability should be undertaken;
- To find out where improvements are most urgent, a detailed analysis of management's shortcomings and of gaps in the skills and competencies among the members, committee members and staff is needed;
- The next phase of the project should work to ensure the Public Private Partnership Model: In order to build sustainability into both environment and youth unemployment projects more extensive cooperation needs to be developed with the private sector. The assistance of the private sector should be drawn on during project design to ensure that the projects will be more viable and their outcomes more sustainable. This will foster greater private sector linkages during project delivery which particularly in the case of youth unemployment projects should lead to a quicker realization of results;

APPENDICES

Appendix 1: Unstructured questionnaire

1. Explain how the project contributed in building and strengthening capacities of youth associations, CBOs/NGOs to undertake conservation of Nyabarongo river system?
2. How each of you was involved in the project activities?
3. What activities do you think have to be carried out to sustain project achievements?
4. What types of income generating projects were started by the youth who got jobs from NEYP?
5. Which are other local entities that the project built and strengthened capacities to undertake conservation of Nyabarongo river system? How those ones were they selected? Do you think they were enough? If 'no' who else should have been included among beneficiaries? Why?
6. Which technologies were used in conserving and managing the Nyabarongo River system? Do you think they are appropriate? Explain your answer.
7. How the project did contribute in waste management in Kigali and towns along Nyabarongo River System? Are you satisfied? If not, what do you think need to be improved?
8. How did the project support to livelihood activities through natural resources and environment management? Are you satisfied? What else should have been done?
9. Did the project create terraces in your District? What kind of terraces? Why?
10. How did the project enhance capacities of youth in environmental management in the District?
11. What are activities carried out by the project to protect banks of Nyabarongo River System? How were chosen those activities? What are plans to sustain those activities after the project closure?
12. How the project did protect Nyabarongo River System against attack of water hyacinth? Are you satisfied of the methods used? Do you think there are ways to do that? How do you plan to sustain that activity?
13. For you, what are the benefits of the project? What the project did well? What were its weaknesses?
14. If you were to design another project to protect the river, what do you think should be its main components?
15. What are infrastructures created per the project in your District?
16. What are other projects do you have in the District dealing with economical activities?
17. How do you rank the contribution of NEYP in the economic development?
18. Do you have other projects with the same components as NEYP?
If yes, which ones?
19. How do you rank the contribution of NEYP for each component?

Appendix 2: Structured questionnaire

Section One: Identification of the respondent

1. Name
2. Sex
3. District
4. Sector
5. Cell
6. Village
7. Education level
8. Member of a youth association (name it)
9. Member of an NGO (Name it)
10. Local leader (specify)
11. Project contractor

Section two: Questions

1. What is your role in NEYP?
2. Did the project contribute in building and strengthening capacities of youth associations?
 - Yes
 - NoIf 'Yes' how?
 - Training in cooperative management?
 - Training on Environment issues?
 - Equipments?
 - Others (specify)
3. What kind of activities permitted you to get jobs in the project?
 - Terraces
 - Tree-planting
 - Tree-protection
 - Other activities (Specify)
4. How many days did you work in those labor intensive activities?
 - Less than 30 days
 - 30 days
 - Between 30 and 60 days
 - 60 Days
 - Between 60 and 90 days
 - 90 days
 - Greater than 90 days
5. How much money were you paid per days?
 - Less than 600 FRW

- Between 600 FRW and 1,200 FRW?
 - More than 1,200 FRW
 - Other (Specify)
6. How much money did you get in total?
7. How was that money paid?
- Cash?
 - Via an account?
8. Was the money paid in its totality?
- Yes
 - No
- If "no" why? (explain)
9. If some amount was kept for you, how did you use that or how do you think to use that?
10. How was that money used?
- To buy food?
 - To buy other items (if 'yes', what kind?)
 - To invest?
 - Other (Specify)
11. If the money was used to generate income, what kind of activities did you carry out?
- Agricultural activity (Specify)
 - Small Business (Specify)
 - Processing plant like cassava plant (Specify)
12. If you are implementing a project from money received, can I see it?
13. Tell me how much money you get from the project per month.
14. How each of you was involved in the project activities?
- In selecting projects to be undertaken?
 - In selecting trees to be planted?
 - In training?
 - In funding some activities?
 - Other (Specify)
15. What activities do you think have to be carried out to sustain project achievements?
- To set aside a fund to continue paying the laborers?
 - To share the trees and to make the beneficiaries responsible?
 - To extend the contract for those who planted trees? (For how long?)
 - To give more trainings (Type and duration)
 - Other (Specify)
16. Do you know other local entities that the project built and strengthened capacities to undertake conservation of Nyabarongo river system?
- Yes
 - No
17. If 'Yes' name them
18. How were they selected?
19. Do you think the list was enough?
- Yes

- No
20. If 'No' who else is important and why?
 21. Which technologies were used in conserving and managing the Nyabarongo River system?
Do you think they are appropriate? Explain your answers.
 22. How the project did contribute in waste management in Kigali and towns along Nyabarongo River System? Are you satisfied? If not, what do you think need to be improved?
 23. How did the project support to livelihood activities through natural resources and environment management? Are you satisfied? What else should have been done?
 24. Did the project create terraces in your District?
 - Yes
 - No
 25. If 'Yes' what kind of terraces?
 - Radical ones
 - Progressive ones
 26. Do you know why those terraces were selected?
 - Yes
 - No
 27. If 'Yes' why?
 28. Which river was protected per NEYP?
 29. Why was it chosen?
 30. What activities were undertaken to protect its banks?
 - To plant trees at 10 m
 - To let a band of natural vegetation
 - To plant bamboos
 - To put terraces
 31. Are all those infrastructures set were protected?
 - Yes
 - No
 32. If 'No' what destroyed them?
 - Farmers who cut trees
 - Famers who let their cattle graze
 - Fire?
 - Others (Specify)
 33. Did you try something to protect those infrastructures?
 - Yes
 - No
 34. If 'yes' what did you try?
 35. What succeeded and what failed and why?
 36. What can be undertaken to sustain those infrastructures?
 37. How did the project enhance capacities of youth in environmental management in the District?
 38. Did NEYP do something to protect the River System against attack of water hyacinth?

- Yes
 - No
39. If 'Yes', what was done
40. Did the strategies protect the river?
41. Do you think there are ways to do that?
42. How do you plan to sustain those activities?
43. For you, what are the benefits of the project?
44. What the project did well?
45. What were its weaknesses?
46. If you were to design another project to protect the river, what do you think should be its main components?
47. What new activities should be put in that new NEYP?
48. What are infrastructures created per the project in your District?
49. What are other projects do you have in the District dealing with economical activities?
50. How do you rank the contribution of NEYP in the economical development?
- The best
 - In The middle (Which one is the best)
 - The last (which are projects ranked first)
51. Do you have other projects with the same components as NEYP?
52. If yes, which ones?
53. How do you rank the contribution of NEYP for each component?
- a) In Protecting the river
 - First
 - Second
 - Third
 - Last
 - b) In income raising
 - First
 - Second
 - Third
 - Last
54. What kind of advice can you give to the following stakeholders to sustain project activities?
- REMA Managers
 - Local Leaders
 - Youth Associations

Appendix 3: List of respondents

District	Number of respondents	Names	Contact
GASABO	5	UWINEZA ODETTE	0782503203
		NYIRAMBARUSHIMANA CLAUDINE	0782263913
		BAGWANEZA CANDID	0788811909
		KAYITESI CLAUDINE	
		UWOBASA ANATHA	
NYARUGENGE	3	NIWEMUBYEYI ASSOUMTA	0784215095
		NKUSI JEAN DE DIEU	
		UWADATA JOSIANE	
NYANZA	3	HATEGEKIMANA EMMANUEL	0785243789
		MUJAWIMANA JOSIANE	
		AYINGENEYE JULIENE	
HUYE	9	NIYONGANA INNOCENT	
		MUKESHIMANA THACLENE	
		MUKANDAYISENGA M.CHANTAL	
		MUNYANEZA JAPHET	
		BIKORIMANA GASPARD	
		NKURUNZIZA FAUSTIN	
		UZAMUKUNDA CHARLES	
		BYUKUSENGE BEATRICE	
		MURERAMANZI INNOCENT	
RUHANGO	3	KANAMUGIRE ANASTASE	
		NUWAYO THEONESTE	
		NSHIMIYUMUREMYI VIATOR	
NYARUGURU	7	GAHONGAYIRE VALENCE	0785357428
		NYIRANTEZIRYAYO ALPHONSINE	0782177881
		NGANABASHAKA DAMIEN	0788702302
		MANIRAKIZA LAURENT	
		MUSENGIMANA DAMASCENE	
		KARINDA PIERRE CELESTIN	0785172161
		GAHONGAYIRE VALENCE	0785357428
BUGESERA	7	UWAMAHORO J.PIERRE	
		UWAMBAJIMANA LENATHA	
		MUKUNDIYUBWO DONATHA	
		UWERA VIRGINIE	
		RULANGIRWA ERIC	
		NSENGUMUREMYI EMMANUEL	
		TWAGIRAYEZU CASIE	
RULINDO	3	UWODUSAZIYE DONATHA	0782308044
		BYUKUSENGE TELESOPHORE	0782834170

District	Number of respondents	Names	Contact
		NSANZEMAHORO GILBERT	
GAKENKE	6	BIHOYIKI DEOGRATIAS	0786925168
		DUKUZUMUREMYE ANDRE	
		HAGENIMANA THAMAS	
		MUREKATETE OLIVA	
		UWAMAHORO JENEVIEVE	
		UWAMUNGU EMMANUEL	
GICUMBI	7	BAVAKURE THEOGENE	
		HABARUSHAKA JMV	0785789486
		KAJEMUNDIMWE	
		MANIRAFASHA EVARISTE	
		MURWANASHYAKA GIRBERT	078854557
		SIBOMANA DANIEL	078620874
		UMWAMIKAZI GENENESE	
GISAGARA	9	BURASANZWE EMMANUEL	0784691991
		HAVUGIMANA GLORIOSE	
		IRADUKUNZE EMILLE	
		IYAMUREMYE FRANCAIS XAVIER	0783563674
		MBAZENDORE VINCENT	
		NKUNDINEZA J.PIEERE	
		NSABIMANA EMMANUEL	
		TWAGIRAYEZU JOSEPH	
		UWISHIMANONE VALENS	
KAMONYI	3	MUGABONAKE FRANCAIS	
		MUKANGABO BEATRICE	
		NKUNZURWANDA ATHANASE	
KICUKIRO	1	MUSAYIDIZI INNOCENT	
MUHANGA	5	BIKWIYE J.BOSCO	
		MUJAWAMARIYA VENANTIE	
		MYASIRO DAVID	
		NYIRAMINANI BALINA	
		TWIZIGIRE BEATRICE	
MUSANZE	7	HODAL OLIVIER	
		IYAMUREMYE FELIECIEN	
		MBONIGABA J.PIERE	
		MUNYANEZA THEOGENE	
		NDAYUMUJINYA JOSEPH	
		NYIRABISABWA BEATHA	
		NYIRANSABIMANA PERUS	
NYAMAGABE	7	MUKASHYAKA FRANCINE	
		MUNYANEZA PHILIPE	
		NTAWUKURIRYAYO PROSPERE	

District	Number of respondents	Names	Contact
		NZAMURAMBA ERICK	
		RWAGASORE FRODUARD	
		BIZIMUNGU FELICIEN	
		UWANKUNZE JOSIANE	

Appendix 4: Amount of money paid in total to job beneficiaries

Amount received in (RWF)	Number of respondents	Total amount paid
6,000	1	6,000
7,000	1	7,000
10,000	1	10,000
11,000	2	22,000
12,000	2	24,000
13,800	1	13,800
16,000	1	16,000
18,000	2	36,000
20,000	2	40,000
21,000	2	42,000
22,000	3	66,000
24,000	1	24,000
25,000	2	50,000
29,000	1	29,000
30,000	5	150,000
32,000	1	32,000
35,000	1	35,000
39,000	1	39,000
45,000	4	180,000
47,000	1	47,000
49,000	1	49,000
54,000	1	54,000
60,000	9	540,000
61,000	1	61,000
62,000	1	62,000
72,000	4	288,000
80,000	2	160,000
84,000	1	84,000
86,000	1	86,000
88,000	1	88,000
90,000	2	180,000
100,000	2	200,000
103,500	1	103,500
104,000	1	104,000
113,000	1	113,000
120,000	2	240,000
127,000	1	127,000
130,000	1	130,000
133,500	1	133,500
136,000	1	136,000
140,000	4	560,000
150,000	1	150,000
160,000	2	320,000
175,000	1	175,000
180,000	2	360,000
195,000	1	195,000
210,000	2	420,000
Total	83	5,987,800

Appendix 5: Photos taken during the physical measurement activity

1. MUSANZE: RWAZA sector



2. GAKENKE: MUZO sector



3. RULINDO: SHYORONGI sector



4. GICUMBI: RUTARE sector



5. HUYE: MARABA and KIGOMA sectors



6. NYAMAGABE: KIBIRIZI sector



7. NYARUGURU: MUNINI sector



8. GISAGARA: MUKINDO sector



9. NYANZA:RWABICUMU Sector



9. MUHANGA: RUGENDABARI sector



10. RUHANGO: KINIHIRA sector

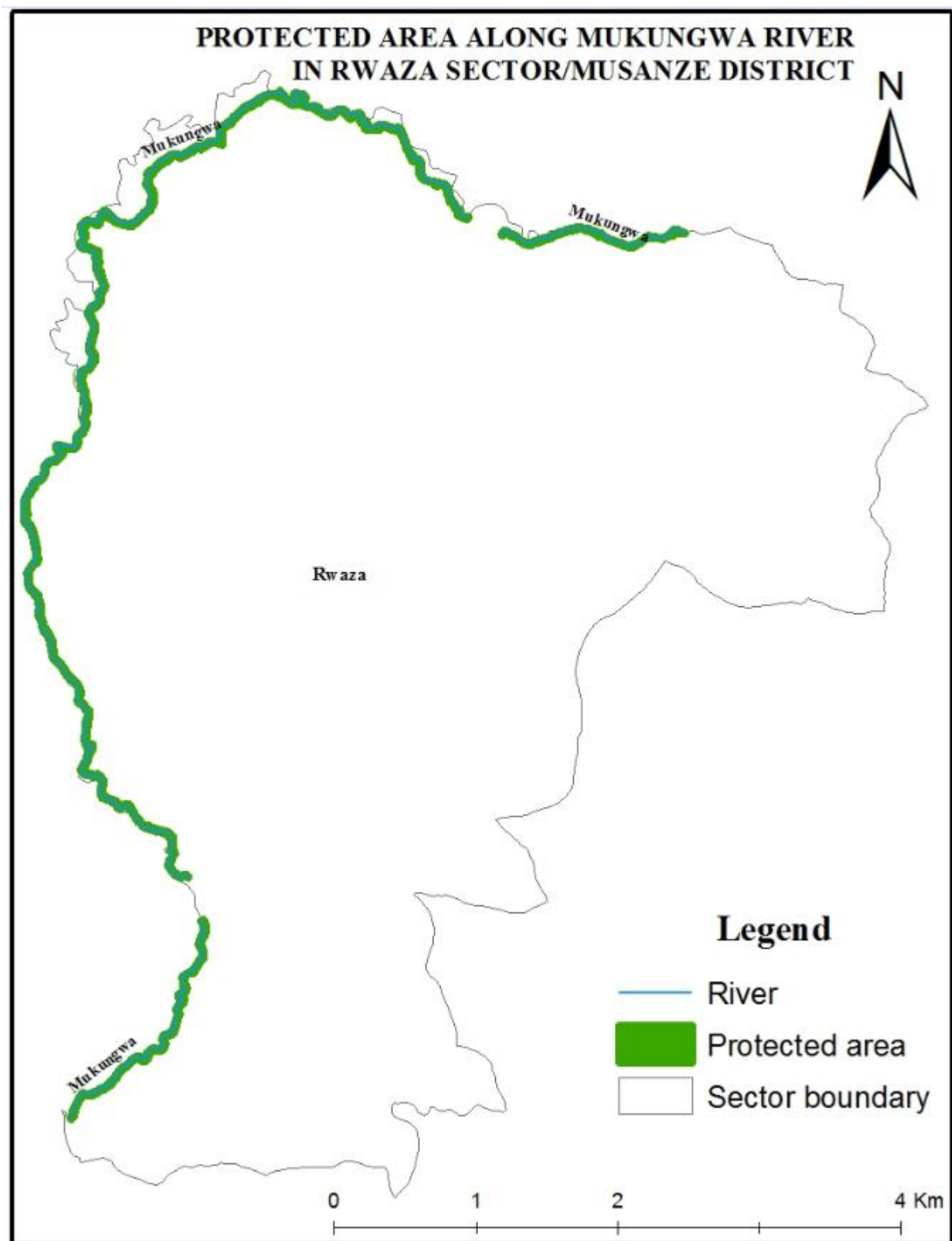


KAMONYI:Kayenzi

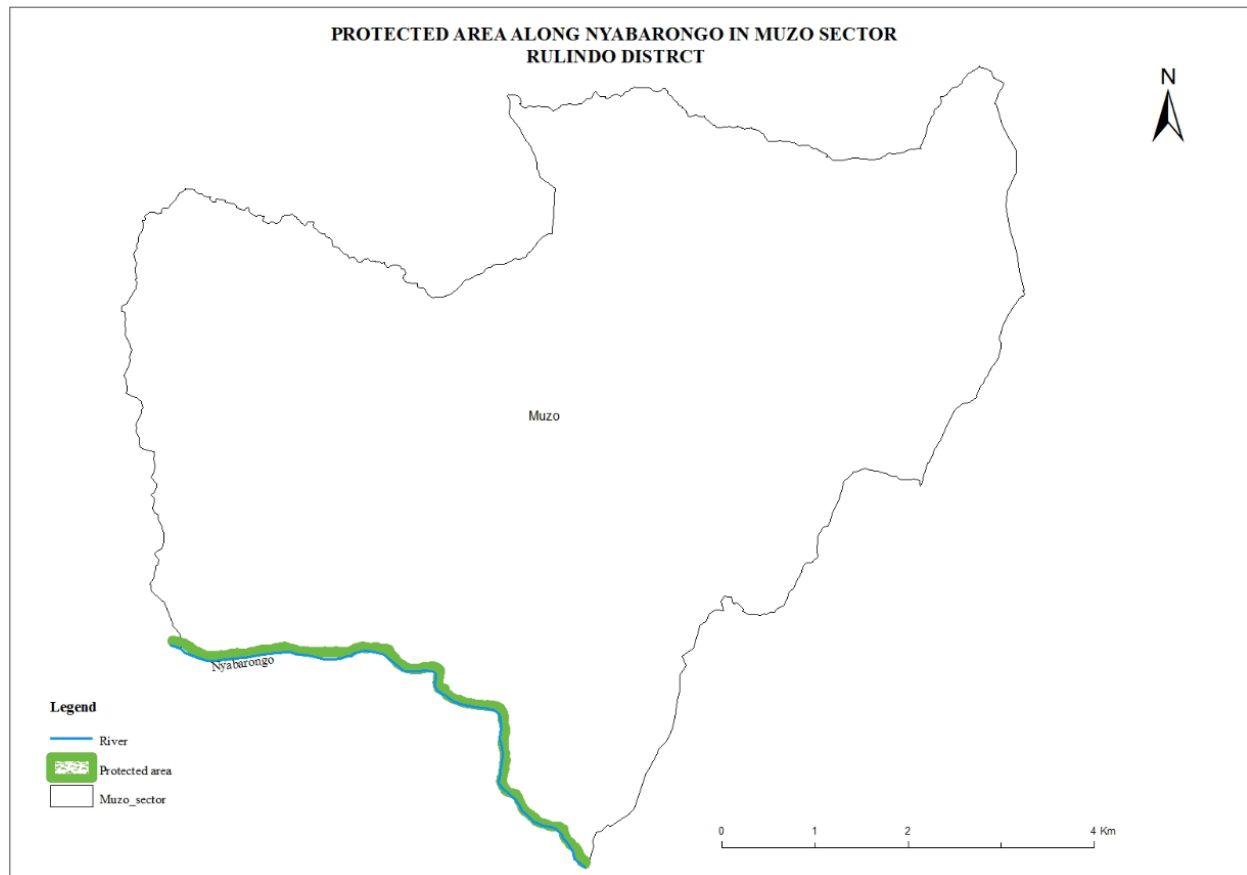


Appendix 6: Maps showing the protected areas

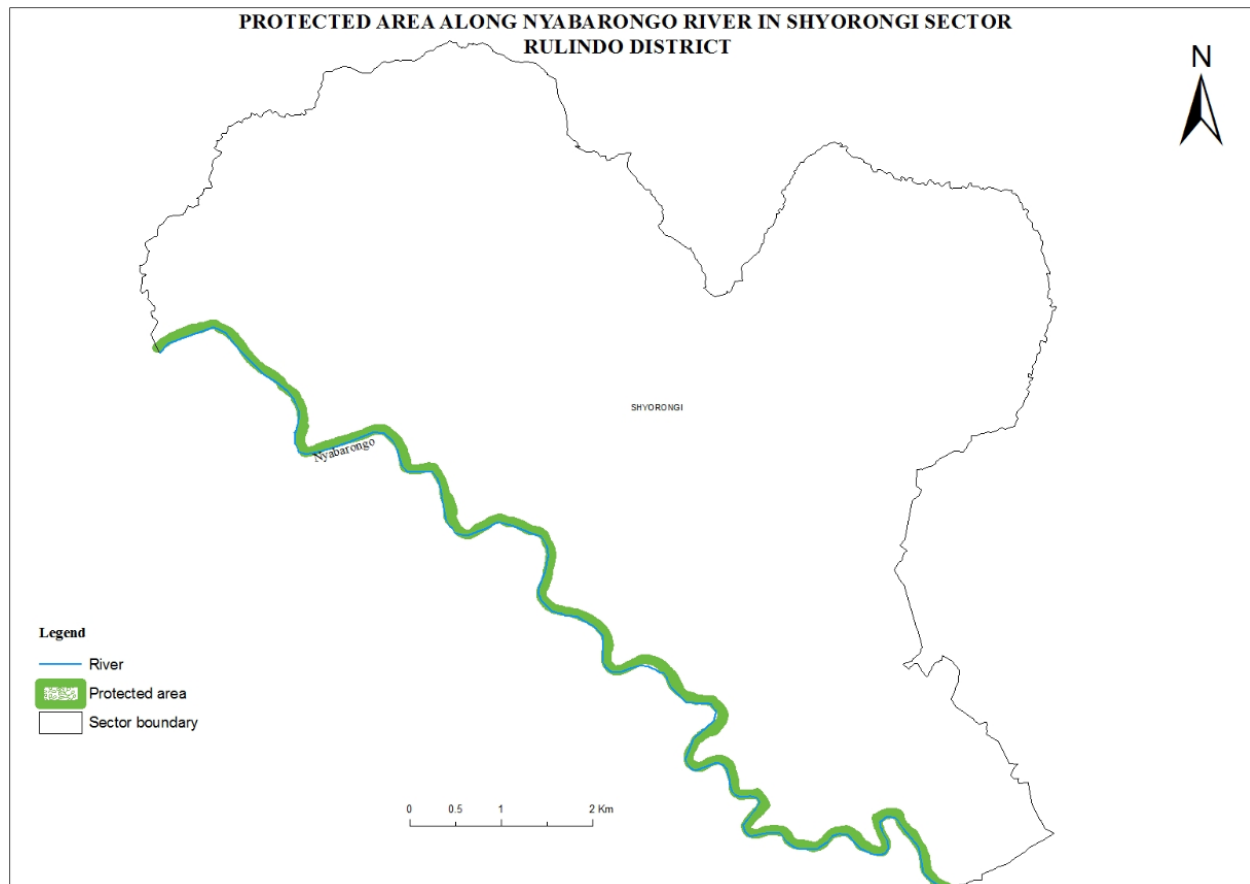
1. MUSANZE: RWAZA sector



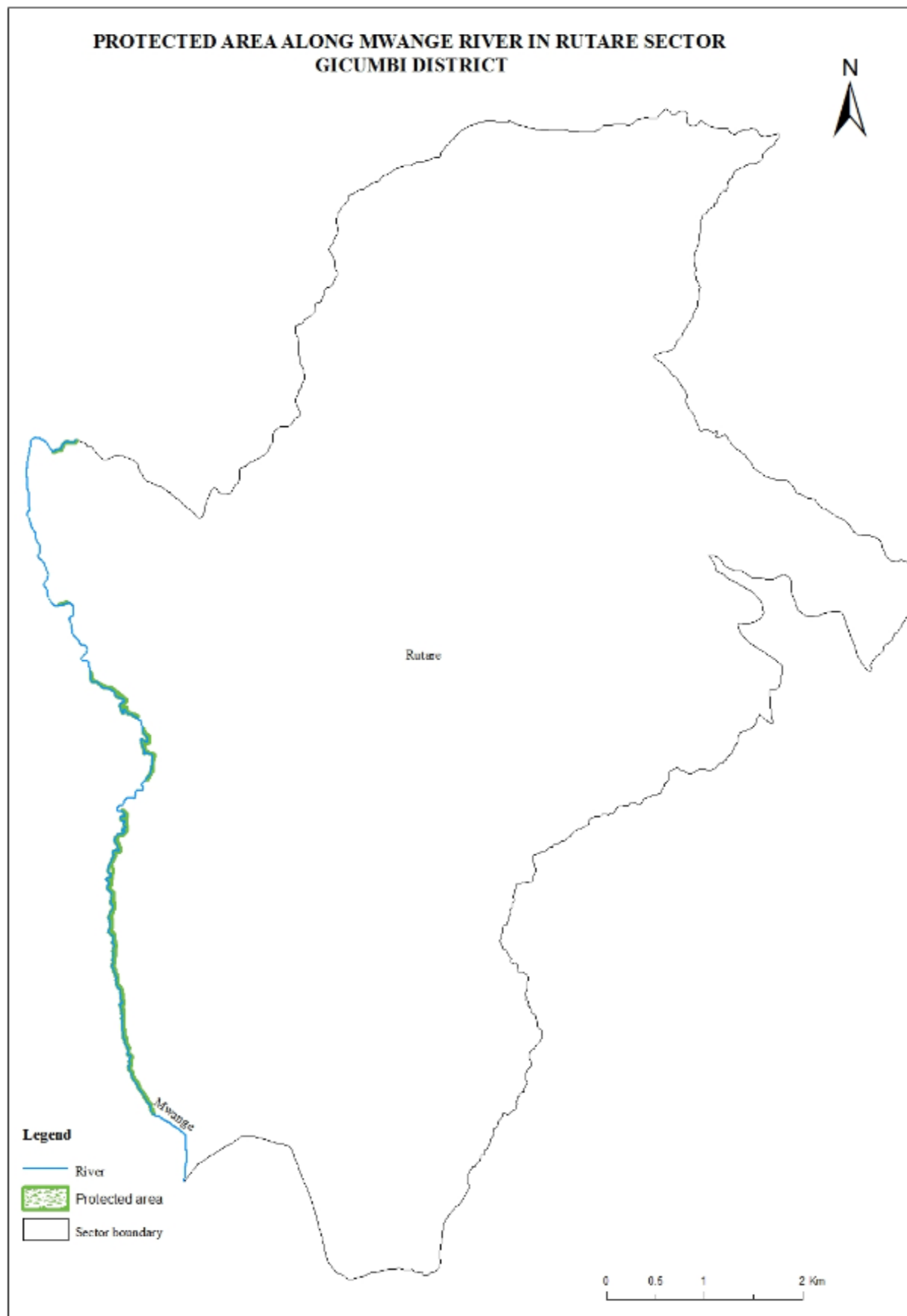
2. GAKENKE: MUZO sector



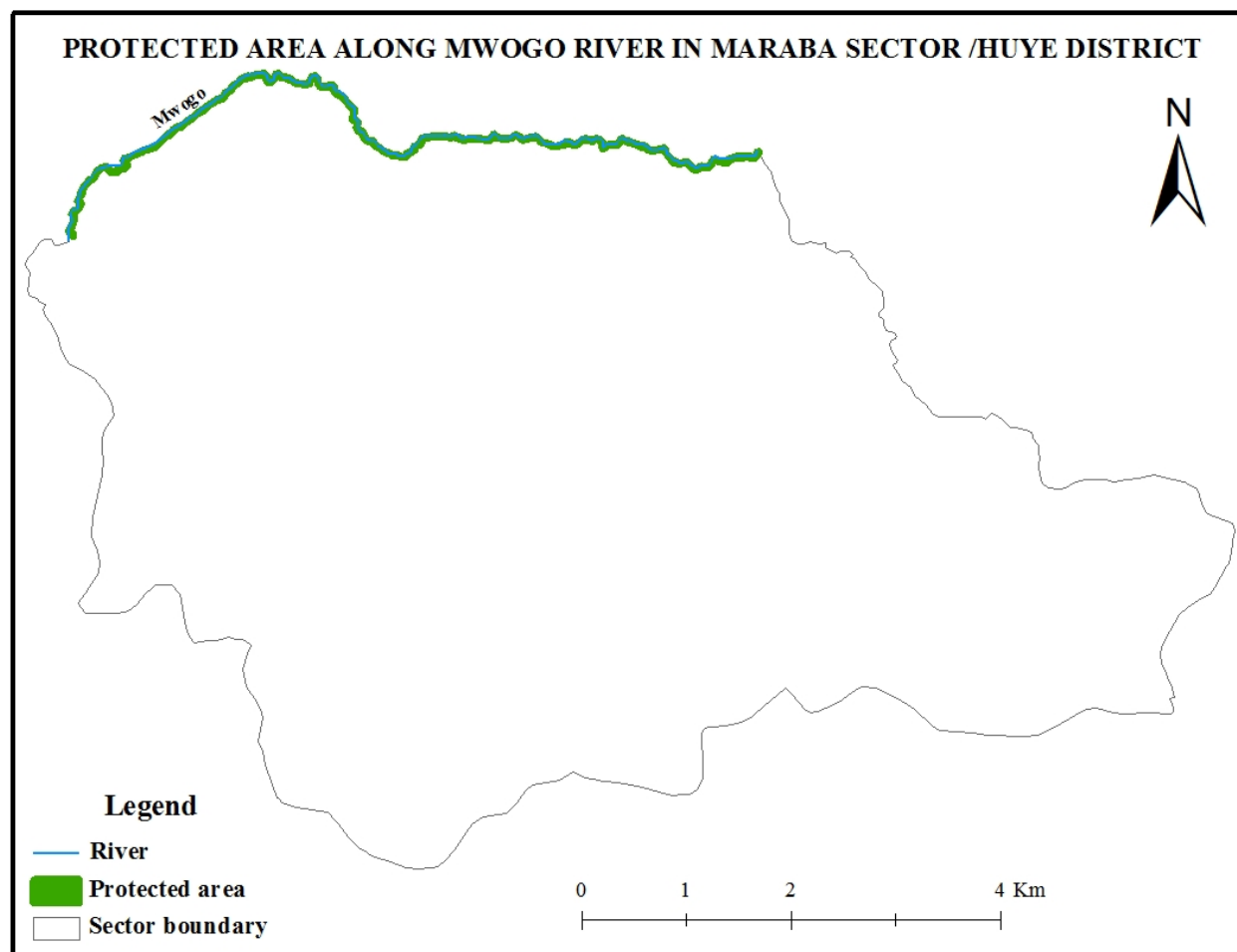
3. RULINDO: SHYORONGI sector



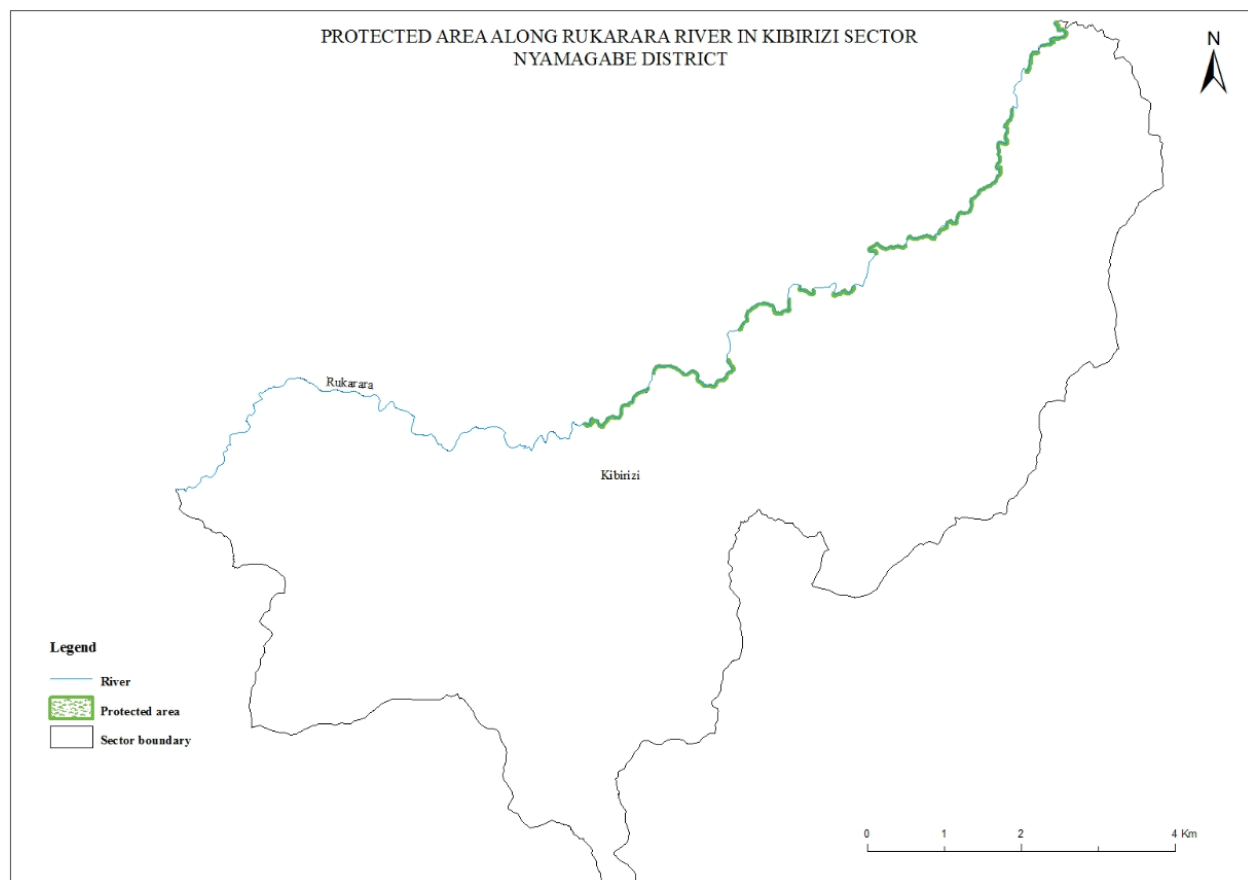
4. GICUMBI: RUTARE sector



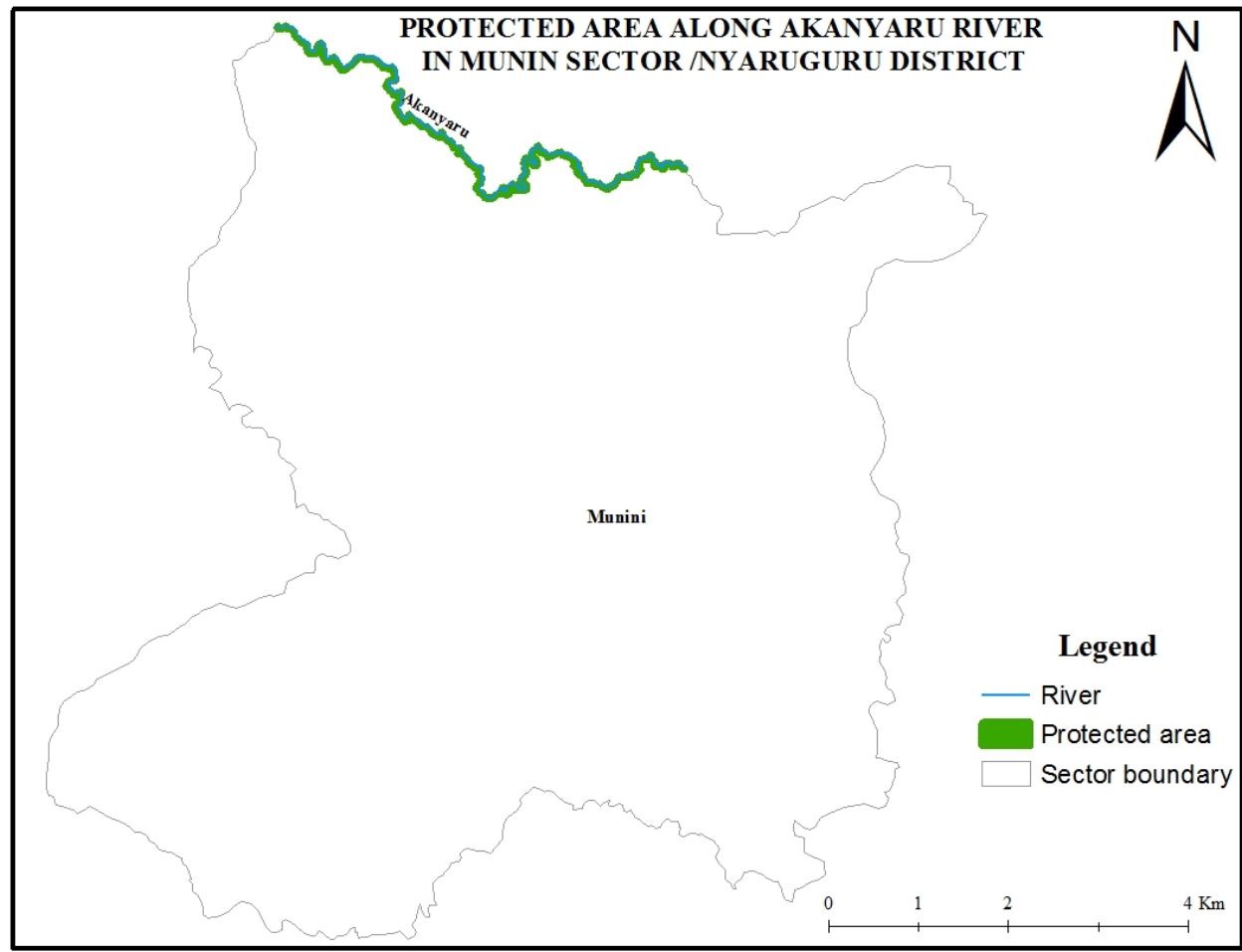
5. HUYE: MARABA sector



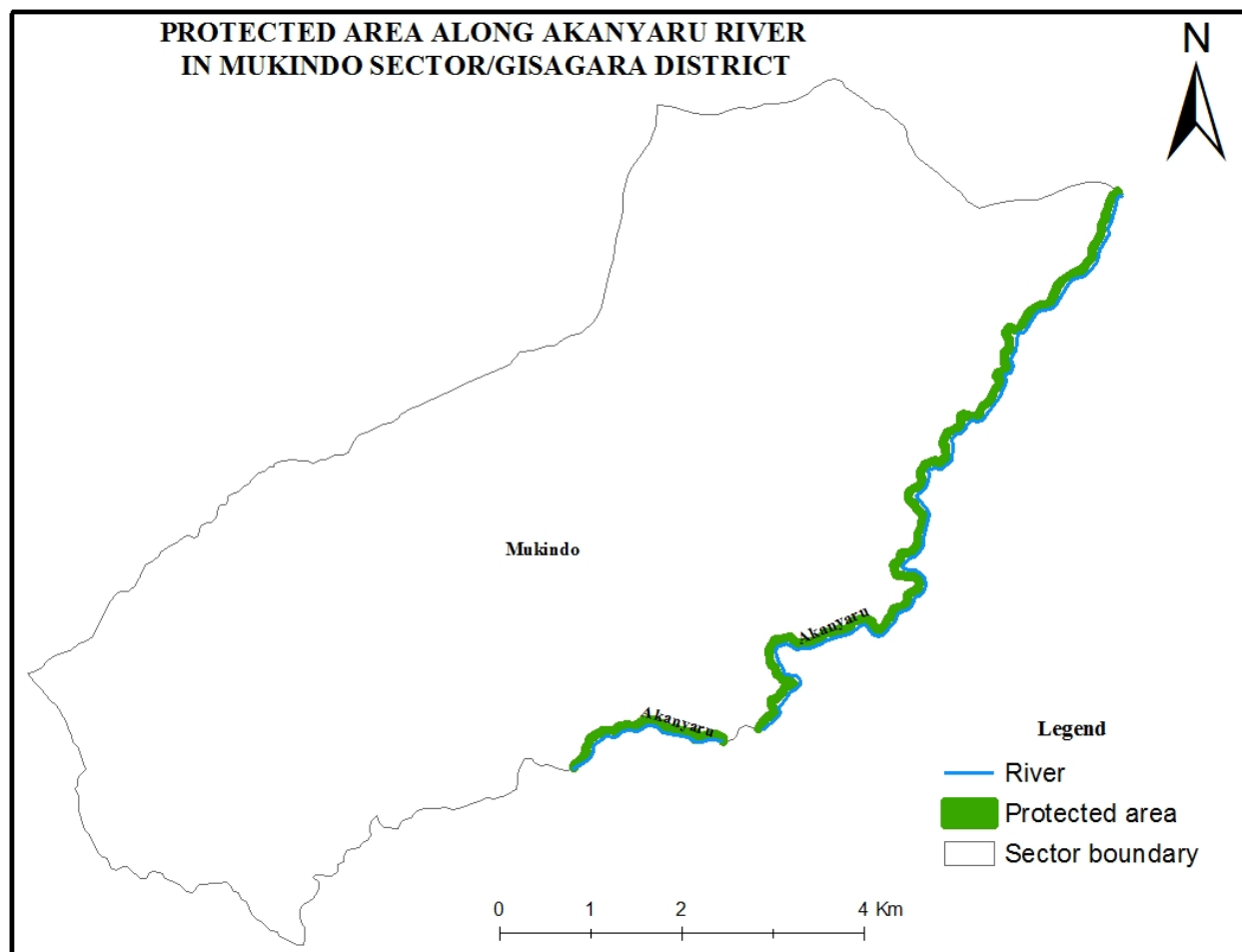
6. NYAMAGABE: KIBIRIZI sector



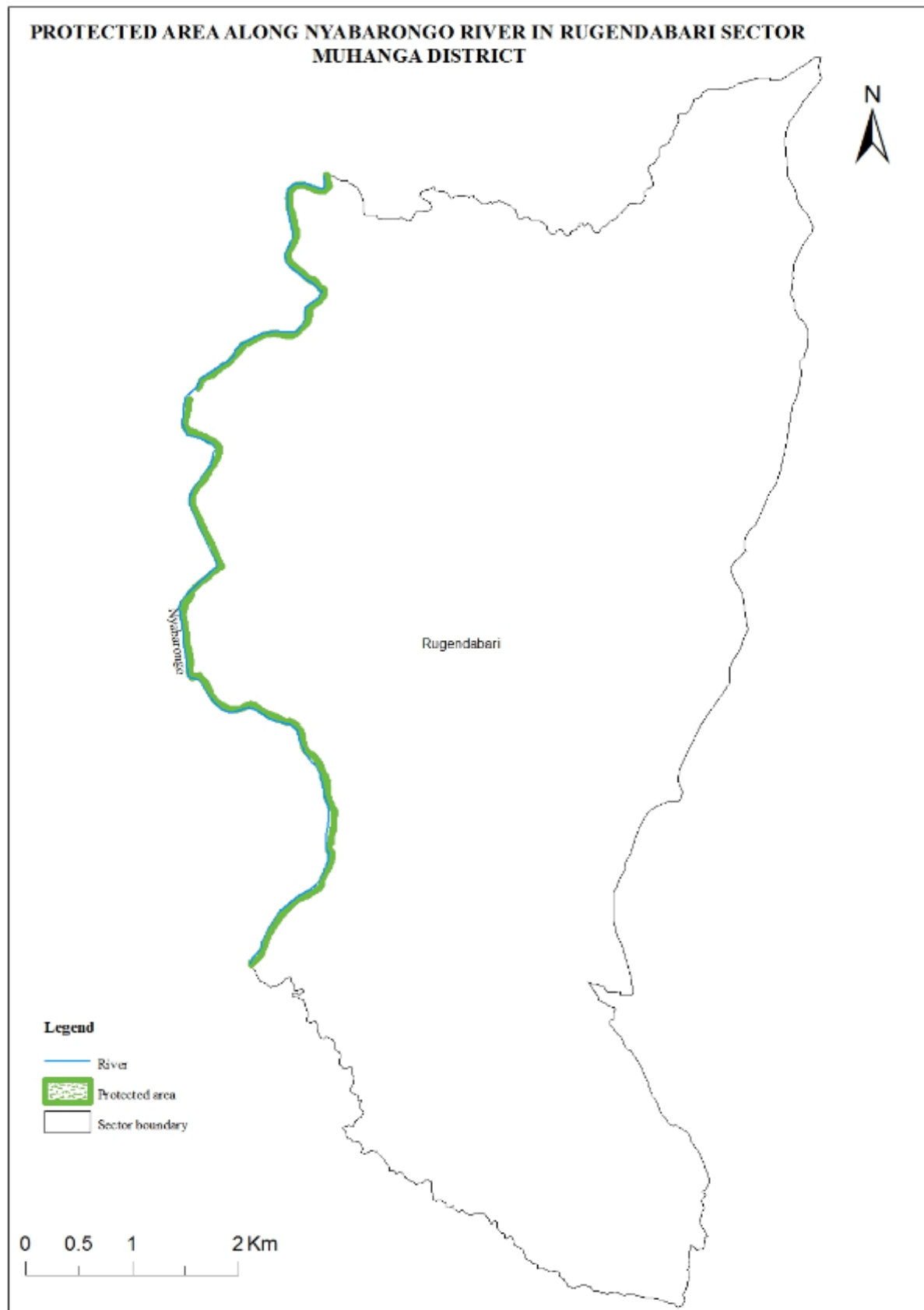
7. NYARUGURU: MUNINI sector



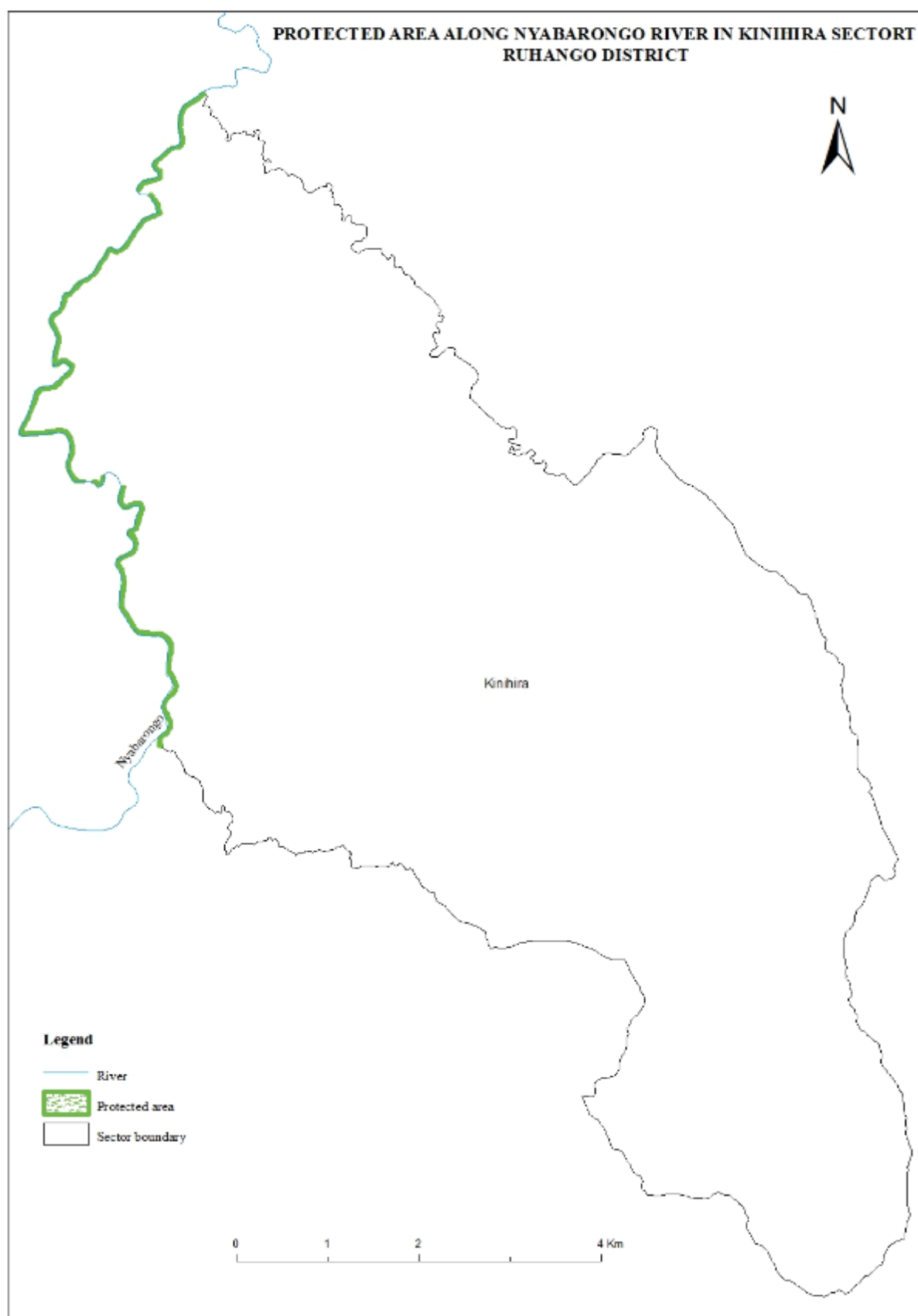
8. GISAGARA: MUKINDO sector



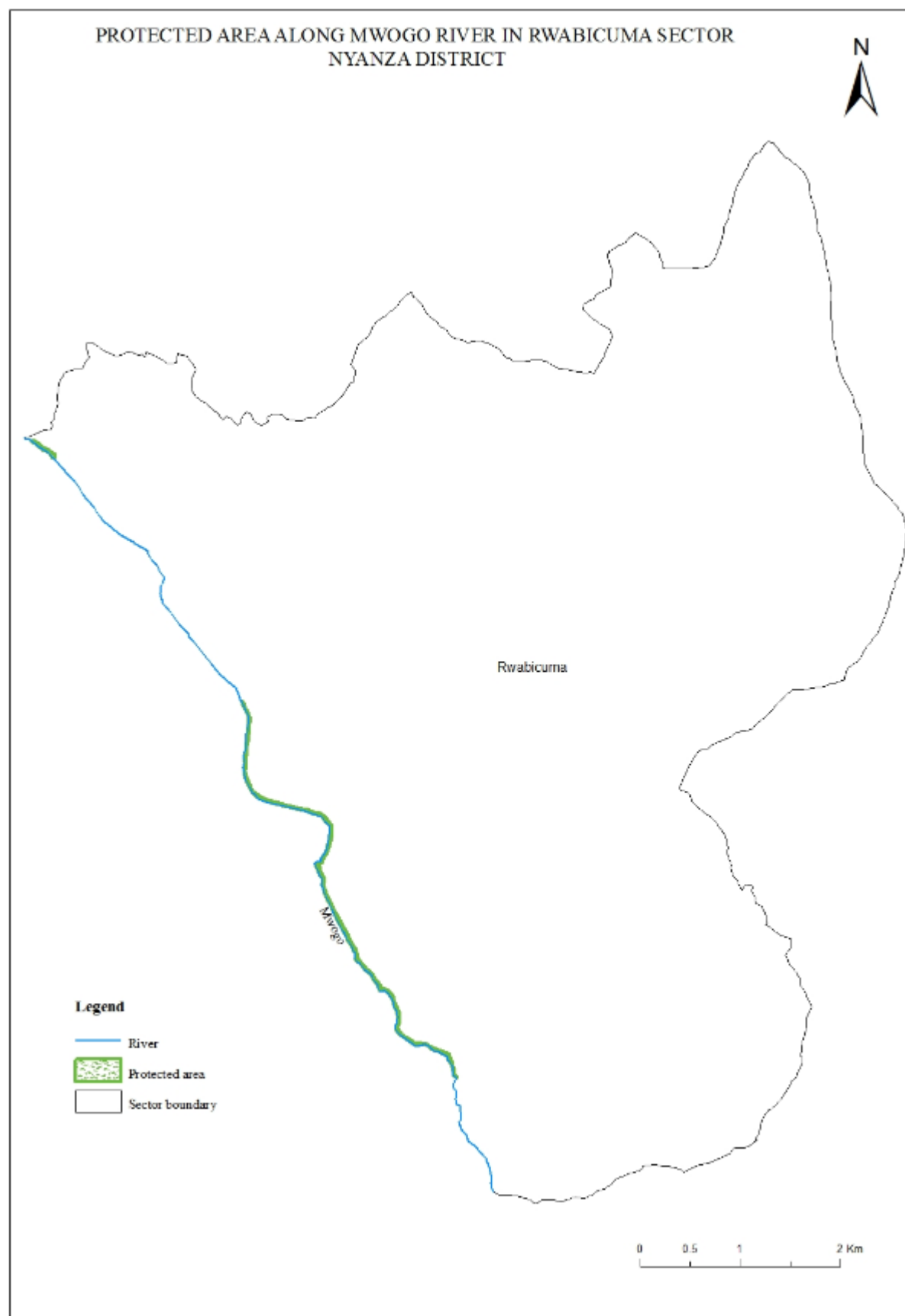
9. MUHANGA: RUGENDABARI sector



10. RUHANGO: KINIHIRA sector



11. NYANZA: RWABICUMA sector



12. KAMONYI: KAYENZI sector

