

# **SOCIAL STUDIES FOR TTCs**

**OPTION: ECLPE**

**YEAR ONE**

**TUTOR'S GUIDE**

© 2020 Rwanda Education Board (REB) .

All rights reserved.

This book is property of the Government of Rwanda.

Credit must be given to REB when the content is quoted.

# FOREWORD

The Rwanda Education Board is honoured to avail the Social Studies Tutor's Guide for Teacher Training Colleges (TTCs) in ECLPE and it serves as official guide to teaching and learning of Social Studies.

The Rwandan education philosophy is to ensure that young people at every level of education achieve their full potential in terms of relevant knowledge, skills and appropriate attitudes that prepare them to be well integrated in society and exploit employment opportunities.

The ambition to develop a knowledge-based society and the growth of regional and global competition in the job market has necessitated the shift to a competence-based curriculum. After a successful shift from knowledge to a competence-based curriculum in general education, TTC curriculum also was revised to align it to the CBC in general education to prepare teachers who are competent and confident to implement CBC in pre-primary and primary education. The rationale of the changes is to ensure that TTC leavers are qualified for job opportunities and further studies in higher education in different programs under education career advancement.

I wish to sincerely express my appreciation to the people who contributed towards the development of this document, particularly, REB staff, lecturers, TTC Tutors, Teachers from general education and experts from Local and International Organizations for their technical support.

I take this opportunity to call upon all educational stakeholders to bring in their contribution for successful implementation of this textebok.

**Dr. NDAYAMBAJE Irénée**

**Director General REB.**

# **ACKNOWLEDGEMENT**

I wish to sincerely express my special appreciation to the people who played a major role in development of Social Studies Tutor's Guide for ECLPE Option. It would not have been successful without the support from different education stakeholders.

I wish also to thank Rwanda Education Board (REB) leadership who supervised the textbook writing process. I wish to extend my appreciation to REB staff, Lecturers, Tutors, experts from Local and International Organizations and Teachers from General Education for their effort during the writing of this textbook.

**MURUNGI Joan**

**Head of Curriculum, Teaching and Learning Resources Department/  
REB**

FOREWORD .....	iii
ACKNOWLEDGEMENT .....	iv
<b>PRESENTATION OF THE TUTOR'S GUIDE</b> .....	<b>1</b>
<b>PART I. GENERAL INTRODUCTION</b> .....	<b>1</b>
1.0. Introduction .....	1
1.1. The structure of the guide .....	1
1.2. Methodological guidance .....	3
<b>SOCIAL STUDIES LESSON PLAN</b> .....	<b>19</b>
<b>UNIT: 1 GENERAL INTRODUCTION TO SOCIAL STUDIES</b> .....	<b>27</b>
1.1. Key unit competence .....	27
1.2. Prerequisite( knowledge, skills, attitude and values) .....	27
1.3. Cross cutting issues to be addressed .....	27
1.4. Guidance on the introductory activity .....	27
1.5. List of lessons.....	28
1.6. Summary of the unit.....	32
1.7. Additional Information for tutors .....	32
1.8. End unit assessment (answers) .....	36
1.9. Additional activities.....	38
<b>UNIT: 2 UNIVERSE AND THE SOLAR SYSTEM</b> .....	<b>41</b>
2.1. Key unit competence: .....	41
2.2. Prerequisite (knowledge, skills, attitudes and values).....	41
2.3. Cross-cutting issues to be addressed .....	41
2.4. Guidance on the introductory activity .....	42
2.5. List of lessons and End Unit assessment.....	42
2.6. Summary of the unit.....	44
2.7. Additional Information.....	45
2.8. End unit assessment .....	45
2.9. Additional activities.....	46
<b>UNIT: 3 FORMATION OF RELIEF FEATURES OF RWANDA</b> .....	<b>49</b>
3.1. Key unit competence: .....	49
3.2. Prerequisite (knowledge, skills, attitudes and values).....	49
3.3. Cross-cutting issues to be addressed .....	49
3.4. Guidance on introductory activity .....	50
3.5. List of lessons/sub-heading .....	50

3.6. Summary of the unit.....	53
3.7. Additional Information for tutors .....	53
3.8. End unit assessment .....	54
3.9. Additional activities .....	55
<b>UNIT: 4 ROCKS IN RWANDA.....</b>	<b>57</b>
4.1 Key unit competence: .....	57
4.2. Prerequisite (knowledge, skills, attitudes and values).....	57
4.3. Cross-cutting issues to be addressed:.....	57
4.4. Guidance on introductory activity .....	58
4.5. List of lessons/sub-heading .....	59
4.6. Summary of the unit.....	62
4.7. Additional Information.....	63
4.8. End unit assessment .....	68
4.9. Additional activities .....	68
<b>UNIT: 5 SOILS IN RWANDA .....</b>	<b>71</b>
5.1. Key Unit competence: .....	71
5.2. Prerequisite (knowledge, skills, attitudes and values).....	71
5.3. Cross-cutting issues to be addressed .....	71
5.4. Guidance on the introductory activity .....	72
5.5. List of lessons and End Unit assessment.....	72
5.6. Summary of the unit.....	77
5.7. Additional information for tutor .....	78
5.8. End unit assessment .....	78
5.9. Additional activities .....	78
<b>UNIT: 6 CLIMATE IN RWANDA .....</b>	<b>81</b>
6.1. Key unit competence: .....	81
6.2. Prerequisite (knowledge, skills, attitudes and values).....	81
6.3. Cross-cutting issues to be addressed .....	81
6.4. Guidance on introductory activity .....	82
6.5. List of lessons/sub-heading .....	82
6.6. Summary of the unit.....	86
6.7. Additional Information .....	86
6.8. End unit assessment .....	86
6.9. Additional activities.....	88
<b>UNIT: 7 VEGETATION IN RWANDA.....</b>	<b>89</b>
7.1. Key unit competence:.....	89
7.2. Prerequisite (knowledge, skills, attitudes and values).....	89
7.3. Cross-cutting issues to be addressed .....	89
7.4. Guidance on introductory activity .....	90

7.5. List of lessons/sub-heading .....	90
7.6. Summary of the unit.....	93
7.7. Additional Information for tutors .....	93
7.8. End unit assessment .....	94
7.9. Additional activities .....	95
<b>UNIT: 8 DRAINAGE SYSTEM IN RWANDA .....</b>	<b>97</b>
8.1. Key unit competence: .....	97
8.2. Prerequisite (knowledge, skills, attitudes and values).....	97
8.3. Cross-cutting issues to be addressed .....	97
8.4. Guidance on introductory activity .....	98
8.5. List of lessons/sub-heading .....	98
8.6. Summary of the unit.....	101
8.7. Additional Information for tutors .....	102
8.8. End unit assessment .....	102
8.9. Additional activities.....	104
<b>UNIT: 9 POPULATION IN RWANDA.....</b>	<b>107</b>
9.1. Key unit competence: .....	107
9.2. Prerequisite/introduction/Revision .....	107
9.3. Cross-cutting issues to be addressed .....	107
9.4. Guidance on the introductory activity.....	108
9.5. List of lessons/sub-heading .....	108
9.6. Summary of the unit.....	111
9.7. Additional Information .....	111
9.8. End unit assessment .....	111
9.9. Additional activities.....	112
<b>UNIT: 10 RURAL AND URBAN SETTLEMENT IN RWANDA.....</b>	<b>113</b>
10.1. Key unit competence: .....	113
10.2. Prerequisite (knowledge, skills, attitudes and values).....	113
10.3. Cross-cutting issues to be addressed .....	113
10.4. Guidance on introductory activity .....	114
10.5. List of lessons/sub-heading .....	115
10.6. Summary of the unit.....	119
10.7. Additional Information.....	119
10.8. End unit assessment .....	119
10.9. Additional activities .....	120
<b>UNIT: 11.1 AGRICULTURE IN RWANDA .....</b>	<b>123</b>
11.1.1. Key unit competency: .....	123
11.1.2. Prerequisite (knowledge, skills, attitudes and values).....	123
11.1.3. Cross-cutting issues to be addressed: .....	123

11.1.4. Guidance on introductory activity: .....	124
11.1.5. List of lessons/sub-heading .....	125
11.1.6. Summary of the unit.....	130
11.1.7. Additional information .....	130
11.1.8. End unit assessment .....	130
11.1.9. Additional activities.....	131
<b>UNIT: 11.2 MINING IN RWANDA .....</b>	<b>133</b>
11.2.1. Key unit competence: .....	133
11.2.2. Prerequisite knowledge and skills/ Introduction .....	133
11.2.3. Cross-cutting issues to be addressed.....	133
11.2.4. Guidance on introductory activity .....	133
11.2.5. List of lessons /Sub-heading.....	134
11.2.6. Summary of the unit.....	136
11.2.7. Additional information .....	137
11.2.8. End of Unit Assessment .....	137
11.2.9. Additional activities.....	137
<b>UNIT: 11.3 POWER AND ENERGY IN RWANDA .....</b>	<b>139</b>
11.3.1. Key Unit competence: .....	139
11.3.2. Pre-requisite (knowledge, Skills, attitudes and values) .....	139
11.3.3. Cross-cutting issues to be addressed.....	140
11.3.4. Guidance on introductory activity .....	140
11.3.5. List of lessons /Sub-heading.....	141
11.3.6. Summary of the unit.....	143
11.3.7. Additional Information .....	144
11.3.8. End unit assessment .....	144
11.3.9. Additional activities.....	144
<b>UNIT: 11.4 INDUSTRIALISATION IN RWANDA .....</b>	<b>147</b>
11.4.1. Key Unit competence: .....	147
11.4.2. Pre-requisite (knowledge and skills, attitude and values) .....	147
11.4.3. Cross-cutting issues to be addressed .....	147
11.4.4. Guidance on introductory activity .....	147
11.4.5. List of lessons /Sub-heading.....	148
11.4.6. Summary of the unit.....	152
11.4.7. Additional Information.....	153
11.4.8. End of unit assessment Questions .....	153
11.4.9. Additional activities.....	153
<b>UNIT: 11.5 ENVIRONMENTAL CONSERVATION IN RWANDA AND TOURISM .....</b>	<b>155</b>
11.5.1. Key unit competence: .....	155



11.5.2. Prerequisite (knowledge, skills, attitudes and values).....	155
11.5.3. Cross-cutting issues to be addressed .....	155
11.5.4. Guidance on introductory activity .....	155
11.5.5. List of lessons/sub-heading .....	156
11.5.6. Summary of the unit.....	160
11.5.7. Additional Information for teachers .....	160
11.5.8. End unit assessment .....	160
11.5.9. Additional activities .....	161
<b>UNIT: 12 CIVILIZATION OF PRE-COLONIAL RWANDA .....</b>	<b>163</b>
12.1. Key unit competence.....	163
12.2. Prerequisite (knowledge, skills, attitudes and values).....	163
12.3. Cross-cutting issues to be addressed .....	163
12.4. Guidance on introductory activity .....	164
12.5. List of lessons/sub-heading .....	164
12.6. Summary of the unit.....	172
12.7. Additional Information for tutors .....	173
12.8. End unit assessment (answers) .....	176
12.9. Additional activities (Questions and answers).....	178
<b>UNIT: 13 COLONIAL RWANDA .....</b>	<b>181</b>
13.1. Key unit competence.....	181
13.2. Prerequisite (knowledge, skills, attitudes and values).....	181
13.3. Cross-cutting issues to be addressed .....	181
13.4. Guidance on introductory activity .....	182
13.6. Summary of the unit.....	193
13.7. Additional Information for the tutor .....	194
13.8. End unit assessment (answers) .....	194
13.9. Additional activities.....	196
<b>REFERENCES .....</b>	<b>201</b>



## **PRESENTATION OF THE TUTOR'S GUIDE**

### **PART I. GENERAL INTRODUCTION**

#### **1.0. Introduction**

The purpose of this tutor's guide is to help you implement the Social Studies syllabus in the option of ECLPE. It is designed to stimulate you to create exciting and meaningful lessons by enabling you to choose relevant and purposeful activities and teaching strategies. It will encourage you to research and look for new and challenging ways of facilitating students' learning. The tutor guide and the syllabus must be used side by side. The syllabus states the learning objectives for the subject and each unit, and outlines the content and skills that students will learn, and the assessment requirements.

The tutor's guide provides direction for you in using the outcomes approach in your classroom using a step by step approach. This tutor's guide provides examples of teaching and learning strategies for Social Studies in the option of ECLPE, elaboration of suggested activities and content, detailed information on how to make assessment tasks and the resources needed to teach Social Studies in the option of ECLPE.

#### **1.1. The structure of the guide**

This section presents the overall structure, the unit and sub-heading structure to help tutors to understand the different sections of this guide and what they will find in each section.

##### **Overall structure**

The whole guide has three main parts as follows:

##### **Part I: General Introduction.**

This part provides general guidance on how to develop the generic competences, how to integrate cross cutting issues, how to cater for learners with special educational needs, active methods and techniques of teaching Social Studies in ECLPE and guidance on assessment.

##### **Part II: Sample lesson plan**

This part provides a sample lesson plan developed and designed to help the tutor to develop their own lesson plans.

### **Part III: Unit development**

This is the core part of the tutor's guide. Each unit is developed following the structure below. The guide ends with references.

#### **Structure of a unit**

Each unit is made of the following sections:

- Unit title: From the syllabus
- Key unit competence: From the syllabus
- Prerequisites (knowledge, skills, attitudes and values)

This section indicates knowledge, skills and attitudes required for the success of the unit. The competence-based approach calls for connections between units/topics within a subject and interconnections between different subjects. The teacher will find an indication of those prerequisites and guidance on how to establish connections.

#### **Cross-cutting issues to be addressed.**

This section suggests cross-cutting issues that can be integrated depending on the unit content. It provides guidance on how to come up with the integration of the issue.

Note that the issue indicated is a suggestion; Tutors are free to take another crosscutting issue taking into consideration the learning environment.

#### **Guidance on the introductory activity:**

Each unit starts with an introductory activity in the learner's book. This section of the tutor's guide provides guidance on how to conduct this activity and related answers.

Note that learners may not be able to find the right solution but they are invited to predict possible solutions or answers. Solutions are provided by learners gradually through discovery activities organized at the beginning of lessons or during the lesson.

#### **List of lessons/sub-heading**

This section presents in a table suggestion on the list of lessons, lesson objectives copied or adapted from the syllabus and duration for each lesson. Each lesson /subheading is then developed.

## **End of each unit**

At the end of each unit the tutor's guide provides the following sections:

Summary of the unit which provides the key points of content developed in the student's book.

Additional information which provides additional content compared to the student's book for the tutor to have a deeper understanding of the topic.

End unit assessment which provides the answers to questions of end unit assessment in the textbook and suggests additional questions and related answers to assess the key unit competence.

Additional activities: remedial, consolidation and extended activities. The purpose of these activities is to accommodate each learner (average and gifted) based on end unit assessment results.

## **Structure of each-sub heading**

Each lesson/sub-heading is made of the following sections:

- Lesson /Sub-heading title
- Prerequisites/Revision/Introduction:

This section gives a clear instruction to teacher on how to start the lesson

**Teaching resources:** This section suggests the teaching aids or other resources needed in line with the activities to achieve the learning objectives.

Tutors are encouraged to replace the suggested teaching aids by the ones available in their respective TTCs and based on learning environment.

**Learning activities:** This section provides a short description of the methodology and any important aspect to consider. It provides also answers to learning activities with cross reference to text book:

**Exercises/application activities:** This provides questions and answers for exercises/ application activities

## **1.2. Methodological guidance**

### **1.2.1. Developing competences**

Since 2015, Rwanda shifted from a knowledge based to competencebased curriculum for pre-primary, primary and general secondary education.

This review comes as response to the needs of learners, society and the labour market. With a holistic learner-centered approach, it demands major changes in teaching methodology and the use of a wider range of assessment techniques focusing more on formative or on-going continuous assessment. This has implications for teacher education and the necessary provision of support and guidance provided to colleges to ensure effective implementation. Since 2016 up to 2018, TTC curriculum have been revised to be competence-based in line with the basic education curriculum. The review was to align the pre-service teacher education programs to the new National Basic Education competence-based curriculum.

This called for changing the way of learning by shifting from teacher centered to a learner-centered approach. Teachers are not only responsible for knowledge transfer but also for fostering student's learning achievement, and creating safe and supportive learning environment. It implies also that a student has to demonstrate what he/she is able to do using the knowledge, skills, values and attitude acquired in a new or different or given situation.

The competence-based curriculum employs an approach of teaching and learning based on discrete skills rather than dwelling on only knowledge or the cognitive domain of learning. It focuses on what learner can do rather than what learners know. Learners develop basic competences through specific subject unit competences with specific learning objectives broken down into knowledge, skills and attitudes. These competences are developed through learning activities disseminated in learner-centered rather than the traditional didactic approach. The student is evaluated against set standards to achieve before moving on.

In addition to specific subject competences, learners also develop generic competences which are transferable throughout a range of learning areas and situations in life.

Below are examples how generic competences can be developed in the subject of Social Studies in the option of ECLPE.

- **Critical Thinking:** Learners analyse their environment or community for problems or challenges faced and the causes. After, they suggest possible remedies to the identified problem.
- **Research and problem solving:** Learners collect data using interviews, questionnaires and any other tool, analyse the data gathered and suggest solutions to the problems identified.
- **Creativity and Innovation:** Learners analyse resources such as waste materials existing in the community or environment. They

develop or come up with new ways of utilizing such resources or how they can be put to use.

- **Communication Skills:** Learners can present themselves and their abilities by writing application letters or CVs to potential employers. Can write different documents such Memos, Notices in a clear and understandable language to convey on information effectively during interpersonal communication.
- **Teamwork, Cooperation, Personal and Interpersonal management and life skills:** Learners in teams complete different tasks where each may take on a different role while complementing each other's strengths and weaknesses in team leadership.
- **Lifelong Learning:** Learners lead a problem solving and decision making process in a team. Does a self-evaluation to identify own areas of strengths, areas of weaknesses and propose strategies for enhancing and improving in a team leadership. Alternatively, learners analyse a scenario involving conflicts ata workplace, identify the causes, suggest solutions and propose how they will apply the learned lessons to similar situations in real situations.

### 1.2.2. Addressing cross-cutting issues

Among the changes in the competence-based curriculum is the integration of cross cutting issues as an integral part of the teaching learning process-as they relate to and must be considered within all subjects to be appropriately addressed. There are eight cross cutting issues identified in the national curriculum framework.

Some cross-cutting issues may seem specific to particular learning areas/subjects but the teacher need to address all of them whenever an opportunity arises. In addition, learners should always be given an opportunity during the learning process to address these crosscutting issues both within and out of the classroom.

Below are examples on how crosscutting issues can be addressed in Social Studies subject in the option of ECLPE:

- **Gender education:** Remind learners that both males and females have similar opportunities, rights and obligations in the workplace, and therefore need to be treated fairly and equally when dealing with contracts or resolving conflicts. People's opinion of gender roles should not deny or hinder one's right or responsibilities to meet his or her contractual obligations while teaching Social Studies in ECLPE.



- **Environment and sustainability:** During the teaching of Social Studies, learners need to acknowledge the importance of protecting the environment in which we live in. So, throughout the unit/lesson there is need to appreciate and take great care for environment as it is paramount.
- **Inclusive education:** Learners all need to realize that universal laws do not discriminate as they apply to all regardless of social, economic, political, physical background. Emphasis should be on how we all have the same rights. During the lessons of Social Studies, learners may discuss and appreciate the need to respect and advocate for employer's and worker's rights and responsibilities at workplace.
- **Peace and Values:** Right before the lesson begins; there are quite a lot of opportunities for tutors to promote peace and values among learners. Being punctual for activities (time management), involvement in various activities (teamwork), keeping their school environment clean (responsibility), greeting one another are among such opportunities (empathy).

In a lesson, encourage learners to greet one another, create a conducive learning environment, clean the chalkboard, arrange the classroom, books, class work, among others. Also in case of conflicts within a lesson, take time to address the conflicts and discuss with learners the need to resolve conflicts amicably. You may also give learners an opportunity to participate in conflict resolution and decision making.

- **Comprehensive sexuality education (HIV/AIDS, STI, Family planning, Gender equality and reproductive health):** During the lessons/activities, learners should be given an opportunity to discuss freely about the various changes they are undergoing, as they are adolescents. They should be aware of how to manage the changes in their bodies, discuss HIV/AIDS without stigmatization, STIs and how to control them, family planning, gender equality and reproductive health. Learners should be encouraged to seek for appropriate help whenever needed. This may not directly fit or come in the lessons but utilize opportunities observed among the learners both in and outside of the class.
- **Financial Education:** For example, in setting personal goals, learners may be requested to make a plan of what they plan to save, how much and when they plan to achieve their saving goals. Learners may describe strategies to reduce spending and increase savings to become financially fit. In every lesson, learners can share



briefly their progress towards their goals: how much, strategies that worked and what needs to improve on.

- **Standardization Culture:** In every lesson take an opportunity to share with learners that standards should be respected since they are part and parcel of our lives. From school uniform, to class size, to lesson duration, language of instruction, among others. So always create opportunities to have learners discuss where standards apply and when they need to be cautious about standards during their everyday life. Throughout the unit, Standardization will be the opportunity to learn all concepts related to standardization Culture and to see how it can apply in different area.
- **Genocide Studies:** Learners need to become aware that all human beings are equal and have equal rights. At the work place they should avoid and denounce all instances that result into other's rights being violated. Give learners opportunities to share how Social Studies in the option of LE and SME can promote the fight against genocide ideologies. During rights and responsibilities session, learners relate the genocide of 1994 against the Tutsi and violation of human rights.

### 1.2.3 Attention to special educational needs and inclusive education

In the classroom, learners learn in different way depending to their learning pace, needs or any other special problem they might have. However, a tutor has the responsibility to know how to adopt his/her methodologies and approaches in order to meet the learning need of each student in the classroom. Also tutors need to understand that learners with special needs; need to be taught differently or need some accommodations to enhance the learning environment. This will be done depending to the unit and the nature of the lesson.

In order to create a well-rounded learning atmosphere, tutors need to:

- Remember that learners learn in different ways so they have to offer a variety of activities. For example role-play, music and singing, word games and quizzes, and outdoor activities.
- Maintain an organized classroom and limits distraction. This will help learners with special needs to stay on track during lesson and follow instruction easily.
- Vary the pace of teaching to meet the needs of each learner. Some learners process information and learn more slowly than others.

- Break down instructions into smaller, manageable tasks. Learners with special needs often have difficulty understanding long-winded or several instructions at once. It is better to use simple, concrete sentences in order to facilitate them understand what you are asking.
- Use clear consistent language to explain the meaning (and demonstrate or show pictures) if you introduce new words or concepts.
- Make full use of facial expressions, gestures and body language.
- Pair a learner who has a disability with a friend. Let them do things together and learn from each other. Make sure the friend is not over protective and does not do everything. Both learners will benefit from this strategy.
- Use multi-sensory strategies. As all learners learn in different ways, it is important to make every lesson as multi-sensory as possible. Learners with learning disabilities might have difficulty in one area, while they might excel in another. For example, use both visual and auditory cues.

Below are general strategies related to each main category of disabilities and how to deal with every situation that may arise in the classroom. However, the list is not exhaustive because each learner is unique with different needs and that should be handled differently.

**Strategy to help a learner with developmental impairment:**

- Use simple words and sentences when giving instructions.
- Use real objects that the learner can feel and handle; rather than just working abstractly with pen and paper.
- Break a task down into small steps or learning objectives. The learner should start with an activity that s/he can do already before moving on to something that is more difficult.
- Gradually give the learner less help.
- Let the learner work in the same group with those without disability.

**Strategy to help a learner with visual impairment:**

- Help learners to use their other senses (hearing, touch, smell and taste) to play and carry out activities that will promote their learning and development.

- Use simple, clear and consistent language.
- Use tactile objects to help explain a concept.
- If the learner has some sight difficulties, ask them what they can see.
- Make sure the learner has a group of friends who are helpful and who allow the child to be as independent as possible.
- Plan activities so that learners work in pairs or groups whenever possible

**Strategy to help a learner with hearing impairment:**

- Always get the learner’s attention before you begin to speak.
- Encourage the learner to look at your face.
- Use gestures, body language and facial expressions.
- Use pictures and objects as much as possible.
- Keep background noise to a minimum.

**Strategies to help learners with physical disabilities or mobility difficulties:**

- Adapt activities so that learners who use wheelchairs or other mobility aids can participate.
- Ask parents/caregivers to assist with adapting furniture e.g. The height of a table may need to be changed to make it easier for a learner to reach it or fit their legs or wheelchair under.
- Encourage peer support
- Get advice from parents or a health professional about assistive devices

**Adaptation of assessment strategies**

Each unit in the tutor’s guide provides additional activities to help learners achieve the key unit competence. Results from assessment inform the teacher which learner needs remedial, consolidation or extension activities. These activities are designed to cater for the needs of all categories of learners; slow, average and gifted learners respectively.

**1.2.4. Guidance on assessment**

Assessment is an on-going process of identifying, gathering and

interpreting information about students' achievement of the learning outcomes and can be integrated into the students' normal learning activities. Assessment is an important part of teaching and learning. It is used to:

- Evaluate and improve teaching and learning
- Report achievement
- Provide feedback to students on their progress.

### **Types of Assessment**

- **Assessment for learning (Continuous/formative assessment):** Assessment for learning is often called formative assessment and is assessment that gathers data and evidence about student learning during the learning process. It enables you to see where students are having problems and to give immediate feedback, which will help your students learn better. It also helps you plan your lessons to make student learning, and your teaching more effective. Often it is informal and students can mark their own work or their friends. An example is a quick class quiz to see if students remember the important points of the previous lesson.
- **Assessment of learning (Summative assessment):** Assessment of learning is often called summative assessment. It is used to obtain evidence and data that shows how much learning has occurred, usually at the end of the term or unit. End of year examinations are examples of summative assessment. It is usually done for formal recording and reporting purposes.

### **Assessing Social Studies units**

In the Social Studies syllabus, the key unit competences, which link to the broad learning outcomes, are assessed through specified assessment tasks using a range of assessment methods. Assessment criteria for each unit outcome provide clear indications of how, and to what extent, the achievement of the learning outcomes may be demonstrated. Performance standards, marking guides and assessment criterion help teachers with the marking process and this ensures that assessment is consistent across schools.

### **When you set a task, make sure that:**

- The requirements of the task are made as clear as possible to the student

- The assessment criteria and performance standards or marking guides are

provided to the student so that they know what it is that they have to do

- Any sources or stimulus material used are clear and appropriate to the task
- Instructions are clear and concise
- The language level is appropriate for the grade
- It does not contain gender, cultural or any other bias
- Materials and equipment needed are available to students
- Adequate time is allowed for completion of the task.

### **Feedback**

- When you assess the task, remember that feedback will help the student understand why he/she received the result and how to do better next time.

### **Feedback should be:**

- Constructive so that students feel encouraged and motivated to improve
- Timely so that students can use it for subsequent learning
- Prompt so that students can remember what they did and thought at the time
- Focused on achievement and effort of the student
- Specific to the unit learning outcomes so that assessment is clearly linked to learning.

### **Feedback can be:**

**Informal or indirect** – such as verbal feedback in the classroom to the whole class, or person to person

- **Formal or direct** – In writing, such as checklists or written commentary to individual student either in written or verbal form.
- **Formative** – given during the topic with the purpose of helping the student know how to improve for example use of portfolios as a tool of assessment during, after or at end of the lesson.
- **Summative** – Given at the end of the unit with the purpose of letting the students know what they have achieved for example use

of portfolios as a form of end of unit assessment.

## **Tests**

A test is a formal and structured assessment of student achievement and progress which the tutor administers to the class. Tests are an important aspect of the teaching and learning process if they are integrated into the regular class routine and not treated merely as a summative strategy. They allow students to monitor their progress and provide valuable information for you in planning further teaching and learning activities.

Tests assist student learning if they are clearly linked to the outcomes. Evidence has shown that several short tests are more effective for student progress than one long test. It is extremely important that tests are marked and that students are given feedback on their performance.

There are many different types of tests. Tests should be designed to find out what students know and about the development of thinking processes and skills. Open questions provide more detailed information about achievement than a question to which there is only one answer.

## **Principles of designing classroom tests**

Tests allow a wide variety of ways for students to demonstrate what they know and can do. Therefore:

- Students need to understand the purpose and value of the test
- The test must assess intended outcomes
- Clear directions must be given for each section of the test
- The questions should vary from simple to complex
- Marks should be awarded for each section
- The question types (true/false, full-in-the-blank, multiple choice, extended response, short answer, matching) should be varied.

## **Tests should:**

- Be easy to read (and have space between questions to facilitate reading and writing)
- Reflect an appropriate reading level
- Involve a variety of tasks
- Make allowance for students with special needs
- Give students some choice in the questions they select

- Vary the levels of questions to include gathering, processing and applying information
- Provide sufficient time for all students to finish.

### **Tutor assessment**

Assessment is a continuous process. You should:

- Always ask questions that are relevant to the outcomes and content
- Use frequent formative tests or quizzes
- Check understanding of the previous lesson at the beginning of the next lesson through questions or a short quiz
- Constantly mark/check the students' written exercises, class tests, homework activities
- Use appropriate assessment methods to assess the tasks.

### **Self-assessment and peer assessment**

Self and peer assessment helps students to understand more about how to learn.

Students should be provided with opportunities to assess their own learning (self-assessment) and the learning of others (peer assessment) according to set criteria.

#### **1.2.5 Students' learning styles and strategies to conduct teaching and learning process**

- How students learn
- What I hear I forget.
- What I hear and see I remember a little.
- What I hear, see and discuss I begin to understand.
- What I hear, see, discuss and do, I acquire knowledge and skills.
- What I teach to another, I master.
- (Active Learning Credo statement by Silberman 1996)
- In support of this are the findings that we remember:
  - 20% of what we hear
  - 40% of what we see



- 90% of what we see, hear, say and do or what we discover for ourselves.

### **A student-centred approach to learning**

Different students learn in different ways. Some students learn best by writing, others by talking and discussing, others by reading and others by listening. Most students learn by using a combination of those. All students learn skills through practicing and repetition. You need to use a variety of teaching strategies to cater for the different ways your students learn.

The selection of teaching method should be done with the greatest care and some of the factors to be considered are: the uniqueness of subjects; the type of lessons; the particular learning objectives to be achieved; the allocated time to achieve the objective; instructional materials available; the physical/sitting arrangement of the classroom, individual students' needs, abilities and learning styles.

### **Teaching and learning strategies**

In order to cater for different students' learning styles and to assist and encourage

students to learn, teachers need to perform certain tasks. These are teaching strategies.

You need to engage students directly in learning but there are times when you have to take charge of the learning in the class and teach particular concepts or ideas

### **Teaching strategies include:**

- Group work
- Skills lab
- Research/inquiry
- Class discussions/debates
- Problem-solving activities
- Teacher talk, instructions, explanations, lectures or reading aloud
- Directed question and answer sessions
- Audio-visual presentations
- Text books or worksheets



- Directed assignments
- Demonstration and modelling
- Guest speakers
- Classroom displays.

#### i. Use of Present Boards and Portfolios during Skills Lab

Present boards are boards made by learners using locally available resources that contain learners' work/achievements. When learners finish their work from presentations as a group, it's hang on the present board. This can be used by both the teacher and students for reference.

The biggest sign of a successful skills lab is the activities students complete. And how do we know whether students completed their group activity? It's through **Present Boards**. Each team has their own board to display all the work they completed during the Skills Lab. At the end of each Skills lab, each team makes a verbal presentation to the class and shows their Present Board.

	<b>When?</b>	<b>How?</b>	<b>Where?</b>
<b>P r e s e n t B o a r d s</b>	Last activity of each Skills Lab. Each lab team/group has their own 1 Present Board.	Made by students. Boards have cool designs to showcase the notes and work product of each lab	Boards are hung on the walls of classroom and kept there for others to see

### **Relationship between Portfolios and Present Boards**

#### **What is a Student Portfolio?**

A portfolio is a collection of student work for individual assessment. Learners fill their portfolios by completing a series of assignments. These individual assignments are the evidence that students have mastered a learning objective. Each assignment requires learners to apply the skill they learned in that unit practically.

Portfolios are the basis for Skills Lab. First, teachers create the portfolio assessment for students to complete.

Skills Lab is when students will work on group activities to prepare for completing the portfolio assessment individually. Skills Lab is one of your teacher's normal lessons (no extra time is needed) that are especially

designated for the purpose of students working in groups to complete their activities. Skills Lab prepares students to complete portfolio assignments on their own after classes. So, the classroom activity should connect directly to the portfolio assignment.

For example, they set goals as a group in class, and set individual goals as portfolio assignment.

	<b>Done by?</b>	<b>When?</b>	<b>Where?</b>
<b>Present boards</b>	Groups	During Skills Lab	On Present Boards
<b>Portfolios</b>	An Individual	As an Assignment	In Portfolio Folder

### 1.2.7. Steps for a lesson in active learning approach

Generally, the lesson is divided into three main parts whereby each one is divided into smaller steps to make sure that learners are involved in the learning process. Below are those main part and their small steps.

#### 1) Introduction.

Introduction is a part where the teacher makes connection between the previous and current lesson through appropriate techniques. The teacher opens short discussions to encourage learners to think about the previous learning experience and connect it with the current instructional objective. The teacher reviews the prior knowledge, skills and attitudes which have a link with the new concepts to create good foundation and logical sequencings.

#### Development of the new lesson

The development of a lesson that introduces a new concept will go through the following small steps: discovery activities/prediction, presentation of learners' findings, exploitation,

synthesis/summary and exercises/application activities, explained below:

- **Discovery activity/prediction**

#### Step 1

- The teacher discusses with students to take responsibility of their learning
- He/she distributes the task/activity, necessary resources and gives

instructions related to the tasks (working in groups, pairs, or individual to instigate collaborative learning, to discover knowledge to be learned)

### **Step 2**

- The teacher let the students work collaboratively on the task.
- During this period the teacher refrains to intervene directly in the working of activity or results/findings of the task
- He/she then monitors how the students are progressing towards the results, output, results, and expectations knowledge to be learned and boost those who are still behind (but without communicating to them the knowledge).

### **Presentation of learners' productions**

- In this period, the teacher invites representatives of groups to share their productions/findings.
- After three/four or an acceptable number of presentations, the teacher decides to engage the class into exploitation of the students' productions.
- Exploitation of learner's productions
- The teacher asks the students to evaluate the productions: which ones are correct, incomplete or false
- Then the teacher judges the logic of the students' products, corrects those, which are false, completes those, which are incomplete, and confirms those, which are correct.

### **Institutionalization (summary/conclusion/ and examples)**

- The teacher summarizes the learned knowledge and gives examples, which illustrate the learned content. Then, he links the activities to the learning objectives, and guide learners to make notes.

### **Exercises/Application activities**

- Exercises of applying processes and products/objects related to learned unit/sub-unit
- Exercises in real life contexts
- Teacher guides learners to make the connection of what they learnt to real life situations. At this level, the role of teacher is to monitor the fixation of process and product/object being learned.

### 3) Assessment

In this step, the teacher asks some questions to assess achievement of instructional objective. During assessment activity, learners work individually on the task/activity.

The teacher avoids intervening directly. In fact, results from this assessment inform the teacher on next steps for the whole class and individuals. In some cases, the teacher can end with a homework assignment, or additional activities.

#### 1.2.8. Template of a lesson plan in active learning approach

##### LESSON PLAN

School Name: ..... Teacher's name: .....

Term	Date	Subject	Class	Unit N°	Lesson N°	Duration	Class size
	... / ... / 20.....	.....	.....	.....	... of ...	...	.....
<b>Type of Special Educational Needs to be catered for in this lesson and number of learners in each category</b>							
<b>Unit title</b>							
<b>Key Unit Competence</b>							
<b>Title of the lesson</b>							
<b>Instructional Objective</b>							
<b>Plan for this Class (location: in / outside)</b>							
<b>Learning Materials (for all learners)</b>							
<b>References</b>							

Timing for each step	Description of teaching and learning activity		Generic competences and Cross cutting issues to be addressed + a short explanation
	Teacher activities	Learner activities	
<b>Introduction</b> ... min			
<b>Development of the lesson</b> ... min			
<b>Conclusion</b> ... min			
<b>Teacher self-evaluation</b>			

# SOCIAL STUDIES LESSON PLAN

School Name: TTC SAVE

Teacher's name: KangabeAnnet

Term	Date	Subject	Class	Unit N°	Lesson N°	Duration	Class size
3	2 /09/ 2019	S o c i a l studies	Y ECLPE	1	1 of 3	40 minutes	32
<b>Type of Special Educational Needs to be catered for in this lesson and number of learners in each category</b>							
<b>Unit title</b>		General introduction to social studies					
<b>Key Unit Competence</b>		The student-teacher should be able to explain the components of social studies and evaluate its importance.					
<b>Title of the lesson</b>		Importance of learning and teaching social studies					
<b>Instructional Objective</b>		With help of extra from the textbook, the student teachers will be able to write the meaning of social studies and the importance of teaching and studying it correctly. The student teachers who have hearing impairment will be repeated loudly the instructions of how to do evaluation.					
<b>Plan for this Class (location: in / outside)</b>		Inside the classroom					
<b>Learning Materials (for all learners)</b>		The internet, the student teacher's textbook of social studies, Braille document					

**References** Social studies student teacher's book page...and social studies teacher's guide page.....

Timing for each step	Description of teaching and learning activity		Generic competences and <b>Cross cutting issues to be addressed+a short explanation</b>
	Through group discussion and with help of extra from the textbook, the student teachers will discover the importance of teaching and learning social studies.		
	<b>Teacher activities</b>	<b>L e a r n e r activities</b>	

**Revision**

5 min

To ask the student-teachers anything they know on the term social studies.

To ask the student teachers where they have learned that information related to social studies.

Tutor announces objectives of the lesson.

Attention will be paid to those student teachers with hearing impairment

To answer questions as they are asked by the tutor.

To answer questions as they are asked by the tutor.

Student teachers listen to the tutor.

**Cross cutting issues** to be addressed

**Inclusive education**

Care will be given to all student teachers including special education needs cases. At this time, all student teachers should be given a quality and equitable education that meets their basic learning needs, and understands the diversity of their backgrounds and abilities.

**Gender**

With this cross cutting issue, learners both girls and boys will be enabled to exploit their full potential and talents without any discrimination or prejudice.

**Generic competences**

**Communication:** through answering questions the student teachers are developing oral communication skills.

**Critical thinking:** through answering questions and discussing with peers student teachers are developing critical thinking.

<p><b>Development of the lesson Analysis 1</b></p> <p><b>Synthesis1</b></p>	<p>- To take the student teachers in smart classroom and search the meaning of the word social studies</p> <p>-Through question and answer technique, the student teachers will share what they have researched</p> <p>The tutor will provide the true possible meaning of the term social studies.</p>	<p>To go in the smart classroom and search the meaning of the word social studies.</p> <p>To answer questions as they are made by the tutor</p> <p>.To listen the tutor while providing the possible meaning of the term social studies.</p> <p>.To answer questions of synthesis one.</p>	<p><b>Generic competences to be addressed:</b></p> <p><b>Cooperation, interpersonal management and life skills:</b> student teachers share their ideas in groups.</p> <p><b>Critical thinking</b> – student teachers observe the map and come up with conclusion</p> <p><b>Communication</b> – student teachers discuss and present their ideas.</p> <p><b>Cross cutting issues</b></p> <p><b>Inclusive education</b></p>
---	---	--	---



## Analysis 2

To ask the student teachers to provide the meaning of the word social studies

To help the student teachers to make groups of five student teachers and the hearing impaired student will be allocated in different groups.

To give them instructions and to assign them the activity to do.

To make presentation by the group representatives

To make harmonization of the activity.

To ask questions on analysis 2

To ask questions on both analysis.

To make groups in active way.

To listen to instructions and the activity.

To make presentation by group representatives and answering

questions asked by other group members.

To make harmonization of the work.

To answer questions as they are made by the tutor.

To answer questions orally on both analysis.

Care will be given to all student teachers including special education needs cases. At this time, all student teachers should be given a quality and equitable education that meets their basic learning needs, and understands the diversity of their backgrounds and abilities.

## Gender

With this cross cutting issue, student teachers both girls and boys will be enabled to exploit their full potential and talents without any discrimination or prejudice.

## Synthesis 2

## Global synthesis

## Synthesis 2

### Global synthesis

Tutor involves student teachers in lesson summary through questions.

To help student teachers to do evaluation activity

To guide student teachers to suggest the next lesson

The tutor gives student teachers the homework to make research on the next lesson

Involve themselves in the summary through questions and answers.

Student teachers do evaluation activity in written form

The visually impaired student teachers will answer the evaluation orally.

Student teachers suggest the next lesson by referring to the current lesson through imagination.

To write the homework together with receiving instructions.

### Generic competences

**Cooperation, interpersonal management and life skills:** student teachers share their ideas in groups.

**Critical thinking** – student teachers observe the map and come up with conclusion

**Communication** – student teachers discuss and present their ideas.

### Cross cutting issues

#### Inclusive education

Care will be given to all student teachers including special education needs cases. At this time, all student teachers should be given a quality and equitable education that meets their basic learning needs, and understands the diversity of their backgrounds and abilities.

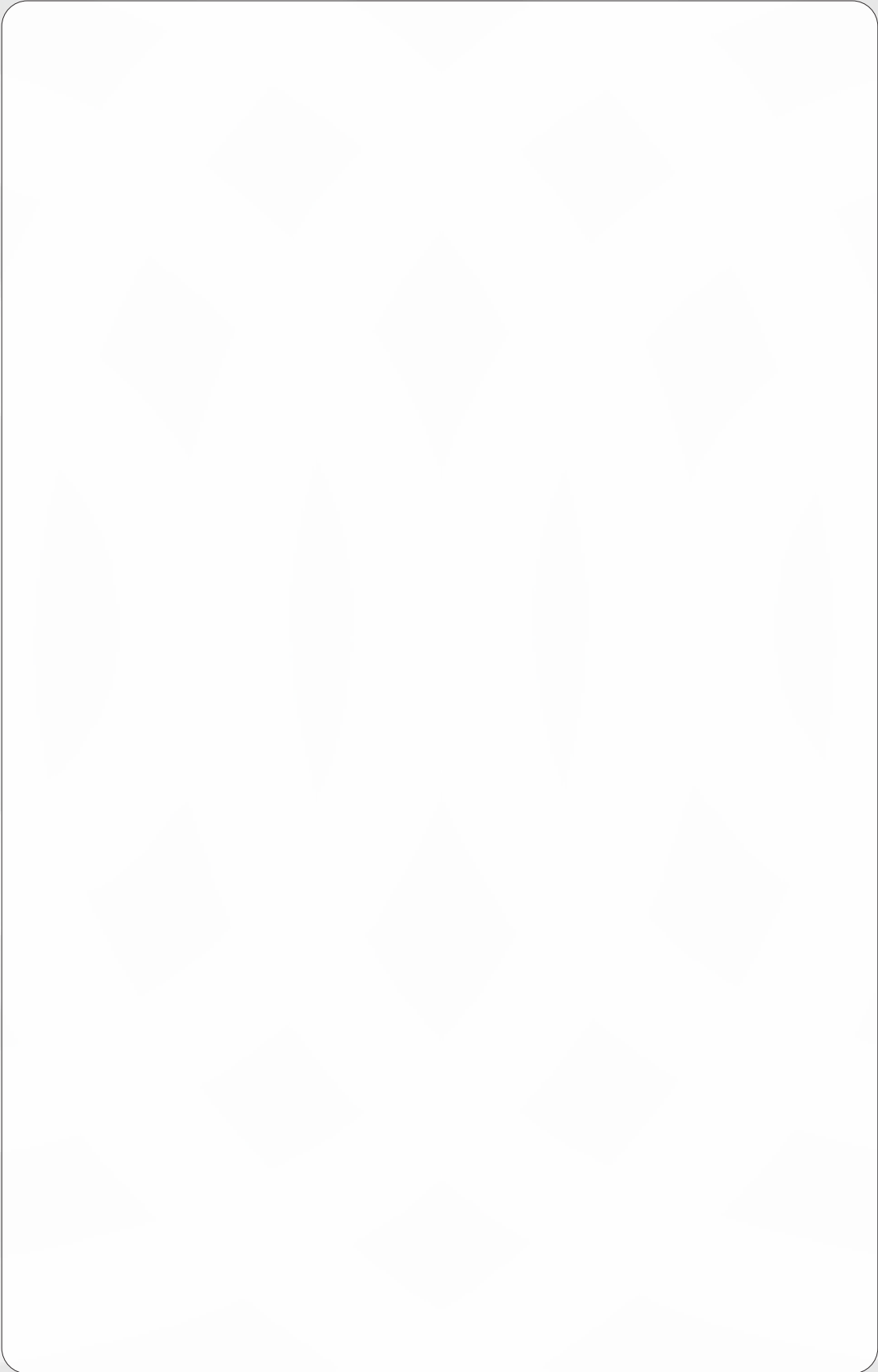
#### Gender

With this cross cutting issue, student teachers both girls and boys will be enabled to exploit their full potential and talents without any discrimination or prejudice.

**Teacher  
evaluation**

**self-**

The objectives were partly achieved being the first lesson of the year after a very long break.  
Remedial activities are to be organized at an appropriate time.



## ● UNIT: 1

# GENERAL INTRODUCTION TO SOCIAL STUDIES

### **1.1. Key unit competence**

The student-teacher should be able to explain the components of social studies and evaluate its importance.

### **1.2. Prerequisite( knowledge, skills, attitude and values)**

As prerequisites to facilitate the teaching and learning of this unit the following elements should have been learned before: The meaning of history, geography, economics, moral issues or ethics, philosophy, political education, sociology, psychology and anthropology.

The will also use knowledge learned in social studies primary schools.

### **1.3. Cross cutting issues to be addressed**

#### **▪ Inclusive education**

Care will be given to all learners including special education needs cases. At this time, all learners should be given a quality and equitable education that meets their basic learning needs, and understands the diversity of their backgrounds and abilities.

#### **▪ Gender**

With this cross cutting issue, learners both girls and boys will be enabled to exploit their full potential and talents without any discrimination or prejudice.

### **1.4. Guidance on the introductory activity**

At the beginning of this unit one, invite learners to do an introductory activity of the unit one found in student teacher's book. It will help student teachers to be interested, to know what happens or will happen in this unit and help them to be passionate to know by the end of the unit what they thought was not possible at the beginning. This will help them identify some issues and open them to what they didn't know and be inquisitive to know about the importance of social studies.

## 1.5. List of lessons

#	Lesson title	Learning objectives	Number of periods
1	Importance of learning and teaching social studies	The student –teachers should be able to explain the importance of teaching and learning social studies	1
2	Components of social studies and their relationship	The student –teachers should be able to explain the components of social studies and their importance	1
3	End unit assessment		1

### Lesson 1: Importance of learning and teaching social studies

#### a) Learning activity

The student –teachers should be able to explain the importance of teaching and learning social studies

#### b) Prerequisites/revision/introduction

To start this lesson, the tutor has to use introduction by asking student teachers about the meaning of Social Studies.

#### c) Teaching resources

The tutor has to use the internet, the student teacher's textbook of social studies and other reference book related to social studies.

#### d) Learning activities

Tutor arranges the learners into groups (3 up to 5 student teachers) and ask them to do the first activity in their textbook (see student book page 1). Student teachers present their work to the whole class and followed by the teacher's harmonisation.

### e) Application activities

#### Suggested answers to application activity 1.1

1. According to Collins English dictionary, *social studies* is the study of how people live and organize themselves in society, embracing geography, history, economics and other subjects.

Social studies are also a study of people in relation to each other and to their world it is an interdisciplinary subject which borrows from many disciplines for example history, geography, and economics. It focuses on peoples' relationship in different environments and help learners to become active and responsible citizens.

2. The study of Social studies provides students with the basic knowledge, skills, attitudes and values to continue to learn, make informed decisions, positively participate in society, and achieve personal goals of interest.

Social studies has the capability to guide students' skills progress, stimulate students' interest and awareness, and enhance their thought processes and decision making.

Some of the major skills social studies will help students to master include critical thinking, writing, reading, analysis, interpretation, independent thinking, and more. If these skills are practiced consistently throughout a school year, students can begin to master them. It is these skills that will build a foundation for the knowledge, ideas, abilities and stimulated interest that social studies can provide for students.

Social studies is also designed to increase historical understanding; turning points, causes and effects, progress and decline, empathy, connecting past and present, and historical agency.

Social studies has the ability to expose students to common biases and multiple perspectives from an early age preparing them for the reality that waits for them after high school, including diversity and dishonesty.

Social studies has the ability to prepare students and adolescents to be productive, successful, and active citizens in a democratic society. All of the skills, ideas, and exposure all funnel into the overall idea of guiding the development of independent, individual, intelligent and informed citizens who can actively participate in society to make necessary changes and improvements.

## Lesson 2: Components of social studies and their relationship

### a) Learning objective

The student –teachers should be able to explain the components of social studies and their importance

### b) Prerequisites/revision/introduction

To start this lesson, the tutor has to use revision by asking student teachers questions about the importance of social studies.

### c) Teaching resources

The tutor has to use the internet, the student teacher's textbook of social studies and other reference book related to social studies.

### d) Learning activities

Tutor arranges the learners into groups (3 up to 5 student teachers) and asks them to do the second and the third activities in their textbook (see student book page .3). Student teachers present their work to the whole class and followed by the teacher's harmonisation.

### e) Application activities

#### Suggested answers to application activity 1.2.

1. **Geography** is the study of earth's landscapes, peoples, places, and environment. It is quite simply about the world which we live. Geography is unique in bridging the social sciences with natural sciences.

**History** is the analysis and interpretation of the human past that enables us to study continuity and change overtime. It is an act of both investigations that seeks to explain how people have changed overtime.

**Economic:**Is a social science that analyze the production of goods and services, it focuses on how economic agent behave or interact and how economic works. Economics is a social sciences that predicts and studies the human behavior before given economic; situation.

**Moral issues or ethics:** Moral issues or ethics refers to an issue concerning how one ought to behave, how other ought to behave or whether a situation proper o un proper, Moral issues are definedasociety often called norm however if you claim to be a Christian moral issues can



or should be defined by biblical principles the question might be what is your moral stand that you use?

**Philosophy:** is a way of thinking about a world that is universal and can help us to learn how to think more creatively. It offers us a path to improve our critical thinking skills far beyond anything else.

**Political education:** refers to the knowledge regarding politics. Political education provides the science of leadership, national integration, creation of good citizens and preparing adult life.

**Sociology:** it is the study of group living, cooperation and their responsibilities.

**Psychology:** it is the study of the mind, emotions and behavioral processes.

**Anthropology:** it is the study of the way people live.

- 2. Relationship between history and geography:** history and geography are closely related because they represent two fundamental dimensions of the same phenomena. History views human experience from the perspective of **time** and geography views human experience from the perspective of **space**. These dimensions of time and space are constantly affecting each other. Key concepts of geography such as location, space, and region are inseparably tied to major ideas of history such as time, period, and events. Geography and history enable learners to understand how events and places have affected each other across time.

### **Relationship between economic and geography:**

Location and climate have large effects on income levels and income growth, through the effect of transport cost, disease burdens and agricultural productivity, among other channels. Furthermore, Geography seems to be a factor in the choice of economic policy itself. When we identify geographical regions that are now conducive to modern economic growth, we find that many of these regions have high population density and rapid population increase. This is especially true in populations that are located far from the coast, and thus that face large transport costs for internal trade, as well as populations in tropical regions of high disease burden.

### **Relationship between political science and history:**

The political science and history are very close, history without political science has no fruits, and political science without history has no roots. History is essential in political science because it is a record of past events. It provides the raw materials to political science. The study of state as it

has been can be done only with the help history. Historical study is essential for understanding political thoughts, movements and institutions. In general, history is a vast store house of facts and information as from which political science obtains data for all its generation. History has also much to borrow from political science. Our knowledge of history is a meaningless if the political bearings of events and movements are not adequately appreciated. E g: History of 19<sup>th</sup> Century Europe cannot be fully understood without bring out significance of Movements like Nationalism, Imperialism, Individualism and Socialism.

### **Relationship between politics/political science and ethics/morals:**

Ethics/ morals and political are intimately related, both are normative science.

Ethics aim at supreme good individual well as political aim at public good. Public good can be obtained through individual good and individual goods can be attained through public good. Both ethics and political are concerned with the idea of justice, liberty, right, and duties etc

### **1.6. Summary of the unit**

From the points discussed by learners in their groups, class presentations, activities done in the classroom, the tutor come up with the synthesis of the whole unit.

### **1.7. Additional Information for tutors**

**Social Studies:** According to Collins English Dictionary Social Studies is the study of how people live and organize themselves in society, embracing geography, history, economics, and other subjects. “Social Studies” is also a study of people in relation to each other and to their world. It is an interdisciplinary subject which borrows from many disciplines for example history, geography, and economics. It focuses on people’s relationships in different environments and helps learners to become active and responsible citizens. The social studies are the study of political, economic, cultural, and environmental aspects of societies in the past, present, and future (National Council for the Social Studies, 1998).

**Family:** it is a group of individuals living together and related through blood, adoption or marriage. **Community:** a group of families which have a senses of belongingness. According to Cook and Cook (1950) a community is an organized way of life within a geographical area. Thus, community is a group of families occupying a particular place with common practices.

**Society:** according to Oxford Dictionary, a society is a system whereby people live together in organized communities. According to Ginsberg (1932) a society is a collection of individuals united by certain relations or modes of behavior which mark them off from others who do not enter into these relations or who differ from them in behavior. According to Cole (1920) a society is the complex of organized associations and institutions within the community.

**Socialization:** it is the process by which an individual is adapted to his social environment and becomes a recognized, cooperating and efficient member of society. It is the process by which children learn the ways of their society and make the ways part of their personality. It is the process whereby an individual learns the behaviors, values and expectations of others that enable him/her to play his/her roles in society. Thus, socialization is the process of preparing a child to fit in his family, community and society by giving the child the right education (knowledge, skills and attitudes).

**Life Skills:** according to World Health Organization, life skills are abilities for adaptive and positive behavior that enables individuals to deal effectively with the demands and challenges of everyday life. According to UNICEF, Life Skills refers to a large group of psycho-social and interpersonal skills which can help people make informed decisions, communicate effectively and develop coping and self-management skills that may help them lead a healthy and productive life. According to Dictionary Com's 21st century, life skills refers to the ability to cope with stress and challenges of daily life, especially skills in communication and literacy, decision making, occupational requirement, problem solving, time management and planning.

**Attitude:** attitudes may be defined as a disposition to respond positively or negatively to cognitive, affective and behavioral responses (Zanna and Rempel, 1988; Fishbein and Ajzen, 1976)

### 3. Nature and Scope of Social Studies

According to Seefeldt (1977) all of education has a goal of transmitting culture to the young, but social studies seems uniquely suited to helping young children gain the knowledge, skills, attitudes, and values required of them to perpetuate society.

'Social Studies' is concerned with the study of people and their interactions with others and the total environment. Social studies transmit a way of life while at the same time, building the skills, knowledge, attitudes and the values needed to change and improve that way of life. Children

learn social studies as they live, grow, and experience. For example while building houses using sticks, and performing family activities. Social studies curriculum is based on children's experiences and on their discovery of the world around them. Themes are planned beginning with the home and then as children's experiences widen, the neighborhood and the community.

According to Seefeldt (1977) Social Studies embrace all disciplines from social science field. Everything concerning the nature of people and the world, the heritage of the past, and all of the contemporary social living is considered to be social studies. In order for a society to perpetuate itself, children in that society must understand the values and attitudes of that society and possess knowledge and skills required to live in that society. For children to be useful in their society, they need to be knowledgeable, and skilled to help them to solve problems, to analyse their attitudes, and be able to live with other people.

The scope of Social Studies is very wide because:

It is concerned with people and their interactions and the total environment. In social studies children learn how to relate with others, how to work with others, and how to live with others. Social studies equip children with knowledge, skills, values, and positive attitudes which will help them to be useful members of their families, community and society.

Social Studies includes the following social disciplines:

- Sociology: it is the study of group living, cooperation and their responsibilities
- History: it is the study of what has happened in the life of people, nation or society
- Geography: it is the study of the earth surface, resources and concepts of direction, location and distance
- Economics: it is the study of production, distribution and consumption of goods and services
- Psychology: it is the study of the mind, emotions and behavioral process
- Anthropology: it is the study of the way people live .Thus, the scope of social studies is very wide because it includes everything that enables children to understand their world and their place in it.

## Role of Social Studies

It includes:

- Social studies develops knowledge, skills and positive attitudes in children which help them to become active and responsible citizens.
- Inculcates values in children. For example, cooperation, honesty, respect, sharing, discipline, and love which makes them useful.
- Social studies helps children to an understanding and appreciation of their family members.
- Social studies help children to understand and appreciate their culture. Culture has two components: Material culture which refers to everything we can see and touch for example houses, chair, food and clothes. Non material culture refers to everything we cannot see and touch for example education, beliefs, laws and religion.
- Social studies develops an understanding of the need for rules and regulations. What are rules? They are limits placed in our environment. Rules protect us from danger or harm. Rules are everywhere for example we have home rules, school rules, and road rules. Caregivers and parents will help children to understand the need for rules and regulations.
- Social studies. develops an understanding, appreciate and preserve the environment. It provides children with opportunities to understand their environment and appreciation of their physical and cultural environments and how human beings depend on the environment.
- Social studies produces people who are creative, caring and courteous citizens. It helps children to adhere to ethical and moral values.
- Social studies equips children with knowledge and understanding of the past which helps them to cope with the present and be able to plan for the future. It provides children with productive problem solving skills
- Social studies helps children to understand institutions within the society and their roles in promoting people's well-being. For example health institutions, banks, schools, etc.
- Social studies connects early childhood curriculum to the family, community and society of the child. This means that in Social studies children learn about their families, community and society or country. Without Social studies, whatever children will be



learning will not be related to their family, community and society of the child. For the society to continue, children need knowledge, skills, and positive attitudes about their society.

#### 4. Objectives of Teaching Social Studies in schools

According to Seefeldt (1977) educators, in order to help children feel competent, to give them self-confidence they need to live in today's world, must plan effective social studies programmes, with clear objectives that are consistent with sound theory and research.

Social studies should be designed to:

- Provide children with experiences that will foster knowledge, build skills, develop attitudes, and clarify values; experiences that will help children to sort out the information they receive from the environment, helping them to be competent, and productive members of their society. Equip them with the knowledge and understanding of the past necessary for coping with the present and planning for the future, enable them to understand and participate effectively in their world, and explain their relationship to other people and to social, economic, and political institutions.
- Provide students with the skills for productive problem solving and decision making, as well as for assessing issues and making thoughtful value judgments.
- Help students to integrate those skills and understandings into a framework for responsible citizen participation, whether in their play group, the school, the community.

### 1.8. End unit assessment (answers)

Answers to end unit assessment or revision questions

1. The following are the importance of teaching and learning social studies in secondary schools
  - Social studies develops knowledge, skills and positive attitudes in children which help them to become active and responsible citizens.
  - Inculcates values in children. For example, cooperation, honesty, respect, sharing, discipline, and love which makes them useful.
  - Social studies helps children to an understanding and appreciation of their family members.
  - Social studies. develops an understanding, appreciate and preserve the environment. It provides children with opportunities to

understand their environment and appreciation of their physical and cultural environments and how human beings depend on the environment.

- Social studies produces people who are creative, caring and courteous citizens. It helps children to adhere to ethical and moral values.
  - Social studies equips children with knowledge and understanding of the past which helps them to cope with the present and be able to plan for the future. It provides children with productive problem solving skills
  - Social studies helps children to understand institutions within the society and their roles in promoting people's well-being. For example health institutions, banks, schools, etc.
2. The relationship between the components of social studies are described below:

**Relationship between history and geography:** history and geography are specially closed because there represent to fundamental dimension of the same phenomena. History view human experience from the perspective of **time** and geography view human experience from the perspective of **space**. These dimensions of time and space are constantly affecting the other. Key concept of geography such as location, space, and region are tied inseparably to major idea of history such as time, period and events. Geography and history enable learner to understand how the events and places have affected each other across time.

**Relationship between economic and geography:**

Location and climate have large effects income levels and income growth, through the effect of transport cost, disease burdens and agricultural productive, among other channels. Furthermore, Geography seems to be a factor in choice of economic policy itself. When we identify geographical regions that are now conducive to modern economic growth, we find that many of these regions have high population density and rapid population increase. This is especially true in populations that are located far from the coast, and thus that face large transport cost for internal trade, as well as population in tropical Regions of high diseases burden.

**Relationship between political science and history:**

The political science and history are very close, history without political science has no fruits, and political science without history has no roots. History is essential in political science because it is a record of past events. It provides the raw materials to political science. The study of state as it

has been can be done only with the help history. Historical study is essential for understanding political thoughts, movements and institutions. In general, history is a vast store house of facts and information as from which political science obtains data for all its generation. History has also much to borrow from political science. Our knowledge of history is a meaningless if the political bearings of events and movements are not adequately appreciated. E g: History of 19<sup>th</sup> Century Europe cannot be fully understood without bring out significance of Movements like Nationalism, Imperialism, Individualism and Socialism.

### **Relationship between politics/political science and ethics/morals:**

Ethics/ morals and political are intimately related, both are normative science.

Ethics aim at supreme good individual well as political aim at public good. Public good can be obtained through individual good and individual goods can be attained through public good. Both ethics and political are concerned with the idea of justice, liberty, right, and duties etc

## **1.9. Additional activities**

### **1.9.1. Remedial activities (questions and answers)**

#### **Questions**

1. What is social studies?
2. List two importances of social studies.

#### **Answers**

1. 'Social Studies' is concerned with the study of people and their interactions with others and the total environment. Social studies transmit a way of life while at the same time, building the skills, knowledge, attitudes and the values needed to change and improve that way of life.
2. Two importances of social studies are:
  - Social studies develops knowledge, skills and positive attitudes in children which help them to become active and responsible citizens.
  - Inculcates values in children. For example, cooperation, honesty, respect, sharing, discipline, and love which makes them useful.
  - Social studies helps children to an understanding and appreciation of their family members.

### **1.9.2. Consolidation activities**



1. Why is important to have social studies skills for parents?
2. What are the relationship between:
  - a. History and Geography
  - b. Economics and Geography

### Answers

1. Some of its importance is explained below:
  - The study of Social studies provides students with the basic knowledge, skills, attitudes and values to continue to learn, make informed decisions, positively participate in society, and achieve personal goals of interest.
  - Social studies has the capability to guide students' skills progress, stimulate students' interest and awareness, and enhance their thought processes and decision making.
  - Some of the major skills social studies will help students to master include critical thinking, writing, reading, analysis, interpretation, independent thinking, and more. If these skills are practiced consistently throughout a school year, students can begin to master them. It is these skills that will build a foundation for the knowledge, ideas, abilities and stimulated interest that social studies can provide for students.
  - Social studies is also designed to increase historical understanding; turning points, cause and effects, progress and decline, empathy, connecting past and present, and historical agency.
  - Social studies has the ability to expose students to common biases and multiple perspectives from an early age preparing them for the reality that waits for them after high school, including diversity and dishonesty.
  - Social studies has the ability to prepare students and adolescents to be productive, successful, and active citizens in a democratic society. All of the skills, ideas, and exposure all funnel into the overall idea of guiding the development of independent, individual, intelligent and informed citizens who can actively participate in society to make necessary changes and improvements.
2. Relationship between history and geography

History and geography are specially closed because there represent to fundamental dimension of the same phenomena. History view human

experience from the perspective of **time** and geography view human experience from the perspective of **space** . These dimensions of time and space are constantly affecting the other. Key concept of geography such as location, space, and region are tied inseparably to major idea of history such as time, period and events. Geography and history enable learner to understand how the events and places have affected each other across time.

### **Relationship between economic and geography**

Location and climate have large effects income levels and income growth, through the effect of transport cost, disease burdens and agricultural productive, among others channels. Furthermore Geography seems to be a factor in choice of economic policy itself. When we identify geographical regions that are now conducive to modern economic growth, we find that many of these regions have high population density and rapid population increase. This is especially true in populations that are located far from the coast, and thus that face large transport cost for internal trade, as well as population in tropical Regions of high diseases burden

#### **1.9.3. Extended activities**

1. What are the skills gained from social studies that will help someone to live in harmony with others?

#### **Answers**

1. It will dependent on some one's answer but the following answers can be common
  - Cooperation
  - Sharing
  - Respect

## ● UNIT: 2

# UNIVERSE AND THE SOLAR SYSTEM

### **2.1. Key unit competence:**

The student-teacher should be able to distinguish between the components of the Universe and the solar system.

### **2.2. Prerequisite (knowledge, skills, attitudes and values)**

The student-teachers are expected to have mastered the content of Unit 3 of S1, where they studied the earth in relation to the universe. This unit of senior one, greatly provides strong foundation that student-teachers can use to understand better the content of this unit 2 of year one. It's very important to note that, they already have necessary knowledge, skills and attitudes. The difference is that, at this level the content as that in the student's book is more detailed and goes beyond what the ordinary level program demanded.

This already acquired knowledge, skills, attitudes and values, should be used by the tutor to conduct diagnostic assessment as a way of measuring each learner's abilities.

### **2.3. Cross-cutting issues to be addressed**

There are many cross-cutting issues that can be applied in this lesson. In the student's book, the writers or authors used activities to integrate the crossing-cutting issues. The most highlighted one is that of environment and sustainability, peace and values education.

Even though, the writers used few cross-cutting issues that should not limit the creativity and innovativeness of the tutor. The activities used were just a sample. This calls for the tutor to take note of the cross-cutting issues that he or she is interested in. What is important to note, is that the following list of cross-cutting issues can be applied. Gender, peace and values, financial education. However, all these require planning in advance on how the tutor is to develop them.

Peace and values education can be integrated using the class room

situation where students themselves are taught to thank you wherever their peers respond to a given answer.

## 2.4. Guidance on the introductory activity

The answers for this introductory activity some are embedded therein the passage and the student-teachers are requested to think out of the box. That is, they should relate the narrative and associate it with the studied topics in S1 under unit 3.

The answers for part (a) include: Meteorites/meteors, moon, stars and Sun. For part (b), the possible answers refer to the student's book under components of the universe.

## 2.5. List of lessons and End Unit assessment

#	Lesson title	Learning objectives	Number of periods
1	The universe and solar system	<ul style="list-style-type: none"> <li>Identify components of the universe and the solar system.</li> <li>Identify the planets in the solar system</li> </ul>	2
2	Earth	<ul style="list-style-type: none"> <li>Describe the planets of the solar system</li> <li>Explain the consequences of the earth movement</li> </ul>	2
3	Assessment		1

### Lesson 1: The universe and solar system

#### a) Learning objectives

- Identify components of the universe and the solar system.
- Identify the planets in the solar system

#### b) Teaching resources

- Flip charts
- Manila papers

- Print outs for the activity
- Text books
- Internet
- Etc.

**c) Prerequisites/Revision/Introduction:**

There is a direct link of Activity 2.1, intended to introduce the lesson, with what the student-teachers studied in senior 1. Therefore, the Activity supports diagnostic assessment (Formative assessment) to see how much the student-teachers know about the universe. At the same time, preparing the student-teachers for the lesson.

**d) Learning activities**

**Activity 2.1**

1. Universe or solar system
2. Refer to the student's book under the definition of the universe and components of the universe.
3. Refer to the student's book under the definition of solar system.

**e) Application Activity**

The tutor should know that this activity 2.1. involves integration of the cross-cutting issue of environment and sustainability.

1. Refer to the student's book under table of group of planets of the solar system
2. The earth supports life because it is the only planet that supports life. Because; it has water, favourable temperature, receives rainfall, supports both animal and plant life, it has non-poisonous air etc.

**Lesson 2: The Earth**

**a) Learning objectives**

- Describe the planets of the solar system
- Explain the consequences of the earth movement

**b) Teaching resources**

- Flip charts

- Manila papers
- Globe
- Print outs for the activity
- Text books
- Internet
- Etc.

**c) Prerequisites/Revision/Introduction**

The student-teachers should have completed properly the content of lesson one. The tutor should also use the past studies the student-teachers had in senior one, to create more introductory activity.

**d) Learning activities**

1. The earth makes two movements
2. Refer to the student's book under the effects of rotation and revolution

**Application Activity**

The possible answers for the first part of the application activity:

1. To ensure the planet Earth remains habitable
2. The time at Rusizi located at 280 E is 6:00
  - Step1: find the time difference east of GMT
  - Step2: find the time difference west of GMT
  - Step 3: add the 2 time differences
  - Step 4: subtract the sum of the time differences from the local time given.

The possible answer for the question is 00:08am.

3. The reason is simple. It is because of the tilting of the earth towards or away from the sun.

**2.6. Summary of the unit**

Unit 2 of year one deals with the coverage of the content concerning the universe and the solar system. Under this, the definition of the universe and its components are all dealt with. It further deals with the solar system and its components. The sun, its description and influence on the earth are all covered. The unit stretches hand to include the characteristics

of different heavenly bodies, peculiar elements of the earth and earth's movements.

## **2.7. Additional Information**

There is no much additional information the tutor needs. However, the writers wish to bring to the attention of the tutor teaching this unit to emphasize the following: The concept of light year is a new one. There is nowhere, students have come across it right away from ordinary level. It is a concept that may challenge both the tutors and student-teachers.

The curriculum requires the tutor to guide student-teachers to study and master the concept of universe. At the beginning of the unit the components of the universe are dealt with and the last part of the unit, they come in form of other heavenly bodies. This should not create a spot of doubt and confusion. The text book clearly addresses this issue.

## **2.8. End unit assessment**

The possible answers for End unit assessment area)

1. a. The heavenly bodies shown in the two photographs are: stars and moon.  
b. Refer to the student's book under components of the universe
2. The atmosphere play a big role in our lives
  - The presence of the atmosphere plays a significant role in the water cycle. It facilitates the formation of clouds which remains suspended until they are heavy enough to pour down on the earth as rain, hail or snow.
  - Atmosphere provide a space for aircraft transport
  - Protects the life forms of the earth from the harmful ultraviolet rays of the sun. The presence of the ozone layer does this by reflecting the ultraviolet rays of the sun.
  - It keeps the temperature of the earth constant so that it is suitable to support life.
  - It protects the earth from smaller meteors.
  - Facilitates combustion and without the atmosphere combustion is not possible.
3. The tutor should guide student-teacher in discussion about the

effects of earth movement to the people. Some consequences have positive effects while others negatives

## 2.9. Additional activities

### a) Remedial Activities:

#### Questions:

1. What is universe?
2. Give a reason why there is night and day on Earth.

#### Answers:

1. Refer to the student's book on definition of universe
2. There is night and day on earth because of the rotation of the earth

### b) Consolidation activities

#### Questions:

1. Identify the main cause of earth movement
2. Explain the main difference between rotation and revolution of the earth

#### Answers:

1. Earth moves because of gravitational force
2. Rotation occurs when earth spins on its axis while revolution is when earth revolves around the sun.

### c) Extended activities:

#### Question:

1. Examine what causes the earth seasons
2. Discuss on the importance of the sun

#### Answer:

1. Seasons are created by two very important events: The tilting of the axis of the earth at  $23.5^\circ$  and the movement of the earth around the Sun.
2. Nothing is more important to us on Earth than the Sun. Without the Sun's heat and light, the Earth would be a lifeless ball of



ice-coated rock. The Sun warms our seas, stirs our atmosphere, generates our weather patterns, and gives energy to the growing green plants that provide the food and oxygen for life on Earth.

## UNIT: 3

# FORMATION OF RELIEF FEATURES OF RWANDA

### 3.1. Key unit competence:

The student-teacher should be able to explain the formation major relief regions of Rwanda and evaluate their effects on human activities.

### 3.2. Prerequisite (knowledge, skills, attitudes and values)

Student-teachers in year one should have knowledge, skills, attitudes and values in what they acquire at school. Student-teachers are not studying this topic for the first time. They have mastered the same content in senior two of unit 4 and 6, where they have studied tectonic process and formation of relief features respectively.

What they have learnt in past studies will provide a strong foundation that student-teachers can to understand better the content of this unit 2 of year one.

It's very important to note that, they already have necessary knowledge, skills and attitudes. The difference is that, at this level the content as that in the Learner's book is more detailed and goes beyond what the ordinary program demanded.

This already acquired knowledge, skills, attitudes and values, should be used by the tutor to conduct diagnostic assessment as a way of measuring each Student-teachers' abilities.

### 3.3. Cross-cutting issues to be addressed

There are many cross-cutting issues that can be applied in this lesson. In the Student's book, some cross-cutting issues were used to integrate them with activities. The most highlighted is environment and sustainability.

However, tutor is advised to improve and use other cross-cutting issues by innovating and creating new situations. The activities used were just a sample. This calls for the tutor to take note of the cross-cutting issues that he/she is interested in.

Peace and values education can also be integrated in every situation where Student-teachers themselves are or in community, taught to thank you wherever their peers or any person respond to a given answer.

### 3.4. Guidance on introductory activity

The introductory activity aims at highlighting the knowledge, skills and attitudes that Student-teachers, acquired previously in classes. This activity prepared, requires student-teachers to put to better use of all the competences, knowledge together with attitudes in understanding the new topic of year one unit 3. Activities in this unit 3 can be answered by most of the student-teachers. The tutor can provide enough time for every student-teacher so that individual participation can be respected. The intention of this activity is see the ability of each student- teachers so that throughout the unit the tutor plans on how to aid his/ her student-teachers.

The ways answers are provided for the introductory activity, some require reviewing the past studies while others require student- teachers to think deeply and read geographical documents.

### 3.5. List of lessons/sub-heading

#	Lesson title	Learning objectives	Number of periods
1	General presentation of Rwanda and the relief regions of Rwanda.	<ul style="list-style-type: none"> <li>• Locate Rwanda in Africa.</li> <li>• Draw a sketch map of Rwanda and locate the political divisions.</li> <li>• Describe the formation of different relief features of Rwanda.</li> </ul>	3
2	Problems related to the relief features of Rwanda and their importance	<ul style="list-style-type: none"> <li>• Identify the problems related to the relief features of Rwanda.</li> <li>• Appreciate the importance of different relief features of Rwanda.</li> </ul>	2
3	Assessment		2

## **Lesson 1: General presentation of Rwanda and the relief regions of Rwanda**

### **a) Learning objectives**

- Locate Rwanda in Africa.
- Draw a sketch map of Rwanda and locate the political divisions.
- Describe the formation of different relief features of Rwanda.

### **b) Teaching resources**

The tutor should prepare the teaching learning resources in advance so that effective teaching-learning exercise can take place. These resources will enable the instructional objectives to be achieved. Some of the materials to be used are the following:

- Text books
- Map of Rwanda
- Video clip
- Charts
- Manila papers
- Etc.

### **c) Prerequisites/Revision/Introduction**

The tutor should engage the student-teachers into a reviewing activity that diagnoses what they may be knowing about four provinces of Rwanda, the origin of mountains in Rwanda and the main physiographic regions of Rwanda. The tutor should know that this is not the first time the student-teachers are studying the concept under his lesson title.

### **d) Learning activities**

The tutor should use various techniques that facilitate the execution or use of student-teacher centred instructional approaches. The learning activity 3.1 has questions that student-teachers need to find appropriate responses to.

The student-teachers are expected to answer the learning **activity3.1** using the following:

1. Tutor is recommended to use the east Africa map, the world map or map of Africa to locate Rwanda in relation to its neighbouring countries.
2. Refer to the student's book under location of Rwanda.

**e) Application activity**

The suggested answers to the first question are the following:

Landlockedness presents several disadvantages that affect the economic growth negatively:

- Being landlocked cuts a nation off from such activities e.g. fishing.
- It also impedes or prevents direct access to sea trade.
- Landlocked developing countries have significantly higher costs of international cargo transportation compared to coastal developing countries.
- Due to their remoteness, landlocked countries are dependent on neighbouring transit countries for their external trade and suffer from high trade transaction cost.
- Problem of lack of safety during transport.
- Risk of deterioration of perishable products.
- Low competitiveness on export product.

On question number two, the application activity requires the student-teacher to use the map of Rwanda to locate the provided districts.

## **Lesson 2: Problems related to the relief features of Rwanda and their importance**

**a) Learning objectives**

- Identify the problems related to the relief features of Rwanda.
- Appreciate the importance of different relief features of Rwanda.

**b) Teaching resources:**

- Use of text books.
- Use of physical map of Rwanda.
- Manila papers for group work drawing.

**c) Prerequisites/ Revision /Introduction**

The tutor should make preview of the previous lesson by asking student-teachers to give a recap of what was covered. Then, he or she introduces the lesson with a couple of questions that can enable student-teachers to connect to the lesson at hand.

**d) Learning activities:**

Possible answers for learning activity 3.2

1. Refer to the student's book under Problems related to the relief features of Rwanda.
2. Refer to the student's book under Importance of the relief features to the development of Rwanda.

**e) Application activity**

Possible answers to this application activity:

- One of the interesting things about the volcanic eruptions is the beauty that it presents. It helps to create tourism around that area and create more jobs.
- Most of volcanic features provide fertile soil which is an advantage for crop growing.
- Volcanic deposits are collected and used for building different things.

### **3.6. Summary of the unit**

Unit 3 of year one deals with formation of relief features of Rwanda. The content describes different general presentation of Rwanda in relation to the neighbouring countries and Africa in particular. Emphasis on administrative division of Rwanda, major relief features, problems and importance of relief feature.

### **3.7. Additional Information for tutors**

The process of formation of the major relief types.

Tutor should recognise that the relief of Rwanda is the result of the process of ground uplift followed by breaks, volcanicity and peneplanations due to erosion which has affected the metamorphosed, folded and solidified block since the Precambrian. These movements are responsible for:

- The uprising of the Congo-Nile peak;
- The difference in level between the central plateau and the Eastern lowlands;

- The formation of the depression of Lake Kivu hosted in a graben;
- The formation of volcanic chain.

Moreover, these movements have driven the 4/5 of the rivers towards Lake Victoria and the Nile, thus contributing to resumption of erosion in “the country of a thousand hills”.

### 3.8. End unit assessment

1. Generally, the amount of precipitation in highland depends on the elevation. This means that the land with low elevation is relatively dry, but high amount of rainfall is received in areas with higher elevation such as Congo Nile Crest and volcanic mountains. This happens because high mountains force warm air to rise, where it cools and creates precipitation.
2. Rwanda has made effort and still keeps dealing with the situation. Here are some strategies and recommendations adopted:
  - Rwanda has made agreements on getting lower transport charges for goods through neighbours’ countries.
  - The United Nations has a law that protects landlocked countries from high taxation. The law gives these countries a right of access to and from the sea without taxation of traffic through transit states.
  - The government is improving energy supply and internet access to improve the flow of information.
  - Landlocked countries like Rwanda depend on good political relations with transit countries.
  - Develop and empower home industries, example “Made in Rwanda”.
  - Joining possible regional economic blocks.
  - Encouraging diaspora to invest in their mother country.
  - Develop and extend air transport.
  - Give chance to new entrepreneurs.
  - Improve on agricultural products so that we get enough yield and surplus for export.
  - Promote education and technology.
  - Encourage people to work hard and spirit of competition among youth and adults.
3. The best method to prevent soil erosion in sloppy areas is planting a lot of trees that is, afforestation. Planted trees are the protective

shield to the soil which are affected by too much rainfall. Terrace cultivation, contour farming and strip cropping are also the proven in many areas to tackle soil erosion.

### **3.9. Additional activities**

#### **3.9.1 Remedial activities**

**Question:** Why is it said that Rwanda is a landlocked country?

**Answer:** A country is qualified as a landlocked because it doesn't have access to the sea.

#### **3.9.2. Consolidation activities**

**Question:** Explain why Rwanda is called “a country of a thousand hills”

**Answer:** It is because the country's relief is dominated by a multitude of Hills, which have emerged from the breaks in rocks.

#### **3.9.3. Extended activities**

**Question:** Explain how relief features influenced river reversal in Rwanda

**Answer:** The following relief features have made rivers of Rwanda to deviate eastward

- The rising of the Congo-Nile Crest.
- Faulting of the western part of the country (rising shoulders of the rift valley).
- The eruption of volcanic mountains in North western part of the country.
- Down warping of the eastern plain.

#### **Skills lab:**

There are many different economic activities. Some are suitable in highlands while others are suitable in lowlands, the student-teachers will suggest those ones which are suitable to their areas.



## UNIT: 4

# ROCKS IN RWANDA

### 4.1 Key unit competence:

The student-teacher should be able to compare major types of rocks in Rwanda and evaluate their importance.

### 4.2. Prerequisite (knowledge, skills, attitudes and values)

- In S1, unit 4, the student-teachers studied the structure of the earth: Internal structure (crust, the mantle, and core) and external structure of the earth (lithosphere, biosphere, hydrosphere, and atmosphere).

In S1, unit 6 they studied the Rocks: types and characteristics of rocks, and the importance of rocks. These units give the student-teacher the prerequisites on rocks. They are introduced on different types of rocks: sedimentary rocks, metamorphic rocks and igneous rocks. The characteristics of rocks: hard rocks and soft rocks. The importance of rocks was also introduced to the student-teachers. The student-teacher is aware of the use of rocks: some rocks are sources of energy, eg: oil, coal; rocks are sites tourist attractions, others can also be used for food, as building materials, manufacture goods or manufacture of jewellery, etc.

In S2, unit 7, the student-teachers studied weathering and rocks; they are here introduced on the characteristics of different types of rocks.

With help of the knowledge and skills acquired in ordinary level, the student-teacher will be well equipped to study this unit.

### 4.3. Cross-cutting issues to be addressed:

#### a) Environment and sustainability

Unit 4 is about rocks, with a key competence of assessing their economic importance. Rocks are extracted from the earth crust and are used for the economic welfare of the society. Construction of houses and other sustainable infrastructures require materials from rocks.

Many ores and minerals are obtained from open-pit mines. When the ore is mined it contains unwanted materials along with the valuable mineral. The waste rock and material must be removed in order to access the valuable mineral. Extracting rocks or removing the waste rock to access ores can be expensive, and in some cases harmful to people and environment. Also rock wastes may pollute stream water, water bodies and soils. This may require much efforts for their cleaning up for further consumption and uses. The effects may be as well long-term as immediate and can affect marine lives.

For this, the tutor is required to talk about the role of rocks for the economic and social welfare of people, but also negative impacts of their extraction should be discussed with student-teachers, with an emphasis on the environmental impacts.

#### **b) Inclusive education**

This unit requires samples during class sessions and a field trip for student-teachers to observe different types of rocks. Learning activities should be within the ability range of all student-learners, including those with learning difficulties or special needs. For instance, if tutors plan field trip, he will consider how student-teachers will access the area to be visited; otherwise he will think about rock samples, DVDs, work group and discussions for student-teachers who cannot access the field study area due to their physical impairment.

#### **c) Financial education**

Extraction of rocks is very beneficial because it contributes to the welfare of the society. For this reason, student-teachers need to get introduced with the importance of money saving and investment in the mining and quarrying sector. Wherever extractions of rocks impact on people and natural resources, there is inevitably implication of money expenses. Money for remediation of sites affected by quarrying is needed. Furthermore, impacts of quarrying are extended to surrounding and remote environments. There is a need that student-teachers are introduced with these resulting environmental issues. Notions about financial means for alleviation of these impacts are therefore needed for student-teacher to realize that extraction of rocks requires planning and suitable techniques that minimize the negative effects.

### **4.4. Guidance on introductory activity**

The key inquiries in this unit that will be the guide to the introductory

activity are that student-teachers in addition to understand and describe different types of rocks and their distinct characteristics, they should be able to explain their economic importance. For this, student-teacher should be able to explain the types of rocks which in turn determine their varied economic importance.

#### 4.5. List of lessons/sub-heading

#	Lesson title	Learning objectives	Number of periods
4.1	Types of rocks in Rwanda and their characteristics	<ul style="list-style-type: none"> <li>• Identify different types of rocks in Rwanda.</li> <li>• Give characteristics of rocks in Rwanda.</li> <li>• Explain the physical properties of the rocks.</li> <li>• Apply knowledge to categorise different types of rocks found in Rwanda and their characteristics.</li> </ul>	2
4.2	Importance of rocks in Rwanda	<ul style="list-style-type: none"> <li>• Identify the importance of rocks.</li> <li>• Appreciate the importance of rocks in Rwanda.</li> <li>• Appreciate different types of rocks found in Rwanda.</li> <li>• Apply knowledge to categorise different types of rocks found in Rwanda and their importance.</li> </ul>	2
	End unit assessment		1

## **Lesson 4.1: Types of rocks in Rwanda and their characteristics**

### **a) Learning objectives:**

- Identify different types of rocks in Rwanda.
- Give characteristics of rocks in Rwanda.
- Explain the physical properties of rocks.
- Apply knowledge to categorise different types of rocks found in Rwanda and their characteristics.

### **b) Teaching resources:**

The tutor should have in possession the print outs of the introductory activity of unit 3 of student's book and distribute it to student-teachers. To achieve the learning objectives of this lesson, the following resources should be used:

- Geographical documents including the learner's book of Year one.
- Samples of rocks representing the three major groups of rocks.
- Maps, Illustrations.
- Internet/DVDs.
- Manila / Paper or flip chart.

### **c) Prerequisites/Revision/Introduction**

- The tutor conducts the revision of the lessons taught in ordinary level by asking student-teachers to briefly recall the definition of rocks, their major groups and distinctive characteristics. Thereafter, the tutor asks student-teachers why rocks are different from each other. In this lesson 4.1. Student-teachers will be able to identify the major types of rocks and to differentiate their characteristics.

### **d) Learning activities 4.1.**

The student-teachers will use observation of rock samples provided and research to identify the types of rocks provided and differentiate their characteristics. The tutor can also provide a handout presenting different types of rocks and ask student-teachers to identify them and to indicate where they are found in Rwanda. He will guide student-teachers to observe it in groups and give answers to activities of lesson 4.1. Thereafter presentation is done. Improvised teaching aids can be

used to identify the characteristics of rocks: hard rocks or soft rocks. The tutor will also refer to lesson 4.1 at its subheading: Types of rocks in Rwanda and their characteristics, to identify the types of rocks found in Rwanda and to give their characteristics.

**e) Application activities**

Refer to the application activity 4.1 in the learner's book, in this lesson, there are two instructional activities which consist of (1) Identify an area in Rwanda where igneous rocks are mostly found, (2) observe rocks found in your environment and explain their characteristics. Refer to lesson 4.1. Types of rocks in Rwanda and their characteristics. The content given here presents different types of rocks found in Rwanda and where igneous rocks are found. It also provides characteristics of different types of rocks. The student-teachers will identify the types of rocks which are predominant in his local environment and identify their characteristics.

## **Lesson 4.2: Importance of rocks in Rwanda**

**a) Learning objective:**

- Identify the importance of rocks.
- Apply knowledge to categorise different types of rocks found in Rwanda and their importance.

**b) Teaching resources:**

To achieve learning objectives, the following resources should be used:

- Geographical documents
- Observation of stones used to build foundations of houses and houses roofing tiles
- Maps, Illustration
- Internet/DVDs

**c) Prerequisites/Revision/Introduction**

In lesson 4.2, student-teachers will learn about the importance of rocks. Student-teachers must have covered the content of lesson 4.1. The knowledge in lesson 4.1 constitute an asset to better understand the lesson 4.2. The tutor shall then engage the student-student-teachers for the revision of previous lesson on the types of rocks in Rwanda and their characteristics.

#### d) Learning activities

Use geographical documents and internet to identify the importance of rocks.

Refer to the learning activity 4.2.in the learner's book.

One learning activity has been prepared for student-teachers. It consists of identifying the importance of rocks. The tutor will guide student-teachers to identify the advantages of rocks and he will invite them to also discuss the disadvantages of rocks.

The answer to the question can be found in Unit 4, lesson 4.2. Importance of rocks in Rwanda and here some disadvantages of rocks are discussed.

#### e) Application activities

Refer to the application activity 4.2. in the learner's book, in this lesson, there is only one instructional activity which consist of discussing disadvantages of rocks in Rwanda. Refer to lesson 4.2: Importance of rocks in Rwanda. The content given here explainhow Rocks are very important for different human activities. Some disadvantages of rocks are also discussed here. The student-teachers will have to discuss the disadvantages of rocks in their local environment and in Rwanda.

### 4.6. Summary of the unit

The unit four is about rocks in Rwanda with a key competence which is to be able to compare major types of rocks in Rwanda and evaluate their importance. A **rock** is an aggregate (collection) of various types of minerals or an aggregate of multiple individual pieces (grains) of the same kind of mineral.

Rocks are classified into three major groups: Igneous rocks, sedimentary rocks and metamorphic rocks. This classification was based on the origin and individual processes involved in the formation rocks constituting each category. The major forming processes of Igneous (magmatic) rocks include **melting** (magma), **crystallization** (intrusive), **consolidation** (extrusive), whereas the formation of metamorphic rocks follows the increase in **pressure** and **temperature**. Processes of the formation of sedimentary rocks include **erosion**, **lithification** (stratification), **cementation** and **compaction**. Igneous rocks are dominated by Feldspars, Plagioclase, Micas (Muscovite, Biotite), Pyroxene, Amphibolite and Olivine; Sedimentary rocks are dominantly made up by the following minerals: Silicates, Clay, Dolomite, Gypsum, Anhydrite, Hematite and Limonite. Metamorphic rocks are constituted by Quartz, Muscovite,



Sillimanite, Andalusite, Kynite, Garnet, Sericite and Staurolite minerals.

Some rocks are resistant to weathering and erosion whereas others are not.

Rocks have a wide variety of uses for the welfare of the society. Rocks are used as building materials of houses floor tiles and infrastructures such as roads and rail ways, some such as coal, are used in power plants to make electricity. Minerals provide the material used to make most of the things of industrial- based society; roads, cars, computers, fertilizers, watches. Some minerals have high economic value because of their uses or they are rare and beautiful. For example, gems or **Gemstones** is a mineral with a distinctive colour which makes it expensive. That is why it is used for jewellery.

#### 4.7. Additional Information

**The types of rock: igneous, metamorphic and sedimentary rocks** according to Mihai Andrei in Geology, science ABC: “The three main types of geological rocks”

- **Igneous** - they form from the cooling of magma deep inside the earth. They often have large crystals (you can see them with the naked eye).
- **Metamorphic** - they are formed through the change (metamorphosis) of igneous and sedimentary rocks. They can form both underground and at the surface.
- **Sedimentary** - they are formed through the solidification of sediment. They can be formed from organic remains (such as limestone), or from the cementing of other rocks.

#### Igneous Rocks



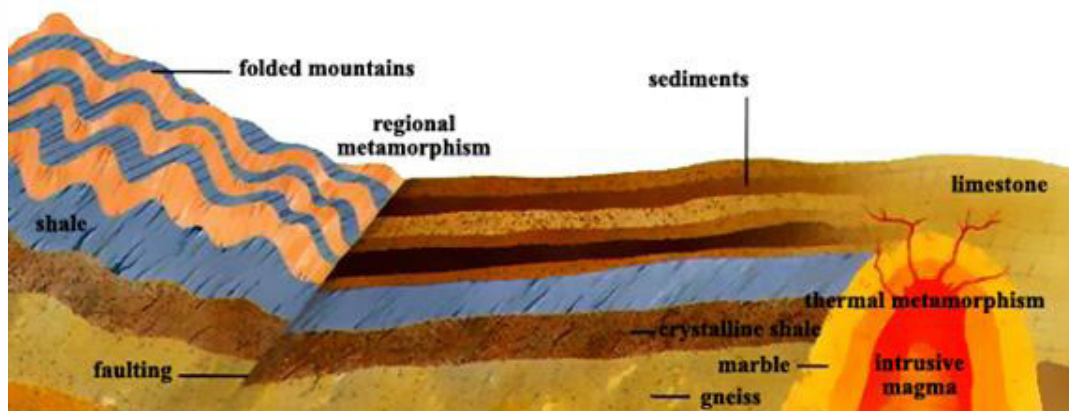
*Lava flow on Hawaii.*

Lava is the extrusive equivalent of magma. Magma is the heart of any igneous rock. Magma is composed of a mixture of molten or semi-molten rock, along with gases and other volatile elements. As you go deeper underground, the temperature rises; go further and you'll eventually reach the Earth's mantle - a huge layer of magma surrounding the Earth's core.

As you probably know, when magma cools, it turns into rock; if it cools while still underground at high temperatures (but at temperatures still lower than that of the magma), the cooling process will be slow, giving crystals time to develop. That's why you see rocks such as granite with big crystals - the magma had time to cool off.

### Metamorphic Rocks

Here, the name says it all. These are rocks that underwent a metamorphosis; they changed. They were either sedimentary or igneous (or even metamorphic), and they changed so much, that they are fundamentally different from the initial rock.



*Different types of metamorphism.*

### Different types of metamorphism

There are two types of metamorphism (change) that can cause this:

- **Contact metamorphism (or thermal metamorphism)** - rocks are so close to magma that they start to partially melt and change their properties. You can have recrystallization, fusing between crystals and a lot of other chemical reactions. Temperature is the main driver here.
- **Regional metamorphism (or dynamic metamorphism)** - this typically happens when rocks are deep underground and they are subjected to massive pressure - so much so that they often become



elongated, destroying the original features. Pressure (often times with temperature) is the main driver here.



*Folded foliation in a metamorphic rock*

Metamorphic rocks can have crystals and minerals from the initial rocks as well as new minerals resulting from the metamorphosis process. However, some minerals are clear indicators of a metamorphic process. Among these, the most usual ones are garnet, chlorite, and kyanite.

Equally as significant are changes in the chemical environment that result in two metamorphic processes: mechanical dislocation (the rock or some minerals are physically altered) and chemical recrystallization (when the temperature and pressure changes, some crystals aren't stable, causing them to change into other crystals).



*Marble is a non-foliated metamorphic rock.*

**Metamorphic rocks** can be divided into many categories, but they are typically split into:

- **Foliated metamorphic rocks** - pressure squeezes or elongates the crystals, resulting in a clear preferential alignment.
- **Non-foliated metamorphic rocks** - the crystals have no preferential alignment. Some rocks, such as limestone, are made of minerals that simply don't elongate, no matter how much stress you apply.

### **Sedimentary Rocks**

Sedimentary rocks are named as such because they were once sediment. Sediment is a naturally occurring material that is broken down by the processes of weathering and erosion and is subsequently naturally transported (or not). Sedimentary rocks form through the deposition of material at the Earth's surface and within bodies of water.

A conglomerate - a rock made from cemented gravel.

Sedimentary rocks are quite difficult to classify, as they have several different defining qualities (the chemical make-up, the sedimentation process, organic/inorganic material), but the most common classification is the following:

- **Clastic sedimentary rocks** - small rock fragments (many silicates) that were transported and deposited by fluids (water, bed flows). These rocks are further classified by the size and composition of the clastic crystals included in the sedimentary rocks (most often quartz, feldspar, mica and clay).
- **Conglomerates** (and breccias) conglomerates are predominantly composed of rounded gravel, while breccias are composed of angular (sharper) gravel.



*A conglomerate*

- **Sandstones:** it is a rock made from many-sand-sized minerals and rock grains. The most dominant mineral in sandstone is quartz because it is the most common mineral in the Earth's surface crust.



*An old red sandstone.*

- **Mudrocks :** they are rock made from solidified mud. They typically contain very fine particles and are transported as suspended particles by turbulent flow in water or air, depositing once the flow settles.
- **Biochemical rocks** — you'll probably be surprised to find out that most limestone on the face of the Earth comes from biological sources. In other words, most limestone you see today comes from the skeletons of organisms such as corals, mollusks, and foraminifera. Coal is another example of biochemical rock.
- **Chemical rocks** — these rocks include gypsum and salt (halite) and are formed mostly through water evaporation



*A halite*

**Some common sedimentary rocks are:** argillite, breccia, chalk, chert, claystone, coal, conglomerate, dolomite, limestone, gypsum, greywacke, mudstone, shale, siltstone and turbidite.

#### 4.8. End unit assessment

1. “Rocks are good and bad” discuss this statement in relation to the context of Rwanda. The student-teachers will discuss this statement basing on their own experience in their local environment and on the advantages and disadvantages of different types of rocks refer to the Learner’s Book unit 4 under “The importance of rocks in Rwanda”.
2. With detailed explanation, show how the following rocks were formed in Rwanda:
  - c. Igneous rocks
  - d. Sedimentary rocks
  - e. Metamorphic rocks

The explanations of how Igneous rocks, Sedimentary rocks and Metamorphic rocks were formed in Rwanda are given in the learner’s book unit 3, under 3.1. Types of rocks in Rwanda and their characteristics.

#### 4.9. Additional activities

##### a) Remedial activities (for slow learners)

##### Question 1. Explain the meaning of a rock

A **rock** is a natural aggregate of minerals in the solid state; usually hard and consisting of one, two, or more mineral varieties. Rocks form the solid part of the earth’s crust.

##### Question 2. Explain the advantages of rocks on human

- Formation of soils. Rocks are broken down into tiny particles through the process of weathering. This leads to the formation of soil that supports plant growth. For example, the igneous rocks around the volcanic mountains in the Northern and Western provinces of Rwanda have been weathered leading to the formation of fertile volcanic soils.
- Tourism development. There are many rocks in Rwanda that attract tourists from all over the world. For example, In Rwanda there are wonderful cliffs and rocks such as “Ibererya Bigogwe (Bigogwe Breast), Urutarerwa Ndaba (Ndaba Rock) and Urutarerwa Kamegeri (Kamegeri Rock).
- Fertilizers: rocks are very useful in the manufacturing of fertilizers.



For example, phosphate bearing rocks are used to make phosphate fertilizers.

- **Minerals.** Rocks provide humans with valuable minerals that are used in various ways. For example, micro- diamonds in Gicumbi and Tin in Muhanga are Igneous rocks. These are exported hence earning foreign exchange.
- **Sources of energy.** Peat coal is used as a source of energy in some homes in Rwanda. Hot rocks found beneath the Earth's surface are responsible for the generation of geothermal energy. This project is still underway in Rwanda but has already picked up in places like Eburru in Kenya.

#### b) Consolidation activities

**Question 1:** Classify igneous rocks based on the mode of occurrence

According to the mode of occurrence, Igneous rocks are classified into intrusive igneous rocks and extrusive igneous rocks.

• **Intrusive igneous rocks:** They are formed when the rising magma, during a volcanic activity, does not reach the earth's surface but rather cools and solidifies below the surface of the earth.

• **Extrusive igneous rocks:** They are formed due to the cooling and solidification of hot and molten lava on the earth's surface (examples are basalt, Gabbro).

**Question 2:** Differentiate between foliated metamorphic rock and Non-foliated metamorphic rock

- **Foliated metamorphic rocks** such as gneiss, phyllite, schist and slate have a layered or banded appearance that is produced by exposure to the heat and pressure.
- **Non-foliated metamorphic rocks** such as hornfels, marble, quartzite do not have a layered or banded appearance.

#### c) Extended activities (for gifted and talented learners)

**Question 1.** Describe different types of intrusive igneous rocks.

- Plutonic igneous rocks:** Are formed due to the cooling of magma very deep inside the earth.
- Hypabyssal igneous rocks:** Are formed due to the cooling and solidification of rising magma during volcanic activity in cracks, pores, crevices and hollow places just beneath the earth's surface.

**Question 2.** Explain different types of extrusive igneous rocks.

- a. **Explosive type:** The igneous rocks formed by a mixture of volcanic materials ejected during explosive or violent volcanic eruptions.
- b. **Quiet type:** The appearance of lava through minor cracks and openings on the earth's surface is called 'lava flow'. The lava forms basaltic igneous rocks after cooling and solidifying.

### **Skills lab**

Most of rocks can be used in construction, in their study the student-teachers will have to identify the best ones which can be used.

## UNIT: 5

### SOILS IN RWANDA

#### **5.1. Key Unit competence:**

The student-teacher should be able to compare major types of soil in Rwanda and assess their importance.

#### **5.2. Prerequisite (knowledge, skills, attitudes and values)**

The student-teachers are expected to have mastered the content of Unit 8 of S2, where they studied the soils in Rwanda. This unit of senior two, greatly provides strong foundation that student-teachers can use to understand better the content of this unit 4 of year one. It's very important to note that, they already have necessary knowledge, skills and attitudes. The difference is that, at this level the content as that in the student's book is more detailed and goes beyond what the ordinary level program demanded.

This already acquired knowledge, skills, attitudes and values, should be used by the tutor to conduct diagnostic assessment as a way of measuring each student-teacher's abilities.

#### **5.3. Cross-cutting issues to be addressed**

There are many cross-cutting issues that can be applied in this lesson. In the student-teachers' book, the writers or authors used activities to integrate the crossing-cutting issues. The most highlighted one is that of environment and sustainability and peace and values education.

Even though, the writers used few cross-cutting issues that should not limit the creativity and innovativeness of the tutor. The activities used were just a sample. This calls for the tutor to take note of the cross-cutting issues that he or she is interested in. What is important to note, is that the following list of cross-cutting issues can be applied. Gender, peace and values, financial education. However, all these require planning in advance on how the tutor is to develop them.

Peace and values education can be integrated using the class room

situation where student- teachers themselves are taught to thank you wherever their peers respond to a given answer.

#### 5.4. Guidance on the introductory activity

The answers for this introductory activity are arranged in a hierarchy order from simple to complex. Hence the student-teachers are requested to think out of the box. That is, they should relate it with the studied topics in S2 under unit 8.

#### 5.5. List of lessons and End Unit assessment

#	Lesson title	Learning objectives	Number of periods
1	Definition of soil, types of soils and where they are found	<ul style="list-style-type: none"> <li>• Research on the different types of soils in Rwanda and where they are located.</li> <li>• Explain the causes and effects of soil erosion and suggest soil conservation measures.</li> <li>• Explain the importance of soils in Rwanda.</li> <li>• Appreciate the value of different types of soils in Rwanda.</li> </ul>	2
2	Soil erosion in Rwanda	<ul style="list-style-type: none"> <li>• Identify the causes and the effects of soil erosion in Rwanda.</li> <li>• Explain the causes and effects of soil erosion and suggest soil conservation measures.</li> <li>• Show concern for the causes and the effects of soil erosion.</li> </ul>	1



3	Soil conservation and the management measures in Rwanda	<ul style="list-style-type: none"> <li>• Outline the appropriate soil conservation measures in Rwanda.</li> <li>• Soil conservation and the management measures in Rwanda.</li> </ul>	1
4	Importance of soil in Rwanda	<ul style="list-style-type: none"> <li>• Explain the importance of soils in Rwanda.</li> <li>• Identify the importance of soils in Rwanda.</li> <li>• Explain the importance of soils in Rwanda.</li> </ul>	1
5	Assessment		1

The above table highlights all the lessons that have been created in relation to dividing the unit content into 5 lessons and each having 1 period except the first lesson that should be covered within two periods. Below is the guidance on the how to go about each lesson or sub heading.

### **Lesson 1: Definition of soil, types of soils and where they are found**

#### **a) Learning objective**

- Research on the different types of soils in Rwanda and where they are located.
- Explain the causes and effects of soil erosion and suggest soil conservation measures.
- Explain the importance of soils in Rwanda.
- Appreciate the value of different types of soils in Rwanda.

#### **b) Teaching resources**

- Flip charts
- Manila papers

- Print outs for the activity
- Text books
- Internet
- Etc.

**c) Prerequisites/Revision/Introduction:**

There is a direct link of Activity 4.1, intended to introduce the lesson, with what the student-teachers studied in senior 2. Therefore, the Activity supports diagnostic assessment (Formative assessment) to see how much the student-teachers know about the types of soils found in Rwanda. At the same time, preparing the student-teachers for the lesson.

**d) Learning activities**

1. Refers to the student's book under the types of soils and where they are found
2. Refer to the student's book under table describing types of soils in Rwanda.

**e) Application Activity**

The tutor should know that this activity involves integration of the cross-cutting issue of environment and sustainability.

1. The student-teachers are expected to draw a sketch map with reference to the map of Rwanda so that they can easily locate the types of soil in their respective places.
2. The student-teachers are expected to give a wide range of answers. But all should rotate around the soil capacity to produce high amount of yields. E.g. volcanic soil is highly fertile, histosol that belong to alluvial soil type is also rich.

## **Lesson 2: Soil erosion in Rwanda**

This is the second lesson under unit 4 of year one. It is concerned with types of soil erosion in Rwanda, causes and effects.

**a) Learning objective**

- -Identify the causes and the effects of soil erosion in Rwanda.
- -Explain the causes and effects of soil erosion and suggest soil conservation measures.
- -Show concern for the causes and the effects of soil erosion.

### **b) Teaching resources**

In this lesson of soil erosion, tutor is suggested to use photographs or conduct a short field visit around where soil erosion is seen. This will help student-teacher to discover and share findings and suggest possible solutions to the destruction of soil.

### **c) Prerequisites/Revision/Introduction:**

The present lesson has only one activity 4.2 and one application 4.2. These activities intend to assess the level of achievement.

### **d) Learning activities**

1. Answers are found in student's book under causes of soil erosion in Rwanda
2. Refers to the learner's book under Effects of soil erosion

### **e) Application activities**

1. All regions of Rwanda do not enjoy productive soil. Factors vary:
  - a. Some areas have highly fertile soil enabling growing and yielding more.
  - b. Areas having many valleys experience alluvial soil the same as areas around rivers and lakes hence surplus food production .
  - c. Nature of the land also influence the fertility of soil.
  - d. There is also a crop failure in areas that experience long dry season especially in some districts of eastern province.
  - e. Creativity and innovation also influence the crop output.
2. Refer to the student's book under Soil conservation and the management measures in Rwanda.

## **Lesson 3: Soil conservation and the management measures in Rwanda**

This is the third lesson under unit 4 of year one. It will be covering all the content concerned with Soil conservation and the management measures in Rwanda.

### **a) Learning objectives**

- Outline the appropriate soil conservation measures in Rwanda.
- Appreciate the importance of soil conservation in Rwanda

### **b) Teaching resources**

In this lesson of soil conservation and the management measures in Rwanda

Tutor is recommended to conduct a short field visit around where soil erosion is seen in order to suggest appropriate solutions. Use of internet is also good, textbook, manila paper etc.

### **c) Prerequisites/Revision/Introduction:**

The present lesson has only one activity 4.3 and one application activity 4.3. These activities intend to assess the level of understanding and achievement.

### **d) Learning activity**

1. Refer to the student's book under Soil conservation and the management measures in Rwanda
2. Referto the student's book under Soil conservation and the management measures in Rwanda

### **e) Application activity**

#### **Question 1**

Suggested answers are described as follows:

- To reduce the rate of soil erosion
- Terrace farming restricts the wash away of nutrients from the fertile soil by the rain water.
- Terracing also helps us in reducing the water loss and soil erosion of your farm.
- The major and significant advantage of terrace farming is that it makes us able to do farming on the sloppy and hilly region where it is not too easy to cultivate.

#### **Question 2**

Possible answers to the question are the follows:

- Manure can be easily collected for the benefit of fodder crops
- Little or no time is spent on herding the animals. Therefore, labour for other farm tasks is saved.
- As long as cattle are inside there less wastage of feeds

- Since herd animals are confined inside, there will be less soil erosion caused by movement of animals

## **Lesson 4: Importance of soil in Rwanda**

### **a) Learning objectives**

- Explain the importance of soils in Rwanda.
- Identify the importance of soils in Rwanda.
- Explain the importance of soils in Rwanda.

### **b) Teaching resources**

To achieve successful learning, tutor in year one is suggested to use print out, Manila paper, textbook and internet. This will help student-teachers in their group discussion to discover different uses of soil.

### **c) Prerequisites/Revision/Introduction:**

In this lesson about the importance of soil, activity 4.4 and application activity 4.4 all intend to facilitate the teaching and learning processes by introducing the new topic.

### **d) Learning activities**

Refers to the content in the student's book under Importance of soil in Rwanda

### **e) Application activity**

Refer to the content in the student's book under Importance of soil in Rwanda

## **5.6. Summary of the unit**

Unit 4 of year one deals with soils in Rwanda. The key points of content to be highlighted in the unit are listed as follows: Definition of soil, types of soils and where they are found

Soil erosion in Rwanda, Soil conservation and the management measures in Rwanda, Importance of soil in Rwanda.

This unit content gives more details about the above points compared to what learners have learnt in previous classes.

## 5.7. Additional information for tutor

Tutor is expected to give more explanation about the distribution of various types of soils found in Rwanda.

The distribution of different types of soil mentioned above is explained by the nature of the rock from which they are made, the intensity of physico-chemical weathering of the rock, the type of vegetation and special conditions of water flow in the valleys.

## 5.8. End unit assessment

1. Possible suggested answers to the end unit assessment are the following:
2. Soil formation occurs with matter originated from erosion, weathering of the bedrock, and deposition of materials through wind and water.
3. Mulch is effective at reducing dislodgement of soil particles by direct impact of rain drop, keeping the surface of the soil more permeable to water, and slowing the velocity of runoff.
4. Refer to the content in the student's book under causes of soil erosion in Rwanda
5. Soil degradation is defined as a change in the soil health status resulting in a diminished capacity of the ecosystem to provide goods and services for its beneficiaries. Degraded soils have a health status such, that they do not provide the normal goods and services of the particular soil in its ecosystem. Soil erosion is a direct effect of soil degradation.
6. Refer to the content in the student's book under effects of the soil erosion.

## 5.9. Additional activities

### 5.9.1 Remedial activities

#### Questions:

1. Describe the types of soil erosion that exist in Rwanda.
2. Identify any three methods of soil conservation in Rwanda.

#### Answers:

1. Refer to the student's book under types of soil erosion in Rwanda
2. Implementing reforestation. Digging anti-erosion ditches, Practising terrace agriculture, Use of manure and chemical fertilizers, Practising mulching etc.

### 5.9.2. Consolidation activities

**Question:** Differentiate between vertisols and histosols

**Answer:** Vertisols are rich in minerals but poor in organic matter while histosols are only composed of organic matter.

### 5.9.3. Extended activities

#### Questions

1. Identify any five areas with severe soil erosion in Rwanda.
2. What is the relationship between soil erosion and weathering?

#### Answers:

1. Erosion is mostly found in all sloppy areas and any bare ground. But it is also happening due to some human activities such deforestation, mining poor rain water conservation etc.
2. *Weathering* and *erosion* are processes by which rocks are broken down and moved from their original location. Their difference is based on whether a rock's location is changed: *weathering* disintegrates a rock without moving it, while *erosion* carries rocks and *soil* away from their original locations.

#### Skills lab

The student-teachers will discuss on different soil erosion measures which can be more effective in their areas.

## UNIT: 6

# CLIMATE IN RWANDA

### 6.1. Key unit competence:

The student-teacher should be able to analyse the climate of Rwanda and its impact on human activities.

### 6.2. Prerequisite (knowledge, skills, attitudes and values)

The student-teachers are expected to have mastered the content of unit 6 in S2, where they studied the same unit of climate and climate change in Rwanda. That unit of senior two greatly provides strong foundation that student-teachers can use to understand better the content of this unit 6 of year one. It's very important to note that, they already have necessary knowledge, skills and attitudes. The difference is that, at this level the content in the student's book is more detailed and almost differ from what they learnt previously.

### 6.3. Cross-cutting issues to be addressed

There are many cross-cutting issues that can be applied in this lesson. In the student-teachers' book, the writers or authors used activities to integrate the crossing-cutting issues. The most highlighted is that of environment and sustainability.

Even though, the writers used few cross-cutting issues, this should not limit to the creativity and innovativeness of the tutor. The activities used were just a sample. This calls for the tutor to take note of the cross-cutting issues that he or she is interested in. What is important to note, is that many cross-cutting issues can be applied where possible depending on occasion, for example:

- a. **Environment and sustainability** can be integrated in some learning activities where the aspects related to the conservation of atmosphere can be referred to.
- b. **Financial Education** can be integrated in learning activities when studying the relationship between climate and human activities. For example the tutor can remind his /her student using typical examples on how good climate can help them to practice



small scale livestock farming on small pieces of land. Thus, this can generate income/money.

- c. Inclusive education** can be integrated in classroom situation where tutor pays attention on student-teachers with special needs such as student-teachers with physical disabilities, hearing disabilities or communication difficulties and visual impairment. For the student-teachers with physical disabilities, the tutor will refer to video clip, or bringing some samples in classroom. For student-teachers with hearing disabilities or communication difficulties, in different learning activities the tutor will use enough illustrations, diagrams and sign languages where possible. For student-teachers with visual impairment, the tutor will help children to use their other senses like hearing and touch because these senses can help them to play and carry out some of learning activities thus promoting their learning and development. This cross-cutting issue can be integrated in all lessons.

#### 6.4. Guidance on introductory activity

The tutor has to allow students to read critically the passage provided related to introductory activity and try to give answers to the questions about interpretation of the photograph. Answers to questions are supposed to be provided by students. Students may not be able to find the right answers but they are invited to predict possible answers. In case the student-teachers fail to come up with right answers to questions related to the given photograph, the tutor may not immediately provide the possible answers but he/she should allow student-teachers to discover themselves the right answers through the learning and teaching process.

#### 6.5. List of lessons/sub-heading

#	Lesson title	Learning objectives	Number of periods
1	Climatic zones and factors influencing climate in Rwanda	<ul style="list-style-type: none"> <li>Identify various climatic zones and their characteristics in Rwanda.</li> <li>Apply the knowledge of climate to describe different climatic zones of Rwanda.</li> </ul>	2

2	Climate change and global warming	<ul style="list-style-type: none"> <li>• Define the concept of climate change and global warming</li> <li>• Explain the causes of climate change</li> <li>• Evaluate the effects of climate change and global warming</li> </ul>	2
3	Assessment		2

## Lesson 1: Climatic zones and factors influencing climate in Rwanda

### a) Learning objectives

- Identify various climatic zones and their characteristics in Rwanda.
- Apply the knowledge of climate to describe different climatic zones of Rwanda.

### b) Teaching resources

During the teaching and learning process, the tutor will refer to the following teaching resources where possible:

- Diagrams
- Pictures
- Flip charts
- Manila papers
- Print outs for the activity
- Text books
- Internet
- Maps
- Field work to the surrounding area.

### c) Prerequisites/Revision/Introduction

The Activity 6.1 tends to introduce lesson 1. This activity 6.1 also requests student-teachers to recall the knowledge and skills gained from previous lessons of senior two. This will enable student-teachers to follow the lesson by linking it to what they have learnt in previous classes

### d) Learning activities

Here are the suggested responses for activity 6.1

1. The distinction of climatic zones in Rwanda is largely due to differences in altitude in Rwanda.
2. The climate of Rwanda is largely dependent on relief and its position in relation to the equator. The temperatures and rainfall are moderate depending on region and the climatic factors. Generally Rwanda is a mountainous country and as a result it has a sub temperate tropical climate.
3. The climatic regions of Rwanda are distributed according to altitude. From east to west, where altitude is very low, temperature increases and rainfall decreases while where altitude is high, temperature is low and rainfall increases.

#### **e) Application activities**

This application activity 6.1 consists of two question that are associated with critical thinking.

1. Climate of an area is influenced by several factors. So being a landlocked means being located far from the sea. The sea affects the climate of a place. Coastal areas are cooler and wetter than inland areas. Clouds form when warm air from inland areas meets cool air from the sea. Location of Rwanda is subject to a large range of temperatures. In dry season, temperatures can be very hot and dry as moisture from the sea evaporates before it reaches the centre of the Rwanda.
2. Large water bodies such as Lake Kivu can affect the climate of an area. Water heats and cools more slowly than landmasses. Therefore, the surrounding regions will stay cooler in dry season and warmer in wet season, thus creating a more moderate climate with a narrower temperature range.
3. The best way of answering this question is that tutor guide learners to think on all program/ projects aiming at environmental conservation. Those activities make climate pattern to occur as they should happen. So those activities influence the climate in a positive way.

## **Lesson 2: Climate change and global warming**

### **a) Learning objectives**

- Define the concept of climate change and global warming.
- Explain the causes of climate change.
- Evaluate the effects of climate change and global warming.

### **b) Teaching resources**

During the teaching and learning process, the tutor will refer to the following teaching resources where possible:

- Pictures
- Flip charts
- Manila papers
- Text books
- Internet.

### **c) Prerequisites/Revision/Introduction**

The tutor has to introduce this lesson and link it with the previous lessons by asking some questions. The activity 6.2 intended to introduce the lesson 2 has a link with lesson five studied before. Through observation, the tutor has to help student content of unit 9 of S2 about climate and climate change in Rwanda. The tutor has to help student-teachers to recall the previous knowledge and skills about climate change and global change in Rwanda

### **d) Learning activities**

The suggested answers for **Activity 6.2** in learners' book are set as follows:

1. Refer to the student's book under definition of climate and climate change.
2. Refer to the content in learners' book on effects of global warming.
3. Refer to the student's book on effects of global warming.

### **e) Application activities 6.2.**

Possible answers for application activity 6.2 are the following:

Tutor should guide student-teachers in their group discussion on effects of climate change in eastern and western province respectively. If they don't find correct and appropriate answers, tutor have to give the right answers.

1. Urban areas experience a different climate compared to the surrounding rural areas. This results in the formation of a heat island over the city due to the following reasons:
  - Surfaces like tar absorb more heat.
  - With a greater area, more heat is absorbed.
  - More factories and cars release more pollution, which traps the heat.

- Factories, cars and air conditioners release heat into the air.
- 2. Refer to the student-teacher's content book on climate change especially on causes.
- 3. -Plant a tree: A single tree will absorb one ton of carbon dioxide over its lifetime.
  - They should enact new laws that limit carbon emissions and require polluters to pay for the emissions they produce.
  - Better to use green power to reduce pollution.
  - Reduce water waste saving water reduces carbon pollution, too.
  - Choosing to live in walkable smart-growth cities and towns with quality public transportation leads to less driving, less money spent on fuel, and less pollution in the air.

## 6.6. Summary of the unit

Unit 6 of year one deals with climate in Rwanda. It describes/gives more details on major climatic zones of Rwanda, factors influencing climate and finally climate change and global warming as well.

## 6.7. Additional Information

As we have seen the dangers of climate change and global warming tutor have to be aware of this. And think about what can be done to mitigate those effects. Addressing climate change will require many solutions. This means that there's no magic bullet. Example, The required changes span technologies, behaviors, and policies that encourage less waste and smarter use of our resources, improvements to energy efficiency and vehicle fuel economy, increases in wind and solar power, biofuels from organic waste, setting a price on carbon, and protecting forests are all potent ways to reduce the amount of carbon dioxide and other gases trapping heat on the planet.

## 6.8. End unit assessment

1. Refer to the content: Learner's book on definitions of climate and climate change.
2. The following is a list of various reasons why weather forecasts are important:
  - Helps people prepare for how to dress (i.e. warm weather, cold weather, windy weather, rainy weather).
  - Helps businesses plan for transportation hazards that can result

from the weather (i.e. fog, clouds as it relates to driving and flying for example).

- Helps people with health related issues to plan the day (i.e. allergies, asthma, heat stress).
  - Helps farmers and gardeners plan for crop irrigation and protection
  - Helps people involved in certain activities to know if conditions will be good (i.e. sport activities and other recreational events).
  - Helps people plan for when to do certain activities that are influenced by weather (i.e. fertilizing, bug spraying, gardening).
  - Helps people know if they need to leave early for work
1. As we know the climate of Rwanda varies according to altitude. This makes changes in terms of amount of rainfall and temperature. For example, from east to west, where altitude is very low, temperature increases and rainfall decreases while where altitude is high, temperature is low and rainfall increases.
  2. The climate of Rwanda is generally characterized by the change in rainfall that depends on the general atmospheric movement and the altitude. Here are factors that cause the typical weather we experience in each season.
    - The trade winds of the South-East: Originating from the Mascarenes anticyclone which releases much of their humidity on the East Africa before entering Rwanda in a relatively dry state (long dry season: June, July and August).
    - The trade winds from Sahara that cross Lake Victoria where they pick up humidity and dump rain in the northern part of Rwanda (September, October, November, December).
    - The Atlantic monsoon that, after being relieved of its humidity on Mitumba Mountains in DRC, reaches Rwanda in a dry state.
    - The rains recorded in Rwanda are mainly due to the intercrossing of the North trade winds with south trade winds or intertropical front, the intertropical convergence between south trade winds and Indian monsoon, and the altitude that favours orographic rainfall.
  3. Student-teachers will make research on other sources of greenhouse gases and how can we reduce the increase of them in the atmosphere using the internet and other geographical documents.

## **6.9. Additional activities**

### **6.9.1. Remedial activities**

**Question:** Explain the factors influencing climate of Rwanda.

**Answer:** Refer to the student's book on factors influencing climate of Rwanda.

### **6.9.2. Consolidation activities**

**Question:** Briefly present different climatic regions of Rwanda

**Answer:** Refer to the content in learner's book under major climatic regions of Rwanda

### **6.9.3. Extended activities**

**Question:** Identify the characteristics of the short rainy season in Rwanda.

When does this season take place?

**Answer:** The short rainy season in Rwanda is characterized by rather strong and frequent downpours, which account for approximately 27% of annual precipitation. It starts in mid-September and ends in mid-December.

### **Skills lab**

For the people who mostly depend on weather patterns, it is better to follow instructions given by forecasting weather agency (Rwanda meteorology agency).

For farmers, they should use glasshouse to ensure all season production.



## ● UNIT: 7

# VEGETATION IN RWANDA

### 7.1. Key unit competence:

The student-teacher should be able to explain the importance of vegetation in Rwanda and evaluate conservation measures.

### 7.2. Prerequisite (knowledge, skills, attitudes and values)

The student-teachers are anticipated to have mastered the content of Unit 10 of S2, where they studied the vegetation in Rwanda. This unit of senior two greatly provides strong foundation that student-teachers can use to understand better the content of this unit 7 of year one. It is very important to note that, they already have necessary knowledge, skills and attitudes.

The tutor to conduct diagnostic assessment as a way of evaluating each student-teacher's abilities. The tutor should refer to knowledge, skills, attitudes and values associated with vegetation student-teachers acquired from the previous classes with the aim of establishing connections between the new learning activities and the previous ones.

### 7.3. Cross-cutting issues to be addressed

There are some cross-cutting issues, which can be applied in the lesson. In the student-teachers' book, the writers or authors used activities to integrate the crossing-cutting issues. The most emphasized is that of environment and sustainability and inclusive education.

What is important to note, is that many crosscutting issues can be applied where possible depending on occasion. For example:

- a. **Environment and sustainability** can be integrated in some learning activities where the questions related to Why is it important to conserve natural vegetation and how can we preserve our natural vegetation are addressed. Thus, the crosscutting issue known as environment and sustainability is developed.
- b. **Inclusive education** can be introduced during the class situation for example if the tutor wants her/his students to make a field study outside classroom.

With the purpose of observing natural vegetation the tutor will consider the student-teachers with physical disabilities and react accordingly by choosing appropriate methodology, which may help those student-teachers with special disabilities to cope with the situation. Nevertheless, tutor can use video containing different images or photographs of different vegetation.

#### 7.4. Guidance on introductory activity

The tutor will ask students to read a set of questions related to introductory activity. The student-teachers will try to answer the questions. Student-teachers may not be able to get the right answer but they are requested to predict possible answers. When the student-teachers fail to come up with right answers to the questions related to introductory activity, the tutor will not immediately provide the required answers rather he /she should let students get the real answers through the course of learning and teaching process. This implies that student-teachers will associate this lesson with the content learnt in the previous lessons of S2.

#### 7.5. List of lessons/sub-heading

#	Lesson title	Learning objectives	Number of periods
1	Types of vegetation and importance of vegetation in Rwanda	<ul style="list-style-type: none"> <li>• Give the meaning of vegetation.</li> <li>• Describe the various types of vegetation.</li> <li>• Appreciate the importance of vegetation to human kind.</li> </ul>	2
2	Causes of the destruction and conservation measures of vegetation	<ul style="list-style-type: none"> <li>• Identify the causes of the destruction of vegetation.</li> <li>• Describe the measures of conserving vegetation.</li> <li>• Show respect for the continual desire to conserve vegetation.</li> </ul>	1
3	Assessment		1

## Lesson 1: Types of vegetation and importance vegetation in Rwanda

### a) Learning objectives

- Give the meaning of vegetation.
- Describe the various types of vegetation.
- Appreciate the importance of vegetation to human kind.

### b) Teaching resources

The tutor should prepare the teaching learning resources in advance so that effective teaching-learning exercise can take place. These resources will enable the instructional objectives to be achieved. Some teaching resources are listed below:

- Maps
- Pictures
- Flip charts
- Manila papers
- Print outs for the activity
- Text books
- Internet

### c) Prerequisites/Revision/Introduction

There is a direct link of Activity 7.1, intended to introduce the lesson, with what the lessons studied in Senior two. The activity 7.1 requests student-teachers to recall the knowledge and skills gained from previous lesson of senior two about vegetation in Rwanda, this will be through diagnostic assessment/ evaluation of tutor. This will enable student-teachers to follow the lesson by linking it to world natural vegetation.

### d) Learning activities

1. To answer the **activity 7.1**, Tutor can engage learners into group of discussion. But for quick answer, tutor refers to the student-teacher's content book under Types of vegetation in Rwanda.
2. Refers to the student's book on importance of vegetation.

### e) Application activities

The appropriate answers for **application activity 7.1** include:

1. Tutor should tell students that most of the materials used at home are products of vegetation. From this hint, student-teachers will be able to describe how much people depend on vegetation.

2. Vegetation can affect climate and weather patterns due to the release of water vapour during photosynthesis. The release of vapour into the air alters the surface energy fluxes and leads to potential cloud formation. In return, the growth of natural vegetation depends upon climatic conditions existing in the place. For example, evergreen forests grow in the regions which experience heavy rainfall.

## **Lesson 2: Causes of the destruction and conservation measures of vegetation**

### **a) Learning objectives**

- Identify the causes of the destruction of vegetation.
- Describe the measures of conserving vegetation.
- Show respect for the continual desire to conserve vegetation.

### **b) Teaching resources**

During the teaching and learning process, the tutor will refer to the following teaching resources where possible:

- Pictures
- Manila papers
- Print outs for the activity
- Text books
- Internet
- Maps
- Field work to the surrounding area

### **c) Prerequisites/Revision/Introduction**

This activity is intended to introduce the lesson two and link it with lesson 1 studied before. The activity 7.2 requests student-teachers to recall the knowledge and skills gained from previous lesson in senior two about deforestation in Rwanda.

### **d) Learning activities**

For the activity 7.2, the tutor will give student-teachers an opportunity to read critically the given questions and give them time so that students can give correct answers. The tutor is requested to try to integrate some generic competencies as well as cross-cutting issues but he/she is free to choose a cross-cutting issue or generic competence taking into consideration the learning environment.

**Possible answers are provided below:**

1. Deforestation is the decrease in forest areas. It can also be defined as the permanent destruction of forests in order to make the land available for other uses.
2. Refer to the student's book on causes of vegetation destruction in Rwanda.
3. Refer to the student's book on the conservation measures of vegetation.

**e) Application activities**

Possible answers in this application activity 7.2 are as follows:

1. Refer to the student's book on causes of destruction of vegetation.
2. Refer to the student's book on the conservation measures of vegetation.

## **7.6. Summary of the unit**

This unit entirely deals with vegetation in Rwanda. Under this unit there are sub topics, such as types of vegetation, importance of vegetation in Rwanda, Causes of the destruction and conservation measures of vegetation.

## **7.7. Additional Information for tutors**

Even though in the student's book only two types of vegetation are described, it is very important for tutor to know that natural vegetation is classified into forests, savannah and valley vegetation.

**i. Forest:**

- Nyungwe is the largest tract of land in Rwanda covered by a forest (approximately 1000km<sup>2</sup>). It is located on the Congo-Nile crest in south western part of the country. Currently it is protected as a national park.
- Mukura forest: This is located in Karongi district of western province.
- Gishwati forest: This is located in the fringes of Rutsiro and Nyabihu districts in western province.
- Birunga forests: This is found at the slopes of Birunga in the north western part of the country.

**ii. Savannah:** This is categorised into; grassland, bushland

and woodlands. The main types of trees are acacia, Albizia (*Umusebeya*), sieberiana (*Umunyinya*) and others. It is located mostly in the central and eastern parts of Rwanda.

**iii. Valley vegetation (swamp vegetation):** The River valleys especially along rivers Akanyaru, Nyabarongo, Akagera and the shores of Lakes are dominated by swamps especially papyrus reeds, water lilies and water hyacinths.

## 7.8. End unit assessment

**Possible answers are the following:**

1. Deforestation leads to many consequences for natural ecosystems and it poses serious problems to the happiness of people.
  - The most known consequence of deforestation is its threat to biodiversity. In turn, this will have a negative impact on :Tourism attraction , Herbal medicine and Rare animal species and vegetation.
  - Deforestation also weakens the soil. This means that the destruction of forest area will probably mean the soil will become increasingly fragile leading to natural disaster such as landslide.
  - Deforestation disrupts the process of water cycle. This results in the formation of low rainfall.
  - Greenhouse gases such as methane and carbon dioxide are gases that trap heat in earth's atmosphere, leading to global climate change. Fortunately, in addition to **releasing oxygen and water into the atmosphere, trees also absorb carbon dioxide**. While trees are still living, they function as efficient greenhouse filters. **The moment they (trees) are cut down**, the carbon dioxide that was stored in their trunk and leaves is released into the atmosphere, further contributing to the increase over the time of greenhouse gases.
2. It is very important to conserve vegetation because it prevents all side effects that could happen if not protected. But also there are many people depending on forests for survival. If not conserved it will disrupt the local people's lives.
3. Tutor should guide learners on how to draw a sketch map of Rwanda and on it, locate the major natural vegetation of Rwanda.

4. Refers to the student's book on the conservation measures of vegetation.

## 7.9. Additional activities

### 7.9.1. Remedial activities

#### Question:

1. What is the difference between vegetation and a forest?
2. Explain how forested areas in Rwanda are being conserved and protected.

#### Possible answers

1. Forest is a natural ecosystem characterised by the dominance of trees while vegetation is sum total plant population covering a region.
2. Refer to the learner's book on vegetation conservation measures.

### 7.9.2. Consolidation activities

**Question:** Describe any three human activities that lead to deforestation in Rwanda.

**Answer:** Agricultural expansion: the conversion of forest into agricultural plantation is a major cause of deforestation.

**Overpopulation** this leads to an increase in needs and wants at national level hence expansion and deforestation.

**Mining:** mining activities also cause deforestation because for mining activities to take place, clearing of vegetation is required.

### 7.9.3. Extended activities

**Question:** Assess the contribution of vegetation to the development of tourism sector in Rwanda

**Answer:** Tourism in Rwanda mostly relies on vegetation. This is because vegetation is a home of wild animals, birds, snakes and also a source of river source. It is of course all of the ecosystem that attract tourists hence contributing to the development of Rwanda.



### **Skills lab**

No one doubt about the importance of home garden. Student-teachers should think about a productive garden where you grow all kind of vegetables to hold the soil but also to be consumed.

## ● UNIT: 8

# DRAINAGE SYSTEM IN RWANDA

### **8.1. Key unit competence:**

The student-teacher should be able to describe the drainage system of Rwanda and explain its relationship with the human activities.

### **8.2. Prerequisite (knowledge, skills, attitudes and values)**

The tutor should be aware that student-teachers already have enough information concerning drainage system in Rwanda. He or she should design variety of reviewing what the student-teachers know about this unit. Student-teachers should have properly covered Unit 11 of drainage system in Rwanda in senior two.

The tutor therefore, as he or she is planning for this unit 8, must know that there is already a lot of knowledge, skills and values and attitudes students have developed previous in favour of drainage system in Rwanda.

### **8.3. Cross-cutting issues to be addressed**

Unit 8 of drainage system in Rwanda, has several cross-cutting issues that can be associated with it. Mostly the one of environment and sustainability. The tutor should therefore, enable the student-teachers to take note of the drainage conservation if it is not monitored and executed in a recommendable way, the environment is affected and eventually the climatic changes associated with global warming will occur. However, the major cross-cutting issues that the tutor can integrate include the following:

- i. Environment and sustainability
- ii. Standardization culture
- iii. Inclusive education
- iv. Gender education
- v. Peace and values education

In this Unit 8, the tutor has the opportunity of addressing other cross-

cutting issues such as inclusive education, peace and values education. Such may not be applied using activity but in the process of teaching, look for an opportunity of saying something about the above two CCI (Cross-cutting issues).

#### 8.4. Guidance on introductory activity

The introductory activity for this unit has questions that students should answer. The possible answers are contained therein the following guideline:

1. Refers to the student-teacher book on drainage map of Rwanda.
2. Tutor should guide student-teachers on discussion about the importance of water bodies.

#### 8.5. List of lessons/sub-heading

#	Lesson title	Learning objectives	Number of periods
1	Major rivers and the drainage basins.	<ul style="list-style-type: none"> <li>• Describe the drainage system of Rwanda.</li> <li>• Differentiate major water bodies in Rwanda.</li> <li>• Appreciate the importance of water bodies in Rwanda.</li> <li>• Advocate for the need to conserve the water bodies.</li> </ul>	2

2	Major lakes and their mode of formation	<ul style="list-style-type: none"> <li>• Use the acquired knowledge of the drainage system to explain the mode of formation of lakes in Rwanda.</li> <li>• Describe the relationship between the drainage system and the human activities in Rwanda.</li> <li>• Appreciate the importance of water resource management and conservation.</li> </ul>	2
3	Assessment		1

## Lesson 1: Major rivers and the drainage basins

### a) Learning objectives

- Describe the drainage system of Rwanda.
- Differentiate major water bodies in Rwanda.
- Appreciate the importance of water bodies in Rwanda.
- Advocate for the need to conserve the water bodies

### b) Teaching resources

The lesson to be effectively taught, the tutor should ensure that the following teaching resources are in place.

- Map of Rwanda
- Text books
- Photographs of some water bodies conservation measures in Rwanda or elsewhere.
- Manila papers for group work drawing.

### c) Prerequisites/Revision/Introduction

The tutor should use Activity 8.1 for introductory purposes. This will

help the student-teachers to connect the lesson content to be learnt with the real-world experiences.

#### **d) Learning activities**

This part of learning activities intends to help tutors to assist student-teachers in their learning process. Possible answer for **activity .8.1** are the following

1. Refer to the content in the student's book on major rivers and the drainage basins
2. Refer to the content in the student's book under waterbasins and major rivers

#### **e) Application activities**

The suggested answers on **application activity 8.1** are the following:

1. The Birunga volcanic area in the North-West is poor in rivers despite heavy rains. This is due to its lithology which allows deep penetration of water which leads to lack of surface flow.
2. The consequence of the uplifting of the Congo –Nile peak is that Rwanda has been divided into 2 basins: the Congo Basin and the Nile Basin.

## **Lesson 2: Major lakes and their mode of formation**

#### **a) Learning objective**

- Use the acquired knowledge of the drainage system to explain the mode of formation of lakes in Rwanda.
- Describe the relationship between the drainage system and the human activities in Rwanda.
- Appreciate the importance of water resource management and conservation

#### **b) Teaching resources**

During the teaching and learning process, the tutor will refer to the following teaching resources where possible:

- Pictures
- Manila papers
- Print outs for the activity
- Text books
- Internet
- Maps
- Field work to the surrounding area

### c) Prerequisites/Revision/Introduction

The tutor should make preview of the previous lesson using/asking student-teachers to give a recap of what was covered. Then, he or she introduces the lesson with a short activity that can enable student-teachers to connect to the lesson at hand.

### d) Learning activities

Suggested answers to the **learning activity 8.2**

1. Refers to the learner's book under Major Lakes of Rwanda.
2. The largest lake in Rwanda is Lake Kivu.

### e) Application activities

Possible answers to the **application activity 8.2**

1. Water is an essential component for all beings. All human activities are based on water: agriculture, bathing, washing, mopping, cooking, drinking and more. Farmers depend on water for irrigation of their crops.
2. The following human activities are responsible for water pollution:
  - Throwing sewage and industrial waste into rivers and lakes,
  - Using harmful fertilizers, and even littering. All of these human activities affect our water sources.
  - Dumping sewage waste and contaminated water into rivers and lakes pollutes the environment and becomes a health problem
  - When people use fertilizers on their soil, the fertilizers runoff into rivers and lakes whenever it rains, causing water pollution.
  - Humans also have accidents such as oil spills. An oil spill is an instance where oil is accidentally removed from its container, or what it is in, and is dumped into a water source. Also, motor vehicle engines drop small amounts of oil onto roads and parking lots, and much of this oil makes its way into water supplies.

## 8.6. Summary of the unit

Unit 8 of year one deals with drainage system in Rwanda. This unit describes/gives more details on major rivers and lakes in Rwanda, the ways they have been formed and finally relationships between the drainage system and the human activities.

## 8.7. Additional Information for tutors

### Evolution of Drainage system in Rwanda.

Before Pleistocene period and there was a continental divide separating India and Atlantic Ocean drainage. From this divide, the Mozambican belt lay approximately along the present Gregory rift in Kenya. Before the formation of major mountains and rift valley in Rwanda, rivers such as Akagera and its tributaries (Nyabarongo, Akanyaru, Mukungwa, Muvumba and others) flowed northwards to south western Uganda.

During Pliocene and Pleistocene periods, rifting took place in western part of Rwanda. This was followed by volcanic eruptions in the northern part of Rwanda. The shoulders of the rift valley rose, causing up warping of the adjacent land. Afterwards the erection of volcanoes caused river Nyabarongo and Mukungwa to change their directions of flow eastwards. As the rate of uplift exceeded the rate at which they could incise their beds, rivers such as Nyabarongo captured Akanyaru to form river Akagera. With time, river Akagera ponded back and finally reversed its direction of flow eastwards towards Lake Victoria (a down warped basin). Many other lakes such as Cyohoha, Mugesera, Rweru, Ihema, and others were formed due to back ponding by Akagera River

## 8.8. End unit assessment

Suggested answers to the end unit assessment are the following:

1. Refer to the student's book on Mode of formation of lakes
2. Most rivers in Rwanda reversed their directions of flow because of the following:
  - The rising of the Congo-Nile crest (folding)
  - Faulting in the western part of the country (rising shoulders of the rift valley).
  - Volcanic eruptions in North West parts of the country
  - Down Warping of the eastern plain
3. a)
  - An incredible growth in the human population
  - The country is experiencing increased urbanization
  - Competition for fresh water
  - Global climate change is impacting fresh water supplies everywhere



- Overuse in agricultural is a major source of fresh water scarcity.
- b) Water, as a resource, can be conserved through the following ways:
  - **Avoiding wastage:** All people should use water wisely to minimize wastage. All taps should be turned off when they are not used. The used water may be re-used again. For example, water that has been used to rinse clothes can be re-used to mop the floor, soak the dirtiest clothes, rags etc. Do not use water directly from the tap, instead fetch the water in a container and use it wisely.
  - **Controlling water pollution:** People should neither throw wastes carelessly nor introduce any chemicals into water. Stern laws should be made and enforced to stop industries from dumping toxic wastes into the water bodies. Any industry found polluting the water by any means should be heavily punished or even closed down altogether.
  - **Protection of water catchment:** Vegetation in water catchment areas should be protected and cared for. People should not carry out agricultural activities close to water sources. Planting of trees that consume a lot of water, such as eucalyptus, near water sources or rivers should also be avoided. Any activity that destroys the water catchment should be banned.
  - **Education:** People should be educated about the importance of conserving the water resources. This education can be conveyed through mass media and introducing water conservation courses in schools and colleges.
  - **Sewage treatment:** Sewage is water containing waste matter produced by people. Much industrial sewage contains harmful chemicals and other waste materials. Sewage must be treated before it flows from sewerage systems into lakes, rivers, and other bodies of water
  - **Controlled use of agrochemicals:** Farmers should be educated on the correct use of agrochemicals. Also agricultural activities should not be carried out in areas close to water bodies. The use of organic manures and chemicals in place of harmful industrial chemicals for agricultural production should be emphasized.
  - **Recycling of products:** People should be advised to recycle the waste instead of dumping it in water sources. This will help reduce the problem of water pollution.

## 8.9. Additional activities (Questions and answers)

### 8.9.1 Remedial activities

**Question:** Differentiate between drainage and drainage system

**Answer:** Drainage refers to as the general distribution of surface water. A drainage system is a lay out or actual plan made by a river and its tributaries on the landscape.

### 8.9.2. Consolidation activities

**Question:**

1. Explain the term “river reversal” in the context of Rwanda
2. Identify the major cause of river reversal in Rwanda

**Answers:**

1. River reversal is a process in which rivers change their direction of flow (diversion of river’s direction). Most rivers in Rwanda reversed their direction of flow eastwards
2. The main causes of river reversal are the following:
  - a. The rising of the Congo-Nile Crest.
  - b. Faulting of the western part of the country (rising shoulders of the rift valley).
  - c. The eruption of volcanic mountains in North western part of the country.
  - d. Down warping of the eastern plain.

### 8.9.3. Extended activities

**Questions:**

1. Identify the consequence of the uplifting the Congo-Nile peak on the hydrography of Rwanda.
2. Describe the effects of river reversal in Rwanda.

**Answers**

1. The division of the waters of Rwanda in 2 basins: the Congo Basin and the Nile Basin.
2. Effects of river reversal in Rwanda are suggested as follows:

- River capture (Nyabarongo captured Mukungwa)
- River rejuvenation (river Akagera after Rusumo falls)
- Formation of alluvial lakes
- Formation of swamps and marshland along rivers Nyabarongo and Akagera
- Formation of water falls over resistant rocks such as at Rusumo, Ntaruka, Rusizi I and II, Mukungwa I and II, and others.
- Formation of fault guided valley (Rusizi and parts of Nyabarongo).

### **Skills lab**

For the problem of scarcity of water in Rwanda, student-teachers have to be aware of that scarcity of water and use less available water wisely. Some activities should be done: recycling of water, tanks to store water ,reduce the amount of used water at home, school, industries, irrigation etc.

## UNIT: 9

# POPULATION IN RWANDA

### 9.1. Key unit competence:

The student-teacher should be able to examine demographic problems in Rwanda and suggest their solutions.

### 9.2. Prerequisite/introduction/Revision

The student-teachers are anticipated to have mastered the content of Unit 13 of S2 and Unit 8 of S3, where they studied the population Rwanda and Africa. This unit of senior two greatly provides strong foundation that student-teachers can use to understand better the content of this unit 8 of Year one. It is very significant to note that, they already have necessary knowledge, skills and attitudes. The difference is that, at this level the content is more detailed.

### 9.3. Cross-cutting issues to be addressed

There are some cross-cutting issues, which can be applied in the lesson. In the student-teachers' book, the writers or authors used activities to integrate the crossing-cutting issues. The most emphasized is that of environment and sustainability and financial education.

Even though, the writers used few crosscutting issues in his / her activities, there is not limit to the creativity and innovativeness of the tutor. The activities used were just an example. This calls for the tutor to take note of the crosscutting issues that he or she is interested in. What is important to note, is that many crosscutting issues can be applied where possible depending on occasion.

**Inclusive education** can be introduced during the class situation for example if the tutor wants her/his student-teachers to make a field study outside classroom. With the purpose to observe the local environment the tutor will consider the student-teachers with physical disabilities and react accordingly by choosing appropriate methodology, which may help those student-teachers with special disabilities to cope with the situation. Nevertheless, tutor can use video containing different images or photographs of different vegetation.

#### 9.4. Guidance on the introductory activity

The tutor will ask students to read carefully the passage related to the introductory activity. The student-teachers will try to answer the questions linked to the given passage. Student-teachers may not be able to get the right answer but they are requested to predict possible answers. When the student-teachers fail to come up with right answers to the questions related to introductory activity, the tutor will not immediately provide the required answers rather he /she should let student-teachers get the real answers through the course of learning and teaching process. This implies that student-teachers will associate this lesson with the content learnt in the previous lessons of S2 and S3 on population to answer the questions.

#### 9.5. List of lessons/sub-heading

	Lesson title	Learning objectives	Number of periods
1	<b>Population concepts</b>	<ul style="list-style-type: none"><li>• Give the definition of different concepts of population</li><li>• Be aware of the current situation of the population concepts in Rwanda.</li></ul>	2
2	Population growth in Rwanda	<ul style="list-style-type: none"><li>• Identify the causes of the rapid population growth and its effects in Rwanda</li><li>• Recognise the causes and the consequences of the rapid population growth and suggest population control measures.</li><li>• Be aware of the population explosion and its effects on the economic development in Rwanda.</li><li>• Analyse the factors for the population growth</li></ul>	2
3	End of Unit Assessment		1

## **Lesson 1: Population concepts**

### **a) Learning objectives**

- Give the definition of different concepts of population.
- Be aware of the current situation of the population concepts in Rwanda.

### **b) Teaching resources:**

During the teaching and learning process, the tutor will refer to the following teaching resources where possible: Maps, Pictures, Flip charts, Text books, Internet.

### **c) Prerequisite / Revision/ Introduction**

The Activity tends to review the lesson 1. The activity also requests student-teachers to recall the knowledge and skills gained from previous lessons of senior two. This will enable student-teachers to follow the lesson by linking it to what they have learnt in previous classes.

### **d) Learning activities**

For this activity, the teacher will give student-teachers an opportunity to read the questions provided and give them time to reflect on the provided questions and then give answers. The tutor is requested to try to integrate some generic competencies as well as cross-cutting issues but he/she is free to choose a cross-cutting issue or generic competence taking into consideration the learning environment.

### **Possible answers**

Refer to student's book on definition of population concept

### **e) Application activity**

Population distribution shows how people are spread in any area/ place and this related to population density which is the number of people per square kilometer, means population distribution determine the population density where high concentration show high density and low concentration show low density.

## **Lesson 2: Population growth in Rwanda**

### **a) Learning objectives:**

- Identify the causes of the rapid population growth and its effects in Rwanda
- Recognise the causes and the consequences of the rapid population growth and suggest population control measures.
- Be aware of the population explosion and its effects on the economic development in Rwanda.
- Create an awareness of the policies of controlling population growth.
- Analyse the factors for the population growth

### **b) Teaching resources**

- Pictures
- Flip charts
- Manila papers
- Print outs for the activity
- Text books
- Internet

### **c) Prerequisite /Revision /introduction**

There is a direct link of Activity 9.2, intended to introduce the lesson, with what the lessons studied in Senior two. The activity 9.2 requests student-teachers to recall the knowledge and skills gained from previous lessons of senior two about population and settlement in Rwanda, this will be through diagnostic assessment/ evaluation. This will enable student-teachers to follow the new lesson.

### **d) Learning activity**

For this activity, the tutor will give student-teachers an opportunity to read the passage and give them time to reflect and answer the questions. The tutor is requested to try to integrate some generic competencies as well as cross-cutting taking into consideration the learning environment.

### **Possible answers to the Learning activity**

1. The factors for population growth, refer to student's book on population growth in Rwanda
2. For consequences of population growth on the environment, let them make discussion and refer them to student's book on population growth in Rwanda.



### **e) Application activity**

Observe the local environment near your home or school;

1. The factors that contribute to the growth of population in the observed area depend on area to area but refer them to student's book on population growth in Rwanda.
2. Different ways to address the challenge of the rapid growth in their village:
  - Promoting family planning techniques and education, for instance use of contraceptive and other methods of population control.
  - Legislation to emphasize adoption of such health care and services.
  - Legislation against early marriages especially of women. (In Rwanda mandatory, age is 21 years).
  - Improvements in the education facilities for women, which raises their status in society.

Refer to student's book on population growth in Rwanda.

## **9.6. Summary of the unit**

The unit 9 of Year one deals with population in Rwanda. This unit gives more details on population concepts and population growth.

## **9.7. Additional Information**

There is no considerably additional information the tutor requires. Nevertheless, the writers wish to convey the attention of the tutor to focus on use of maps, photographs and population pyramids to facilitate the student-teacher to be familiar with population growth, population problems and its consequences. The tutor is requested to support and stimulate student-teachers to make additional research via internet, field works and visiting libraries.

## **9.8. End unit assessment**

However, the student-teachers should give his or her opinion/view or self-constructed answers, their answer will rotate to the content in reference to the following possible answers for end unit assessment:

1. Refer to student's book on the Population concepts.
2. Factors that influence population distribution in Rwanda are:

Fertile soil, historical factors, government policy, availability of infrastructures, security, relief etc.

3. Refer to student's book on Population growth
4. Let student-teachers to search and discuss on types, causes and effects of migration. Refer to student's book on migration in Rwanda.

## 9.9. Additional activities

### a) Remedial activities

Distinguish these terms: Over population, under population, optimum population

#### Answers:

- **Over population** refers to a situation where population is more than the resources.
- **Under population** refers to a population when resources available are more than population while **optimum population** is a situation when population is equal to the available resources.

### b) Consolidation activities

Examine the negative effects of migration in the area of origin.

Answers: It causes depopulation; Limited labour; insecurity and under population.

### c) Extended activities

1. Evaluate the effects of over population in Kigali city.

Answers: Shortage of land, insufficient land for expansion, shortage of food, high cost of resource, traffic congestion.

2. Explain the role played by the population census in the development of Rwanda.

Answer: -It helps in the planning and management of people; it helps in the counting of people.

## UNIT: 10

# RURAL AND URBAN SETTLEMENT IN RWANDA

### 10.1. Key unit competence:

The student-teacher should be able to evaluate the impact of the rural and urban settlements on the sustainable development in Rwanda.

### 10.2. Prerequisite (knowledge, skills, attitudes and values)

The tutor should guide the student-teachers towards application of various knowledge, skills, attitudes and values, acquired and developed right away from senior two. It is vital to note that, student-teachers already have a handful of skills that can enable them to understand and master this unit.

There is a connection between the content of year one and senior two. The difference is that, at this level of year one, the content in the learner's book is more detailed to the settlement in Rwanda. The already acquired knowledge, skills, attitudes and values from past studies, should be used by the tutor to conduct diagnostic assessment as a way of evaluating each student-teacher's abilities

### 10.3. Cross-cutting issues to be addressed

There is a wide range of cross-cutting that can be integrated into the teaching of this Unit 10 year one. In the learner's book, the writers or authors used activities to integrate crossing-cutting issues. The most highlighted is that of environment and sustainability, Peace and values, and financial education.

Although, the writers might have utilized few cross-cutting issues, this should not be a barrier to the creativity and innovativeness of the tutor. Most of activities used are models.

It is very important to apply all possible cross-cutting issues where possible basing on the occasion. Examples are Genocide studies, gender, peace and values, inclusive education, standardization culture and comprehensive sexuality education. As a tutor, planning is a main preoccupation on how

and when to use and develop the above cross-cutting issues.

Peace and values, gender and financial education can be integrated using the class room situation

**Environment and sustainability:** the role of a tutor is to clarify the lesson, through all activities related with the topic. The tutor is requested to explain more on relationship between agricultural activities and the environment. Besides, tutor is an adviser to the student-teacher. He/she should help student-teacher to understand and have knowledge and skills on good farming methods which is environmental friendly.

**Peace and values:** Education could be addressed in the any activity that involves student-teacher to work in group. In any case, working in groups develops positive attitudes of someone who has peace. In any activity where tutor give tasks to the student-teacher he/she should reinforce the need of peace in the society.

**Financial education:** One of the primordial importance of agriculture is the provision of food. Additionally, agricultural products are sold to generate money to the farmers even to the country. The tutor should explain how agriculture should be respected and how it is beneficiary to many people in terms of money, food, job, skills etc.

**Inclusive education:** The tutor is advised to cater for special needs of student-teacher with disabilities. For example; the tutor has to use audio materials for students' visual impairments, audio-visual materials to those who have physical impairments so that they can see and hear the samples brought. The tutor should select conducive environment to all students so that students with disabilities can participate in learning activity.

#### **10.4. Guidance on introductory activity**

The introductory activity in this unit is provided to warm up student-teachers so that they can actively be involved in the lesson. The tutor has to conduct and allow student-teachers to make group discussions and give the answers to the questions provided in this part. Student-teachers are supposed to answer all questions. In case they fail to find out correct answers to the questions, tutor should not intervene immediately to provide possible right answers, but he/she should allow student-teachers to discover themselves the right answers through the learning and teaching process.

## 10.5. List of lessons/sub-heading

#	Lesson title	Learning objectives	Number of periods
1	Rural settlement	<ul style="list-style-type: none"><li>• Name the various types of rural settlement.</li><li>• Appreciate the types and the characteristics of rural settlement in Rwanda</li></ul>	1
2	Problems and solutions associated with rural settlement in Rwanda	<ul style="list-style-type: none"><li>• Evaluate and carry out a research on the Government policy towards the rural settlement schemes (Grouped settlement/ Imidugudu).</li></ul>	2
3	Urban settlement in Rwanda	<ul style="list-style-type: none"><li>• Give the characteristics of urban centres in Rwanda.</li><li>• State the factors favouring the growth of the urban centres in Rwanda.</li><li>• Identify the effects of the urban settlements</li><li>• Carry out an investigation on the causes and problems of the slums.</li></ul>	1
4	Assessment		1

### Lesson 1: Rural settlement

#### a) Learning objectives

- Name the various types of rural settlement.

- Appreciate the types and the characteristics of rural settlement in Rwanda

**b) Teaching resources**

For effective delivery of the lesson the tutor should avail the following resources: - Print outs for the activity, - Flip charts, - Manila papers, - Text books, - Internet, - Field work to the surrounding area or watching video

**c) Prerequisites/Revision/Introduction**

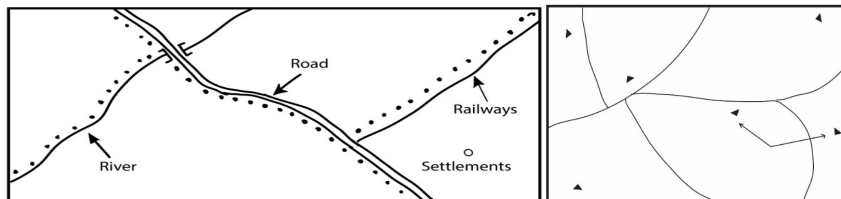
There is a direct connection of Activity 10.1, intended to introduce the lesson, with the lessons studied in senior two. The activity 10.1 requests student-teachers to recall the knowledge and skills gained from previous lessons of senior two about settlement in Rwanda, this will be through diagnostic assessment/ evaluation by tutor.

**d) Learning activities**

Possible answers to the **activity 10.1** are the following:

1. Place where one live may be a rural or in urban areas.
2. Refer to the types of settlement
3. Refer to the types of settlement

**e) Application activities**



## Lesson 2: Problems and solutions associated with rural settlement in Rwanda

**a) Learning objective**

- Evaluate and carry out a research on the Government policy towards the rural settlement schemes (Grouped settlement/ Imidugudu).

**b) Teaching resources**

In order to achieve learning objectives of this lesson, the following resources should be used:

- Geographical documents
- Maps, Illustration
- Internet
- Manila Paper or flip chart

#### c) Prerequisites/Revision/Introduction

In lesson 10.2 students will learn about the Problems and solutions associated with rural settlement in Rwanda. The tutor should engage learners in revision of previous lesson, and will establish the link between today's lesson and the previous lesson.

#### d) Learning activities

Possible answers to the **activity 10.2** are the following:

1. Refer to the learner's book on Some of the problems associated with rural settlements
2. Refer to the learner's book on Rwanda's government policy towards rural settlement schemes
3. Refer to the learner's book under Reasons for establishment of imidugudu settlement schemes in Rwanda

#### e) Application activities

Suggested answer to the **application activity 10.2** is the following:

Tutor should guide learners in deep discussion about the advantages and disadvantages of living in Imidugudu.

### Lesson 3: Urban settlement in Rwanda

#### a) Learning objective

- Give the characteristics of urban centres in Rwanda.
- State the factors favouring the growth of the urban centres in Rwanda.
- Identify the effects of the urban settlements
- Carry out an investigation on the causes and problems of the slums.

#### b) Teaching resources

During the teaching and learning process, the tutor will refer to the following teaching resources where possible:

- Pictures
- Manila papers



- Print outs for the activity
- Text books
- Internet
- Maps
- Field work to the surrounding area

**c) Prerequisites/Revision/Introduction**

The tutor has to introduce this lesson and link it with the previous lessons by asking some questions. The activity 10.3 intended to introduce lesson 3 has a link with the previous lesson studied before. The tutor has to help student-teachers to recall the previous knowledge and skills about Imidugudu scheme in Rwanda

**d) Learning activities**

Possible answers to the **activity 10.3** are the following:

1. Refer to the learner's book under Problems of the urban centres of Rwanda
2. Refer to the learner's book on solutions to the problems of urban centres

**e) Application activities**

The possible answers to the **application activity 10.3** are suggested as follows:

**1. Advantages**

- The process of urbanization contributes to an increase in labor productivity, allows solving many social problems of society.
- People who live in urban area tend to earn due to the availability of many jobs.
- As the economy increases, the whole society benefits from internal improvements, either through a richer tax base or through competition between private organizations.
- Urbanization offers real economic opportunities to people who would otherwise be destined to subsistence without hope of economic improvement.
- Another advantage of urbanisation is that it improves technology at a faster rate.

## Disadvantages

- Urbanisation has a direct greater impact on the environment and quality of life, pollution due to traffic, congestion of vehicles and poor collection of waste;
  - Price of the home: the price of homes is one of the main elements that are affected by the agglomeration in cities. Thus, living in a big city is always more expensive than in small urban centres.
  - Cost of mobility, this is greater in large cities, a factor that in fact decisively influences the first point (the price of housing), since the price you are willing to pay for a house depends largely on the displacement cost.
  - There is a high crime rate in urban centres than rural ones.
2. Refer to the learner's book on solutions to the problems of urban centres.

## 10.6. Summary of the unit

This unit 10, deals with settlement in Rwanda and more precisely types of settlement in Rwanda, characteristics of rural settlement, problems and solution of rural settlement, urban settlement, characteristics, functions of urban centres, major secondary cities, problems and solutions of urban centres in Rwanda.

## 10.7. Additional Information

The tutor is supposed to guide the learners on the case studies of secondary cities: Muhanga, Rusizi, Nyagatare, Musanze, Huye and Rubavu. The student-teachers will research on the reasons for their establishment, their motivation and challenges.

## 10.8. End unit assessment

Possible answers to the end unit assessment are suggested as follows:

**Question 1:** Refer to the learner's book on types of rural settlements

Question 2:

- a. Refer to the learner's book on factors influencing rural settlement in Rwanda.
- b. Refer to the learner's book on problems associated with rural settlements Rwanda.

**Question 3:** Refer to the learner's book on factors that influence rural settlements in Rwanda.

Positive effects of urban centres	Negative effects of urban centres
<ul style="list-style-type: none"> <li>• People who live in urban area tend to earn due to the availability of many jobs</li> <li>• Urbanization offers real economic opportunities to people who would otherwise be destined to subsistence without hope of economic improvement.</li> <li>• Another advantage of urbanisation is that it improves technology at a faster rate.</li> </ul>	<ul style="list-style-type: none"> <li>• Urbanisation has a direct greater impact on the environment and quality of life, pollution due to traffic, congestion of vehicles and poor collection of waste;</li> <li>• Price of the home: the price of homes is one of the main elements that are affected by the agglomeration in cities. Thus, living in a big city is always more expensive than in small urban centres.</li> <li>• There is high crime rate in urban centres than rural ones.</li> </ul>

## 10.9. Additional activities

### 10.9.1 Remedial activities

**Question:** Explain what urbanisation is?

**Answer:** Urbanization refers to the concentration of population and its activities such as social, cultural and economic in different cities

### 10.9.2. Consolidation activities

**Question:** Describe the major functions of cities in Rwanda

**Answer:** City functions can include:

- Serving as administration centre for the area around it
- Commercial centre: it sells expensive or rare commodities or services
- Entertainment centre: it offers sporting attractions, shopping areas, restaurant etc.

### 10.9.3. Extended activities

**Question:** Assess the contribution of city growth in the development of the country

**Answer:** The question requires both positive and negative contributions. Learners are requested to discuss and discover the opportunities that cities provide and challenges they face or cause.

## UNIT: 11.1

# AGRICULTURE IN RWANDA

### **11.1.1. Key unit competency:**

The student-teacher should be able to investigate the impact of various agricultural activities on the sustainable development in Rwanda.

### **11.1.2. Prerequisite (knowledge, skills, attitudes and values)**

The tutor should guide the student-teachers towards application of various knowledge, skills, attitudes and values, acquired and developed right away from senior one to year one. It is vital to note that, student-teachers already have a handful of skills that can enable them to understand and master this unit.

There is a connection between the content of year one and senior two. The difference is that, at this level of year one, the content in the student's book is more detailed to agriculture in Rwanda. The already acquired knowledge, skills, attitudes and values from past studies, should be used by the tutor to conduct diagnostic assessment as a way of evaluating each student-teacher's abilities

### **11.1.3. Cross-cutting issues to be addressed:**

There is a wide range of cross-cutting that can be integrated into the teaching of this Unit 11.1 year one. In the student's book, the writers or authors used activities to integrate crossing-cutting issues. The most highlighted is that of environment and sustainability, Peace and values, and financial education.

Although, the writers might have utilized few cross-cutting issues, this should not be a barrier to the creativity and innovativeness of the tutor. Most of activities used are models.

It is very important to apply all possible cross-cutting issues where possible basing on the occasion .Examples are Genocide studies, gender, peace and values, inclusive education, standardization culture and comprehensive sexuality education.As a tutor, planning is a main preoccupation on how and when to use and develop the above cross-cutting issues.

Peace and values, gender and financial education can be integrated using the class room situation

**Environment and sustainability:** the role of a tutor is to clarify the lesson, through all activities related with the topic. The tutor is requested to explain more on relationship between agricultural activities and the environment. Besides, tutor is an adviser to the student-teacher. He/she should help student-teacher to understand and have knowledge and skills on good farming methods which is environmental friendly.

**Peace and values** education could be addressed in the any activity that involves student-teacher to work in group. In any case, working in groups develops positive attitudes of someone who has peace. In any activity where tutor give tasks to the student-teacher he/she should reinforce the need of peace in the society.

**Financial education:** One of the primordial importance of agriculture is the provision of food. Additionally, agricultural products are sold to generate money to the farmers even to the country. The tutor should explain how agriculture should be respected and how it is beneficiary to many people in terms of money, food, job, skills etc.

**Inclusive education:** The tutor is advised to cater for special needs of student-teachers with disabilities. For example; the tutor has to use audio materials for students' visual impairments, audio-visual materials to those who have physical impairments so that they can see and hear the samples brought. The tutor should select conducive environment to all students so that students with disabilities can participate in learning activity

#### **11.1.4. Guidance on introductory activity:**

The introductory activity in this unit is provided to warm up student-teacher so that they can actively be involved in the lesson. The tutor has to conduct and allow student-teacher to observe critically the photographs provided. Student-teachers are supposed to answer all questions. In case they fail to find out correct answers to the questions, tutor should not intervene immediately to provide possible right answers, but he/she should allow student-teacher to discover themselves the right answers through the learning and teaching process.

### 11.1.5. List of lessons/sub-heading

S/N	Lesson title	Learning objectives	Number of periods
1	Crop cultivation in Rwanda	<ul style="list-style-type: none"><li>• Identify the different crops grown in Rwanda.</li><li>• Outline the advantages and disadvantages of crop farming in Rwanda.</li><li>• Identify the ways of improving crop production in Rwanda.</li><li>• Describe the advantages and disadvantages of crop farming in Rwanda.</li><li>• Do research on ways of improving agriculture in Rwanda.</li><li>• Appreciate the importance of agriculture to the economy of Rwanda.</li><li>• Show continual desire to improve the agriculture system in Rwanda.</li></ul>	3



2	Livestock farming in Rwanda	<ul style="list-style-type: none"> <li>• Describe the advantages and disadvantages of crop farming in Rwanda.</li> <li>• Do research on ways of improving agriculture in Rwanda.</li> <li>• Describe the different systems of rearing animals in Rwanda, and their characteristics.</li> <li>• Analyse the contributions and problems associated with the livestock farming in Rwanda.</li> <li>• Carry out a research on ways of improving livestock farming in Rwanda.</li> <li>• Carry out a research on the importance of keeping smaller animals in Rwanda.</li> <li>• Investigate the importance of agriculture to the economy of Rwanda Show respect for keeping smaller animals in Rwanda</li> <li>• Show concern for the importance of agriculture to the economy of Rwanda.</li> </ul>	2
3	End of unit assessment		1
	Total		6

## **Lesson 1: 11.1: Crop Cultivation in Rwanda**

### **a) Learning objectives:**

- Describe the characteristics of the different crop cultivation methods
- Appreciate the reasons for increasing the agriculture production.

### **b) Teaching resources**

For effective delivery of the lesson the tutor should avail the following resources: - Pictures - Flip charts - Manila papers - Print outs for the activity - Text books - Internet - Field work to the surrounding area or watching video

### **c) Prerequisite/introduction:**

There is a direct link of Activity 11.1.1, intended to introduce the lesson, with the lessons studied in senior two. The activity 11.1.1 requests student-teachers to recall the knowledge and skills gained from previous lessons of senior two about Agriculture systems in Rwanda, this will be through diagnostic assessment/ evaluation by tutor. This will enable student-teachers to follow the lessons by linking it to Rwandan agricultural systems.

### **d) Learning activity 11.1.1**

Guide and facilitate student-teachers to work in groups and discuss a set of questions in relation to agriculture, especially crop cultivation. Student-teachers should use the knowledge, skills acquired in their past studies in their discussion to answer questions.

The student-teachers will be engaged in activities like discussions, asking and answering questions by referring to the student's book

Possible answers for learning activity 11.1.1 include:

1. The subsistence crop cultivation refers to the growing of crops on a small scale for domestic purposes and the surplus for sale.
2. The subsistence crops that are grown in your region maize, irish potatoes, peas, beans etc
3. The characteristics of subsistence farming refers to student's book on point 11.1.1.1
4. Climate change may influence negatively and positively depending on the kind of crops

**e) Application activity 11.1.1.**

1. Suggest measures that should be taken to address the challenges facing crop growing in swamps of Rwanda

**Possible solutions:**

- Avoid soil erosion
  - Terracing steep slop
  - Good management of swamps and marshes
2. Analyse ways in which plantation agriculture can be improved in Rwanda

**Possible solutions:**

- Land use Consolidation
- Mechanization
- Improve the transportation facilities Provide loans for agriculture
- Attract foreign investors

**Lesson 2: 11.2: Livestock farming in Rwanda**

**a) Learning objective:**

- Describe the advantages and disadvantages of crop farming in Rwanda.
- Do research on ways of improving agriculture in Rwanda.
- Describe the different systems of rearing animals in Rwanda, and their characteristics.
- Analyse the contributions and problems associated with the livestock farming in Rwanda.
- Carry out a research on ways of improving livestock farming in Rwanda.
- Carry out a research on the importance of keeping smaller animals in Rwanda.
- Investigate the importance of agriculture to the economy of Rwanda Show respect for keeping smaller animals in Rwanda
- Show concern for the importance of agriculture to the economy of Rwanda.

## **b) Teaching resources**

For effective delivery of the lesson the tutor should avail the following resources: - Diagrams - Pictures - Flip charts - Print outs for the activity - Text books - Internet - Field work

## **c) Prerequisite/introduction:**

There is a direct link of Activity 11.1.2, intended to introduce the lesson, with the lessons studied in senior two. The activity 11.1.2 requests student-teachers to recall the knowledge and skills gained from previous lessons of senior two about Agriculture systems in Rwanda, this will be through diagnostic assessment/ evaluation by tutor. This will enable student-teachers to follow the lessons by linking it to Rwandan agricultural systems.

## **d) Learning Activity 11.1.2**

### **Possible answers:**

1. Refer to the student's book under the problem of livestock.
2. Refer to the student's book on the characteristic of small animals.
3. People get manure, money, receive visitors, etc.

## **e) Application activity 11.1.2**

1. Identify the key factors influencing ranching in Rwanda

### **Possible answers:**

- Availability of land
  - Availability of capital
  - Availability of man power
  - Good climate
2. Describe challenges facing nomadic pastoralism in Rwanda

### **Possible answers:**

Refer to the student's book on problems of pastoralism

1. Suggest different ways of improving livestock farming in your region.

### **Possible answers:**

- Provide loans to pastoralists in order to improve the quality of animals reared
- Educating the livestock farmers on the importance of quality

- Fencing and paddocking to ensure controlled grazing
- Establishment of livestock processing industries.
- Introducing nutritious and drought resistant grasses (such as Alfalfa, elephant grass, Nandi grass, etc) into pastures to ensure constant supply of pasture.
- Establishing markets in pastoral areas for easy marketing of animals and animal products

### **11.1.6. Summary of the unit**

Unit 11.1 of year one deals with agriculture in general. The content describes different crops methods used in Rwandan agriculture. Emphasis on factors, challenges in agriculture, and suggest solution. Agriculture as one of the ancient activity, deals also with small animals, livestock farming.

### **11.1.7. Additional information**

The types of agriculture change from time to time due to many factors like population pressure and climate change where pastoralism change into Zero grazing and type of crops depends on the climate.

### **11.1.8. End unit assessment**

Tutor guides student-teachers to answer all questions in relation to the passage that reflect on the entire unit.

Below are suggested answers

1. The impact of population pressure on the agriculture:
  - a. Reduce land for cultivation
  - b. Destroy crops
  - c. Are used as manpower
  - d. Increase production
  - e. Protect crops.
2. To improve agricultural productivity:
  - a. The farmers should be organised into cooperatives.
  - b. Transport facilities should be established and the existing ones rehabilitated.
  - c. Cross breeding of traditional breeds with improved hybrids.

- d. Training farmers in the keeping of different kinds of smaller animals.
- e. Introduction of modern facilities for different animals.
- 3. a) The economic benefits: development of infrastructure, provide income, etc.  
b) The social benefits: provide food, increase life standard.
- 4. The role played by agriculture: raw material to industries but also offer employment opportunities to a very large proportion of population.
- 5. The relationship between livestock and crop cultivation: they interdepend one on one another.

### 11.1.9. Additional activities

#### a) Remedial Activities

- 1. Define the term agriculture

**Answer:** refers to the student's book on introduction of agriculture

- 2. Distinguish Zero farming from small animal farming

**Answer:** refers to the student's book under livestock agriculture

- 3. Identify at least 3 advantages and disadvantages of crop cultivation

**Answer:** refer to the student's book under crop cultivation

#### b) Consolidation activities

- 1. Agriculture is classified into two broad categories. Identify them.

**Answer:** These are **crop cultivation and livestock** farming

- 2. How does commercial farming differ from subsistence farming ?

**Answer:**

- i. Commercial farming involves farming for profit. The farmer intends to grow crops or rearing animals to sell for as much money as possible. These farms can be arable, (Just growing crops), pastoral (just rearing animals) or mixed (both arable and pastoral)
- ii. Subsistence farming is a farming whose products are intended to provide basic needs of the farmer, with little surplus for marketing.

**c) Extended activities:**

1. What is food insecurity?

**Answer:** it is lack of basic food. This occurs when a person is unable to obtain a sufficient amount of healthy food on a day-to-day basis. Because of food insecurity, people suffer from chronic hunger and poor nutrition, and are, therefore, less likely to have healthy and productive lives

2. Suggest measures to control famine in a sustainable way

**Answers:**

- Providing aid and relief to people or countries that are suffering.
- Making sure that domestic agriculture continues to produce what is needed.
- Importing food stuffs that are not locally produced.
- Reducing income inequality and poverty by introducing rural development schemes that include skills training and supporting local farmers.
- Exporting food excesses at affordable prices.

**Skills lab**

Student-teachers already have necessary skills of doing a business plan. Therefore, they should use it to create a business based on agricultural products either small animal or crop growing business, but to be more profitable, innovation and creativity should be added.



## UNIT: 11.2

# MINING IN RWANDA

### **11.2.1. Key unit competence:**

The student-teacher should be able to investigate the impact of mining on the sustainable development in Rwanda.

### **11.2.2. Prerequisite knowledge and skills/ Introduction**

Unit 11.2 of Mining year one requires the student-teachers to have at least successfully covered the content under Senior 2, unit 18, senior 3 and unit 13. Therefore, the tutor should realize that the two units provide the prerequisite knowledge to the students. This implies that student-teacher can participate conveniently in the teaching and learning of this unit.

### **11.2.3. Cross-cutting issues to be addressed**

Unit 11.2 of mining in Rwanda, is directly connected to the cross-cutting issue of environment and sustainability. The tutor should therefore, enable the student-teachers to realize that if mining operations are not monitored and executed in a recommendable way, the environment is affected and eventually the climatic changes associated with global warming will set in. However, the major cross-cutting issues that the tutor can integrate include the following: Environment and sustainability, Standardization culture, Inclusive education, Gender education, Peace and values education

In this unit, the tutor has the mandate of emphasizing other cross-cutting issues such as inclusive education, peace and values education. Such may not be applied using activity but in the process of teaching, look for an opportunity of saying something about the two Cross-cutting issues.

### **11.2.4. Guidance on introductory activity**

The tutor will ask students to read a set of questions related to introductory activity. The student-teachers will try to answer the questions. Student-teachers may not be able to get the right answers but they are requested to predict possible answers. When the student-teachers fail to come up

with right answers to the questions related to introductory activity, the tutor will not immediately provide the required answers rather he /she should let students get the real answers through the course of learning and teaching process. This implies that student-teachers will associate this lesson with the content learnt in the previous lessons of S2.

### 11.2.5. List of lessons /Sub-heading

	Lesson title	Learning objectives	Number of periods
1	Types, importance, problems and their solutions to mining in Rwanda	<ul style="list-style-type: none"> <li>• Identify the major minerals in Rwanda</li> <li>• State the factors affecting the exploitation of minerals in Rwanda.</li> <li>• Identify the importance of mining to the economy of Rwanda.</li> <li>• State the problems affecting mining.</li> <li>• Create a sketch map of Rwanda to identify and locate the major minerals in Rwanda.</li> <li>• Do research on the factors affecting the exploitation of minerals in Rwanda.</li> <li>• Evaluate the importance of mining to the economy of Rwanda.</li> <li>• Analyse the problems affecting mining in Rwanda and suggest the solutions</li> </ul>	3
2	End unit assessment		2

## **Lesson 1: Types, importance, problems and their solutions to mining in Rwanda**

### **a) Learning objective**

- Identify the major minerals in Rwanda
- State the factors affecting the exploitation of minerals in Rwanda.
- Identify the importance of mining to the economy of Rwanda.
- State the problems affecting mining.
- Create a sketch map of Rwanda to identify and locate the major minerals in Rwanda.
- Do research on the factors affecting the exploitation of minerals in Rwanda.
- Evaluate the importance of mining to the economy of Rwanda.
- Analyse the problems affecting the mining in Rwanda and suggest the solutions.

### **b) Teaching resources**

The lesson to be effectively taught, the tutor should ensure that the following teaching resources are in place.

- Internet
- Text books
- The map of Rwanda
- Drawing materials such as pencils, coloured markers and flip papers.
- Photographs of some mining activities taking place in different district.
- Manila papers for group work drawing.

### **c) Prerequisites/ Revision /Introduction**

The tutor should take note of the skills the student-teachers must have acquired from the two levels (Senior 2, unit 18, senior 3, unit 13) where they covered a lot in relation to the mining sector.

This provides the tutor the chance of creating various activities, where the student-teachers can be engaged in the introductory session, using the past studies. Here the tutor can design activities using methods of

recap such as, Mind mapping, run to your friend, speed betting, throw the ball game, cabbage Game and many others.

Thereafter, the tutor introduces the actual content of the lesson. This will have enabled the student-teachers to review and remember the information about mining. Therefore, when well executed the instructional objectives of the lesson are achieved.

The tutor should be observant to identify students that may have not covered the appropriate information concerning mining in their previous school/levels.

#### **d) Learning activities:**

1. The leaning activity needs the student-teachers to use an atlas book to know the major areas where minerals are located. The answers therefore, can be in line with the lesson 11.2. on the major mining areas in Rwanda in student's book.

2. Refer to the student's book lesson 11.2. on major mineral areas and internet, they draw the sketch map of Rwanda showing the various mining areas and the types of minerals found in these areas.

#### **e) Application activities**

1. The negative effects of mining on the physical environment of Rwanda: Destroy the earth crust, destroy crops, pollute the atmosphere, remove fertile soil for agriculture, pollute water, land and air, spread of diseases, Loss of well-balanced eco-system, they are barriers to transport
2. Ways of protecting the environment from the damage caused by mineral exploration and exploitation are:
  - Used advanced technology.
  - Use skilled labours.
  - Planting trees after mining.
  - Use better methods of mining.
3. The low levels of mineral exploitation in Rwanda is due to shortage of skilled labor, not appropriate methods of mining, the size of ore mineral, shortage of transport facilities, remote areas, Shortage of enough capital, Shortage of enough power and energy, most of the large deposits occur deep underground, Etc.

### **11.2.6. Summary of the unit**

This unit 11.2, deals with the types of mineral, importance of mining to the economy, products from the minerals in Rwanda, Problems affecting the development of mining industry in Rwanda and their solutions.

### **11.2.7. Additional information**

The student-teachers should be guided on how to execute transfer of knowledge and skills to find responses to any associated learning activity or any other assessment task subjected to them.

### **11.2.8. End of Unit Assessment**

#### **Proposed answers**

1. Refer to the student's book under 11.2. Importance of mining to the economy of Rwanda.
2. Impacts of mining on the environment:
  - Shortage of clean and safe water for domestic use
  - Non-productive soils
  - Spread of diseases
  - Increased number of deaths
  - Loss of well-balanced ecosystem
  - Lack of biodiversity
  - Degradation of the environment
3. Refer to the student's book under 11.2. Possible solutions to the problems of mining in Rwanda.

The program can include also the following:

- Registration of all mining companies.
- Afforestation reforestation of areas around the mines
- Mass education
- Environmental impact assessment reports be made
- Exploit minerals that require underground methods of mining.

### **11.2.9. Additional activities**

#### **11.2.9.1. Remedial activities:**

1. Describe the distribution of minerals in Rwanda.

Possible answers refer to the student's book

2. Give the suitable methods of mining the following minerals;
  - a. gold
  - b. Coltan
  - c. Methane gas

**Possible answers:**

- a. Panning
- b. Panning/placer mining
- c. Drilling

**11.2.9.2. Consolidation activities**

1. Identify any three minerals extracted in Rwanda.

**Possible answers:**

Refer to the student's book under 11.2. Products from minerals.

2. Give five factors that favour the development of mining in Rwanda.

**Possible answers:**

Availability of capital, size of mineral, market of mineral, cheap labour, method of mining.

**11.2.9.3. Extended activities**

1. Evaluate the effects of the overdependence of Middle East countries on oil and natural gas.

**Possible answers:**

- Loss of revenue
  - Over exploitation
  - Stand a risk of not getting another source of fuel.
2. Assess the contribution of petroleum to the people of Rwanda.

**Possible answers**

**Petroleum contribute in:**

- construction of roads
- transport of people
- industries
- Medicine

**Skills lab**

Let student-teachers think on a career they can do on mineral production after finishing their studies.

## UNIT: 11.3

# POWER AND ENERGY IN RWANDA

### 11.3.1. Key Unit competence:

The student-teacher should be able to investigate the impact of Power and Energy production on the sustainable development in Rwanda.

### 11.3.2. Pre-requisite (knowledge, Skills, attitudes and values)

Unit 19 of senior two and unit 14 of senior three introduced the study of power and energy and discuss about major sources and forms energy sources, different problems associated with the physical, human and economic environment and suggest solutions used in Rwanda. This unit greatly constitutes a strong prerequisite that student-teachers can use to understand better the content of this unit 11.3 of Year one. It's very important to note that, they already have necessary knowledge, skills and attitudes. The difference is that, at this level the content in the student's book is more detailed and almost differ from what they learnt previously.

The already acquired knowledge, skills, attitudes and values from previous classes, should be used by the tutor to conduct diagnostic assessment as a way of evaluating each student-teacher's abilities and establishing connections between the new learning activities and the previous ones.

In unit 11.3 of Year one entitled the Power and Energy in Rwanda, the introductory activity presented in the student's book intends to remind student-teachers that the power and energy sources are used and exploited in different ways. This enables student-teachers evaluate the success of the sustainable development projects in the power and energy production in different parts of Rwanda. It was compulsory to integrate in this unit a crosscutting issue of environment and sustainability, inclusive education, peace and values which are briefly developed in the following paragraphs.



### 11.3.3. Cross-cutting issues to be addressed

There are many cross-cutting issues that can be highlighted in this lesson. The following list of cross-cutting issues can be applied where possible depending on occasion, for example:

a) **Environment and sustainability:** The issue of environment and sustainability will be integrated through all learning activities to address the problems related to power and energy. Thus, the tutor is required to explain to students about the alternative sources of power and energy that are friendly to the environment, for the use of natural gas for cooking and heating purposes in their local environment.

b) **Peace and Values Education:** Education on peace and values will constitute a component that addressed during the class situation whereby a tutor can refer to learning activities like the public lighting which strengthens security.

c) **Financial Education:** On one side it can be addressed during the class situation whereby a tutor explains to the student-teachers the most appropriate use of power and energy either at school or at home. For instance, student-teachers should not waste power and energy. They should remember to switch off lights especially during the day or other power tunnels when they are not in use.

d) **Inclusive education:** The tutor should ensure that the student-teachers with impairments or special needs like physical disability to cope with the situation. In this context the tutor can use a video or film containing different power and energy samples collected from outside the school compound or the tutor can even bring different power and energy samples in classroom setting for those who will not be able to reach the place. For student-teachers with hearing disabilities or communication difficulties, in different learning activities the tutor will help them using enough illustrations, diagrams and sign languages where possible. For student-teachers with visual impairment, the tutor helps learners to use their other senses like hearing and touch because these senses can help them to play and carry out some of learning activities thus promoting their learning and development. In this context the tutor is supposed to provide sufficient explanations related to different learning activities so that student-teachers with visual impairment can carry out the designed learning activities using their hearing.

### 11.3.4. Guidance on introductory activity

The tutor should let his /her student -teachers read carefully the introductory activity and answer the questions linked to the given activity.

When the student-teachers fail to come up with right answers to the questions related to the introductory activity, the tutor will not immediately provide the required answers rather he /she should let student-teachers get the real answers through the whole learning and teaching process.

### 11.3.5. List of lessons /Sub-heading

	Lesson title	Learning objectives	Number of periods
1	Major sources, forms of energy and importance of energy in Rwanda	<ul style="list-style-type: none"> <li>• Recall the forms of energy used in Rwanda and the difference between the renewable and non-renewable energy.</li> <li>• State the factors favouring the power production in Rwanda.</li> <li>• Distinguish between different sources of energy used in Rwanda.</li> <li>• Analyse the factors that hinder the potential exploitation of rivers in Rwanda in the production of power and energy.</li> <li>• Evaluate the importance of power and energy in Rwanda.</li> </ul>	2
2	Problems hindering the development of energy and their possible solutions	<ul style="list-style-type: none"> <li>• Identify the factors that hinder the potential exploitation of rivers in Rwanda in production of the power and energy</li> <li>• Investigate the problems hindering the development of energy and suggest possible solutions.</li> <li>• Show respect for the efforts in the development of power and energy in the country.</li> </ul>	2
3	End Unit Assessment		1
	Total		5

## **Lesson 1: Major sources, forms of energy and importance of energy in Rwanda**

### **a) Learning objective**

- Recall the forms of energy used in Rwanda and the difference between the renewable and non-renewable energy.

### **b) Teaching resources:**

During the teaching and learning process, the tutor should refer to the following teaching resources where possible: - Pictures - Flip charts - Manila papers - Print outs for the activity - Text books - Internet - Maps - Field work to the surrounding area.

### **c) Prerequisites /Revision/ Introduction**

Tell the student-teacher to observe critically the pictures in the student's book on different forms of power and energy. Student-teacher should identify the different types of power and energy. Ask student-teacher to research on other types of energy and describe their contribution to sustainable development.

### **d) Learning activity**

After reading the passage the student-teacher guided by the tutor respond to learning activity

1. Other source of energy not mentioned in the passage are Solar energy, Hydro Electric Energy, petroleum, Wind energy,
2. The importance of power and energy in Mahirwe's family is to facilitate cooking and watch television

### **e) Application activities**

1. Hydroelectric power is mostly used than other sources of energy in Rwanda Because of a big number of rivers, waterfalls, manpower, capital etc
2. The advantages of oil fuel over solar energy:
  - It facilitates Transports
  - It facilitates industrial activity.
  - It facilitates working of generators.
  - It facilitates electrification.

## **Lesson 2: Problems hindering the development of energy and their possible solutions**

### **a) Learning objectives**

- -Identify the factors that hinder the potential exploitation of rivers in Rwanda in production of the power and energy
- -Investigate the problems hindering the development of energy and suggest possible solutions.
- -Show respect for the efforts in the development of power and energy in the country.

### **b) Teaching resources**

- Manila papers - Print outs for the activity - Text books – Internet - Maps - Field work to the surrounding area

### **c) Prerequisites /Revision/ Introduction**

Based on the acquired knowledge in the past and the research made student-teachers outline the problems of mining and their solutions

### **d) Learning activities**

Refer to student's book under 11.3.2 Problems hindering the development of energy, their possible solutions in Rwanda.

### **e) Application activities**

The presence of waterfalls is responsible for the development of power and energy production in Rwanda in different ways as a source of energy and the major factor in hydroelectric power production. For more answers refers to student's book under 11.3.1 The factors favouring the power production in Rwanda.

### **11.3.6. Summary of the unit**

Unit 11.3 of Year one deals with power and energy in Rwanda. The key points of content to be highlighted in the unit are sources and forms of energy, importance of power and energy, problems and possible solutions to power and energy in Rwanda.

### 11.3.7. Additional Information

There are many projects concerning energy and power production like Nyabarongo II, Rusumo, Geothermal and different project on rivers to make research on water projects and production.

### 11.3.8. End unit assessment

However, the student-teachers should give their own opinion/view or self-constructed answers, their answers will rotate on the content in reference with the following possible answers for end unit assessment:

1. Even if it is known that it is a non-renewable, if the oil supply gets exhausted one day this would affect our life style in different domains by limiting transport, by causing shortage of product from oil and by stopping generators using oil.
2. The government of Rwanda advocates for transmission and distribution of power and energy to rural areas in order to develop these areas, to attract investors towards rural areas and to limit rural urban migration.
3. The effects of power generating stations and operation on the environment, they cause pollution (land, water, air, sound), destruction of vegetation, destroy infrastructure.
4. Ways in which the government will cope with the increasing demand for power with the increasing population. Refer to student's book under 11.3.2 Possible solutions to the problems affecting power and energy production in Rwanda.
5. The factors affecting oil fuel production in Rwanda are low technology, unskilled labour, the size of deposited oil. For further factors refer to student's book under 11.3.2 Possible solutions to the problems affecting power and energy production in Rwanda.

### 11.3.9. Additional activities

#### a) Remedial Activities:

The following are questions that the tutor can use for remedial activities (activities for slow student-teacher). They are rephrased in a way that the slow student-teacher can also be assisted to raise their self-confidence and at the same time learn in the simplest possible way.

1. Identify the main sources of power and energy in Rwanda

**Answer:** hydropower, solar energy, thermal energy

2. Give 2 examples of renewable energy sources

**Answer:** wood fuel, hydroelectricity, solar energy

3. Give the importance of power and energy

**Answer:** for cooking, lighting and heating

### **b) Consolidation activities:**

Establish the link between power and energy

**Answer:** Power is the capacity of energy, which is being used, while energy is 'joules', power is 'joules per second'. In other words, Power is 'watt' and Energy is 'watt-hour'. Another difference is that energy can be stored whereas power cannot be stored.

### **c) Extended activities**

The following is a suggested question for gifted and talented students.

Describe the following energy sources.

- i. Non-renewable energy sources;
- ii. Renewable energy sources

**Possible answers:** Before coming up with answers to this question, student-teachers should first define each sources of energy. The definitions associated with the key terms are very important. The student-teachers may say that Non-renewable resources are those when exhausted they cannot be re-used, whereas renewable resources are inexhaustible.

### **Skills lab**

Let student-teachers think deeply on a source of energy that will provide light or heat but at the same time not deteriorating the environment.

## UNIT: 11.4

# INDUSTRIALISATION IN RWANDA

### 11.4.1. Key Unit competence:

The student-teacher should be able to explain the impact of industrialization on the sustainable development in Rwanda

### 11.4.2. Pre-requisite (knowledge and skills, attitude and values)

Unit 11.4 of Year one introduces the study of industry in Rwanda. They studied types of industries, importance, problems of industrial development in Rwanda. They also studied solutions to mitigate the problems of industries in Rwanda. This will help student-teachers to understand appropriate measures to be taken in conserving the environment.

### 11.4.3. Cross-cutting issues to be addressed

A citizen has to conserve his environment, by using it appropriately. The management of the environment must be emphasized and various methods should be adopted. In this unit, emphasis must be put on the need for environment and sustainability based on knowledge to mitigate the problems caused by industry; the student-teachers should know how to protect their environment. Financial education is another cross-cutting issue that is linked to the study of the economic importance of industries. This economic activity has helped people to earn a living and national income for sustainable development.

Standardization culture is another cross-cutting issue that is linked to the study of various industrial products produced by major industries. These products must have a measurable standard for people's health.

### 11.4.4. Guidance on introductory activity

The introductory Activity aims at highlighting the knowledge, skills and attitudes that Student-teachers acquired previously in classes. This activity prepared, requires Student-teachers to put to better use of all the competences, knowledge together with attitudes in understanding the



new topic. Activities in this unit 2 can be answered by most of the Student-teachers. The tutor can provide enough time for every student-teacher so that individual participation can be respected. The intention of this activity is to see the ability of each Student- teacher so that throughout the unit the tutor plans on how to aid his/ her Student-teachers.

The way answers are provided for the introductory activity, some require reviewing the past studies while others require Student- teachers to think deeply and read geographical documents.

#### 11.4.5. List of lessons /Sub-heading

	Lesson title	Learning objectives	Number of periods
1	Industry and factors affecting the location of industries in Rwanda	<ul style="list-style-type: none"> <li>• Recall the definition of industry.</li> <li>• State the factors influencing industrial development in Rwanda.</li> <li>• Explain the factors influencing industrial development in Rwanda.</li> <li>• Show concern for the factors affecting the development of industries in Rwanda.</li> </ul>	2
2	The importance, Problems affecting industrial development and their solutions in Rwanda	<ul style="list-style-type: none"> <li>• Identify the importance of industries in Rwanda.</li> <li>• Identify the problems affecting industrial development in Rwanda.</li> <li>• Appreciate the importance of industrial development to the economic growth of the country.</li> <li>• Investigate the problems affecting industrial development in Rwanda.</li> </ul>	2

3	Environmental and health issues associated with industrialization and ways to mitigate them	<ul style="list-style-type: none"> <li>• Outline the environment and health issues associated with industrialisation.</li> <li>• Show resilience for the environmental and health problems resulting from industrialisation</li> <li>• Investigate the environment and health issues associated with industrialisation.</li> </ul>	2
4	End Unit Assessment		1

## Lesson 1: Industry and factors affecting the location of industries in Rwanda

### a) Learning objectives

- Recall the definition of industry.
- State the factors influencing industrial development in Rwanda.
- Explain the factors influencing industrial development in Rwanda.
- Show concern for the factors affecting the development of industries in Rwanda.

### b) Teaching resources:

For effective delivery of the lesson, you should ensure that you have the following resources and other appropriate teaching aids: -Text books  
-Sample maps -Internet

### c) Pre-requisites/ Revision /Introduction

This topic on industrialization was discussed in senior 2 and 3. It is important to link the content studied with what is going to be learnt in year one.

Facilitate the student-teachers to review senior 2 and 3 contents by asking them to explain the types and factors influencing industrial development in Rwanda. After this review, using the photograph provided in the student's book, student-teachers should be able to answer the learning activity.

#### **d) Learning activities:**

Refer to the learning activities 11.4.1.in the student's book

Help student-teachers to work in groups, they should be able to identify types of industries and find out the factors that influence their location and development. Their answers should involve the integration of generic competences such as critical thinking, cooperation, communication, research and problem-solving skills.

Engage student-teachers in activities like discussion, asking and answering questions and for more answers they are referred to the student's book.

#### **e) Application activities**

Refer to the application activities 11.4.1 in the student's book

Student-teachers are asked to differentiate industry from industrialization, explain factors influencing industrial development and factors leading to its location. They will use the content given in the student's book on 11.4.1. Industry and factors affecting industries in Rwanda to answer these questions

### **Lesson 2: The importance, Problems affecting industrial development and their solutions in Rwanda**

#### **a) Learning objectives:**

- Identify the importance of industries in Rwanda.
- Identify the problems affecting industrial development in Rwanda.
- Appreciate the importance of industrial development to the economic growth of the country.
- Investigate the problems affecting industrial development in Rwanda.

#### **b) Teaching resources: -Text books -Internet - Other geographical documents**

#### **c) Pre-requisites/ Revision /Introduction.**

Student-teachers should briefly explain importance, problems and their

solutions for industrial development in Rwanda. Supplement the answers given by student-teachers.

#### **d) Learning activities**

Refer to the learning activities 11.4.2 in the student's book

Student-teachers are asked to explain the importance of industries in a country. Guide them to get the answers in the passage which is: providing job, to get out of poverty and to be proud of their job. The problems facing and their solutions refer to the student's book under 11.4.2. The importance, Problems affecting industrial development and their solutions in Rwanda; the answers should involve the integration of generic competences such as critical thinking, cooperation, communication, research and problem solving skills.

Engage student-teachers in activities like discussion, asking and answering questions and for more answers they are referred to the student's book.

#### **e) Application activities**

Refer to the application activities 11.4.2 in the student's book

Student-teachers are asked to explain with supporting evidences how Made in Rwanda policy is one of the solutions to the problems that affect industrial development of Rwanda. They will use the content given in the student's book and other geographical documents.

### **Lesson 3: Environmental and health issues associated with industrialization and ways to mitigate them**

#### **a) Learning objectives**

- Outline the environment and health issues associated with industrialisation.
- Show resilience for the environmental and health problems resulting from industrialisation
- Investigate the environment and health issues associated with industrialisation.

#### **b) Teaching resources:**

-Text books -Internet -Other geographical documents.

### **c) Pre-requisites/ Revision /Introduction.**

Student-teachers are asked to find out the impacts of industrialization and to suggest solutions to the impacts of industries. Supplement the answers given by student-teachers and introduce the content related to problems resulting to the effects of industrialization and ways to mitigate them.

### **d) Learning activities**

Refer to the learning activities 11.4 in the student's book

Guide them in discussion about the impact of industrialization on the environment and on human life and ways in which the effects of industrialization can be addressed and their negative impacts lessened. Afterwards refer them to the student's book for problems resulting from industrial development and ways to mitigate them. They should present their findings in class. Their answers should involve the integration of generic competences such as critical thinking, cooperation, communication, research and problem-solving skills.

Engage student-teachers in activities like discussion, asking and answering questions and for more answers they are referred to the student's book on 11.4.3. Environmental and health issues associated with industrialization and ways to mitigate them.

### **e) Application activities**

Refer to the application activities 11.4.3 in the student's book

Student-teachers are asked to visit an industry. They will use the content given in the Student's book and other geographical documents to explain the effects of the industry on the environment and on human health and Suggest ways to mitigate the impacts

## **11.4.6. Summary of the unit**

This unit covers definitions, factors influencing location and development of industries, importance of industries and problems affecting industrial development, impacts of industrialization in Rwanda and ways to mitigate them. This helps the student-teachers to internalize financial education as a cross cutting issue and know how man has utilized the available resources for industrial development. The common phenomena like industrial pollution which requires control measures creates awareness for environmental protection hence integration of environment and sustainability as a cross cutting issue.

### **11.4.7. Additional Information**

It is very important for student-teachers to link the prior knowledge acquired in senior 2 and 3 to what is contained in this unit. When you are teaching this unit, you should use local examples of industries in your districts. Make comparison between different regions in relation to industrial development.

It is therefore necessary that where possible methodology can be changed and activities adjusted to achieve learning objectives.

### **11.4.8. End of unit assessment Questions**

#### **Guidance to answers**

1. Reasons why industries are important in Rwanda.

Facilitate student-teachers to share the answers by using experience in their community; and refer to the student's book on importance of industries

2. The problems that affect industrial development in Rwanda and their solutions.

Guide student-teachers to describe the problems of industrial development and their solutions in Rwanda and refer to the student's book on the problems of industries and their solutions in Rwanda.

3. Explain three environmental issues associated with industrialization in Rwanda.

In groups let student-teachers brainstorm on environmental issues associated with industrialization in Rwanda. They should use local examples from developing countries and get references in student's book on the Environmental and health issues associated with industrialization and ways to mitigate them.

### **11.4.9. Additional activities**

#### **a) Remedial activities (for slow student-teacher)**

- i. Define an industry.
- ii. Outline five examples of industries in Rwanda.
- iii. Explain the meaning of industrialization.

These are questions that require low order thinking and are answered as follows:

- i. An industry is an establishment that involves production of goods and offering of services or an industry is commonly used to describe factories that process or transform raw materials into finished goods.
- ii. Example of industries in Rwanda are: Tolirwa, Cimerwa, Azam, Sulfo, Rwandafoam.
- iii. Industrialization refers to the concentration of industries within an area. It is a process whereby countries increasingly get involved in the production of manufactured goods.

**b) Consolidation activities:**

- i. Evaluate the effects of industrial pollution in your area.
- ii. Give an example of an industry in your area and describe the factors for its location.

Guide student-teacher how to answer the above questions using local examples.

- i. For example, the effects of industrial pollution include: destruction of Ozone layer, Acidic rain, creation of barren land, global warming, etc.
- ii. Example of industries are agro-based industries such as Inyange industry, Utexrwa. The factors for their location include: availability of power, availability of raw materials, market, land, favorable climate, etc.

**c) Extended activities (for gifted and talented student-teacher)**

Account for the high level of industrialization in Kigali city

**Answer:** Availability of capital, market, raw materials, labour, etc.

Guide student-teachers to make research on the factors for industrial development in Kigali city. Their findings should be presented in class.

**Lab skills:**

Student-teachers should propose a small project for making any industrial product by using local materials as a raw material. To make it more appreciated, they should add value to their products.



## UNIT: 11.5

# ENVIRONMENTAL CONSERVATION IN RWANDA AND TOURISM

### 11.5.1. Key unit competence:

The student-teacher should be able to investigate the impact of tourism on the sustainable development of Rwanda.

### 11.5.2. Prerequisite (knowledge, skills, attitudes and values)

The tutor should guide the student-teachers towards application of various knowledge, skills, attitudes and values, acquired and developed right way from senior two. It is vital to note that, student-teachers already have a handful of skills that can enable them to understand and master this unit.

Throughout the subject of geography, under the unit 22 of senior two, students studied the Tourism in Rwanda.

### 11.5.3. Cross-cutting issues to be addressed

This book is written in the way that many cross-cutting issues are easily applicable with the content. Writers have created useful activities for student-teachers. The most utilised cross-cutting issues in this unit are: Financial education and Environment and Sustainability.

In this unit, there is a use of few cross-cutting issues, but this does not mean that it's enough to use one cross-cutting issue. Tutor is free to set other cross-cutting issues that are related to the lessons being covered in this unit. It is very important for tutors to create new scenario that support the integration of other cross-cutting issues. This will be favourable to the tutor when he/she plans it in advance.

### 11.5.4. Guidance on introductory activity

One way to hold student-teacher's attention and keep them learning actively is to incorporate activities in the teaching. So, in our case, every lesson starts with an activity. The objective of introductory activity is to open up student-teachers' possibilities of knowledge, skills and attitudes that they have acquired or expected to learn directly in their class.

All activities in this unit, year one are prepared for learners to help her or him to get a deep understanding of tourism in Rwanda. Activities are prepared and organized in a way that all student-teachers will be able to respond to them. They can be answered individually or in pairs. The role of tutor is to guide and facilitate the accomplishment of all activities.

Some activities have their answers in their correspondent passages; they require a high critical thinking and analysis while others necessitate experiment.

### 11.5.5. List of lessons/sub-heading

#	Lesson title	Learning objectives	Number of periods
1	Forms of tourism, major tourist attractions and factors influencing tourism in Rwanda.	<p>Define tourism and eco-tourism.</p> <p>State the major tourist attractions in Rwanda.</p> <p>Explain the factors affecting the development of tourism in Rwanda.</p> <p>Evaluate the impact of tourism on the environment and development in Rwanda.</p> <p>Explain the problems affecting tourism.</p> <p>Justify the importance of tourism in the development of the economy.</p>	2

2	Importance and prospects of tourism in Rwanda, Problems affecting tourism in Rwanda and solutions	<p>Give the importance of tourism in Rwanda.</p> <p>Identify the problems of tourism in Rwanda.</p> <p>State the impact of tourism on the environment of the country.</p> <p>Explain the factors affecting the development of tourism in Rwanda.</p> <p>Evaluate the impact of tourism on the environment and development in Rwanda.</p> <p>Explain the problems affecting tourism.</p> <p>Justify the importance of tourism in the development of the economy.</p> <p>Importance and prospects of tourism in Rwanda.</p> <p>Problems affecting tourism in Rwanda and the solutions.</p> <p>Impact of tourism on the environment and development in Rwanda</p>	2
	End unit assessment		1

### **Lesson 1: Forms of tourism, major tourist attractions and factors influencing tourism in Rwanda.**

#### **a) Learning objectives**

- Define tourism and eco-tourism.
- State the major tourist attractions in Rwanda.
- Explain the factors affecting the development of tourism in Rwanda.

- Evaluate the impact of tourism on the environment and development in Rwanda.
- Explain the problems affecting tourism.
- Justify the importance of tourism in the development of the economy.

#### **b) Teaching resources**

To achieve successful in learning, teacher in year one is suggested to use print out and map of Rwanda to show them learners during learning activities. As student-teachers observe and see different features on the map, this will help them to discover different touristic sites and associate them with reality. Finally conducting fieldwork will be a paramount objective in this unit.

#### **c) Prerequisites/Revision/Introduction**

This is the last lesson in this unit. The lesson about tourism in Rwanda is closely related to the previous lesson of environmental conservation in the same unit. So, learning tourism will be easy for learners in year one. Because it is associated with the lesson already covered in past studies. The lesson has only one activity and one application activity.

#### **d) Learning activities**

For this activity, the teacher will give learners an opportunity to read attentively the passage and give them time to reflect on the provided questions and then give answers. The teacher is requested to try to integrate some generic competencies as well as cross-cutting issues but he/she is free to choose a cross-cutting issue or generic competence taking into consideration the learning environment.

Possible answers are suggested as follows:

1. Refer to the learner's book on definition of tourism
2. The major national parks are: Akagera national park, Nyungwe national park, Virunga national park and Gishwati-Mukura national park.
3. Refer to the learner's book under Major tourist attraction in Rwanda

#### **e) Application activities**

The suggested answers for Application activity 10.8.2.1 the following:

1. Refer to the learner's book on major tourist attraction in Rwanda

2. Refer to the learner's book on definition of tourism and eco-tourism

## **Lesson 2: Importance and prospects of tourism in Rwanda, Problems affecting the tourism in Rwanda and the solutions**

### **a) Learning objectives**

- Give the importance of tourism in Rwanda.
- Identify the problems of tourism in Rwanda.
- State the impact of tourism on the environment of the country.
- Explain the factors affecting the development of tourism in Rwanda.
- Evaluate the impact of tourism on the environment and development in Rwanda.
- Explain the problems affecting tourism.
- Justify the importance of tourism in the development of the economy.
- Importance and prospects of tourism in Rwanda.
- Problems affecting tourism in Rwanda and solutions.
- Impact of tourism on the environment and the development in Rwanda.

### **b) Teaching resources:**

To achieve successful learning, tutor in year one is suggested to use print out, map of Rwanda and fieldwork.

### **c) Learning activities**

1. Refer to the student's book on importance and prospects of tourism in Rwanda
2. Refer to the student's book under Problems affecting tourism in Rwanda

### **Application activity**

1. Refer to the learner's book on the major problems affecting tourism in Rwanda
2. Refer to the learner's book under future prospects of tourism in the country
3. Refer to the learner's book on importance and prospects of tourism in Rwanda

### **11.5.6. Summary of the unit**

This unit deals with environmental conservation (Environmental conservation and Types of natural resources, Reasons for the conservation of natural resources in Rwanda, Ways of conservation of the natural resources in Rwanda, Impact of conservation on the environment and the development in Rwanda, Problems encountered in conserving the environment and the solutions in Rwanda) and tourism in Rwanda which deals with the forms of tourism, major tourist attractions and factors influencing tourism in Rwanda, Factors affecting the development of tourism in Rwanda, Importance and prospects of tourism in Rwanda, Problems affecting tourism in Rwanda and solutions.

### **11.5.7. Additional Information for teachers**

The tutor should prepare a field visit to any of the national parks of Rwanda in order to relate the content of this unit to the real world.

### **11.5.8. End unit assessment**

1. Tourism and environment are closely linked to one another: on one hand tourism destinations are relying on natural resources, such as mountainous regions, forests, rivers and lakes, fauna and flora in general. Or any other resource which function in form of attractions. So continuous conservation of environment will make tourism an endless activity to people, companies and government. But careless or poor measures to conserve the environment will lead to decrease or failure in tourism development.
2. Advertisement is considered as one of the most important procedures that a company or community must have to generate.
  - The objective is to generate tourists from both local and international market place on regular basis.
  - Advertising increases the familiarity of the locality to tourism for people who are planning to organize a personalized leisure or business trip.
  - It transforms curiosity into an interest made by the potential tourists who will be visiting the area to spend leisure time with their family and friends.
  - As a result, there will be an increase in tourism arrivals to the targeted locality where tourists can visit and explore for a certain period of time.

3. Referrer to the learner's book on Future prospects of tourism in the country
4. Poaching is one of the major challenge in tourism and environment conservation.
  - a. Poaching is defined as the illegal killing, capturing or hunting of wild animals.
  - b. Poaching often occurs because of limited job opportunities, lack of sufficient agricultural production, and/or inability to maintain livestock production. Briefly, in rural areas many people depend on natural resources.
  - c. Here are some suggestions to stop poaching
    - There must be a strong partnership between government and local community to stop poachers
    - Improving security in the area concerned (national park or game park) and at border between countries
    - Use of technology like drone, or any other remote tracking device to assist rangers in the fight against poaching
    - Fencing the national parks.

### **11.5.9. Additional activities**

#### **11.5.9.1 Remedial activities**

##### **Questions:**

1. What is environment?
2. Differentiate tourism from eco-tourism

##### **Answers:**

1. Environment is anything that surrounds man.
2. Refers to the learner' book on definition of tourism and ec-tourism

#### **11.5.9.2. Consolidation activities**

**Question:** Explain why the Government makes effort to promote tourism industry

**Answers:** refer to the importance of tourism to the development of the country.



### 11.8.9.3. Extended activities

#### Questions

1. How can tourism contribute to environmental conservation?
2. Explain the reasons for KwitaIzina event in Rwanda

#### Answers:

1. A rise in environmental awareness among tourists can lead to an increase of wildlife conservation because the tourism industry is going to realize how people base their decision making on the sustainability aspect of a destination which will lead to an increased demand of nature based or green tourism. This is done through environmental conservation.
2. **KwitaIzina** is a Rwandan ceremony of giving a name to a new born baby gorilla. It is named after the ancestral baby naming ceremony that happened after the birth of a newborn. The ceremony's main goal is to help and monitor each individual gorilla and their groups in their natural habitat. It was created as a means of bringing attention both locally and internationally about the importance of protecting the mountain gorillas and their habitats in Volcanoes National Park in the Virunga Mountains in the north of the country.

#### Skills lab:

Student-teachers will carry out a field visit in their area and identify other possible tourist attractions.

## UNIT: 12

# CIVILIZATION OF PRE-COLONIAL RWANDA

### 12.1. Key unit competence

The student-teacher should be able to analyze the civilization of pre-colonial Rwanda

### 12.2. Prerequisite (knowledge, skills, attitudes and values)

In order to study this unit the student teachers should have knowledge, skills and competences on the following issues:

- Meaning of civilization.
- Origin of civilization.
- Factors for the rise of any civilization.
- Components of civilisation.

In addition, the student teachers should have some understanding on examples of civilizations happened on the world.

### 12.3. Cross-cutting issues to be addressed

#### Peace and values education

In this unit of civilisation of pre- colonial Rwanda, the student teachers will learn how ancient Rwandans live peacefully, in harmony through different concepts kike social organisation (solidarity) and share what they have as the case of barter trade where student teachers will be aware on exchange of goods and goods. Different values will be also learned in socio- cultural organisation like sharing, cooperation, patriotism...

#### Inclusive education

Through learning and teaching process of this unit, care will be given to all learners including Special Education Needs cases. At this time, all student teachers will be given a quality and equitable education that meets their basic learning needs, understands the diversity of their backgrounds and abilities.

## Gender

This cross-cutting issue is particularly addressed in Section related to *civilisation of the pre- colonial Rwanda*. The tutor can help student teachers to understand how female were not equal to male in decision making either at home or in politics of their kingdom. Help student teachers to understand that gender equity is a process to be achieved in different domains.

### 12.4. Guidance on introductory activity

At the beginning of this *Unit 12*, the introductory activity motivates student teachers to know what happens or will happen in this unit and help them to be passionate to know by the end of the unit what they did not know before. As they get engaged in the lessons of this unit, they themselves discover answers to the questions they were asking at the beginning. This will help them identify some issues and open them to what they did not know and be inquisitive to know what happens in pre-colonial Rwanda.

### 1 2.5. List of lessons/sub-heading

#	Lesson title	Learning objectives	Number of periods
1	Social organization of the Pre-colonial Rwanda	The student teachers should be able to examine the social organization of Rwandan kingdom in comparison to today's Rwanda.	1
2	Cultural organization of the pre- colonial Rwanda	The student teachers should be able to examine the cultural organization of Rwandan kingdom in comparison to today's Rwanda.	1
3	Political and military organization of the pre- colonial Rwanda	The student teachers should be able to examine the political organization of Rwandan kingdom in comparison to today's Rwanda.	1
4	Economical organization of the pre- colonial Rwanda	The student teachers should be able to examine the economic organization of Rwandan kingdom in comparison to today's Rwanda.	1
<b>End unit Assessment</b>			<b>1</b>

## **Lesson 1: Social organization of the Pre-colonial Rwanda**

### **a) Learning objective**

The student teachers should be able to examine the social organization of Rwandan kingdom in comparison to today's Rwanda.

### **b) Teaching resources**

The following materials will help you during the lessons; Year one social studies student teacher's Book, internet, poems, media, stories, songs, jaws software, talking globes, tactile maps and braille materials for learners who are visually impaired. Sign language should be used when teaching student teachers with hearing impairment.

### **c) Prerequisites/Revision/Introduction**

To begin this lesson, tutor can use introduction where he can tell the story related to social organisation of the pre-colonial Rwanda. Thereafter, the tutor can ask student teachers questions on the story that will help them to enter smoothly into the new lesson. In addition, student teachers should have some knowledge on the pre-colonial Rwanda society.

### **d) Learning activities**

Let student teachers do activity 12.1 in small groups followed by a plenary discussion. If there is a resource person he/she can be invited and put on his/her input. Remember to let the student teachers write points as they discuss in groups. They should appoint one person to represent them during plenary discussion. Alternatively, the whole group should stand in front of the class, as one of them leads the presentation.

### **e) Application activities**

#### **Answers to activity 12.1**

1. The lineage is a set of several families descending from one common and real ancestor and recognizable because of the genealogical tree traces. People who claim the same lineage take on the name of the common ancestors. Besides carrying a proper genealogical remembrance, the members of the same lineage have kept a minimum residential unity.

The clan is a set of several lineages claiming a same mythic common ancestor, but rather far off and fictitious. It is not easy to trace it using a genealogical tree. The members of same clan share the same culture, same taboos and same totem.

## While

The clan is a group, which is characterized by a biological relationship shared by members who show mutual solidarity. The clan's totem symbolizes unity among its members.

“The term “clan” means a group of people who claim to be descendants from one common mythical ancestor. It is a legendary group or a fabulous ascendancy to which a group of people are attached. However, it is not always possible to establish all the genealogic ties between the common ancestor and the entire group.

The word “clan” corresponds to the term “ubwoko” and its institution neither has a chief or a particular internal organization”. Besides, the clan implies a social category and not a corporate group. It has no chief, internal organization, or procedures that manage business of common benefits. The clan is different from a small lineage “inzu” and from a big lineage “umuryango”. The clan is not even a residential grouping; its members are located all over the country.

Clans also have animal totems and when possible animal taboos. The main clans had totems as their recognition sign, in this situation they were from animal species: an animal, a bird, a mammal, batrachians and a reptile.

Certain clans have taboo. Banyiginya have impwi as their taboo.

2. The following are the roles played by clans in the Pre-colonial Rwanda.
  - Clan members have common ties which are social identities or individual identification in relationship with others
  - Clan system was a way of finding friends almost from anywhere.
  - A member of a given clan may be benefited from their hospitality or the support from another clan
  - These entities also play a role in marriage because in principle the exogamy of clans prevails in the choice of the partner.
3. The following are the significances of the animal totem and animal taboos in relation to the clan:
  - It led to obedience of each group member
  - It led to environmental conservation.
  - It was a sign of recognition.

## **Lesson 2: Cultural organization of the pre- colonial Rwanda**

### **a) Learning objective**

The student teachers should be able to examine the cultural organization of Rwandan kingdom in comparison to today's Rwanda.

### **b) Teaching resources**

The following materials will help you during the lessons; Year one social studies student teacher's Book, internet, poems, media, stories, songs, jaws software, talking globes, tactile maps and braille materials for learners who are visually impaired. Sign language should be used when teaching student teachers with hearing impairment.

### **c) Prerequisites/Revision/Introduction**

To begin this lesson, tutor can use revision by asking the learners some questions related to social organisation of the pre- colonial Rwanda.

### **d) Learning activities**

Let student teachers do activity 12.2 in small groups followed by a plenary discussion. If there is a resource person he/she can be invited and put on his/her input. Remember to let the student teachers write points as they discuss in groups. They should appoint one person to represent them during plenary discussion. Alternatively, the whole group should stand in front of the class, as one of them leads the presentation.

### **e) Application activities**

#### **Answers to application activity 12.2**

1. In the Pre-colonial period, Rwandans were monotheists who believed in One Supreme Being. They commonly accepted their God (**Imana**) as omnipotent, omnipresent and omniscient. However, there were no rites for Imana, no temple to worship Imana but Imana is present in throughout some aspects of the daily living of Rwandans. For instance, in naming their children, Rwandans referred to the idea of the role played by Imana in their day-to-day activities and life. These names are like: Ndayisaba (I implore God), Ndayisenga (I pray God), Niyibizi (It is God who knows), Habimana (It is God who exist), Habyarimana (It is God who procreates), Hareriman (It is God who nurtures),...

The rite of Kubandwa is a ritual ceremony accomplished in two steps and consists to offer the offertories to Ryangombe and other Imandwa.



According to the tradition, Ryangombe was a hunter whose origin area is Nkole in Uganda. But other areas are supposed to be his origin as well as Bugoyi, Ndorwa and Bwanamukali. Ryangombe is the son of Babinga and Nyiraryangombe. He had three ladies Nyirakajumba, Gacubya and Karyango. He had also two boys named Binego and Ruhanga and two gils such as Bukiranzuzi and Nyirabirungu.

The first stage of kubandwa is “**Kwatura**”. By accomplishment of this stage, a novice is admitted in the community of Imandwa and he gets a new name and new parents. He is called from now” **Uruzingo**”

The second step, called “**Gusubizwaho**” or “**Gusubirakuntebe**”, the novice is invited to sit once again on the seat of Ryangombe. By this confirmation, he/she takes the definitive name and became **Imandwa**.

A similar cult was practiced in the north of the country and it was rendered to Nyabingi. Legend traces Nyabingi’s origin to Ndorwa or Karagwe. She was a noble woman never married and died very old. After her death, her followers (Abagirwa or Ababyukurutsa) spread her cult. Legend says that she was the daughter of Nyakajumba and Nyabunyana.

Introduction of Nyabingi’s cult in Rwanda corresponded to the end of reign of Kigeli IV Rwabugiri and it was known in Umutara, Rukiga, Kibari, Murera, Buhoma, Bugamba, Bugoyi and Kanage.

- **Taboos** were activities that were not allowed to be done because they could bring curses. E.g. Kwicainyamanza, kwicarakuisekuru, etc.
- Uruzingo was a novice who was admitted in the community of Imandwa and he gets a new name and new parents.
- The rite of **guterekera** concerns to offer some things as food or drinks to Umuzimu. That rite took place in small house called *Indaro*. The gestures are accompanied by oral requests formulation according to circumstances. The offertories are symbols because are the smallest. Often these offertories are the things which were liked by Umuzim during his/her life.
- The rite of **Kubandwa** is a ritual ceremony accomplished in two steps and consists to offer the offertories to Ryangombe and other Imandwa.



## **Lesson 3: Political and military organization of the pre- colonial Rwanda**

### **a) Learning objective**

The student teachers should be able to examine the political organization of Rwandan kingdom in comparison to today's Rwanda

### **b) Teaching resources**

The following materials will help you during the lessons; Year one social studies student teacher's Book, internet, poems, media, stories, songs, jaws software, talking globes, tactile maps and braille materials for student teachers who are visually impaired. Sign language should be used when teaching student teachers with hearing impairment.

### **c) Prerequisites/Revision/Introduction**

To begin this lesson, tutor can use revision by asking the student teachers some questions related to social organisation of the pre- colonial Rwanda. Through those questions, the tutor will connect the revision to the new lesson.

### **d) Learning activities**

Let student teachers do activity 12.3 in small groups followed by a plenary discussion. If there is a resource person he/she can be invited and put on his/her input. Remember to let the student teachers write points as they discuss in groups. They should appoint one person to represent them during plenary discussion. Alternatively, the whole group should stand in front of the class, as one of them leads the presentation.

### **e) Application activities**

#### **Answers to application activity 12.3**

#### ***King (Umwami)***

The king was very honoured in Ancient Rwanda

He occupied the topmost position in the political, administrative and military hierarchy to the extent that these functions were closely linked. Following his nomination, the king identified himself as a separate entity from the nobility. The kingdom of Rwanda was sacred and the king was therefore supposed to have the divine origin. The term Imana (God) refers to the Creator but also to the essence of life and the fertility of the

land and humans. The king and dynastic drums was the very centre of unity in the kingdom.

The king was the sole proprietor of everything and had every right to life and death over his subjects. He was also in charge of the armies, lawmaker and supreme judge. His sentences had no appeal.

### ***Queen-mother (Umugabekazi)***

She was usually the mother of the king. She could perform some ceremonies defined by the tradition. She was the confident of and chief advisor to the king. She could orient the king's actions and act as regent in case the king came to the throne when he was still young. The most remembered queen-mother in the history of Rwanda is Kanjogera under the reign of King Musinga.

### ***Custodians of the esoteric code (Abiru)***

They were the guardians of the tradition and royal secrets. They were high dignitaries and they came second as advisors of the king. They mastered the rites and symbolic procedures and processes of the country and their accomplishment. The king confided to them the name of his successor and he passed recommendations to the successor through them.

Abiru were responsible for the continuity of tradition and were under the authority of the king. Their function was hereditary. They were also responsible for knowing:

- The order in which queens were chosen and the *matri-dynastic clan (Ibibanda)* of the next queen-mother (*Abega, Abasinga, Abaha Abazigaba, Abagesera and Abakono*);
- Rules of enthronement of the new king (*Inzira y'ubwimike*);
- Rules regarding decoration of royal drums

### ***Chiefs (Abatware b'intebe)***

They were the heads of Ibiti appointed by the king and lived most of their lives in the royal court. They were consulted by the king especially in the time of crises. They had following functions of:

- Controlling farmers and cattle keepers;
- Supervising closely and control the functions of land and cattle sub-chiefs;
- Commanding the army;

- Raising taxes for the king, ikoro and other service;
- Distributing land and to withdraw it from others if it was felt necessary

Abatwareb'intebe were largely responsible for the recruitment and mobilization of the mass as far as the protection and maintenance of security of the country were concerned.

2. The army in Ancient Rwanda had the following roles:

- Expanding country;
- Participating in the different wars;
- Fighting against cattle rustlers and various raids;
- Ensuring territorial security.

## **Lesson 4: Economical organization of the pre- colonial Rwanda**

### **a) Learning objective**

The student teachers should be able to examine the economic organization of Rwandan kingdom in comparison to today's Rwanda.

### **b) Teaching resources**

The following materials will help you during the lessons; Year one social studies student teacher's Book, internet, poems, media, stories, songs, jaws software, talking globes, tactile maps and braille materials for student teachers who are visually impaired. Sign language should be used when teaching student teachers with hearing impairment.

### **c) Prerequisites/Revision/Introduction**

To begin this lesson, tutor can use revision by asking the student teachers some questions related to cultural organisation of the pre- colonial Rwanda. Through these revision questions, the tutor will introduce the new lesson.

### **d) Learning activities**

Let student teachers do activity 12.4 in small groups followed by a plenary discussion. If there is a resource person he/she can be invited and put on his/her input. Remember to let the student teachers write points as they discuss in groups. They should appoint one person to represent them

during plenary discussion. Alternatively, the whole group should stand in front of the class, as one of them leads the presentation.

### **e) Application activities**

#### **Answers to application activity 12.4**

1. The main imported products from the neighbouring countries included the following:

- The salt from Lake Eduard;
- The bracelet from Masisi and Buhavu;
- The perfume from Ijwi Island

The items produced internally are:

- The main crops cultivated were beans, sorghum, peas, maize, yams, bananas, tobacco, sweet potatoes, local green leaves (Isogi)...
  - The animal production in Ancient Rwanda was mainly based on cattle rearing, goats, sheep and the keeping of the dogs and the bees.
  - It was from handicraft that Rwandans could get most tools to satisfy their daily needs. They made clothes, metal and wooden objects destined for commercial purposes.
2. Cattle rearing occupied a very important place in Rwandan life because the cows were the measure of wealth and expressed the social prestige. Products from cows were milk, meat, butter, hides and skins used for clothing.

A cow was also used to cement social relations between the different families when they exchanged it as a sign of love and friendship. Cows were also given as dowry or marriage settlement.

3. Three regions of Rwanda had celebrity on making and production of hoes such as:

Buberuka: Amaberuka

Buramba: Amaramba

Rusengesi: Amasengesi

## 12.6. Summary of the unit

Civilisation happens over a period of time for people to change from one state of affairs to an improved or a better one that is more universally acclaimed.

Cultural organisation reflects people's values, norms, language, beliefs and habitats. It is reflected in what people eat, how they dress and how they relate with each other.

Rwandans in the pre-colonial period believed in a God called Imana. Rwandans observed traditional rites known as imigenzo, whereby they celebrated events such as: marriages, births and deaths.

Rwandans in the traditional kingdom also observed various taboos.

In traditional Rwandan kingdom, the king (umwami) was the overall leader of the political, administrative, religious and military hierarchy.

Rwandans in the ancient kingdom performed this economic activity: agriculture, trade, handicraft, fishing, hunting and gathering.

## 12.7. Additional Information for tutors

**Difference between race, tribe, ethnicity, clan and totems – and the relationship with Ubunyarwanda/Hutu, Tutsi and Twa .**

### a) Clan

The term 'clan' designates a group of people who hail from the same mythic ancestors. It is a social category which claims to have a totem.

There are over 20 different clans in Rwanda, e.g. *Abazigaba*, *Abanyiginya*, *Abashambo*, *Abazigaba*, *Abagesera*, etc. The clan is divided into sub-clans (Amashyanga) and the sub-clan into lineage entities (*Umuryango*, *inzu*), which are in turn divided into more or less nucleus families (Ingo) finally making the clan a social identity.

In Pre-colonial Rwanda, belonging to a given clan could bear a significant importance regarding the status occupied by the concerned clan in the political, socio-economic or even cultural aspect. Clans are not particular to Rwanda. It is a fact that is found in many countries of Africa located in the Great Lakes Region.

Another fascinating aspect of Rwandan clans is their multi ethnic composition. Before the introduction of the new Hutu-Tutsi-Twa identities, which were imposed by the colonial and postcolonial bureaucracy, clans were used as identification elements.

## b) Race

The term 'race' has several meanings; it etymologically comes from the Latin *ratio*, which means 'nature', 'kind', 'species', 'category', 'manner of being'; but also 'descent', 'birth', 'extraction', 'lineage' or 'family'. In the 19th century, it indicated a set of specific features, of aptitudes and of predispositions which link the ascendants and descendants in the same lineage, from generation to generation. By extension, the term 'race' also means 'people' or 'nation'.

The term 'race' is applied to human groups distinguished by clear physical traits clearly and which can be inherited.

### How did these theories come about?

It is important to understand that Rwandans lived together before independence. When the Germans, Rwanda's first colonizers arrived, they found a highly developed social structure with a King on top of the administrative ladder supported by powerful chiefs with all Rwandans categorised under clans.

These clans originated from various parts of the country and had specific totems. For example, Abazigaba had a leopard for totem, and were found in Nduga, Gisaka, Bwishya, Ndorwa, Mubari, Bufumbira, Rukiga and other places.

These clans were known as 'Ubwoko', a word now associated only with Tutsi, Hutu, Twa. With the advent of the Belgians and identity cards, came the search for an appropriate word to better describe the different groups.

The Belgian identity card equated *Ubwoko* to family and clan. When distributing the cards, the Belgians would ask, '*Uri bwokoki?*' (What clan are you from?) and people would answer, '*Ndi umutsobe*' (I am *Umutso*be).

The same identity card also divided these clans along the lines of Mututsi, Muhutu and Mutwa, what the Belgians called 'race'. However, given that Rwandans were culturally and linguistically homogenous, this was not the appropriate word.

In Kinyarwanda, *Ubwoko* refers to race, clan, family, ethnic group, type, or category. There are no distinct words to capture these differences. However, what is certain is that Rwandans before and during colonial times identified *Ubwoko* with clan.



So what exactly was Hutu, Tutsi or Twa? These were social formations based on a number of things including social class or occupation. You could be *Umuzigaba* and be either Hutu or Tutsi, under the same totem.

### **When clans were reduce to three**

The new republic born after Belgium granted Rwanda independence, institutionalized and promoted ethnic differentiation. The old identity card was abolished and a new card where Ubwoko referred to ethnic group was adopted. One could only be a Hutu, Tutsi or Twa.

This change was so systematic that when asked, '*Uri bwokoki?*' one would quickly respond, '*Ndi umuhutu, Ndi umututsi, Ndi umutwa*'.

Rwandans could no longer identify themselves along clan lines, which cut across the Hutu, Tutsi, Twa divide and people who were once part of the same 'family' became enemies overnight.

### **The evolution of the concepts of Hutu, Tutsi and Twa categories and its consequences**

With the colonisation, 'Hutu', 'Tutsi', and 'Twa' categories were identified as 'races', 'castes' and 'ethnic groups' by Europeans. Vansina (2001) said that the current debate on ethnic groups (essentialism, functionalism and constructivism) is 'fallacious since the current groups known as Hutu and Tutsi are not the descendants of two 'pure' ethnic groups who came at the same time in the country. 'Hutu' did not indicate ethnic group and the actual Tutsi group comprises many people who are not descendants of the Tutsi ethnic group.

In the pre-colonial context (and even after), 'Hutu' had moreover a double sense: It indicated the dependant or the inferior, even from Tutsi origin, in a hierarchal relation. In Rwanda, the first sense tended to mean 'subject, servant', in reference to a free person. The term has been used to mean 'rich' or 'master'. So, the Hutu-Tutsi opposition has born after a group identified as Tutsi acquired servants, these being or not Tutsi (Vansina).

Vansina also underlines that the sense of the term 'Tutsi' evolved with the growth of the kingdom whereby the stockbreeders belonged to the political elite. The most probable, for Vansina, is that the term 'Tutsi', preferably designated political elite among the stockbreeders. These stockbreeders, even living in poor conditions, presented themselves as 'Tutsi' to mark the difference between them and the farmers.

In Africa, the term 'ethnic group' especially appeared in the last third of



the twentieth century. An impact of the call of UNESCO who preferred the use of the term 'ethnic group' instead of 'race', this contributed to the extension of the term 'ethnic group' in French-speaking countries. But neither the Universal Declaration of the Human Rights nor the UNESCO initiatives to fight against racism have not succeeded to suppress the belief in the human 'races', not only in daily life, but also in scientific community.

Progressive ethnicization of the Rwandan society from social representations originated from a group of intellectuals and was popularized on the political level, by the 'Hutu' elites before contaminating the whole population. It became a hegemonic ideology from 1960 until the 1994 genocide against the Tutsi. The process proves that no 'ethnic group' is a permanent reality (an-historical). The ethnic groups are created, can develop and disappear according to the principle of the multiple identities and the different interests in competition. It is the colonial anthropology which created the ethnic groups and the Rwandan elites perpetuated their existence.

### 12.8. End unit assessment (answers)

1. The following are totems that have been identified and their animal totems:

No	Clan	Totem
1	Abanyiginya	Crested crane ( <i>Umusambi</i> )
3	Abazigaba	Leopard ( <i>Ingwe</i> )
4	Abagesera	Wagtail ( <i>Inyamanza</i> )
5	Abasinga	Kate ( <i>Sakabaka</i> )
6	Abacyaba	Hyena ( <i>Impyisi</i> )
7	Ababanda	Crow ( <i>Igikona</i> )
8	Abega, Abakono and Abaha	Frog/Toad ( <i>Igikeri</i> )
9	Abashambo	Lion ( <i>Intare</i> )
10	Abahondogo	Peak ( <i>Ishwima</i> )
11	Abongera	Gazelle ( <i>Isha</i> )
12	Abungura	Pigeon ( <i>Inuma</i> )
13	Abasita	Jackal ( <i>Nyiramuhari/Umuhari/Imwebwe</i> )
14	Abanyakarama	
15	Abashingwe	

2. In general, a family played several roles. It was the basic unit of cooperation and economic production. It produced all that it needed. In any case, people only went to the market if it was unavoidable. For a polygamous family, every nucleus family consisted of an independent unit of production. It was the husband who sold his labor. The occupations for women depended on the social status the family (rich families had big-sized livestock while poor ones kept small-sized livestock). According to the Rwandan mentality, an increased number of children brought happiness and strength to the family. Marriage of a daughter made it possible to extend alliances with other lineage groups. A daughter was considered as a linking factor between families. The lineage and eventually the army were responsible for the socialization of children.
3. The lineage is a set of several families descending from one common and real ancestor and recognizable because of the genealogical tree traces. People who claim the same lineage take on the name of the common ancestors. Besides carrying a proper genealogical remembrance, the members of the same lineage have kept a minimum residential unity.

The clan is a set of several lineages claiming a same mythic common ancestor, but rather far off and fictitious. It is not easy to trace it using a genealogical tree. The members of same clan share the same culture, same taboos and same totem.

### **While**

The clan is a group, which is characterized by a biological relationship shared by members who show mutual solidarity. The clan's totem symbolizes unity among its members.

“The term “clan” means a group of people who claim to be descendents from one common mythical ancestor. It is a legendary group or a fabulous ascendancy to which a group of people are attached. However, it is not always possible to establish all the genealogical ties between the common ancestor and the entire group.

The word “clan” corresponds to the term “ubwoko” and its institution neither has a chief or a particular internal organization”. Besides, the clan implies a social category and not a corporate group. It has no chief, internal organization, or procedures that manage business of common benefits. The clan is different from a small lineage “inzu” and from a big lineage “umuryango”. The clan is not even a residential grouping; its members are located all over the country.

Clans also have animal totems and when possible animal taboos. The main clans had totems as their recognition sign, in this situation they

were from animal species: an animal, a bird, a mammal, batrachians and a reptile.

Certain clans have taboo. Banyiginya have *impwi* as their taboo.

4. The king played a vital role at this level of the life of his country. He occupied the topmost position in the political, administrative and military hierarchy to the extent that these functions were closely linked. Following his nomination, the king identified himself as a separate entity from the nobility. The kingdom of Rwanda was sacred and the king was therefore supposed to have the divine origin. The term Imana( God ) refers to the Creator but also to the essence of life and the fertility of the land and humans. The king and dynastic drums was the very centre of unity in the kingdom.

The king was the sole proprietor of everything and had every right to life and death over his subjects. He was also in charge of the armies, lawmaker and supreme judge. His sentences had no appeal.

## **12.9. Additional activities (Questions and answers)**

### **12.9.1. Remedial activities**

#### **Questions**

1. List down six economic activities that were carried out in pre-colonial Rwanda.
2. Show the importance of cows in traditional Rwandan society.

#### **Answers**

1. Six economic activities carried out in pre-colonial Rwanda are:
  - Agriculture
  - Trade
  - Animal rearing
  - Handicraft
  - Fishing
  - Gathering and hunting
2. A cow had many roles in the traditional Rwandan society. A part from being used to settle dowry in marriage settlement, cows were a measure of wealth and social prestige. Cows gave a range of products which were necessary in daily life: milk, meat, butter, hides and skins, horns, manure etc..

## 12.9.2. Consolidation activities

### Questions

1. Discuss the role played by the following leaders in pre-colonial Rwanda:
  - i. The king
  - ii. Queen mother
  - iii. Ritualists.
2. Compare Rwandan traditional marriage and the modern marriage in Rwanda

### Answers

1. The king occupied the topmost position in the political, administrative and military hierarchy to the extent that these functions were closely linked. Following his nomination, the king identified himself as a separate entity from the nobility. The kingdom of Rwanda was sacred and the king was therefore supposed to have the divine origin. The term Imana (God) refers to the Creator but also to the essence of life and the fertility of the land and humans. The king and dynastic drums was the very centre of unity in the kingdom.

The king was the sole proprietor of everything and had every right to life and death over his subjects. He was also in charge of the armies, lawmaker and supreme judge. His sentences had no appeal.

### *Queen-mother (Umugabekazi)*

She was usually the mother of the king. She could perform some ceremonies defined by the tradition. She was the confident of and chief advisor to the king. She could orient the king's actions and act as regent in case the king came to the throne when he was still young. The most remembered queen-mother in the history of Rwanda is Kanjogera under the reign of King Musinga.

### *Custodians of the esoteric code (Abiru)*

They were the guardians of the tradition and royal secrets. They were high dignitaries and they came second as advisors of the king. They mastered the rites and symbolic procedures and processes of the country and their accomplishment. The king confided to them the name of his successor and he passed recommendations to the successor through them.

Abiru were responsible for the continuity of traditional and were under

the authority of the king. Their function was hereditary. They were also responsible for knowing:

- The order in which queens were chosen and the *matri-dynastic clan (Ibibanda)* of the next queen-mother (*Abega, Abasinga, Abaha Abazigaba, Abagesera and Abakono*);
  - Rules of enthronement of the new king (*Inzira y'ubwimike*);
  - Rules regarding decoration of royal drums
2. Marriage is an alliance between individuals: it is a union between a man and a woman. Such a union can be consecrated or administrated by law or through customary arrangements. In the pre- colonial Rwanda, all marriages were customarily administered (*bateraga umwishwa*) .Consequently, this union of two people by marriage necessarily brought about a sort of bond or union and solidarity between the family of the man and the family of the woman. Marriage was an affair between two families (*umugore yari uw'umuryango*). Generally the boy and the girl did not know each other. But currently marriage is essentially an affair between two individuals a boy and a girl.

### 12.9.3. Extended activities

#### Questions

1. “Modern culture is better than traditional culture”, debate.
2. Describe the economic organisation of the pre-colonial Rwanda.

#### Answers

1. Debate with emphasis on seeds cultivated, methods of cultivation, technicians in agriculture, kind of manure used, crop rotation,...
2. See the content summary

## UNIT: 13

# COLONIAL RWANDA

### 13.1. Key unit competence

The student-teacher should be able to assess the performance of the German and Belgian rules, the 1959 crisis and the process of the independence in Rwanda.

### 13.2. Prerequisite (knowledge, skills, attitudes and values)

In order to study this unit, the student teachers should have knowledge, skills and competences on the following issues:

- Causes of colonization of Africa in general and Rwanda in particular
- The role of explorers in sharing Africa for colonization

### 13.3. Cross-cutting issues to be addressed

#### 13.3.1. Peace and values education

In this unit of German and Belgian colonization in Rwanda, the student teachers will be working within groups and this will develop cooperation. By analysing the causes of colonization of Rwanda, they will be developing critical thinking.

#### 13.3.2. Inclusive education

Through learning and teaching process of this unit, where they will be working in their respective groups, care will be given to all learners including Special Education Need cases. At this time, all student teachers will be given a quality and equitable education that meets their basic learning needs, and understands the diversity of their backgrounds and abilities.

#### 13.3.3. Gender

This cross-cutting issue will be addressed as student teachers will be working in groups, girls and boy will have the same participation while sharing ideas.

### 13.4. Guidance on introductory activity

At the beginning of the unit 13, the introductory activity will motivate student teachers to know why Africa in general and Rwanda in particular was colonized and the impact this colonization has had on Africa and Rwanda. Tutor will help student teachers working through groups discussions to increase respect of other's ideas, cooperation and critical thinking through the analysis of different components of this unit.

### 13.5. List of lessons/sub-heading

#	Lesson title	Learning objectives	Number of periods
1	German administration of Rwanda and its impact	The student teachers should be able to describe the causes and the steps of the German administration of Rwanda	1
2	Belgian military occupation and its reforms (1916 – 1926)	The student teachers should be able to explain the reforms made in Rwanda during Belgian military occupation.	1
3	Rwanda under Belgian mandate (1926-1946)	The student teachers should be able to explain the transformation done in Rwanda during Belgian mandate.	1
4	Rwanda under Belgian trusteeship (146-1962)	The student teachers should be able to explain the transformation done in Rwanda during Belgian trusteeship..	1
5	The 1959 crisis in Rwanda	The student teachers should be able to examine the causes and the consequences of the 1959 crisis in Rwanda	1
6	The “Coup d’Etat” of Gitarama	The student teachers should be able to explain what happened during the coup d’Etat of Gitarama	1
<b>End unit Assessment</b>			1



## **Lesson 1: German administration of Rwanda and its impact**

### **a) Learning objective**

The student teachers should be able to describe the causes and the steps of the German administration of Rwanda

### **b) Teaching resources**

There are many resources that can be used in teaching this lesson such as:

**Textbooks:** student teacher Social Studies book and its tutor's

**Teaching materials:** A photo of Captain Bethe, African map and Rwandan map, internet, testimonies, press media, tactile materials, Braille materials can be availed if there are impaired student teachers.

### **c) Prerequisites/Revision/Introduction**

To begin this lesson, tutor can use revision by asking the student teachers some questions related to Rwanda before colonization: political, economic and social organization because these are related to the unit they have already see and it is related to this new lesson.

### **d) Learning activities**

Before starting this lesson, student teachers will be asked to look for various documents such as the internet where it possible and books, and then, analyze in groups, the causes of colonization of Rwanda by Germans and Belgians and the steps used by Germany to rule Rwanda.

After this activity, tutor invites student teachers to present their work to the whole class and add some missing information where it is necessary.

### **e) Application activities**

#### **Answers to application activity 13.1**

1. German and Belgium came to colonize Rwanda because of the following reasons:
  - **Need of cheap labour:** Especially Belgians needed a work force to cultivate their plantations in Kongo;
  - **Need of areas to invest:** The Germans and Belgians needed the new areas where they could invest their surplus capital and found

Rwanda as a virgin country to cater for such desire which made them to be interested in colonizing Rwanda;

- **Need of markets:** Germany and Belgium was among the first industrialized countries in Europe and they needed the markets for their manufactured products elsewhere outside of Europe, may be in Africa including Rwanda. This encouraged them to come and occupy Rwanda;
  - **Need to promote Western civilization:** By coming and colonizing Rwanda, the Germans and Belgians socially wanted to promote Western civilization by making people of Rwanda modern and civilized. This developed more obsessive desire in colonizing Rwanda;
  - **Need to spread Christianity:** The Germans and Belgians who were Christian missionaries were fascinated by colonizing Rwanda as they could spread out their religion to Rwanda as they looked it as “the best religion” in the World;
  - **Need to gain political prestige and glory:** By the time, European countries believed that having more colonies is one way to be respected in the World. Therefore, the Germans had also this desire to acquire political prestige by colonizing more areas including Rwanda and among others;
  - **Green light given by the 1884 – 1885 Berlin Conference:** This conference on partition of Africa had officially recognized Germany as the rightful colonial master of Rwanda. This granted and encouraged the Germans to take up Rwanda as their colony.
2. On this question, Tutor will have time to listen to the ideas from student teachers. No specific answer. The aim of this question is to help student teachers to promote their critical thinking). They are some ideas they can provide:

**For Yes:**

- They were not sure for their security.
- They were trying to see if the colonization of Rwanda peacefully is possible, if not, to fight.
- Everywhere they passed, the war was inevitable. They thought it would be the same in Rwanda.

**For no:**

- The military phase was not necessary because the treaty was already signed
- The military phase was not necessary because even the war could happen between Rwandan and German troops, German knew that was so strong to defeat Rwanda.

Then, after seeing that they are welcomed, they launched their second phase and began their civil administration and supported Musinga to pacify the country and began to operate some reforms.

3. The German government helped the the King Musinga to suppress several rebellions, markedly the rebellion of Ndungutse and his acolytes Rukara and Basebya. Ndungutse rebellion had started in the north of Rwanda towards the 1910 in the former provinces of Ruhengeri and Byumba (Buberuka, Kibali and Bukonya).

**Lesson 2: Belgian military occupation and its reforms (1916 – 1926)****a) Learning objective**

The student teachers should be able to explain the reforms made in Rwanda during Belgian military occupation.

**b) Teaching resources**

The following materials will help the tutor during the lessons; Year one social studies student teacher's Book, internet, media, stories, songs, jaws software, tactile maps and Braille materials for student teachers who are visually impaired. Sign language should be used when teaching student teachers with hearing impairment.

**c) Prerequisites/Revision/Introduction**

To begin this lesson, tutor can use revision by asking the student teachers some questions on causes of colonisation of Rwanda by both Germany and Belgian. The questions will be answered orally by different answers.

**d) Learning activities**

Let student teachers do activity 13.2.1 in small groups followed by a plenary discussion. Remember to tell the student teachers write down the main points as they discuss in groups. Each team should appoint one person to represent them during plenary discussion. Alternatively,

the whole group should intervene, as one of them leads the presentation. Tutor will help to have additional information on what is being said by asking probing questions.

### **e) Application activities**

#### **Answers to application activity 13.2.1.**

##### **a) Judiciary reform of 28 April 1917**

The king was stripped off the right to condemn his subjects to death and life but he kept the right to hear appeal cases. The chiefs who traditionally had the power to hear and resolve differences in the areas of jurisdiction and had the right to emit punishments saw their powers reduced. The Belgian Resident representative or even the Belgian administrator was given the right to hear appeals from such cases.

##### **b) Politico-religious reform**

The king was forced to sign a decree proclaiming freedom of worship. Therefore, the royal power became secular because the King had just been forced to destroy his politico-religious power. Actually Rwandans considered the King as their unique religious leader who communicated with God through some sort of magical power and he was, for them, a source of life and prosperity for the whole kingdom.

##### **c) Fiscal reform of 26 December 1924**

The Belgians introduced new fiscal reform in 1924. The significant part of this reform was abolition of certain gifts:

**Imponoke** which consisted of cows given as gifts to a chief who had lost cattle in huge numbers.

**Indabukirano** which were cows given to a new chief upon assuming his duties as a new leader in an area. This gift was disguised as a form of congratulatory gift but it often amounted to an inducement to have some favours from the chief.

4. Other reforms made in Rwanda during this period are:

- From 1917, Rwanda was governed from Kigoma by a Royal High Commissioner. However, it was retained as residence and the Belgians imitated the German local policy which consisted of exploiting the authority of the local administration by making sure that they were made tools of colonial occupation. Hence the King

and traditional chiefs were allowed to exercise their functions under the guidance of the new colonial authority.

- From 1923, a law was put in place to deter the King from appointing or dismissing a chief without the permission of the Resident Representative of the Belgian Government. In the same way chiefs and Governors of Provinces did not have the right to dismiss their subordinates.
- The application of the system of indirect rule in Rwanda by the Belgian authorities was dictated by the fact that they did not have enough Belgian officials in the country. The traditional authorities in Rwanda were charged with the responsibility of collecting taxes, mobilising porters and workers on the local roads or tracks

### **Lesson 3: Rwanda under Belgian mandate (1926-1946)**

#### **a) Learning objectives**

The student teachers should be able to explain the transformation done in Rwanda during Belgian mandate.

#### **b) Teaching resources**

The following materials will help the tutor during the lessons; Year one social studies student teacher's Book, internet, poems, media, stories, songs, jaws software, tactile maps and braille materials for learners who are visually impaired. Sign language should be used when teaching student teachers with hearing impairment.

#### **c) Prerequisites/Revision/Introduction**

To begin this lesson, tutor can use revision by asking the student teachers some questions relating to Rwanda under Belgian military occupation.

#### **d) Learning activities**

Let student teachers do activity 13.2.2 in small groups followed by a plenary discussion. If there is a resource person, he/she can be invited and put on his/her input. Remember to let the student teachers write points as they discuss in groups. They should appoint one person to represent them during plenary discussion. Alternatively, the whole group should stand in front of the class, as one of them leads the presentation.

## e) Application activities

### Answers to application activity 13.2.2

1. The following are administrative reforms introduced by Belgians in Rwanda between 1926 -1931:

Between 1926 and 1931, Belgians did many administrative reforms known as Mortehanrefoms. These are the following:

- Rwanda – Burundi was joined to Belgian Congo in terms of administration. Congolese colonial law were applied to both countries.
  - Rwanda which was originally governed under 20 Ibiti or districts and pastoral fiefs or Ibikingi, was transformed into a system of chiefs and sub chiefs and territories. By 1931, the 52 “chefferies” corresponded more or less to historical traditional regions and the 544 “Sous-chefferies” were equivalent to former pastoral fiefs.
  - The functions of the three chiefs: Chief of land (umutware w’ubutaka), chief of the cattle (umutware w’umukenke) and chief of the army (umutware w’ingabo), were abolished and replaced by Tutsi chiefs and sub chiefs.
  - The chiefs from that time resided in their administrative places and not in the royal court as it was before this administrative reform.
2. Rudahigwa was proclaimed a king of Rwanda, all his power felt down and became a staff of colonial administration. He occupied the 6<sup>th</sup> position in the administration of Rwanda. The King was under the Resident authority and had to report on him. He had also a contract and a salary.
  3. The Belgian policy of forced labour had negative effects such as famines: Rumanura (1917 – 1918), Gakwege (1928–1929) and Ruzagayura (1943–1944) and insecurity among people.

Forced labour became so insupportable that people started fleeing it to neighbouring countries like Uganda and Tanzania in search of free and paid work.

4. In 1935, the Belgian colonial administration introduced a national identity card basing on ethnicity. The Banyarwanda who possessed 10 or more cows were registered as Batutsi, whereas those with less were registered as Bahutu and Batwa were considered not only as those with no cows but as the “pygmies” and as those who survived by pottery active ties. They measured also the height and noises. You could see two people born from same parents



given identities mentioning different ethnics group (one Hutu and another, Tutsi).

This was not the same before the colonization. The so called ethnic group were social classes that could change as the wealth of people changed. After the introduction of the identity card mentioning Hutu, Tutsi and Twa as ethnic group and the ideology followed by other divisive ideology such as different origins of Rwandan people, Rwandans began to see themselves as different and this is the beginning of ethnic ideology in Rwanda that led to genocide against Tutsi in Rwanda.

## **Lesson 4:Rwanda under Belgian trusteeship (1946–1962)**

### **a) Learning objectives**

The student teachers should be able to explain the transformation done in Rwanda during Belgian trusteeship.

### **b) Teaching resources**

The following materials will help you during the lessons; Year one social studies student teacher's Book, internet, poems, media, stories, songs, jaws software, tactile maps and braille materials for learners who are visually impaired. Sign language should be used when teaching learners with hearing impairment.

### **c) Prerequisites/Revision/Introduction**

To begin this lesson, tutor can use revision by asking the student teachers some questions related to the political, social and economic transformations operated by Belgians in Rwanda during the mandate period and their effects in Rwanda.

### **d) Learning activities**

Let student teachers do activity 13.2.3 in small groups followed by a plenary discussion. If there is a resource person, he/she can be invited and put on his/her input. Remember to let the student teachers write points as they discuss in groups. They should appoint one person to represent them during plenary discussion. Alternatively, the whole group should stand in front of the class, as one of them leads the presentation.



## e) Application activities

### Answers to application activity 13.2.3

1. The Belgian government elaborated a Ten Year Social and economic development Plan for Rwanda – Burundi in 1951 (From 1951 up to 1960). With this plan, several projects were financed under this plan like the construction of schools by Fond du Bien-Etre Indigène (FBI), hospitals, dispensaries, roads, the development of marshlands and the plantation of forests.
2. The political reforms introduced by Belgian colonizers in Rwanda in 1952 failed. Discuss.
  - First of all, in 1947, Belgians introduced the political reforms where they set up a “Conseil du Gouvernement du Rwanda- Urundi” where the King of Rwanda and Burundi were representing their countries. However, this council was consultative only. It couldn’t take any decision and so, was useless.
  - The elections of other councils (Conseils) were badly organized because all people were not involved in the elections.

That why, instead of helping Rwandans to solve the emerging political problem, these reforms increased them as they increased divisionism.

3. Analyse the weakness of political parties created in 1959.

**Weakness:** - Some political parties created in 1959 were based on divisive ethnical ideology (PARMEHUTU, AREDETWA)

- Some others were created on other groups (regional such as Abaki)
- Others were supporting colonization instead of fighting it. Eg. RADER
- They were local based

## Lesson 5: The 1959 crisis in Rwanda

### a) Learning objectives

The student teachers should be able to examine the causes and the consequences of the 1959 crisis in Rwanda

### b) Teaching resources

The following materials will help you during the lessons; Year one social studies student teacher’s Book, internet, poems, media, stories,

songs, jaws software, tactile maps and braille materials for student teachers who are visually impaired. Sign language should be used when teaching student teachers with hearing impairment, the photo of MBONYUMUTWA Dominique.

### **c) Prerequisites/Revision/Introduction**

To begin this lesson, tutor can use revision by asking the student teachers some questions related to the political, social and economic transformations operated by Belgians in Rwanda during the trusteeship period and their effects in Rwanda.

### **d) Learning activities**

Let student teachers do activity 13.2.4 in small groups followed by a plenary discussion. If there is a resource person, he/she can be invited and put on his/her input. Remember to let the student teachers write points as they discuss in groups. They should appoint one person to represent them during plenary discussion. Alternatively, the whole group should stand in front of the class, as one of them leads the presentation.

### **e) Application activities**

#### **Answers to application activity 13.2.4**

1. Do you agree that the 1959 crisis happened because Mbonyumutwa was simply beaten? Explain your answer!

No! Because the crisis was already there, since the publication of *Mise au point* and *Hutu* manifesto. The creation of political parties increased the crisis until even the small event could provoke a such crisis.

2. Analyse the effects of 1959 crisis on Rwandan people.
  - Killing of people (Almost 200 people were killed during this crisis) and almost 317 were injured.
  - Refugees (between 150,000 and 200,000).
  - Destruction of houses belonged to the Tutsi population and other UNAR members.
  - The Tutsi cows were killed and eaten.

## **Lesson 6: The “Coup d’Etat” of Gitarama**

### **a) Learning objectives**

The student teachers should be able to explain what happened during the coup d’Etat of Gitarama

### **b) Teaching resources**

The following materials will help you during the lessons; Year one social studies student teacher's Book, internet, poems, media, stories, songs, jaws software, tactile maps and braille materials for student teachers who are visually impaired. Sign language should be used when teaching student teachers with hearing impairment.

### **c) Prerequisites/Revision/Introduction**

To begin this lesson, tutor can use revision by asking the student teachers questions related to 1959 crisis in Rwanda through which they can enter smoothly into the new lesson.

### **d) Learning activities**

Let student teachers do activity 13.2.4 in small groups followed by a plenary discussion. If there is a resource person, he/she can be invited and put on his/her input. Remember to let the student teachers write points as they discuss in groups. They should appoint one person to represent them during plenary discussion. Alternatively, the whole group should stand in front of the class, as one of them leads the presentation.

### **e) Application activities**

#### **Answers to application activity 13.2.5**

With the complicity of the Belgian government, the coup d' Etat of Gitarama proclaimed the following decisions:

1. The abolition of the monarchy and the kingdom emblem, the royal emblem drum Kalinga and Ubwiru institution.
2. The proclamation of a republic and the election of the first president of the republic, Mr.Mbonyumutwa Dominique.
3. The formation of a government made up of 11 ministers with Grégoire Kayibanda as prime minister.
4. Creation of a supreme court.

### **13.6. Summary of the unit**

The Berlin conference (1884-1885) assigned Rwanda to German as a protectorate that took place from 1898 to 1916. This colonisation has been possible thanks to explorers' account that provided written information about Rwanda. The German occupation has been characterised by good relationships between the mwami and colonial administration and

by many economic projects which have not been realised due to time shortage.

After the German failure in firstWorld War, Rwanda was military occupied by Belgian from 1916 up to 1919.during this period, Belgians did not make important changes, but very soon they imposed thorough control on traditional power. On 1-1-1919 the military regime was replaced by a civil administration and the first resident was Edmond Van Den Eede. On 28<sup>th</sup>-6-1919 the Versailles treaty gave to alliance the wrights to occupy the former German colonies. Belgium was then reassigned the mandate of Rwanda without the Eastern region: Gisaka and Mutara-Mubali according to Orts- Milner convention. After long negotiations and discussions, the mentioned regions are given back to Rwanda and the mandate was officially confirmed on 31 st-8-1923 by the League of Nations. Belgium accepted it by the law of 20-10-1923.

During the mandate period (1919-1946) the history of Rwanda has been characterised deep transformations in political, economic, and social areas. Globally the aim of economic reforms consisted of increasing the production while the political ones aimed at reducing gradually the mwami's power. As most of these reforms well considered as constraints, they were badly received by local population.

After the WWII, Rwanda has been replaced under UN Trusteeship, Belgium was asked to improve Rwandans socio- economic conditions. So the ten years plan for socio-economic development of Ruanda- Urundi was elaborated to cover the period 1952-1961, however, Rwandans were not involved in its elaboration. On political level, as Belgian authority had to prepare/ to help local people to self- administration, political parties occurred in 1959 early 1960s,there were around twenty political parties and alliances in Rwanda and most of them were regional and ethnic based. This period was also characterised by the increasing of hatred against Tutsi, violence and upheavals and the independence has been achieved on 1/7/1962 after having chased Tutsi from their properties and from the country.

### **13.7. Additional Information for the tutor**

Conference of Berlin 1884-85, international meeting aimed at settling the problems connected with European colonies in Africa. At the invitation of the German chancellor Otto von Bismarck, representatives of all European nations, the United States, and the Ottoman Empire met at Berlin to consider problems arising out of European penetration

of West Africa. The stated purpose of the meeting was to guarantee free trade and navigation on the Congo and on the lower reaches of the Niger. In fact, the territorial adjustments made among the powers were the important result. The sovereignty of Great Britain over Sub Nigeria was recognized. The claims of the International Association, a private corporation controlled by King Leopold II of Belgium, were more or less recognized; these applied to the greater part of the Congo. These territorial awards ignored French claims to parts of the Congo and of Nigeria and the historical claim of Portugal to the mouth of the Congo. The attempts to guarantee free trade and the neutrality of the region in wartime and to set up rules for future colonial expansion in Africa were hailed, but soon the agreements proved too vague to be workable

### 13.8. End unit assessment (answers)

#### Suggested answers to end unit assessment

1. Why European countries came to colonize Rwanda?
  - **Need of cheap labour:** Especially Belgians needed a work force to cultivate their plantations in Kongo;
  - **Need of areas to invest:** The Germans and Belgians needed the new areas where they could invest their surplus capital and found Rwanda as a virgin country to cater for such desire which made them to be interested in colonizing Rwanda;
  - **Need of markets:** Germany and Belgium was among the first industrialized countries in Europe and they needed the markets for their manufactured products elsewhere outside of Europe, may be in Africa including Rwanda. This encouraged them to come and occupy Rwanda;
  - **Need to promote Western civilization:** By coming and colonizing Rwanda, the Germans and Belgians socially wanted to promote Western civilization by making people of Rwanda modern and civilized. This developed more obsessive desire in colonizing Rwanda;
  - **Need to spread Christianity:** The Germans and Belgians who were Christian missionaries were fascinated by colonizing Rwanda as they could spread out their religion to Rwanda as they looked it as “the best religion” in the World;
  - **Need to gain political prestige and glory:** By the time, European countries believed that having more colonies is one way to be

respected in the World. Therefore, the Germans had also this desire to acquire political prestige by colonizing more areas including Rwanda and among others;

- **Green light given by the 1884 – 1885 Berlin Conference:** This conference on partition of Africa had officially recognized Germany as the rightful colonial master of Rwanda. This granted and encouraged the Germans to take up Rwanda as their colony.
2. Explain the circumstances under which the Belgian Rule was established in Rwanda.

The Belgians conquered Rwanda during WWI after defeating German troops. During the Versailles treaty, the powerful countries recognized the efforts of Belgium in conquering Rwanda and Burundi and decided to offer them to the Belgium and Belgium annexed them to its colonial Congo.

3. Identify the political, economic, social and socio – cultural performance of the Belgians in Rwanda during mandate period.

### **Political performance:**

Between 1926 and 1931, Belgians did many administrative reforms known as Mortehanrefoms. These are the following:

- Rwanda – Burundi was joined to Belgian Congo in terms of administration. Congolese colonial law were applied to both countries.
- Rwanda which was originally governed under 20 Ibiti or districts and pastoral fiefs or Ibikingi, was transformed into a system of chiefs and sub chiefs and territories. By 1931, the 52 “chefferies” corresponded more or less to historical traditional regions and the 544 “Sous-chefferies” were equivalent to former pastoral fiefs.
- The functions of the three chiefs: Chief of land (umutare w’ubutaka), chief of the cattle (umutare w’umukenke) and chief of the army (umutare w’ingabo), were abolished and replaced by Tutsi chiefs and sub chiefs.

### ➤ **Economic transformation**

- Forced labour policy

During the Belgian colonial rule, the Belgians used cruel forced labour in Rwanda, called “Akazi”. Forced labour was mainly in plantations of the forests, carrying things, road construction, building of churches, schools and hospitals and the digging of anti-erosive ditches. With the



introduction of akazi, people found themselves in a worse situation, because this work was so hard and not paid. Instead of being paid, those who didn't perform well their tasks were bitten by the chiefs nominated by colonial masters.

The Belgian colonizers introduced also "Shiku": This was the cultivation obliged food crops such as cassava, sweet potatoes in common plantations. People were also obliged traveling long distances to cultivate the cash crops like coffee. These were cultivated away from their homes, often near the roads where colonial dignitaries liked to pass and get a good impression. The Belgian policy of forced labour had negative effects such as famines: Rumanura (1917 – 1918), Gakwege (1928–1929) and Ruzagayura (1943–1944) and insecurity among people.

Forced labour became so insupportable that people started fleeing it to neighbouring countries like Uganda and Tanzania in search of free and paid work.

#### 4. Taxation policy

Capitation or poll tax was introduced in 1917. This was obligatory for all men adult Rwandans of sound mind. From 1931, poll tax was even more concretised. It covered more people and it was paid in form of money, depending on the welfare of each Territory.

##### ➤ **Agriculture and animal husbandry**

In this field, the Belgians intensified the cultivation of food crops like cassava, Irish potatoes and sweet potatoes in order to fight endemic famines which were ravaging the country. They also encouraged the plantation of trees and the digging of terraces to control soil erosion.

In 1927 the colonial power put in place 3 agricultural research stations in Rwanda: Rubona (Southern Province), Rwerere (Western Province), and Karama (Eastern Province).

In the area of animal rearing, the colonial power concentrated on higher animals like cows and goats. Research centres were established at Nyamiyaga – Songa in Southern Region Cyeru in Northern Region and Nyagatare in Eastern Region. Animal health centres were built and veterinary clinics were established in rural areas.



### ➤ **Mining activities**

The mining activities started in 1923 while prospection had started five years before. Four mining companies in all shared the mining exploitation. These were MINETAÏN (Société des Mines d' Etain) which had deposits in Gatumba (former Gisenyi) and in Musha (near Rwamagana) and was founded in 1926.

SOMUKI (Société Minière de Muhinga et de Kigali), founded in January 1923 exploited and had deposits in Rutongo and in Nyungwe forest for the mining of gold; COREM (Compagnie de Recherche et d'exploitation Minière) which was a mixed company, jointly managed by the territorial government of Rwanda – Burundi and GEORWANDA (Compagnie Géologique et Minière du Rwanda) that had big concessions in Rwinkwamvu. The main minerals were tin, Colombo tantalite, gold, wolfram and other minerals associated with tin. Some people got jobs in the mining sector employed by these mining companies.

### ➤ **Trade, commerce and infrastructure**

In 1930, the monetary economy has been re-enforced in Rwanda due to the emerging class of salaried Rwandans who had started working in the newly created enterprises such as commercial companies, mines, civil servants working for colonial administration in plantations and in the road construction.

As for external trade, the main partners were Belgian, Congo, Burundi, some European countries, Asian countries and America. Foreign companies controlled import and export business. The colonial administration only intervened in the trade of coffee which required a lot of care in order to export good quality products.

In domain of transport, three international roads were built: **Road** Bujumbura – Bugarama – Astrida – Kigali – Rwamagana – Gatsibo – Nyagatare – Kagitumba; **Road** Bujumbura – Cyangugu – Bukavu; **Road** Bukavu – Cyangugu – Astrida

#### • **Socio – cultural transformations**

### ➤ **Education**

Belgians introduced secular and religious education under the control of the missionaries. However, it should be noted that admission to some sections of these schools was selective for some sections (Groupe Scolaire of Astrida), allowing only sons of Tutsi chiefs and other notables.

This type of education introduced was a monopoly of Christian missionaries and the main courses taught at the beginning were religion, arithmetic, reading and writing (Kiswahili, German and later French with the Belgians).

Secondary schools started in 1912 with the creation of the minor seminary of Kansi which in 1913 was transferred at Kabgayi. Secondary education developed in 1929 with the establishment of the “Groupe Scolaire d’Astrida”. Other secondary schools were established such as the teacher Training School in Zaza by Brothers of Charity (transferred from Kabgayi in 1944), teacher Training School for girls at Save managed by White Sisters (1939).

➤ **Christianity**

The Catholic Church dominated other churches and had in large numbers different congregations. The number of Rwandan priests increased from 5 in 1922 to 40 in 1939. The number of baptised converts also increased from 13, 400 in 1928 to 320, 000 in 1945.

➤ **Health**

The medical sector was run by the Christian missions. By 1932, the colonial administration had 2 hospitals: Kigali and Astrida and 29 dispensaries. From 1933, the colonial administration conceived a new policy to replace all dispensaries with mobile “assistance camps”.

This policy was done in order to solve the problem of insufficient medical infrastructure. The private hospitals were put in place in Kigeme and Shyira by the Anglican Church and some others by mining companies like hospital of Rutongo by SOMUKI and Rwinkwavu hospital by GEORWANDA. Other Christian missionaries set up the hospitals throughout the country such as Kabgayi and Mibilizi by the Catholics; Kilinda by the Presbyterians; Gahini by the Anglicans; Ngoma – Mugonero by the Adventists

In addition, a section of training of medical assistants was opened in Groupe Scolaire of Astrida and Medical auxiliaries also opened at Astrida and 2 schools for assistant nurses at Kabgayi and in Kigali.

➤ **Introduction of identity card**

In 1935, the Belgian colonial administration introduced a national identity card basing on ethnicity. The Banyarwanda who possessed 10 or more cows were registered as Batutsi, whereas those with less were

registered as Bahutu and Batwa were considered not only as those with no cows but as the “pygmies” and as those who survived by pottery active ties. They measured also the height and noises. You could see two people born from same parents given identities mentioning different ethnics group (one Hutu and another, Tutsi)

#### **4.Explain the causes and the effects of 1959 crisis in Rwanda.**

##### **Causes:**

- Bad will of Belgians colonizers of defending their future interests;
- Divisive ideology based on racism;
- Creation of political parties based on divisive ideology;
- Misinterpretation of the King Rudahigwa.

##### **Effects:**

- People were killed (Almost 200 people in the country according to the report from of UN done in1960)
- Other people were injured (almost 317 according to the same report)
- Others fled the country (almost between 150,000 and 200,000 people) and went in neighbouring countries.
- Houses of Tutsi people were burned and others destroyed all over the country
- The cows of Tutsi population were killed and eaten
- Internal displacement: Many Tutsi were obliged to leave their homes and were brought in Bugesera and Rukumberi.

#### **5. Describe the different steps that led to achievement of independence in Rwanda.**

1. From 26<sup>th</sup> June to 30<sup>th</sup> July, 1960, communal elections took place where PARMEHUTU had 166 Bourgmestres, 21 were from APROSOMA, 7 were from RADER and 17 were from other different political parties. UNAR had only one Bourgmester.
2. On October 26, 1960, a provisional government was put in place by the resident general. It was composed of 10 Rwanda ministers and 9 Belgian state secretaries. On the 25<sup>th</sup> January, 1961, the resident general conferred upon these institutions the powers of autonomy.
3. On the 28<sup>th</sup> January, 1961, the famous “Coup d’état of Gitarama”

took place. At that time, a meeting took place in a market in Gitarama in which about 2,900 councilors and bourgmasters took part. These people were elected from PARMEHUTU and APROSOMA political parties. With the complicity of the Belgian government, they proclaimed the following decisions:

- The abolition of the monarchy and the kingdom emblem, the royal emblem drum Kalinga and Ubwiru institution.
  - The proclamation of a republic and the election of the first president of the republic, Mr. Mbonyumutwa Dominique.
  - The formation of a government made up of 11 ministers with Grégoire Kayibanda as prime minister.
  - Creation of a supreme court.
4. On the February 1961, the Belgian Trusteeship recognised that regime and transferred the power of autonomy to them. A new tricolor flag of Red, Yellow and Green was exhibited.
  5. On September 25<sup>th</sup> 1961, legislative elections and a referendum were organised and were won by PARMEHUTU
  6. On the second of October 1961, the legislative assembly was put in place and Grégoire Kayibanda was elected President of the Republic by the Legislative Assembly headed by Joseph Habyalimana Gitera. From October 1961 up to July 1962, the negotiations and other preparations were done by UN and Belgian government so as to offer the independence Rwanda and Burundi.
  7. On the 1<sup>st</sup> July, 1962, independence was given to Rwanda; the Belgian flag was replaced by the Rwandan flag.

## REFERENCES

1. BYANAFASHE, D. and RUTAYISIRE, P. (2011). *History of Rwanda; from the beginning to the end of the twentieth century*, National University of Rwanda, Huye.
2. CHRETIEN J.-P., (2000). *L'Afrique des Grands Lacs. Deux mille ans d'histoire*, Paris, Aubier.
3. D'HERTEFELT M., (1971). *Les clans du Rwanda ancien. Eléments d'ethnosociologie et d'ethnohistoire*, Tervuren.
4. DELMAS L., (1950). *Généalogie de la noblesse (les Batutsi) du Ruanda*, Kabgayi, Vicariat Apostolique du Rwanda.
5. GAHAMA, J., (1982). *Le Burundi sous l'administration Belge*, Karthala.
6. GALABERT, J.L., (2011). *Les enfants d'Imana. Histoire sociale et culturelle du Rwanda ancien*, Editions Izuba.
7. HARROY, J.P. (1984). *De la féodalité à la démocratie*, Hayez, Bruxelles.
8. INSTITUTE OF RESEARCH AND DIALOGUE FOR PEACE, (2006). *History and conflicts in Rwanda*, Kigali.
9. KAGAME, A. (1975). *Unabrégé de l'Ethno-Histoire du Rwanda*, Butare.
10. KAGAME, A., (1975). *Un abrégé de l'histoire du Rwanda de 1853 à 1972*, Coll "Muntu", Tome 2, E.U.R, Butare.
11. KALIBWAMI, J. (1991), *Le catholicisme et la société Rwandaise*, P.A, Paris.
12. LOGIEST, G. (1988). *Mission au Rwanda. Un blanc dans la bagarre Hutu-Tutsi*, Didier Hatier, Bruxelles.
13. LUGAN, B. *Histoire du Rwanda dès la préhistoire à nos jours*.
14. MAQUET J.-J., (1954). *Le système des relations sociales dans le Ruanda ancien*, Tervuren, Musée Royal du Congo Belge.
15. MINEDUC, NCDC, (2010). *The History of Rwanda Secondary Schools, Teacher's Guide, Module I & II*, Kigali.
16. MINEPRISEC, (1987). *Histoire du Rwanda, Tome I*, Kigali, DPES,
17. MUZUNGU B., (2003). *Histoire du Rwanda précolonial*, Paris, L'Harmattan.
18. NKUNDABAGENZI, F. 1961). *Rwanda politique (1958-1960)*, Dossier du CRISP, Bruxelles.
19. BAREKYE, R. (2016). *Achievers Geography For Rwandan Schools*.

- Nairobi: East African Educational Publishers Ltd.
20. BUCKLE, C. (1978). *Landforms in Africa Longman*. London.
  21. GILLIAN C. MORGAN, GOH CHENG LEONG. (1982). *Human and Economic Geography*. New York: Oxford university press.
  22. J, W. (1984). *Dictionary of physical geography*. New York.
  23. KICHODO, H. M. (2011). *world problems and development*. Kampala: Campsolutions.
  24. M.GABRIEL, L.NJUGUNA, C.Nalianya, J.Gathenya. (2016). *Geography and Environment For Rwanda Schools*. Kigali: Longhorn Publishers(Rwanda) Ltd.
  25. R.B, B. (1973). *General Geography in Diagrams Longman*. London.
  26. SUGUT, D. K. (2016). *Achievers Geography For Rwandan Schools*. Nairobi: East African Educational Publishers Ltd.

### Electronic references

1. [https://www.google.rw/search?q=photo+on+the+rite+of+kubandwa+in+rwan-da&source=lnms&tbn=isch&sa=X&ved=0ahUKEwjU8dS4qLfkAhUDShUI-HfbfBOYQ\\_AUIEigB&biw=911&bih=438#imgcr=WEhT0lVoOdZmJM](https://www.google.rw/search?q=photo+on+the+rite+of+kubandwa+in+rwan-da&source=lnms&tbn=isch&sa=X&ved=0ahUKEwjU8dS4qLfkAhUDShUI-HfbfBOYQ_AUIEigB&biw=911&bih=438#imgcr=WEhT0lVoOdZmJM)
2. <https://www.pinterest.com/pin/463378249132527834/>
3. <https://www.google.com/search?q=Rudahigwa+images&tbn=isch&source=iu&ictx=1&fir=iqsNc0at8Y4x-M%253A%252C-ZYKGIbj5dwfKM>
4. [https://www.google.com/search?rlz=1C1CHBD\\_enRW858RW858&q=mbonyumutwa+imagess&tbn=isch&source=univ&sa=X&ved=2ahUKEWjk6\\_Ls87nkAhUHrxoKHZytCOkQ7A16BAgIECQ&biw=1038&bih=722&dpr=1.25#imgcr=HwzusufTrQi6ZM:](https://www.google.com/search?rlz=1C1CHBD_enRW858RW858&q=mbonyumutwa+imagess&tbn=isch&source=univ&sa=X&ved=2ahUKEWjk6_Ls87nkAhUHrxoKHZytCOkQ7A16BAgIECQ&biw=1038&bih=722&dpr=1.25#imgcr=HwzusufTrQi6ZM:)
5. <http://www.economiesafricaines.com/en/countries/rwanda/geographic-framework/relief>
6. [https://solarimpulse.com/global-warming-solutions?gclid=EAIaIQobChMI7Yqh8sa25AIVxuFRCh0yfg47EAAYASAAEgIXpD\\_BwE](https://solarimpulse.com/global-warming-solutions?gclid=EAIaIQobChMI7Yqh8sa25AIVxuFRCh0yfg47EAAYASAAEgIXpD_BwE)
7. <https://study.com/academy/lesson/what-are-natural-resources-definition-lesson-quiz.html>
8. <https://e360.yale.edu/features/how-deforestation-affecting-global-water-cycles-climate-change>
9. <https://www.len.com.ng/csblogdetail/339/Land-Mode-of-Transportation--its-Advantages-and-Disadvantages>