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Sazani Trust

Teaching Guide 13

Land use

Healthy and Sustainable Schools Programme 2nd Edition

Preface

The Healthy and Sustainable Schools Programme is a result of Sazani Associates UK and Sazani Trust Zanzibar's ongoing partnership with the Ministry of Education to improve the quality of education and learning in Zanzibar.

The project is aligned with the Sustainable Development Goals and actively supports teachers and schools in achieving Global Education Target 4.7.

By 2030, ensure that all learners acquire the knowledge and skills needed to promote sustainable development, including, among others, through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship and appreciation of cultural diversity and of culture's contribution to sustainable development (UNSD, 2021).

Focusing on the combined importance of key skills and healthy and sustainable life skills, we have revised and updated our series of fifteen Teaching Guides to support competency based curriculum linked learning.

The teaching materials are suitable for use in the last two years of primary across the transition to the first two years of secondary school.

There are fifteen Teaching Guides in this series, themed around topics that contribute to healthy and sustainable life styles within the context of Zanzibar, as follows:

1. Why we need to eat well
2. Getting enough food
3. Keeping food safe and clean
4. Population and health
5. Water
6. Sanitation and waste
7. Tourism
8. Biodiversity
9. Agriculture
10. Fisheries and marine resources
11. Energy
12. Land transport
13. Land use
14. Climate change
15. Participatory action learning

Each Teaching Guide is themed and contextualized to bring Zanzibar and contrasting localities into a classroom setting and to make learning engaging and relevant to local livelihoods. Activities are gender responsive, participatory and proven to support numeracy, literacy, English language and critical thinking.

For more information please visit our website **www.sazani.org**

Acknowledgements

This series of fifteen Teaching Guides has been adapted from Sazani Associates HSSP topic books by Rajab S. Ali, Safia M. Abdalla, Mwanawije M. Makame, Patrick Rutledge, Nicola Shone, Joshua Shawe and Rashid O. Shehe, with editorial review by Marilyn James and Dr Cathryn MacCallum. Graphic design and layout by Seven Six Design.

Contents

1 Introduction

The learning content and activities in this Teaching Guide have been designed to be easily integrated across the curriculum. Throughout the resource, knowledge, skills, attitudes, and values are interlinked and are built into all the topic areas addressed.

We have revised and updated our series of fifteen Teaching Guides to support competency-based, curriculum linked learning and development by focusing on the combined importance of key skills including numeracy, literacy, critical thinking and English language for healthy and sustainable lifestyles. The teaching materials are suitable for use in the last two years of primary across the transition to the first two years of secondary school.

There are different methods of displaying this information, through text, tables, diagrams, images and activities. Each activity includes icons to illustrate which curriculum area and which key skills are used as summarized in the tables below.

Key skills				
Numeracy 	Literacy 	Critical thinking 	English language 	Creativity 

Activity / STD V-VI	Maths	English	ICT	Civics	Geography	History	Science	Religion	Arabic
Shout out a land use				X	X	X	X		
Local land use proposal (part 1)				X	X	X	X		
Local land use proposal (part 2) debate		X	X	X	X	X	X	X	X
Comprehension		X	X	X	X	X	X	X	X
Interviews		X	X	X	X	X	X	X	X
Using interviews to map before and after land use		X	X	X	X	X	X		
Where to build		X			X		X		
Preventing environmental degradation (natural sea defence vs man-made)		X			X		X		

Activity / Form 1-2	Maths	English	ICT	Civics	Geography	History	Biology	Chemistry	Physics	Religion	Arabic
Shout out a land use				X	X	X	X	X			
Local land use proposal (part 1)				X	X	X	X	X	X		
Local land use proposal (part 2) debate		X	X	X	X	X	X	X	X	X	X
Comprehension		X	X	X	X	X	X	X	X	X	X
Interviews		X	X	X	X	X	X			X	X
Using interviews to map before and after land use		X	X	X	X	X	X		X	X	X
Where to build		X			X		X				
Preventing environmental degradation (natural sea defence vs man-made)		X			X		X				

2 Topic overview

Key words

Environmental protection: the practice of protecting the natural environment by individuals, organisations and governments.

Population growth: the increase in the number of individuals in a population.

Coastal erosion: the loss or displacement of land, or the long-term removal of sediment and rocks along the coastline due to the action of waves, currents, tides, wind-driven water, waterborne ice, or other impacts of storms.

Ecosystem: a biological community of interacting organisms and their physical environment.

Zanzibar is a highly agricultural country of around 1 million people, of which 60% live on the island of Unguja and the remaining 40% on the island of Pemba. The total land area covers 2,332 square kilometres, making Zanzibar one of the world's most densely populated agricultural islands with around 400 people per square kilometre. The agricultural lands are predominantly located on the western side of both islands.

The main subdivision of rural land use in Zanzibar are:

- Rain fed agriculture e.g. makoba.
- Irrigated agriculture e.g. kibokwa, mtwangoss.
- Grass land e.g. Jamhuri garden.
- Forestry or recreation e.g. Jozani.

Box 1. Early settlement In Zanzibar

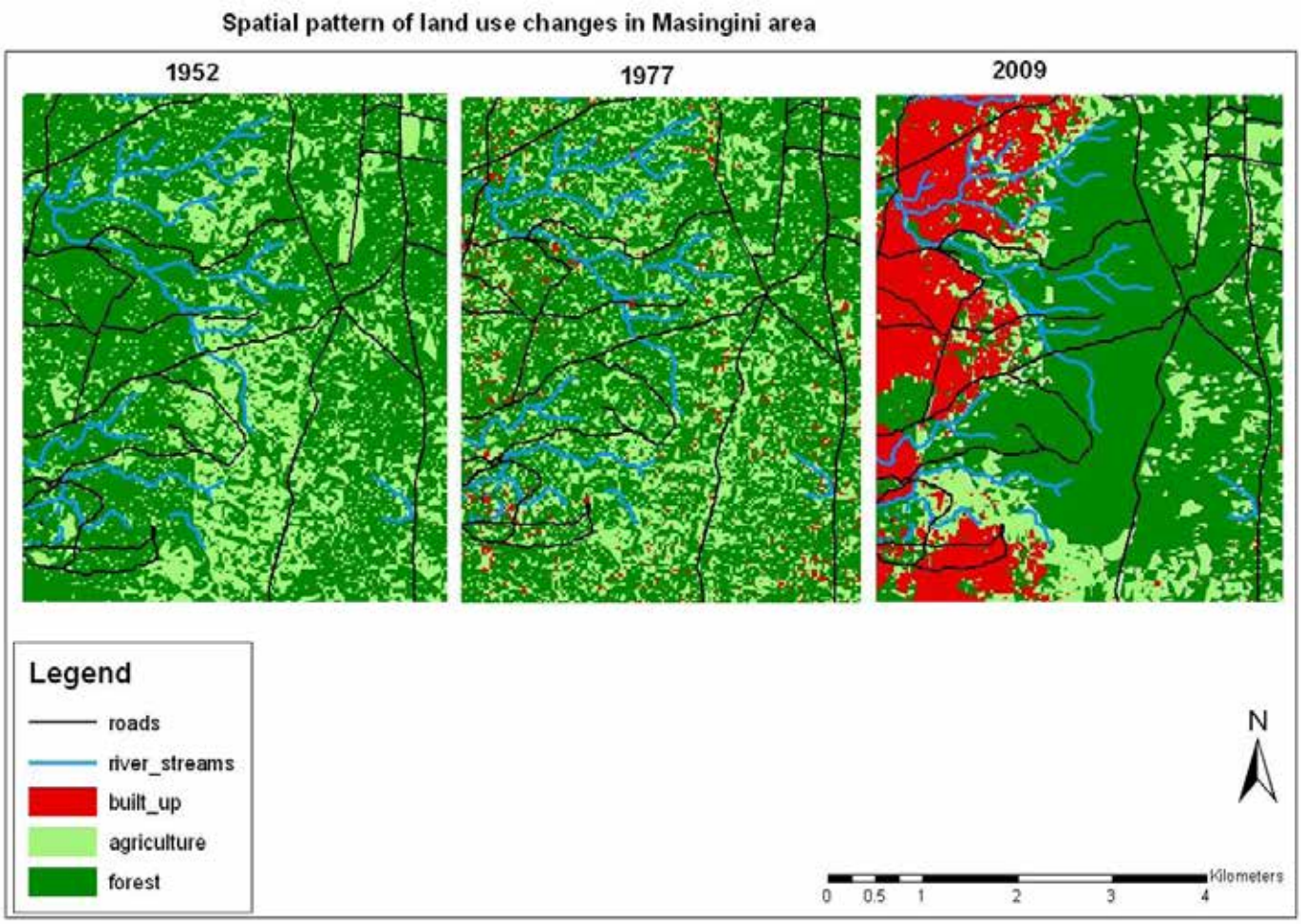
People have lived in Zanzibar for over 20,000 years and the island's history was greatly shaped by its geography, the prevailing winds of the region placing it directly on the Indian Ocean trade routes and making it accessible to both traders and colonists. The first immigrants in Zanzibar were traders who travelled to and from Arabia, Persia, India and Africa in the 10th century. They established plantations to grow spices, and hence the island became known as the 'Spice Island'. In 1890, the British arrived in Zanzibar and formally established their rule which lasted until the island gained independence in December 1963 as a constitutional monarchy. In 1900, they institutionalised land administration and carried out the first Land survey to oversee all land administration activities on the islands. In 1978, Zanzibar saw the introduction of the first comprehensive master plan of Zanzibar towns, which aimed to provide an orderly development of all town areas in Zanzibar. This was to last for 20 years with reviews of the plan to be carried out every five years.

2.1 Land-use planning

Land-use planning in Zanzibar is governed by the National Land Use Plan (NLUP), a comprehensive strategic policy document produced by the Government of Zanzibar. The previous NLUP lasted until 2015 and served as a basis for environmental protection. The plan covered three main areas:

- **The Settlement Structure Plan (SSP)** – which provides guidelines for a balanced approach to settlement development.
- **Tourism Zoning Plan (TZP)** – which identifies areas for tourism and proposes a strategy for its implementation.
- **Coastal Zone Management Plan (CZMP)** – which aims to determine the best long-term sustainable use of the nation's terrestrial and marine resources.

Due to the ever-increasing population in Zanzibar, there is a growing demand for housing, putting pressure on the land and environment. The picture below shows a special distribution map of how land use in the Masingini area (northeast of Stone Town) has changed between 1952 and 2009.



2.2 Why land-use planning is important

When the population on an island is small, there is plenty of land for everyone to build a house, grow subsistence food and cash crops, use for modern road construction (infrastructure), and for recreational activities.

Zanzibar's population is estimated at just over a million and is growing at an annual rate of 3.1 percent. The islands have registered a population growth of 3 percent between 1978 and 1988, up from 2.86 percent between 1976 and the 1978 census, and 1.81 percent between 1957 and 1967. This population growth and accompanying economic growth has led to competition for land.

2.3 Determinants of land use

Social problems	Natural hazard and limitation	Difference between land use and land suitability	Rural planning problems
Population pressure / too many people using land resources.	Water supply and distribution.	Unsustainable clearance of forest.	Inadequate power.
Unequal and unfair distribution of land, capital and opportunity.	Irregular relief (gradient of slope).	Inadequate soil conservation practices.	Ineffective market price structure.
Restriction of land tenure and ownership.	Drought prone / dry soil.	Ineffective period of time for bush fallowing.	Lack of finance.
	Poor drainage.		Inadequate transport system.
	Diseases.		Lack of technical support.

Compromises have to be made about how land will be used, which could create tensions between various competing stakeholders – different groups of people who all have an interest or 'stake' in the same thing – who hold differing opinions about how the land should be used.

Questions that arise include:

- What is the best way to use the land?
- Who gets the best land?
- Who receives the benefits?
- What are the consequences of developing the land for human use?

There are many answers to these questions, not just one! The uses will change according to the type of land, and according to the human population's needs.

2.4 Human impacts on marine ecosystems

The **coastal zone** is the place where land meets the sea. There are significant interactions between the sea and dry land, which keep the coastline in a healthy state. If these processes are disturbed, the whole coastline may be affected, for example:

1. Removing the vegetation at the back of a beach (e.g. to provide a nice view) also removes the roots that hold the sand and soil.

   RESULT: The beach erodes, especially during stormy weather.

2. Removing an area of mangrove and the natural trapping and filtering process (of soil and debris) stops.

   RESULT: The nearby coral reef is affected by sedimentation, pollution, etc.

3. Place walls or groynes along the coastal edge so that sea and sand's natural movement is altered.

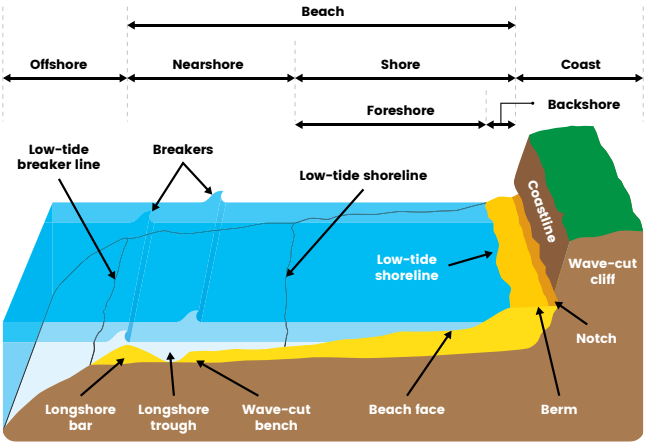
   RESULT: Abnormal loss of sand and coastal erosion.

4. Drain or fill in a freshwater marsh and the natural sponge effect (absorption of excess water after heavy rain and slow release of water during dry periods) is lost.

   RESULT: Flooding of the area, or extra-dry soil.

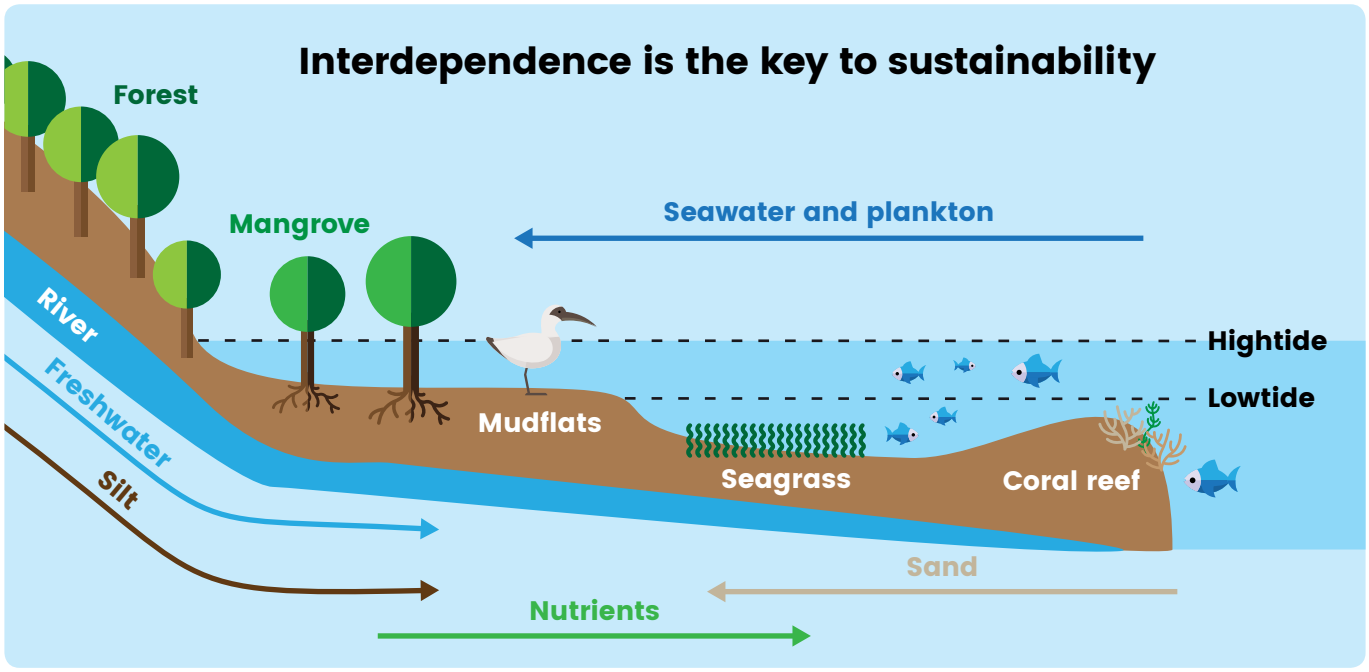
5. Remove a coral reef or reef flat (for example by dynamiting a channel or reclaiming land) and the protection that the reef offers against storm waves is the reduced.

   RESULT: Erosion of the coastline.



2.5 Ecosystem interdependence

- Fresh water carries fallen leaves to the mangrove
- Silt is trapped in the mangrove mudflats
- Nutrients produced in the mangrove nourish sea grass
- Sea water brings food to mangroves and mudflat animals
- Sand is stabilized by sea grass roots
- Sand and silt accumulate to produce new land



3 Reclaiming land from the sea

Key words

Land reclamation: the process of creating new land from oceans, seas, riverbeds or lake beds.

Habitat: the natural home or environment of an animal, plant, or other organism.

Reclamation: the cultivation of waste land or land formerly under water.

Fine sediments: is normally taken to comprise sand, silt and clay particles, that is those grain.

Environmental destruction: damage to the natural environment.

Monetary value: how much money something is worth.

What is land reclamation?

Land reclamation is the process of creating new land from oceans, seas, riverbeds or lake beds.

3.1 Why do governments use land reclamation?

In some countries, the government has reclaimed land from the sea because reclaimed land can be made flat and is therefore much easier to develop than mountainous land. Reclaimed land can be used to build an airport or develop a port, a small industry with lots of businesses, or housing, factories, schools, hospitals, and leisure resorts. In a small Island such as Zanzibar with a relatively large population given its size, land reclamation may be a potential solution in the future to accommodate an ever-increasing population.

3.2 Advantages and disadvantages of land reclamation

Reclamation of land from the sea is a controversial issue because it destroys marine habitats (such as reef flats, seagrass beds, sand and mudflats), which are an essential part of the coastal ecosystem. The reclamation process can cause fine sediments to fall on nearby corals, affecting their growth and survival. The new land also alters the flow of sea currents, which can result in coastal erosion and other changes to the coastline.

When deciding whether to use land reclamation decision-makers have to weigh up it's benefits and drawbacks and ask questions such as:

- Who benefits?
- How much environmental destruction can be tolerated?

Development is measured in terms of its social and economic benefits. Giving a monetary value to the environment thus becomes an important way of balancing the long-term positive and negative effects of development.

For development to be sustainable, it must not affect the environment's long-term ability to provide necessary services such as protection from wave action and sea-level rise, areas for fish reproduction and clean beaches.

An example of land reclamation:
The Palm, Dubai in the United Arab Emirates.

The process of "infilling" which involves filling the area with large amounts of heavy rock and / or cement then filling with clay and dirt until the desired height is reached.

4 What is environmental degradation?

Key words

Deforestation: the action of clearing a wide area of trees.

Soil fertility: the ability of soil to sustain agricultural plant growth.

Environmental degradation: the deterioration of the environment through depletion of resources such as air, water and soil; the destruction of ecosystems; habitat destruction.

Degradation is a process whereby something is spoiled or damaged. When this happens to the environment, soil is lost or deposited in the wrong place, water dries up, poisons are added, and plants and animals are harmed or even disappear.

4.1 Examples of environmental degradation

- **Deforestation:** when trees are cut down, and large areas of forest are cleared, the soil quickly dries out and loses its fertility, or it gets washed away (soil erosion). When this happens, many plants and animals that lived in the forest cannot survive.
- **Fire:** whether started accidentally or deliberately fires can get out of control and spread to nearby land leaving the soil bare. This bare soil may erode or dry out from the sun.
- **Pollution:** this can be caused by the dumping of wastes in rivers or on the land, by overuse of fertilisers or pesticides, by liquid leaking from septic tanks or animal farms (e.g. pigs, chickens). Pollution can also damage or kill plants and animals.
- **Poor agricultural management:** the use of inappropriate methods for land cultivation and keeping livestock by farmers can cause soil erosion or pollution. Soil erosion decreases soil fertility, which can negatively affect crop yields.
- **Poor construction methods:** if the land is completely cleared before road or house construction begins, vegetation is lost. Without the protection of vegetation, soil dries out and / or washes away.
- **Poor location of constructions:** buildings constructed too close to the sea can result in beach erosion. Buildings located on steep slopes may cause landslides. Buildings situated on freshwater marshes or mangroves can result in the complete destruction of the habitat.

Box 2. Flooding: natural or unnatural?

The flood plains of large rivers have very fertile soil and provide valuable agricultural land. The rivers flood frequently and tend to change their course. The maps below show two examples: the Mississippi river system in the USA and Bangladesh river system (where the Ganges, Jamuna and Meghan rivers meet and form a vast delta).

The Mississippi river system in the USA.

Bangladesh's river system.

Jeremy's story

Jeremy lives near the Mississippi River. His family has been farming in the area for generations. The local people wanted the river to remain in one place so that they could farm and be free of floods. Therefore river banks were raised and dams built which controlled the river. Wetlands (marshes and ponds) were drained and used for agriculture. The land around the river was converted into towns and farmland. Then one day it rained heavily for several days, and the river flooded. Jeremy's family lost almost everything. Their crops were destroyed and their house spoilt by floodwater. Fortunately, the government compensated the family, but people were angry and demanded that the government protect their land. They demanded higher riverbanks and more flood controls.

Padma's story

Padma's family also farms, in the fertile soil of Bangladesh. Every year, during the monsoon (rainy) season, the water level rises typically several metres above sea level. The new layer of soil brought by the flooding river is rich in nutrients for plant growth, so crops do well. However, Padma has lost several members of her family in such floods. Deforestation in India and the Himalayas has made the flooding worse, and sometimes there are terrible cyclones which cause more damage. Padma's family have few possessions, and they do what they can with what they have. They have been living with these floods for generations. The government has little money to repair the damage or to build defences against the flooding. It relies a lot on aid from other countries.

5 How can we use land sustainably?

Key words

Sustainability: the active protection of natural resources in order to maintain an ecological balance.

Biodiversity: the variety of plant and animal life in the world or in a particular habitat, a high level of which is usually considered to be important and desirable.

National park: an area of countryside, or occasionally sea or freshwater, protected by the state for the enjoyment of the general public or the preservation of wildlife.

Environment and development must go hand in hand. If we overuse resources such as water, soil, land, sand and trees, they may disappear or become damaged and unable to provide us with things we need. This is known as environmental degradation. If we damage the environment by putting dangerous chemicals into it or by upsetting the natural balance of plant and animal species, it is we humans who will be affected in the long run.

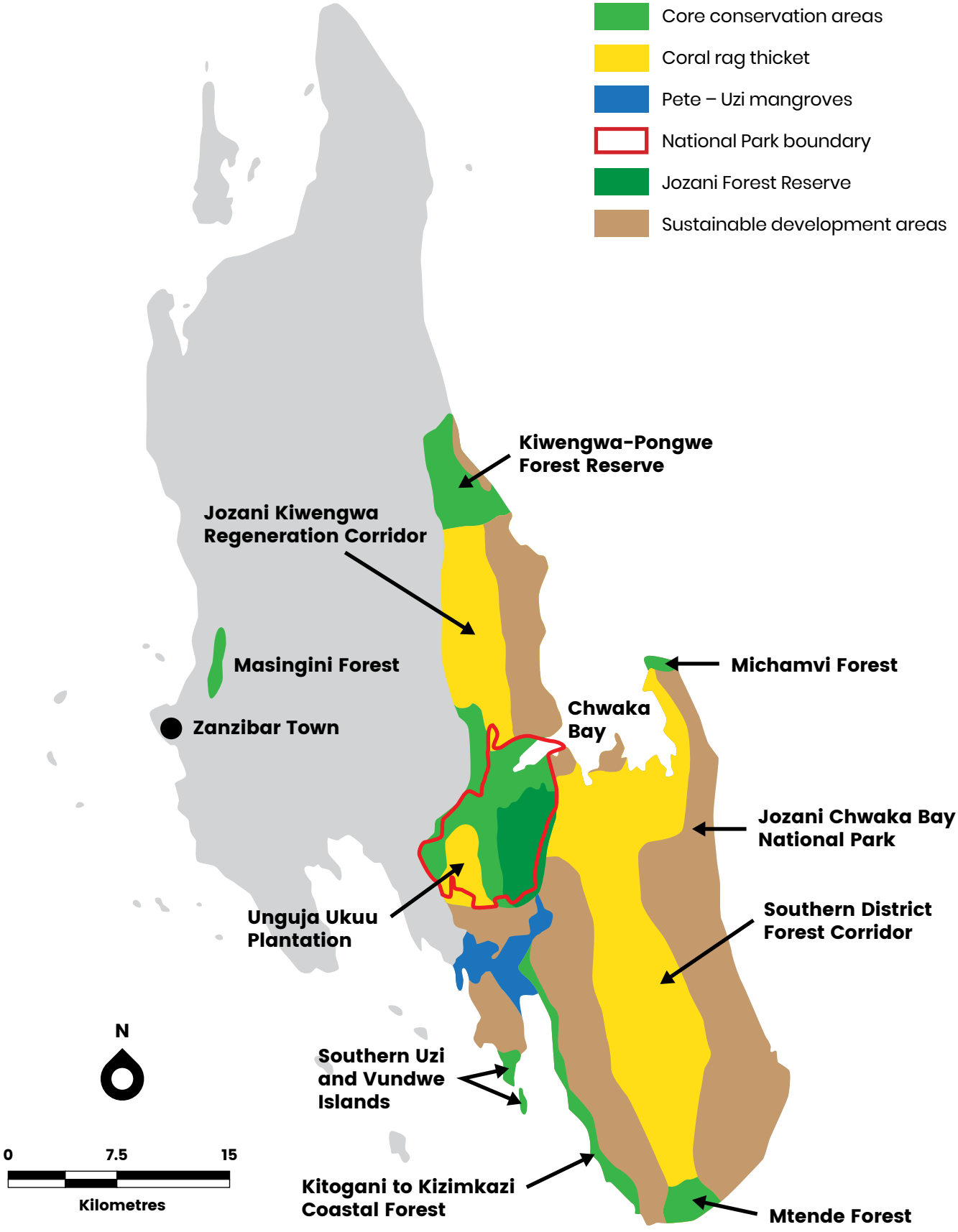
Therefore we must find ways of using and developing land in a truly sustainable way. We need creative solutions!

We need to be more aware of the power of nature; we need to work with nature rather than against it.

5.1. Ensuring the environment is included in planning

In Zanzibar, there is already some awareness of the importance of the environment in our lives. However, for sustainable land use, we need to think long-term. We need to think about the future for our grandchildren and beyond. Several things can be done, including:

- **Land Use Plan:** is vital for sustainable development, and needs to include the outer islands and the newly reclaimed land as well as the inner islands. Fortunately, there is a legally binding Land Use Plan in Zanzibar. However, in some countries, there is too much flexibility in land use planning. Developers sometimes have too much power, and environmental issues are given a low priority. It is easy then for development to become unbalanced. Land Use Plans are useful for getting the local community involved and listening to their points of view. This is important to avoid negative consequences for a community or group of people.
- **Geographic Information System (GIS):** GIS maps are digital maps (e.g. on a computer) that have layers of data added to them. GIS maps can be changed to show specific information about a place, for example, positions of houses and water pipes, soil, farmland and boundaries. Computers can process this information to produce a map showing the relationships between selected information. This is an essential tool for planning.
- **Sensitive Area Atlas:** This is a special atlas that identifies sensitive areas that should be valued for their contribution to our lives, whether as beauty spots, for the extraordinary biodiversity or for supplying us with water, fish and other resources. These include mist forests, mangroves, coral reefs, seagrass beds, etc., as well as beautiful beaches. We often forget how important these areas are in our lives, and we must not let them disappear!
- **Laws and regulations:** provide the means to protect and improve the environment, control activities which harm the environment, and set standards for technologies, levels of pollution, etc.
- **Environmental Impact Assessment (EIA):** an EIA is a report about a proposed development, which may affect a sensitive area. It examines the plans and highlights the positive and negative social, financial and environmental impacts of the proposed development. It also suggests ways to solve or reduce any environmental problems. People who may be affected by the development can look at the EIA and make comments. Unfortunately, many developers see the EIA as a hindrance rather than a useful process. Also, many people either cannot easily understand the EIA's complex language, or they believe the development will go ahead anyway, so they do not comment. Once an EIA is approved, the development's progress must be checked to ensure that all the EIA's environmental recommendations are followed.
- **Conflict resolution:** resolving conflicts over land ownership and land use can be difficult. New techniques are being developed to help in such disputes. These techniques could prove effective in Zanzibar in the future.



A sensitive area atlas of Unguja.

- **Protected areas:** some sensitive areas are already protected such as National Parks, e.g. Jozani Chwaka Bay National Park. Other areas are special reserves, e.g. Mnemba Island. Protected areas are an important way of caring for and preserving our environment.

6 What we have learned:

- All use of land by people causes changes to the environment.
- Increasing human population creates pressures on the land.
- In Zanzibar the coastal zone is critical, given the interaction between land and marine habitats.
- Land reclamation, like all land use, provides development at the expense of natural habitats.
- Environmental degradation is damage to the environment, often caused by human activities.
- Countries differ in their ability to work with nature or to control nature.
- We can achieve sustainable use of land if we have the right information, tools and methods.

Knowledge and skills	Attitudes and values
Understand the importance of including environmental issues in land use decisions; understand the consequences of actions taken.	Appreciate the complexity of land use decision-making; value the environment as part of land use planning.

7 Learning activities

How How How activity

Refer to the **How How How activity** detailed in the "Participatory Action Learning" book to help the student explore different ideas and concepts and challenge each other's points of view.

Activity 1: Shout out a land use

Resources required:

- One or more small balls, such as tennis balls
- Paper or writing book for the finished list to be copied down
- A pen / pencil for each learner

Set up:

This can be done inside the classroom if there is enough room, or outside.

Place learners in groups.

Give each group a ball.

Activity:

- Ask learners to take turns throwing and catching the ball and shouting out a land use when the ball lands with them.
- The game continues until learners have run out of land uses they can think of.
- Alternatively the teacher can throw the ball at the front of the class and each time its caught a learner must shout a land use.
- If they do not know one, they can ask someone to help them.
- Each answer is written on the board by the teacher and copied down by learners.

Review:

The following questions or points may be used to review the activity:

- Ask learners to explain each answer on the board further.
- Ask learners to think of land uses around the world.

Activity 2: Local land use proposal (part 1)

Resources required:

- Large piece of paper or writing book to create a proposal
- A pen / pencil for each learner

Set up:

Put learners into groups or pairs.

Activity:

- Ask groups to prepare a land use proposal (plan) for a place in their locality.
- Ask them to include outlining of the various benefits and costs associated to the proposal.
- You may want to include some of the factors in the below table:

Proposal for land use	
Reasons	
Advantages to the community	
Disadvantages to the community	
Cost	
Environmental benefits	
Environmental cost	

Review:

The following questions or points may be used to review the activity:

- Complete an environment impact assessment of the proposal using their local area and then confer whether the benefits outweigh the environmental cost.

Activity 3: Local land use proposal (part 2) debate

Resources required:

- Large piece of paper or writing book to record the debate
- A pen / pencil for each learner

Set up:

Split the class in to two big groups (pros and cons groups for the debate) and one small group (judge group who will award points).

Have the bigger groups of the class on either side of the classroom, ready to debate and the judging team near the blackboard ready to keep track and score points.

(Alternatively, smaller groups to have their own debates and the teacher can circulate).

Activity:

- Ask learners to take 10 minutes each to prepare their pros or cons for debate.
- Give the learners 30 minutes to debate, taking it in turns to give pros and cons, back and forth in the style of a debate.
- Give the judging team 10 minutes to summarise the key points of the debate and decide who has won the debate (without announcing it yet to the rest of the class).
- While the judging team do this ask the rest of the class to copy the pros and cons list on the blackboard into their books, or simply read it.
- Ask the judging team to announce who has won the debate!

Review:

The following questions or points may be used to review the activity:

- Ask each team to review the other teams points and why they agree with those points.

Activity 4: Comprehension

Resources required:

- Paper or writing book
- A pen / pencil for each learner

Set up:

This can be done as a class or in pairs / small groups as a discussion or written down in books / on paper.

Learners will need to refer to the Box 2 information.

Activity:

Read the information in the "Box 2. Flooding: natural or unnatural?" on page 11. Then answer the questions below:

- What is your reaction to these two stories?
- Are you angry about the unfairness of the two different situations?
- Do you dismiss the Bangladeshi's situation as 'that is what happens in poorer countries'?
- Should Padma's family be satisfied with compensation and should the Government of Bangladesh continue to compensate people if they lose their possessions to floods instead of focusing on controlling the floods by building defenses against them?

Review:

The following questions or points may be used to review the activity:

- What can you say about the situation in Zanzibar in comparison to Bangladesh?

Activity 5: Interviews

Resources required:

- Pens / pencils
- Clipboards / paper for recording interview
- Map

Set up:

Learners can do this in small groups / pairs or independently

This activity involves learners interviewing older people in their families and in their community.

Activity:

- Work in small groups to interview older people in your family and in your community.
- Find out what changes have occurred to the land and the environment in your area.
- Here are some examples of questions:
  - Has the number of houses in the area changed (increased or decreased)? Are there new buildings now? Or sports facilities?
  - Are there more paths or roads? Have some disappeared?
  - Is it cleaner or more polluted now?
  - Has the amount of agricultural land increased or decreased?
  - Have there been changes in the numbers of trees, or kinds of trees?
  - Have any habitats (e.g. freshwater marsh, mangrove, beach, and mudflat) disappeared?
  - Have any plants or animals disappeared?

Review:

The following questions or points may be used to review the activity:

- Ask learners to discuss what they think about the changes.
- Are they positive or negative changes?
- How has the land use in their community changed?

Activity 6: Using interviews to map before and after land use

Resources required:

- Pens / pencils
- Paper for mapping

Set up:

Learners can do this in small groups / pairs or independently.

This activity involves the learners using their interviews from the previous activity.

Alternatively, if they have not interviewed anyone, they can make the map using their imagination.

Activity:

- Ask learners to look at the example maps below and create their own to portray the differences in how their community was before and after different land uses.

Before

After

Display it in the classroom at school – ask for permission first.

Review:

The following questions or points may be used to review the activity:

- Ask learners to discuss what they think about the changes.
- Are they positive or negative changes?
- How has the land use in their community changed?

Activity 7: Where to build

Resources required:

- Pens / pencils
- Paper for mapping

Set up:

Study the map (on next page).

Work in small groups.

Activity:

- Inform learners that a children's playground, a new small hotel and a new landfill (dump for waste / rubbish) have to be situated in the area shown in the map.
- Teams need to help the developers to decide on the best location for the three developments.
- You may need to make three tables like the one shown below, one for each development.

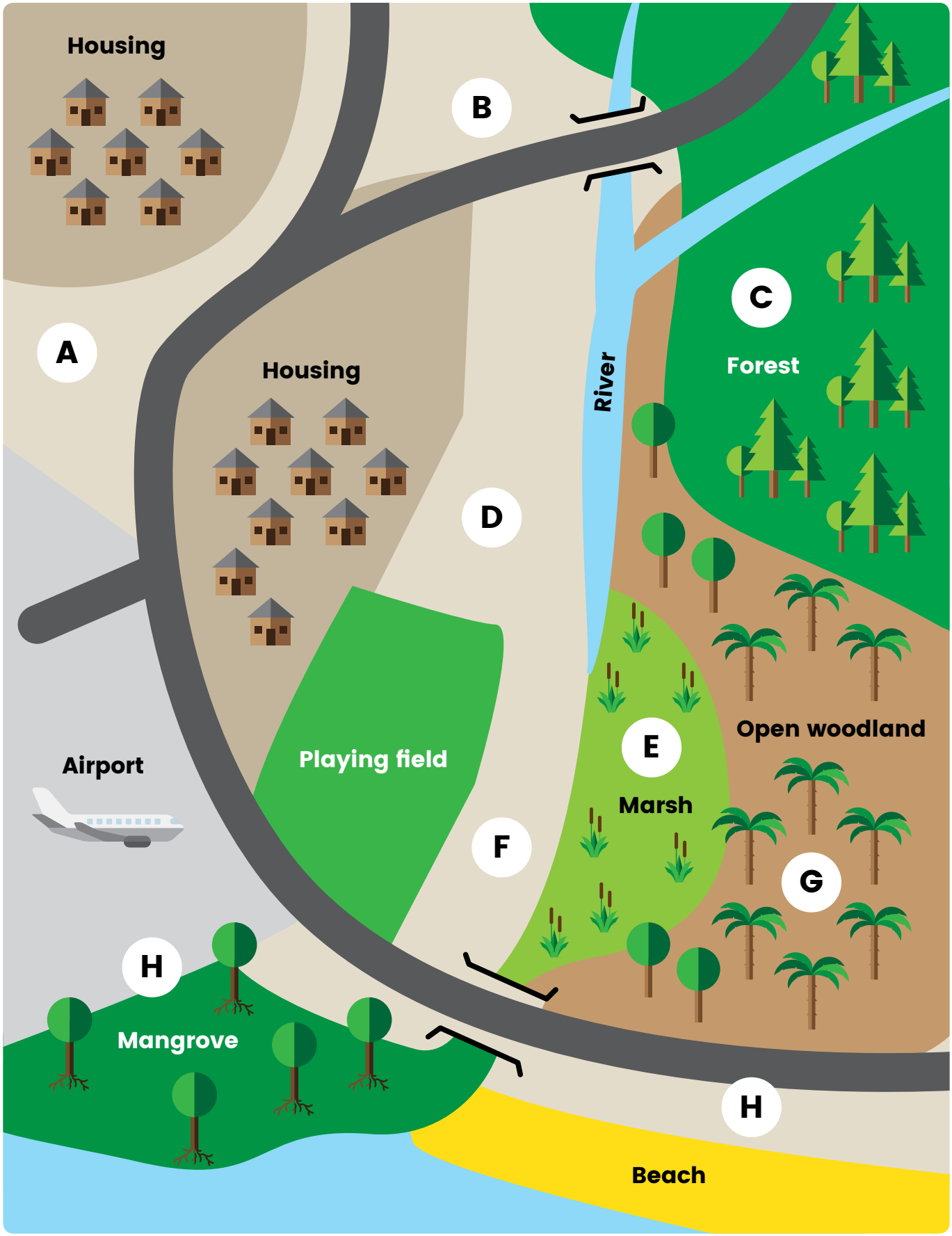
Site	Suitable	Unsuitable
A		
B		
C		
D		
E		
F		
G		
H		
I		

Review:

The following questions or points may be used to review the activity:

- In each case, consider the locations indicated on the map and give reasons why you would choose or reject that location.
- Think about how the development will affect people and the environment at each site. Remember there are no right or wrong answers!

Study the map:



Activity 8: Preventing environmental degradation (natural sea defence vs man-made)

Resources required:

- Poster / flyer paper
- Pens / pencils

Set up:

If possible, ask learners to study the pictures.

Learners can work in pairs or small groups.

Activity:

- Ask learners to compare what a natural sea defence (example of mangrove swamp) does to prevent environmental degradation.
- Ask learners to compare the natural sea defence with the cost of putting in man-made sea defences.
- Ask learners to consider what benefits are unable to be recreated.
- Pictures with a small list of facts could be used for the comparison.
- Learners can produce a news bulletin, poem or painting to express ideas.

Review:

The following questions or points may be used to review the activity:

- Have learners ever seen either of these sea defences?
- Do learners' communities have either of the sea defences?
- Which do they think is better?

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