

LIFE ON LAND

RESOURCE FOR TEACHERS AND FACILITATORS





The Sustainable Development Goals are 17 unique goals set out by the UN member states to help tackle some of the biggest causes of **POVERTY**, **INJUSTICE** and **DAMAGE** to our planet.

Today we are seeing unprecedented land degradation, and the loss of arable land at 30 to 35 times the historical rate.

Land is the foundation for all life-sustaining processes on the planet. It provides us with food and water. It helps us manage environmental risks such as floods and drought. It supports natural processes such as soil formation and nutrient cycling. In economic terms, land benefits billions of people, including a large proportion that depend entirely on farming and forest products for their livelihood. For all these reasons, it's imperative to maintain sustained and productive use of land. (www.thegef.org)



LIFE ON LAND



1.6 billion people depend on forests for their livelihoods.



Forests are home to more than 80% of all terrestrial species of animals, plants and insects.



Worldwide, 2.6 billion people depend directly on agriculture to earn a living.



Of the 8,300 animal breeds known, 8% are extinct and 22% are at risk of extinction.



8 out of 10 people living in rural areas in developing countries rely on traditional plant-based medicines for basic healthcare.



Of the more than 80,000 tree species, less than 1% have been studied for potential use.



Climate action – Is intrinsically linked to life on land. Climate change is impacting on the eco systems of the planet in very harmful ways which can threaten the existences of entire species. Rising temperatures and increased rainfall is making it increasingly hard for poor farmers who depend on farming as their livelihood.



No Poverty – 2.6 billion people depend on agriculture for their income. The destruction of the land will directly impact these people and they will need to migrate or find alternative methods to earn a living.



Good Health and Well being – When an area suffers from land degradation, people are forced to move as there is a lack of water and food sources. This can increase water and food borne illnesses, respiratory disease and the spread of infections.



Reduced inequalities – Many of the countries that are vulnerable to land degradation, in particular desertification, are already suffering from extreme poverty. It is vital that education is provided to help vulnerable communities find alternative sustainable methods and solutions in using the land.



Zero Hunger – Plant life provides 80% of our human diet. If land degradation continues, this will have a huge impact on crop production worldwide. Not only will this impact our vegetative diet but animals need crops to feed on. When people are forced to move to find more hospitable land there are high risks of malnutrition.

Land degradation, what is it?

Land degradation is any change in the condition of the land which reduces its productive potential. It is the deterioration in the quality of land caused by a multitude of factors:



Extreme weather conditions in particular drought



Human activities cause pollution and the degradation of the quality of soils and land utility



This negatively effects food production and livelihoods



Throughout the 20th century land degradation has accelerated. As of 2017 a third of the planet's land is severely degraded and fertile soil is being lost at the rate of 24bn tonnes a year



Land degradation is due to the increased combined pressures of agriculture and livestock production, urbanization, deforestation and extreme weather patterns



Desertification is a form of land degradation, where fertile land becomes desert

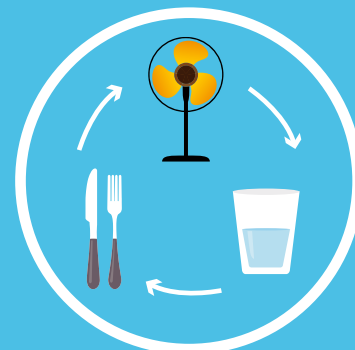


HOW DOES LAND DEGRADATION AFFECT HUMAN HEALTH?

Life on Land is essential for the provision of food, water and quality air.

Land degradation and desertification can have impacts on human health through complex pathways.

If land is degraded in some places desert expands, food production is reduced, water sources dry up and populations in these areas are forced to move to areas with more hospitable land.



Possible outcomes are:

1.
HIGHER
THREATS OF
MALNUTRITION

2.
MORE WATER-
AND FOOD BORNE
DISEASES

3.
RESPIRATORY
DISEASES CAUSED
BY ATMOSPHERIC
DUST

4.
THE SPREAD OF
INFECTIOUS DISEASES
AS POPULATIONS
MIGRATE

WHAT IS DESERTIFICATION:

The turning of land, often through physical processes and human mismanagement, into desert.

Causes



- Deforestation
- Unsustainable agriculture techniques
- Overpopulation
- Climate change
- Famine
- Poverty
- Political instability

Effects



- Soil becomes infertile
- Vegetation is damaged or destroyed
- Soil erosion
- Natural disasters
- Polluted sources of drinking water
- Famine, poverty, and starvation
- Collapse of civilizations
- Mass migration
- Extinctions

Solutions



- Education
- Rehabilitation Efforts
- Sustainable practices to prevent desertification from happening
- Policy changes related to natural resources
- Policy changes related to how people can farm

Discussion points

- What are the dangers of land degradation to vulnerable human beings?
- What can be done to prevent the degradation of land?

TEACHER/ FACILITATOR ACTIVITY 1



LEARNING OUTCOME:

Students should be able to explain how desertification occurs and which countries are most effected.

NEED: Map of world, pack of SDG cards per group (available from resources@concern.net).

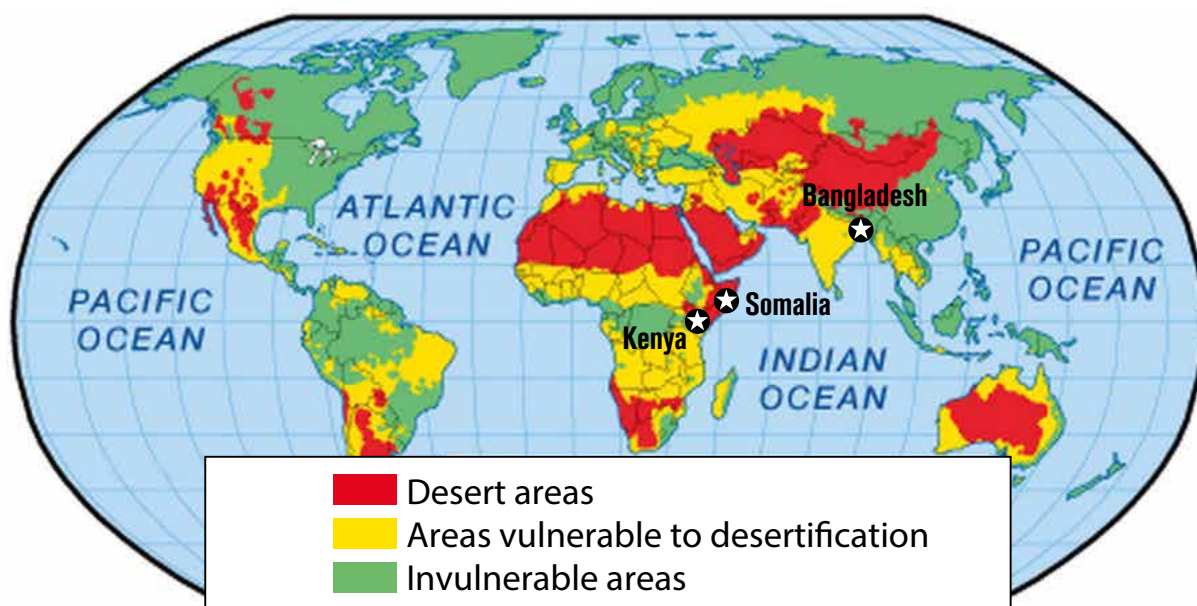
INSTRUCTIONS:

Place students in groups of four and show image of map below on projector or print individual copies for each student

1. Ask students to look at the map of the world and see if they can identify countries that are
 - Already desert areas
 - Vulnerable to desertification
 - At low risk to desertification
2. Identify the countries with stars on the map as Somalia, Bangladesh and Kenya. Explain that these are countries Concern works in. Give each group a profile of a young person (on page 5) who lives in each country.

Ask each group to assess the following

- How has desertification impacted on their life?
- How has it impacted their community?
- What SDGs need to be achieved for each person in order to improve their quality of life?



How can we prevent desertification:

- Improved water management to protect the soil
- By protecting the vegetative cover, which protects the soil from wind and water erosion
- Giving local communities the capacity to prevent desertification and to manage dryland resources effectively
- Establish economic opportunities outside of drylands



PROFILES FOR ACTIVITY 1



KENYA:

My name is Adamu. I am 16 years old. I live with my family in Mathare slum in Nairobi city. Nairobi is the capital of Kenya. Before we moved here we used to live in the countryside. I loved living there and helping my parents with our animals.

When the rain did not come the land became so hard that we could not farm. We took the cattle to find watering holes for them but there was very little water. We heard that some of the elephants in the nearby park had died. We tried very hard to look after the cattle, but the soil degraded and our animals began to die from starvation. My father wept, this made me really sad. My brother became very poorly and had to go to hospital. The hospital was a really long walk and when we got there the doctor explained that my brother was very ill from the lack of food. The doctor gave my mother some special food.

When the situation got very bad my mother and father decided we should move from our village to Nairobi. It is really different here, I can't believe so many people can live in one place. I miss our old home, but I will try my best to be happy here.



BANGLADESH

My name is Dina, I am 10 years old and live in Bangladesh. My family are farmers and my father works really hard every day with the cattle to ensure they are healthy and have plenty of water. I like to help him and my mother. I used to go to school but I haven't been in a while. The cattle have gotten very thin and we aren't able to sell as many as we used to. I miss school but it is more important that I am here to help my family. My younger sister is still going to school because she still has a lot to learn.

A few people have left to move to the capital city Dhaka for jobs – I don't want to move, my best friend Nawrin lives just a few minutes from me. We love to skip, I wait for her when she gets back from school and then we spend time together. Last year there was a bad flood that damaged our crops. I am hoping that the floods don't come this year and then I will be able to go back to school.



SOMALIA

My name is Bilan, I am 13 years old, the eldest child in my family. I have two brothers and one sister and we live with our mother in northern Somalia. When I was little there were trees and green grass all around where we lived which was used to graze animals. Now that the land has gotten worse and worse, the trees are gone and the wind spreads dust that goes into my lungs and makes me cough. I can see that when I cough a lot my mother gets really worried.

My mother told me that in the years just before I was born people began cutting down the trees to produce charcoal. She told me that the demand for charcoal is causing desertification some of the trees that were cut down were over 100 years old! My mother has had to borrow cash from relatives to buy food and pay for our school fees. I feel very lucky that I get to go to school. So many people cannot afford to go.

My mother is now working in a water reservoir and she hopes to open a small tea shop with the money she is earning after she repays her loans. I am very fortunate to have my family.



Palm oil – what has it got to do with Life on Land?

- Palm oil is a type of edible vegetable oil – similar to sunflower oil and rapeseed oil
- It is derived from the palm fruit, grown on the African oil palm tree
- Today palm oil is grown throughout Africa, Asia, North America and South America, with 85% of all palm oil globally produced and exported from Indonesia and Malaysia, most of the time not using sustainable measures
- Kenya, a country where Concern works, has in recent years began developing palm oil production



Discussion point

What impact could the growing of palm oil have on the people that Concern work with in Kenya?

WHAT DOES PALM OIL HAVE TO DO WITH YOU?

- Palm oil is an ingredient seen in almost all of the processed foods and products we buy, from bread to chocolate spread, instant noodles to shampoo and ice-cream the list goes on and on
- The demand for palm oil has caused large areas of tropical forests and other ecosystems with high conservation values to be cleared to make room for the vast palm oil plantations
- This has led to the destruction of critical habitats for many already endangered species including rhinos, elephants, tigers and orang-utans. In some cases the plantations have led to eviction for forest-dwelling peoples

The problems caused by these vast plantations are large scale forest conversion, loss of critical habitat for endangered species, soil erosion, air pollution, soil and water pollution and climate change. New plantations can also create social conflicts if the rights and livelihoods of local communities are ignored.



Source WWF

TEACHER/ FACILITATOR ACTIVITY 2



NEED: Flip chart paper, food package labels. Students should be asked to bring in 5 food labels with them the day before (or use labels on their lunches).

LEARNING OUTCOME: Students should be able to connect the food they eat and products they use to the environmental and social impacts of palm oil.

INSTRUCTIONS:

1. Students should be put into groups and asked to draw an outline of one of the animals that are affected by palm oil.
2. Have the group read through the labels to look out for palm oil in the listing or vegetable oil (Vegetable oil is often named to conceal the presence of palm oil in products).
3. Ask each group to call out some of the products and in the class have a discussion about how often they might use this product or eat this food.
4. Ask the students to then draw a gingerbread man. Ask the groups to write inside the gingerbread man what they think they could do in their own homes about the palm oil situation.
5. Then ask students to write outside the gingerbread man what they think they could do to raise awareness about the damage palm oil production and consumption can cause.

Discussion points

- Are you surprised by how many products can contain palm oil?
- Do you think companies would start using more sustainable practices if people refused to buy their products?
- Palm oil production is forcing people in some of the poorest parts of the world to leave their homes, what could the impacts of this be?



Visit this website '10 things you're buying that probably contain palm oil'

WHAT IS CONCERN DOING?

The health of livestock is of massive importance to many of the people Concern work with. Concern's programme in Chad aimed to provide basic veterinary services through community animal health workers (CAHW's). CAHWs are managed by Pastoralist Interest Groups (GIP) that comprise of representatives from between three to four villages. The Livestock Breeders Federation supported a training to enable GIPs to manage the CAHWs; including the management of veterinary kits and animal health and animal nutrition.

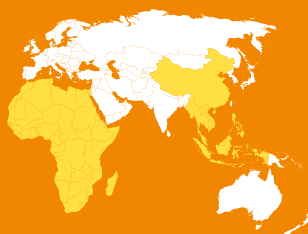
Programmes in Pakistan and Sudan focused on training for the vaccination of animals against worm infestations and in Somalia a programme provided farm inputs, tools, irrigation support and trainings to the farmers.

In Kenya Concern also worked with communities to help prevent animal borne disease. A review was carried out of Animal health Participatory Disease Surveillance (PDS) in Marsabit, Wajir and Turkana counties. The study revealed significant human, technical and financial capacity gaps in the county system (human resource, technical leadership, finance, supplies and logistics). This information provided a basis for the design of the animal health system strengthening support package in Marsabit County that will be developed further throughout 2018. There is need to promote local technical knowledge in veterinary science by winning of community trust for them to share local knowledge practices as part of disease detection. As a result, a joint work plan was developed to address the critical system gaps. Government departments were tasked to deliver services while other stakeholders undertook to provide technical and financial assistance to the plan. With a functional PDS system in place, supported by all stakeholders through a well-coordinated and accountable network, livestock keeping communities are better prepared and are less vulnerable to threats and hence likely to become more resilient.



Gagallo Guyo below using the animal health products received through the e-wallet programme
Photo: Francis Mwangi / Concern Worldwide

CASE STUDY: THE PANGOLIN



- The world's most trafficked animal
- A rare, cat sized, scale covered mammal
- When frightened, it curls up into a ball
- Their scales are used for medicines, their meat is seen in some parts of the world as a delicacy and their blood is drunk as a healing tonic
- No one knows how many of these small creatures remain in the world- but at the rate they are being killed it is safe to assume that the number is shrinking fast
- Around 300 pangolin's are poached everyday - they are the most trafficked animal in the world. It is difficult to estimate the population size of the pangolin due to the lack of knowledge surrounding the species



Source: Wild planet photo magazine.



Watch this short video:

[www.facebook.com/
bbcearth/videos/
1964551080245105](https://www.facebook.com/bbcearth/videos/1964551080245105)



TEACHER/ FACILITATOR ACTIVITY 3: CONNECTING LIFE ON LAND WITH THE SDGS

NEED: SDG cards, flip chart paper, markers

LEARNING OUTCOME:

Students will be able to identify and discuss which of the other SDGs relate to SDG 15 (see page 2)

INSTRUCTIONS:

- Ask the students to get into groups
- Hand each group out a pack of SDG cards
- In the groups the students should choose which SDG's relate to SDG 15 Life on Land
- After 5 minutes ask the students which SDG's they think relate to the SDG 15 Life on Land?
- With the flip chart paper ask the students to write down how they feel the SDG's relate to Life on Land



Discussion points

- Which SDG's did the students relate most to life on land?
- Zero hunger relates to life on land – and to the work that Concern does. Ask the students to explain how these two SDG's and the work of Concern are related?

FACTS ABOUT POACHING:

- Poaching is the illegal hunting or capturing of wildlife animals
- Often the people who carry out the hunting or the capturing of these animals are living in impoverished circumstances and poaching can provide them with a decent income
- There is a demand for products such as fur, medicines, ornaments and pets amongst other things
- Since 1960, the black rhino population has decreased by 97.6% due to poaching
- At current poaching rates, elephants and rhinos will be extinct in our lifetime
- An average of 55 elephants are killed every day by ivory poachers



BELOW ARE SOME SAMPLE ACTION TO TAKE:

- Hold your own Life on Land workshops with other students in your school
- Start a poster campaign about palm oil or desertification to raise awareness in your school/ local community
- Book a workshop with Concern Worldwide by email schools@concern.net

TAKE ACTION!