



# Workbook for participants #1

Interactive worksheets for distance learning



# Protecting our forests

## A vital ecosystem under threat



Full name ..... Group/class .....

E-Mail address .....

Phone number ..... Date .....



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## Dear teachers and parents,

The following **workbook for participants** is part of the learning pack “Protecting our forests – A vital ecosystem under threat”. It is aimed at **students and participants** in projects working through this learning pack in online classes.

Instructions on using the learning pack should be issued by a **teacher**. Teachers can find further information on this as well as other learning packs at [➤dw.com/learning-environment](https://www.dw.com/learning-environment)

Most worksheets require a program compatible with PDF files, such as [➤Adobe PDF-Reader](#) or similar. These are free-of-charge and enable participants to fill out forms. You will need a stable internet connection to watch the films.

# i Help

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Dear student,  
Dear participant,

This **workbook** relates to the issue of “Protecting our forests – A vital ecosystem under threat”.

You can fill out the worksheets on the computer or laptop and save them. There are some helpful tips below.

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## How do I fill out the worksheets?

1. Go to the worksheet you wish to use.
2. Read the task thoroughly. Add your answers to the text field on the worksheet. Keep your answers as short as possible. You can only write in the text field.
3. Once you have filled out all the text fields, rename the PDF document and save it. If no file name has been agreed upon, it should include your last name (the file name should not be too long and should not contain any special characters).
4. You can now send your teacher your work in the saved PDF file, for example, as an attachment.

Before you begin, write your name and contact information on the **› title page**.

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## How do I find films and articles?

### Watching films

On some worksheets, you will be asked to watch a **film**.

By clicking on a film title, you will be taken to the web page where you can watch the film. If that doesn't work, you can copy the link in brackets into the search box of your browser.

### Reading articles

Other worksheets relate to articles you will need to read in order to complete certain tasks. Each article is included with the corresponding worksheet.

By clicking on the title of an article, you will be taken directly to the article without having to scroll.

### Tip

At the top of each page, you will find a navigation menu.

By clicking ↶, you will return to the page you last looked at.

The ? will take you to this help page.

Click → [table of contents](#) to go back to that page.

You can use the arrows ← and → at the bottom right of the page to move between pages.

### Something isn't working?

If there is anything you don't understand or if you are having technical problems (such as with the internet or the PDF file), please ask an adult for help!



## Worksheet 2

### Film questionnaire “What is a forest?”

Watch the >film “What is a forest?” ( [dw.com/p/318MP](http://dw.com/p/318MP) ).

Once you have finished watching, answer the following **questions**:

1. What is the definition of a forest according to the United Nations Food and Agriculture Organisation (FAO)?

.....  
.....

2. What percentage of the earth’s land surface is covered in forest?

.....

3. What is the difference between a forest and a plantation?

.....  
.....

4. Which countries have the most forest cover?

.....

5. What functions does a forest ecosystem perform?

.....  
.....  
.....

6. What functions does a forest perform for humans, specifically?

.....  
.....  
.....

7. What are the most significant threats to the continued existence of forests?

.....  
.....  
.....

8. What personally do you associate with the forest?

.....  
.....



# Worksheet 3

## Article questionnaire: “Forest SOS – Earth’s green lungs disappear”

Read the [▶ article “Forest SOS – Earth’s green lungs disappear”](#).

Once you have finished reading, answer the following **questions**:

- 
1. Why is the forest so important for climate protection?  
.....
  2. How much forest was cleared in 2017? .....
  3. What percentage of the earth’s land surface is covered in tropical forest and what percentage of known species live in these forests?  
.....
  4. Why are forests being cut down?  
.....  
.....
  5. Why did deforestation sink in Brazil between 2000 and 2012, and why has the rate been increasing since 2012?  
.....  
.....
  6. How do you interpret these developments?  
.....  
.....
  7. What will happen if the Amazon loses more than 20 percent of its tree cover?  
.....  
.....
  8. What solutions are presented to protect the forest and what do you think of them?  
.....  
.....
  9. Please take a look at the infographic showing the loss of tree cover globally: What is your interpretation of the developments A) between 2011 and 2015? B) since 2016?  
.....  
.....

## i

## Article 1

## Forest SOS: Earth's green lungs disappear

**Forests, particularly tropical ones, are fundamental to the fight against climate change. They produce oxygen, store carbon and are home to millions of people and animals. Yet they are disappearing at an alarming rate.**



*Giant trees in the Sumatran rainforest*

From a damp year-round lush green canopy, to a canvas of oranges and reds come the fall, to pointed trees with evergreen spindles, the mention of a forest will evoke strikingly different images depending on where in the world you live.

But for all those physical and geographical differences, forests have many things in common.

They help regulate weather patterns, prevent flooding and erosion, and provide food, water and shelter. They also provide oxygen, store CO<sub>2</sub> and, oceans aside, have the greatest biodiversity on the planet.

Still, forest is being lost all over the world. In 2017 29.4 million hectares (72.6 million acres) of tree cover disappeared. That's an area equivalent to 41 million soccer pitches and just slightly below the record set in 2016, according to the latest figures from Global Forest Watch (GFW).

Tropical tree cover loss, the monitoring tool noted, was particularly badly hit in 2017, with a decrease of 15.8 million hectares (39 million acres) — an area half the size of Poland.

The tropical forests of South and Central America, Africa and Asia are home to about 80 percent of the

world's documented species, although they cover just 6 percent of the earth's land surface. Yet, the financial gains to be made of their soil and huge hardwood trees have made them one of the planet's most endangered habitats. That's bad news for the fight against climate change, considering they also store massive amounts of carbon.

"Between 12 and 17 percent of all carbon emissions come from the loss of tropical forests," Jake Bicknell, a conservation scientist at the University of Kent in Great Britain, told DW.

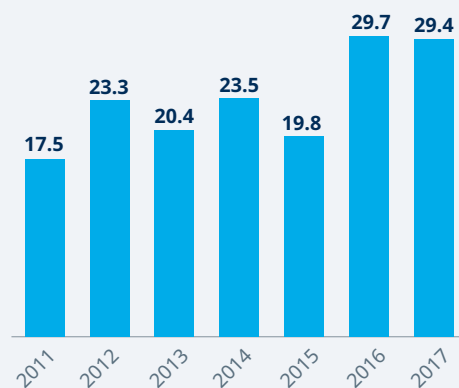
"We are talking the horror stories of football fields," he said, referring to calculations based on analysis of forest change, indicating that the equivalent to an average of 50 soccer pitches are disappearing every minute. "This is real," Bicknell added.

### Deforestation ticks upward

The Amazon is the world's largest rainforest. Some two-thirds of tropical woodland is found in Brazil, where it has seen some of the worst deforestation and degradation (whereby the "quality" of the forest worsens, reducing the number of species therein).

### Tree cover loss worldwide

Million hectares



Source: Global Forest Watch

©DW

In the later part of the 20th century and early 2000s, as demand for meat soared, vast areas were cleared to make way for cattle ranching, which is one of the leading causes of deforestation.

## i

## Article 1

Between 2000 and 2012, deforestation rates in Brazil dropped by 75 percent due to better conservation efforts, monitoring and the commitments by some international companies to stop selling meat or leather from cattle reared on deforested land.



*Huge tracts of forest disappear every minute*

But according to Brazil's National Institute for Space Research, rates have risen steadily since 2012 when the country's government began to weaken environmental regulations and abandoned plans for new conservation areas. In recent years, the rate of forest loss has increased sharply and reached a new high of 5.4 million hectares in 2016, according to GFW.

Dirk Embert, a biologist and South America spokesperson with environmental group, WWF, partly attributes the deteriorating situation to "new laws that facilitate deforestation" brought after a government change in 2016. Environmentalists have accused the country's president Michel Temer of loosening deforestation regulations under pressure from agricultural lobby groups.

He also says clearance of forest for oil palms is a newly emerging problem. Palm oil has been one of the other main factors in driving global deforestation in other parts of the world. "We are getting reports from more and more countries in South America that the first palm oil plantations are planned or already installed," said Embert.

### **Palm oil: A major contributor**

Until recently, palm oil production had largely been confined to Indonesia and Malaysia. Oil palm and wood fiber (mainly used for pulp and paper) plantations are the two largest contributors to forest loss

in both countries, according to studies by GFW and Indonesia-based Center for International Forestry Research (CIFOR).

Between 2001 and 2015, around 1.5 million hectares of primary forest were converted to such plantations in Indonesia. Primary forest is defined as woodland that has not been significantly disturbed by human activities and is considered to be the "best" in terms of biodiversity and carbon storage.

"You can't replace a primary forest," said forest ecologist Markus Eichhorn from the University of Nottingham in the United Kingdom. "You can't just regrow one, unless you're willing to wait a good few centuries to do so."

As demand for palm oil increases, more companies are looking to Congo River Basin. It's an area conservationists are calling the "new frontier." Dubbed the world's second set of lungs because the rainforest there is the second-largest after the Amazon, the basin's woodlands are already facing threats from agriculture, logging and charcoal production, and are disappearing at a rate of 2-3 percent a year. Much of the forest there is primary.



*Palm oil monocultures*

### **No Amazon, no future**

Forests are on the frontline in the defense against climate change. "Losing the Amazon will mean that we have no chance to save our planet," said WWF's Embert, adding that the world's largest remaining rainforest is now dangerously close to 20 percent deforestation that would constitute a "tipping point," from which there would be no return.



## i

## Article 1

If that happens, he says the Amazon could become “so weak that it cannot maintain its ecosystem and may become a savannah.”

The consequences of the damage done so far, are already being felt in Brazil where many parts of the country depend on “flying rivers” as a source of water. The wet jungle channels water vapor through the atmosphere from the Amazon River Basin to cities such as Sao Paulo. The vapor is now evaporating over the dry, hot soil in deforested areas. The upshot is urban water shortage.



*Monarch butterflies overwinter in forests*

### Looking for solutions

Bicknell believes there is no way to stop deforestation for now, and says conservationists should, therefore, focus on reducing impacts, such as species’ expulsion and extinction.

One way to do this is by supporting protected and indigenous territories. In the Amazon, for example, deforestation rates are significantly lower inside such areas, says Embert.

Another is to promote certified sustainable wood products harvested through carefully planned selective logging. This entails felling selected trees in 30 to 40-year cycles and leaving behind a structurally intact forest.

A similar approach could be used for palm oil plantations, says conservation scientist Bicknell. “Either the entire area can be cleared,” he said. “Or we can do it cleverly by leaving patches (of forest) that have the highest conservation values, that are maybe important for rare species and connecting those patches of forest through corridors that animals can move through.”

New technology is also helping in the fight. Conservationists and forest communities are using smart-phone apps and mobile phones to record damage and changes in the forest, as well as to report illegal happenings.

The small NGO Rainforest Connection, for instance, repurposes old phones and installs them in forests to detect illegal logging. The microphones in the solar-powered phones pick up the sound of chainsaws, similar to the way an app like Shazam recognizes a song, and sends an alert to the authorities. Thanks to the phone’s GPS tracker, forest rangers know where to look for loggers.

“The scope for policing things on the ground is really improving through these sorts of initiatives,” says Eichhorn. “Plus the higher resolution of earth observation systems through satellite technology is giving us much more eyes in the sky. So we are getting much better at it.”

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*1 August 2018*  
*Jennifer Collins*  
[dw.com/p/32Qm2](http://dw.com/p/32Qm2)





# Worksheet 4

## Film questionnaire “Madagascar’s lemurs – cute forest dwellers soon losing their home?”

Watch the >film “Madagascar’s lemurs – cute forest dwellers soon losing their home?” ( [dw.com/p/1IcIU](http://dw.com/p/1IcIU)).

Once you have finished watching, answer the following **questions**:

1. Why is the forest being destroyed and what effect is it having on lemurs?

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2. Do you empathize with the reasons for the destruction of the lemurs’ habitat? Please give reasons for your answer.

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3. What eventually happens to the soil after a forest has been cleared?

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4. What strategies are the scientists from “Friends of Kirindy” using?

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5. What do you think of their activities? Please give reasons for your answer.

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## Worksheet 5.1

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# Film questionnaire “Deforestation fueled by dirty water”

Watch the >film “Deforestation fueled by dirty water” ([dw.com/p/30nOR](http://dw.com/p/30nOR)).

Once you have finished watching, answer the following **questions**:

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1. Why are people drinking water from the river?

.....  
.....  
.....

2. Why does the water have to be boiled?

.....  
.....  
.....

3. How is the water boiled?

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.....  
.....

4. Why is this method of getting clean water a problem for the people and the forest?

.....  
.....  
.....

5. Can you think of any alternatives to purifying water in this way?

.....  
.....  
.....  
.....



## Worksheet 5.2

# Article questionnaire “Palm oil: Too much of a good thing?”

Read the [▶ article “Palm oil: Too much of a good thing?”](#).

Once you have finished watching, answer the following **questions**:

1. What is palm oil used for and what products contain palm oil?

.....  
.....  
.....

2. What is the problem regarding the amount of palm oil produced?

.....  
.....  
.....

3. How large is the global area currently covered by palm oil plantations? Which countries have the largest palm oil plantations?

.....  
.....

4. What are the consequences of these cultivation practices?

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.....

5. Why is palm oil so popular?

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6. What alternatives exist? How should we deal with the current challenges posed by palm oil cultivation? What is your opinion?

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# Worksheet 5.2

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## Graphics questionnaire

7. Please take a look at *graphic 1* showing global palm oil consumption: How much has consumption increased in the time period shown? What are the possible consequences for forests?

.....  
.....  
.....

8. Please look at *graphic 3* showing the yields of the world's most important plant oils: Why is palm oil so popular?

.....  
.....  
.....

9. What do you notice when you look at *graphic 2* showing the world's five largest palm oil producers?

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.....  
.....  
.....

## i

## Article 2

## Palm oil: Too much of a good thing?

**Palm oil can be used in everything from cosmetics to fuel, and is cheap and efficient to produce. But this versatile crop has a dark side – its incredible popularity has caused widespread environmental destruction.**



*The number of industrial palm oil plantations is growing*

Ancient humans were buried with casks of it. In traditional African medicine, it's used to treat pain. It can be found in about 40 percent of everyday products on supermarket shelves, from donuts to shampoo, chips to ice-cream – and even appears in the gas tank of your car.

Palm oil is nothing if not versatile, and humans have known that for a long time. It's probably been on the menu since hunter-gatherers realized that the thick clusters of reddish, plum-sized fruits growing in the tropics on African oil palm trees (*Elaeis guineensis*) yield far more rich fat than any other plant.

Archaeological evidence shows we've been processing palm oil fruit for at least 5,000 years. Long a regional trade good in Africa, it rose to global prominence in the late 1800s when the British established the first commercial palm plantation in Indonesia.

In the intervening years, palm oil production and demand have exploded. Between 1996 and 2017 global consumption more than tripled from just over 17 million to more than 60 million metric tons, according to the US government (see graphic 1). The boom is taking an environmental toll, wiping out tracts of forest to create space for sprawling monocultures.

"It creates immense pressure on land in the regions where they are grown. The pace of deforestation is blistering and it's really unnecessary," says William Todts, director of a Belgium-based nonprofit sustainable transportation organization, Transport & Environment.

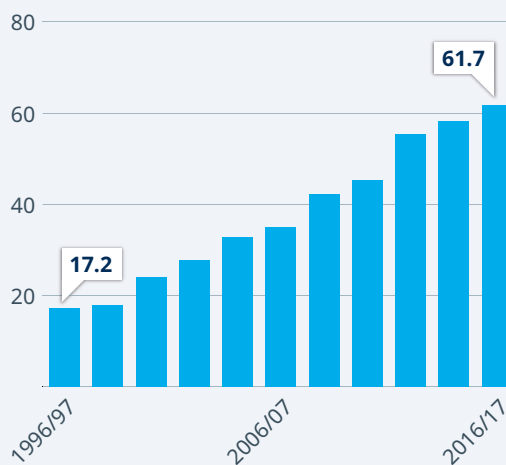
### A threat to species and the climate?

In many places oil palms are grown unsustainably on clearcut jungle. Globally, plantations now cover about 160,000 square kilometers (62,000 square miles) of tropical landscapes, an area larger than Greece, according to the Rainforest Alliance. By some estimates, 300 soccer fields worth of land are being cleared for the crop every hour.

In Borneo and Sumatra, that's wiping out habitat areas for rhinos, tigers and orangutans and driving those species toward extinction. One recent study found that more than 100,000 Bornean orangutans have been killed since 2009 – in part by hunters, but also by logging for paper mills and palm oil plantations.

### Worldwide consumption of palm oil

In millions of tons



Source: USDA Foreign Agricultural Service

©DW

Graphic 1

Palm oil production is the leading driver of tropical deforestation, which accounts for 18 percent of all global human-caused greenhouse gas emissions. Clearing Indonesian forests is a particular problem,

## i

## Article 2



*Orangutans are threatened with extinction*

because they store more carbon per hectare than the Brazilian Amazon thanks to their “carbon-rich” soils, according to US-based Union of Concerned Scientists.

Land clearing for palm oil was also linked with giant fires in Indonesia in 2015 that became one of the world’s biggest climate disasters in terms of greenhouse gas pollution. The fires released more heat-trapping gases than all of Germany’s annual emissions from fossil fuels.

Rod Taylor, director of the World Resources Institute forest program says Indonesia has been trying to prevent a repeat of that situation through national policies to promote sustainable palm oil production.

“There’s a large push in Indonesia to avoid the peat soils, and to re-wet ones that were drained to restore their ability to capture carbon,” Taylor tells DW. “The challenge is how far can you wind back the clock...to find some kind of balance between landscape and production.”

Indonesia and Malaysia account for over 80 percent of global production (*see graphic 2*). But as demand for palm oil grows, the frontiers are shifting and companies are increasingly moving into West African countries like the Democratic Republic of Congo. The Amazon isn’t immune either, according to Dirk Embert, a biologist and South America spokesperson with environmental group, WWF.

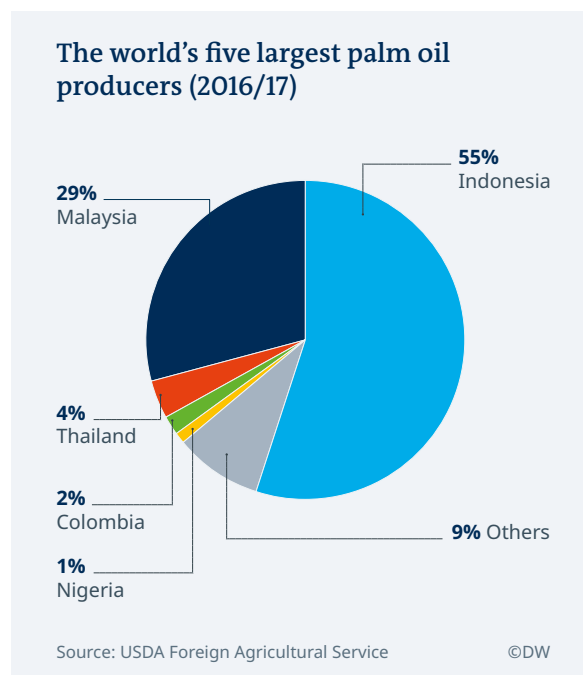
“We are having reports from more and more countries that the first palm oil plantations are already installed and if you see other tropical forests, that has been the main cause of total deforestation,” Embert told DW.

### Why is palm oil so popular?

Oil palms are valuable because they are the most efficient oil-producing crop in the world. Producing a ton of palm oil requires significantly less space than producing the equivalent amount in soybean, sunflower or rapeseed (*see graphic 3*).

Its production contributes to gross domestic product in South Asia, Africa and increasingly South America, and fills a huge demand for cheap plant oil for cooking and fuel in developed and developing countries, including China, India and Europe.

It’s commonly found in lipstick, for example, because it holds color well, and has almost no taste. Manufacturers of shampoo use it to restore oil that’s stripped away by other chemicals in the product. Even bakers use it widely because it’s solid at room temperature, inexpensive and easy to bake with.



*Graphic 2*

### Toward sustainability?

As palm oil can be an economically beneficial and sustainable product, nobody wants to ban it completely. The long-term goal is to lessen its environmental impact, says Frans Claassen, chair of the trade group European Palm Oil Alliance.

# i Article 2

“Global sustainability means we do not want to have any more deforestation of land. The question is how to do that as palm oil production increases,” said Claassen. More productivity on existing plantations is one answer, as is accountability and transparency in the entire supply chain, he added.

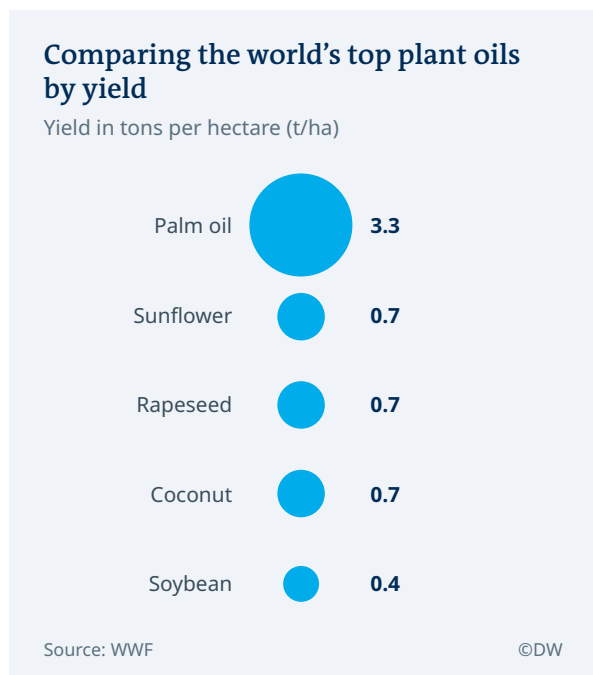
Industry-wide standards for “sustainably-produced” palm oil do exist. The Roundtable on Sustainable Palm Oil (RSPO), for instance, has established perhaps the most widely-used palm oil certification scheme for producers, processors and consumer-goods manufacturers. Only about one-fifth of the palm oil produced globally is certified by the RSPO. And the certification leaves loopholes by only protecting old-growth forests, leaving others vulnerable, according to watchdog groups like the UCSUSA.



*Palm oil can be sustainable: Smallholders in Sierra Leone cultivating oil palms*

Taylor, who worked on sustainable forestry issues in Indonesia for 12 years, says the RSPO is a serious attempt to distinguish the bad practices from the good ones. And there are a lot of good tools out there to help consumers do that, including a recently launched smartphone app that scans barcodes on products to help identify sustainably sourced palm oil.

“I’m definitely in the camp that thinks boycotts ‘don’t help’. Trying to reward good practice is the better way. The best option for a consumer is to be part of the solution,” he says.



Graphic 3

6 August 2018  
 Bob Berwyn  
[dw.com/p/32jIg](http://dw.com/p/32jIg)





# Worksheet 5.3

## Film questionnaire

### “Protecting Paraguay’s forests from cows and soya farms”

Watch the >film “Protecting Paraguay’s forests from cows and soya farms” ( [dw.com/p/184RL](http://dw.com/p/184RL) ).

Once you have finished watching, answer the following **questions**:

1. How much forest disappears in Paraguay every day? .....

2. What are the reasons behind forest loss? What arguments does the representative from the Rural Association of Paraguay make?  
.....  
.....  
.....

3. What effects can be seen in the east of the country? What is being farmed here?  
.....  
.....

4. What strategies are being used by Alberto Yanosky and his NGO Guyra Paraguay?  
.....  
.....  
.....

5. What do you think of these strategies?  
.....  
.....  
.....

6. How does Eusebio Chaparro from the Mbyó community live from the forest and what is the difference between this and the livestock sector?  
.....  
.....  
.....  
.....

7. Why are the Mbyó teaming up with the NGO and what do you think of the move? Please give reasons for your answer.  
.....  
.....  
.....



# Worksheet 6.1

## Film questionnaire “Female power in Malawi”

Watch the >film “Female power in Malawi” ( [dw.com/p/R7B6](http://dw.com/p/R7B6) ).

Once you have finished watching, answer the following **questions**:

1. What does Mpandasoni from Malawi use to cook her food?

.....

2. What are the advantages according to Ms Mpandasoni?

.....  
.....

3. What is the most important source of energy in Malawi and what effect does this have on the forest?

.....  
.....

4. What problems do traditional cooking methods pose for people and nature?

.....  
.....

5. What is Chitetezo Stove Project’s strategy?

.....  
.....

6. How are the improved stoves produced and who is making them?

.....  
.....

7. What are the advantages of these stoves and the method of producing them?

.....  
.....

8. Do you know similar examples from your region? Could the example in the film be applied where you live?

.....  
.....



## Worksheet 6.2

# Film questionnaire “Putting people before palm oil in Guatemala”

Watch the >film “Putting people before palm oil in Guatemala” ( [dw.com/p/2WhEc](http://dw.com/p/2WhEc) ).

Once you have finished watching, answer the following **questions**:

1. What did the Jimenez family previously farm and why was that problematic?

.....  
.....  
.....

2. What has changed since then?

.....  
.....  
.....

3. What strategies were used by Heidy Garcia from conservation organization “Defensores de la Naturaleza?”

.....  
.....  
.....

4. What’s behind the success of the new farming strategies?

.....  
.....  
.....

5. How does the new system – known as agroforestry – protect the rainforest?

.....  
.....  
.....

6. How does the system help people?

.....  
.....  
.....

7. What conclusion does the farmer Jimenez draw from his new approach to farming and what is your opinion of it?

.....  
.....



# Worksheet 6.3

## Film questionnaire “Ethiopia’s last wild coffee forests”

Watch the >film “Ethiopia’s last wild coffee forests”( [dw.com/p/16zq8](http://dw.com/p/16zq8) ).

Once you have finished watching, answer the following **questions**:

1. What statements does coffee grower Aregash Ago Ambo from Ethiopia make about the importance of the forest?

.....  
 .....  
 .....

2. Project coordinator of the Kafa Biosphere Reserve explains the forest’s functions. What are those functions?

.....  
 .....  
 .....

3. How many tons of CO2 does this protected cloud forest store?

.....

4. Why is the forest in Ethiopia under pressure and what are the consequences of deforestation?

.....  
 .....  
 .....

5. What roles do “buffer zones” and “core zones” play in the protected forest?

.....  
 .....  
 .....

6. What changes in the climate has Aregash Ago Ambo observed and why is she worried?

.....  
 .....  
 .....

7. What concrete measures has the conservation project implemented?

.....  
 .....  
 .....



# Worksheet 7.1

## Film questionnaire

### “Young mangrove defenders fight to save Panama’s wetlands”

Watch the >film “Young mangrove defenders fight to save Panama’s wetlands” ( [dw.com/p/2YMby](http://dw.com/p/2YMby) ).

Once you have finished watching, answer the following **questions**:

1. How much of Panama’s mangrove forest area has disappeared? .....
2. In which project is Silvia Mariano participating and what is the aim of the project?  
.....  
.....
3. What exactly are the young mangrove defenders doing?  
.....  
.....
4. What important functions do mangroves have when it comes to climate protection?  
.....
5. Why are mangroves being cut down?  
.....  
.....
6. What line of argument does Harrys Tejeira from “Grupo de Cascareros de San Lorenzo” use and what do you think of it?  
.....  
.....
7. What is the bark of the mangrove used for and why is it so important in the region?  
.....  
.....
8. Why is Silvia planting mangroves? What does she say exactly?  
.....  
.....
9. Do you find the example inspiring? Please explain your answer in your own words: If your answer is no, why not? If the answer is yes, why?  
.....



## Worksheet 7.2

# Film questionnaire “Kenya: Planting trees with a slingshot”

Watch the >film “Kenya: Planting trees with a slingshot” ( [dw.com/p/2wtDv](http://dw.com/p/2wtDv) ).

Once you have finished watching, answer the following **questions**:

1. Why do the Kenyan school kids find this unique way of planting trees so much fun?

.....  
.....

2. Why is forest being lost in Kenya?

.....  
.....  
.....

3. What does farmer Samuel Kariuki say about the matter?

.....  
.....  
.....

4. Why did Elsen Karstad set up “Seedballs?”

.....  
.....  
.....

5. How do the seed balls work and why is charcoal dust used?

.....  
.....  
.....

6. What do you think of the idea? Please give reasons for your answer.

.....  
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.....  
.....



## Worksheet 9

### Experiment: Making seed balls

You can conduct the experiment alone or with others. If you are working alone, discuss any open questions with an adult before you get started.

You will need:

- 1 part native seeds (flower, herb or tree seeds)
- 3 parts clay (ideally dry in powder form)
- 5 parts soil (ideally compost or potting soil)
- Some water
- 1 surface lined with paper (e.g. a wooden board or a baking tray)

#### Instructions

1. Choose the seeds that are best suited to the area. They should come from native plants, typical to your region.



2. Add the clay, seeds and earth together. Mix everything well and add a few drops of water. Knead the mixture.

3. Using your hands, make a ball the size of a walnut.



4. Place the seed balls on your tray or board lined with paper (e.g. newspaper). Place them in a warm area to dry out, for instance on a windowsill or in the oven at a low temperature.



**Be careful:** If the seed balls don't dry quickly enough, they may sprout before you've had a chance to plant them

5. Now you can disperse the seed balls to your heart's content – but please only in areas where you have permission and they will have a chance to grow.





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