## **Workbook for participants #9**

Interactive worksheets for distance learning



## **Ancestral treasures**

Environmental protection using Indigenous knowledge







Full name	Group/class		
Email address			
Phone number	Date		

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## Dear teachers and parents,

The following **workbook for participants** is part of the leaning pack "Ancestral treasures – Environmental protection using Indigenous knowledge". It is aimed at **students and project participants** 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** 

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.



## Help

## Dear student, Dear participant,

This **workbook** relates to the issue of "Ancestral treasures – Environmental protection using Indigenous knowledge".

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

#### 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.
- 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.

### 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  $\bigcirc$ , you will return to the page you last looked at.

The ? will take you to this help page.

Click  $\rightarrow$  table of contents to go back to that page.

You can use the arrows  $\leftarrow$  and  $\rightarrow$  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!





## Poster: Indigenous peoples

There are Indigenous peoples almost everywhere in the world, and their customs are often centuries or even millennia old. This traditional knowledge is also of value today – especially when it comes to protecting the environment and the climate.

Watch the > film "Indigenous peoples and their knowledge of nature" ( dw.com/p/3vByc ).

Make a **poster** on which you answer the questions below. Make **notes** using bullet points before you start getting creative. For the poster, you can draw something yourself, use pictures out of magazines or your own photographs.

2. What are the problems facing Indigenous peoples?	
2. What are the problems facing Indigenous peoples?	
	· · · · · · · · · · · · · · · · · · ·
3. Why is it important to protect Indigenous traditions?	
	· · · · · · · · · · · · · · · ·

Take a photo of your poster and share it with the other participants in your group.

**Copyright**: Before you make your poster publicly available (for example on social media networks or on a homepage), make sure you have the rights to use all your selected picture material.





## Text with gaps: Nomads and climate change

The traditional way of life of many Indigenous peoples is under threat. For example, from climate change. Get to know a nomadic group living in Russia.

?

Watch the > film "Reindeer and their nomadic herders face climate change" (dw.com/p/3gOPd).

Fill in the **gaps**. You will find the words at the end of the text. They are not in the right order. Cross off the words you have already used.

The (1) a health of the But maintaining their tradigenous group. The mai more than for the Nenets to follow t	ditional way on reason is cl	(2) is vi of life is beco limate chang as the rest of	tal, as they re oming increas Je. The the planet. Th	present their singly difficult (3	· livelihood. t for the In- ) is heating
Every fall, the Nenets and winter in the forests. On the Ob, on the Yamal pening the river ice frozen water at is a lower risk of breaking (8) before	the way ther insula. It's da (6). A (7), v g through the	e, the Nenet ingerous bec As a result, th vhen temper	s have to cro ause the high ne Nenets on ratures are at	ss frozen riven temperature ly dare travel their coldest	ers, such as es are mak- across the t and there
The cold is coming ever until the river has is that reindeer that can't Because it's very important that th	keep moving ( <mark>12</mark> ) ir	, die within a n the barren	matter of a fe tundra lands	ew cape doesn't (	( <mark>11</mark> ). go very far,
There is another proble (14) are of grazing regions earlier is into the the (16) there are high numbers of mals. One reason for this two herds also compete for the (14) are of (15) are o	changing. The the year. In the year. In (15), in order incress of wild reinde is that the definition is the definition is the definition in the definition is the definition is the definition in the definition is the defini	hey are moven the winter, er to find en easingly crosser, the noma	ving to the o on the othe ough food. I s with those o ids can't raise species often	cool norther ir hand, they The migratory of the nomads their domes in join the wild	n summer go deeper y routes of . But where ticated ani-
available food	forests	Arctic	Nene	ts froz	en
reindeer herds	wild	twice	south	nights	later
grazing areas	hinner	days	moving	reindeer	shore





## An Indigenous group fights against oil extraction on its land

Indigenous lands are often points of conflict, as this example in Ecuador's rainforest proves. Home to vast oil reserves, extraction is already underway, and more is planned.

But the region is also home to the world renowned Yasuni National Park, which is not only rich in biodiversity, but is also where the Waorani people live. Their land was earmarked for drilling, but representatives of the group declared an agreement allegedly reached with the government in 2012 as fraudulent, and filed a lawsuit against oil extraction on their territory. And they won. In a ruling that generated wide international interest, the court ordered that Indigenous groups have an "inalienable, unseizable and indivisible" right to remain in possession of their ancestral lands. Waorani leader Nemonte Nenquimo played an instrumental part in the lawsuit.

Read the > article "Nemonte Nenquimo: Indigenous and victorious" and answer the following questions.

1.	How many Waorani are there, where do they live and how large is the area they live on?
2.	What do the Waorani live from in undeveloped areas?
3.	Why did Rafael Correa, who was president of Ecuador in 2013, open the nature reserve in the Yasuni National Park to the oil industry?
4.	How much of the Waorani's native land did the government of Ecuador approve for oil production?
5.	What was special about the Pastaza 2019 court ruling?



## Nemonte Nenquimo: Indigenous and victorious

Ecuadorian Waorani leader Nemonte Nenquimo successfully fought against oil extraction in the Amazon, and made it onto Time magazine's list of the 100 Most Influential People of 2020.



Nemonte Nenquimo, Waorani leader

"This victory is a first! Our people beat the government. Let's use this win for another three million hectares." With this 2019 tweet, the Waorani celebrated a ruling by the provincial court in Pastaza, Ecuador, not to allow oil drilling on their native land in the Amazon rainforest.

The ruling marked the end of a long legal battle between the Indigenous people and the Ecuadorian government, which had opened up 180,000 hectares of land for oil extraction. The Waorani's historic victory was down to their charismatic leader, Nemonte Nenquimo.

### **Indigenous identity**

The lawsuit was filed by an alliance of Indigenous peoples called Alianza Ceibo, which Nemonte Nenquimo co-founded in 2015.

The Waorani spokeswoman grew up in the Nemonpare community on the Curaray River in eastern Ecuador, where her family still lives today. Her parents sent her to a missionary school outside the village, but when she felt pressured by staff to abandon her native language and Indigenous identity, Nemonte dropped out and returned home. In 2018, she was elected as the first female president of Conconawep, the Waorani organization in Pastaza. In 2020, she featured in Time magazine's list of the 100 Most Influential People alongside US Vice President Kamala Harris, German Chancellor Angela Merkel and European Commission President Ursula von der Leyen.

Nenquimo said the recognition is "not only for the Waorani in the Amazon, but for all Indigenous peoples around the world who are defending their land and their lives. I feel deeply emboldened, it gives me strength and hope."

#### Advance of the oil companies

The Waorani settlement area is one of the last nearly untouched regions in Ecuador's Amazon rainforest. Around 5,000 members of the group live in an area rich in rivers that covers about 600,000 hectares. The eastern half of their territory is in the Yasuni National Park.

Originally, the Ecuadorian government offered to leave the area's oil reserves undisturbed if the international community agreed to pay compensation. But when the plan failed, then President Rafael Correa opened the conservation area up to the oil industry – with devastating results for the environment.

In the undeveloped Waorani settlement areas, the forest dwellers live mainly from hunting, fishing and agriculture.

Over time, however, tourism and the oil industry have become an important source of income, with many Waorani working as guards, porters, skippers, cooking assistants or interpreters. But oil extraction is increasingly regarded as a threat to the existence of the Waorani.

"In 2019, in the name of the Waorani, I filed a lawsuit against the oil excavation plans of the Ecuadorian government. It was specifically about the area that has been identified as Block 22, in which the Waorani communities of Pastaza live. The government wanted to sell this area to oil companies, but we Waorani were not consulted. Our rights to life and nature were not respected," Nemonte Nenquimo said.







The Waorani took their protest against the oil industry out of the Amazon and into cities

### Preserving nature for future generations

In 2012, government representatives flew to Pastaza and promised that the oil companies would bring wealth to the region. The meeting attendance list signed by the Waorani was later used by the government as supposed proof of their support for the project.

Block 22 covers some 16% of the Waorani settlement area. In 2019, the court in Pastaza ruled that the Waorani has been defrauded by the government and oil companies. The verdict, which was later upheld by the Constitutional Court, was the first in the history of Ecuador to favor an Indigenous group.

"People in the cities often think natives own the forest without using it. But that is capitalistic thinking," the Waorani leader told DW. "Our Indigenous view is that we respect Mother Nature. She gives us everything we need – water, food, fish, medicinal plants, space and air. As Indigenous people, it is our conviction that we must preserve nature for future generations."

#### An uncertain future

Nemonte Nenquimo says protecting the forest is also important for the climate.

"White people consider themselves developed and talk a lot about technology, but they don't know what the world will look like in the future. They are not leaving an inhabitable world for their children, and that is what we are fighting against. I am very happy that Time magazine recognizes the value of our fight."

Women, in particular, are leading the charge, Nenquimo said.

"Women all over the world, and not only Indigenous women, have to take the lead in building the future. So our children can be healthy, and live well without illness and environmental pollution."

Being highlighted in Time magazine has inspired Nenquimo to continue fighting for the future of the Waorani, because she knows the 2019 verdict does not offer absolute security.

"People who come to dirty our forests, to drill for oil, to fell or burn trees or to pollute our waters, are not welcome. But people who come from different countries to support us and who want to preserve the forest are welcome. Our house is open."

02.10.2020

Authors: Mirjam Gehrke, Nádia Pontes





# Introduction to Indigenous methods for environmental protection

Some Indigenous traditions and methods are still used today, sometimes even in new fields. They often contribute to greater sustainability.

Watch one of these **films**::

- "Mexicans turn to ancient Aztec floating gardens to revive mangrove forests" ( dw.com/p/3JLLk )
- "Panama: Fairer chocolate from the forest" ( dw.com/p/3eE9D )

Complete the **information** about the methods presented in the film.

1.	The method presented:
	·
2.	Indigenous people that originally used the method:
3.	Place of origin:
4.	How the method works:
5.	The method was once used for:
6.	Today it is used for:
7.	The method is sustainable because:
8.	Further advantages of the method:





# What did grandma and grandpa know about being eco-friendly?

All over the world, some **traditions** and **methods** date back far into the past. Even today, these methods can be good for environmental and climate protection.

?

Conduct an interview on this subject with someone from your grandparents' generation. Ask the person you are interviewing to think about their own experiences, but also about what their own parents and grandparents told them.

The **questions** below will help you conduct your interview. You can also come up with your own questions.

#### Tip:

During the conversation, take notes in bullet point form.

It is unlikely that your interview partner will be able to answer all questions in detail. Think about a method that respects nature, a recipe or something else from times gone by that particularly interests you, and ask you interviewee to explain more about it.

On **worksheet 5.2** "Yesterday's ideas for today's environmental protection," you can write down the method or the recipe of your choice.

- 1. Which types of fruit and vegetables did your family used to eat? Are there any that are no longer well known today? Which ones?
- 2. Did your family grow their own vegetables, fruit or anything else? Did they use environmentally friendly methods to keep pests away?
- 3. Did you collect wild herbs, fruit or mushrooms? If so, when and where?
- 4. Did you keep animals? If so, what kind? How important were animals for your family?
- 5. Did you go hunting or did you fish? If so, what role did that play in your family's life? How did you set about it? What did you have to pay attention to?
- 6. What home remedies did you use when someone was sick? Did you use specific plants for tea or for making ointments? Did you have home remedies that were not made from plants? If so, what were they?
- 7. What tricks did you have for the home, farm and garden? For example, what did you use for cleaning, how did you keep things in good condition, what did you do with kitchen waste?



Worksheet 5.2

# Yesterday's ideas for today's environmental protection

Ask your interview partner to give you **instructions** for an old way of doing something that is in harmony with nature. It could be a recipe for something to eat or for an old natural remedy, a construction method, a way to fish or something similar.

?

Instructions from: (name,	)
For this method:	
Instructions:	
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	•
	•
	•
	•

Present your instructions or old method and recipes to the big group.



## Brazil: Indigenous people use an app to protect their habitat

Indigenous groups in Brazil repeatedly face problems that threaten their livelihoods. Many are now using the SOMAI app to protect their lands. The app makes data about rainfall and deforestation available, but also shows where the borders of the Indigenous community are.

?

Read the > article "Brazil: Indigenous people use an app to protect the forest".

What advantages does the SOMAI app offer Indigenous groups? In bullet point form, write down all the arguments put forward in the article. Add your own thoughts on how the app is beneficial.

Arguments from the article:			
Further arguments:			



## Brazil's Indigenous groups go mobile to protect the forest

Brazil's Indigenous groups are struggling to protect their land from cattle ranchers and loggers. Now, some are turning to their phones as a weapon in the fight against land-grabbing and environmental destruction.



When a small cluster of houses appeared on the outskirts of the remote Serra da Moça in northernmost Brazil, Jabson Nagelo da Silva was alarmed.

"They had just put themselves there," said Nagelo. "They were taking advantage of our lands."

That land belongs to the Makuxi. Nagelo, the son of one of the tribe's leaders who passed away in recent years, sees the encroachment as an invasion - and a threat to them and their way of life.

Although the intentions of the new arrivals remain unclear, Nagelo's concern was based on past experience.

Ever since the Makuxi first came into contact with outsiders more than 200 years ago, they've fought to maintain their languages and customs - as well as the land they say their ancestors have lived on for centuries.

Waves of mining prospectors, loggers and cattle ranchers have been moving in and around Indigenous lands for years, including Serra da Moça. In some cases, the Makuxi have faced threats and physical violence when they've pushed back against encroachment.

But before Nagelo could alert the authorities to the suspected intrusion, he had to prove the settlement was indeed on Makuxi territory - even though the

tribe didn't have a copy of official maps showing the borders first recognized in 1984.

Proof came in an unexpected form: a smart phone app.

#### Digital tool for land rights

Developed by Brazil-based nongovernmental organization, Institute for Environmental Amazon Research (IPAM), the app, called SOMAI, tracks rainfall and deforestation, and provides maps that demarcate Indigenous territory.

Nagelo had attended a workshop on how to use the digital tool along with 100 other Indigenous Brazilians earlier in 2018. When he accessed the map of Makuxi territories via the app, his suspicions about the new houses were confirmed. Smart phone in hand, he could make a complaint to the authorities.

"We suspected an invasion, but no one had the tools to map our territory ourselves," he said. "When I saw the map of the demarcated Indigenous land, I was happy that we had this tool. We can do our own monitoring of our territory."

IPAM say its free app has helped verify several cases similar to the Makuxi's. When the Kayapó people known for maintaining colorful traditional festivals - noticed deforestation on the outskirts of their land in June 2017, they reported it via the app. They were able to preserve that land, and farming traditions.

While many such communities live in remote areas, IPAM's Indigenous group coordinator Fernanda Bortolotto says they more connected now. She estimates that over 100 people are now using the app - although she's unsure of the total number, as cell phones are often shared within the communities.

"In my job, it's a lot easier to communicate with them by Facebook or Whatsapp than by email," Bortolotto told DW. "They've had mobile phones for a long time - just not as tools to monitor their territories before."

### Coping with climate change

Indigenous representatives say they're also using the apps to deal with threats due to climate change.

Record droughts are increasing in the Amazon, heightening chances of wildfires and tools like SO-MAI can help communities avoid these hotspots and combat fires.



Temperature and rainfall information are also helping communities plan for drought and other extreme weather events. Those using the app are able to add in their own climate-tracking data, too.

"We saw an opportunity with the app to produce information from within Indigenous communities," said Sineia do Vale, who is a member of the Uapixana Indigenous group and environmental manager at the Indigenous Council of Roraima, a non-governmental organization in Roraima state, where the Makuxi live.

"Communities can make their own climatic maps (and) become more resilient."

But the survival of Brazil's Indigenous is not just an issue of land rights or local environmental benefits, say Indigenous rights groups.

Recent research has shown that Amazon deforestation is at a "tipping point," which would mean that the rainforest could become a savannah. In that scenario, the world could lose one of the planet's most important CO2 stores.

Studies show deforestation is much lower in protected and Indigenous territories than outside them, meaning forest peoples are playing an "unparalleled role" in protecting the 54.5 million metric kilotons of carbon stored in tropical forests.

#### **Ongoing threats**

Still, proposed laws in Brazil could make it more difficult for Indigenous communities to lay claim to their land. Demarcated Indigenous territories account for 13% of the country's terrain – 98.5% of which is in the Amazon region.

Land demarcation is already a lengthy process subject to several layers of investigation by government bodies, including the Justice Ministry. But a proposed "time stamp" would burden Indigenous groups with proving they were present on their lands in 1988, when the Brazilian Constitution came into effect, in order to remain.

After visiting Indigenous communities in Brazil in 2016, UN rapporteur Victoria Tauli-Corpuz described what she saw as grave and worsening conditions.



IPAM is providing workshops to indigenous communities to teach them how to use the SOMAI app

Funai, the Brazilian government body responsible for policies relating to Indigenous peoples, has had its budget slashed nearly in half in recent years – undermining monitoring, protection and demarcation efforts.

Meanwhile, Indigenous groups say they are again facing sometimes violent threats from loggers, miners and agribusiness.

Indian communities sharing the Makuxi's land told investigative journalism outlet Amazonia Real that members of their group had been threatened "nine times" in recent years by individuals associated with timber company FIT Manejo Florestal, which is logging along the borders of the land.

DW reached out to FIT for comment but were unable to reach them at the time of publication.

IPAM believes its app, which won a Google Social Impact Challenge award in 2016, could play an important role as Indigenous communities come under increasing pressure.

"Our objective is that this data will be principally made available to these Indigenous peoples," said Bortolotto,"so they can use it as a tool in their fight (for rights)."

11.08.2018 Author Ciara Long (São Paulo) dw.com/p/32nER



Worksheet 7.1

## Camel Charisma: An income for Indian camel nomads

The Raika in Rajasthan are struggling to live from their tradition of raising camels. A dairy that produces camel milk products is trying to help them preserve their way of life. Find out more about it.

?

Watch the > film "India's camel nomads compete for a place in the modern world" ( dw.com/p/38fcs ).

Fill out the **table**.

What are the answers to the problems facing What problems do these solutions bring?	
the camel nomads?	
······································	





Worksheet 7.2

## Write a funding application for Camel Charisma

?

Imagine you work for the "Camel Charisma" project. The camel dairy can't yet fully finance itself, so you write an **application** to potential sponsors.

In the application, briefly introduce the project and explain why it is important to support the camel nomads and why someone should invest in the camel dairy. Use your **notes** from the table to back up your arguments.

### My application:

Dear Sir or Madam,

I would like to introduce you to the "Camel Charisma" project, for which I am currently working. We would be delighted if you were willing to support the important work of the camel dairy.





## My advertising campaign: Insects on the table!

From termites to crickets, locusts to meal worms, for many people in the world, eating critters has long been part of everyday life. If insects were an accepted food source everywhere, it could be good for the environment and the climate.

Read the > article "Biodiversity: Protecting South Africa's edible insects"

Using the article as a basis, design an **advertising campaign** for a product made from edible insects. You can take <a href="photos">photos</a> or <a href="shoot video">shoot video</a>, design a <a href="poster">poster</a> or make a <a href="radio">radio</a> commercial.

The following **questions** will help to guide you:

1.	Which product do we want to advertise (insect protein bars, cricket burgers, snacks with meal worms, etc.)?
2.	Which medium do we want to use for our campaign (poster, social media, TV commercial, etc.)?
3.	Which arguments speak for our product? (Why is this product good for me? How does it benefit me if I buy it? Why is it good for the environment?)
4.	How should we design our advertising campaign?

Present your advertising campaign.

**Copyright:** Before you make your campaign publicly available (for example on social media networks or on a homepage), make sure you have the rights to use all your selected picture, video and audio material.



## Biodiversity: Protecting South Africa's edible insects

Eating insects is common among many communities around the world. Could DNA barcoding help protect them and culinary traditions for future generations?



Edible insects, consumed by many communities in rural South Africa, are now attracting the interest of scientists

Standing underneath a big mango tree in Mopye, a village in north eastern South Africa, Martin Boima is snacking on crunchy dried termites. He's been eating the insects, known locally as "makeke," since he was a little boy, coaxing them out of their mounds with long strips of grass and drying or frying them.

Today he is handing out homemade termite protein bars, available in cheese or chocolate flavor, to an excited village crowd. It is part of a series of taste tests he is running through his new insect-based foods business.

He is joined by Bronwyn Egan, a zoologist from the South African University of Limpopo, who shares his fascination for edible insects, on a culinary and academic level. For the last two years, she has worked closely with Boima and other locals, collecting both their knowledge of nutritious critters, as well as actual specimens.

### Enriching science with traditional knowledge

She is looking to build up the scientific understanding of these species as a first step to conserving them. Some estimates say up to 40% of insect species could become extinct globally over the coming decades, due to habitat loss as land is converted to intensive agriculture, as well as to urbanization and the use of pesticides.

Egan fears poor insect taxonomy in South Africa makes it especially difficult to accurately know the scale of biodiversity being lost there. "We don't even have names for all the things that are being lost on a daily basis," she said.

Enriching science with traditional knowledge, Egan hopes her project will aid conservation for insects that are a particularly valuable food source to communities.

Catching, cooking, and eating insects whole is a common practice in many parts of rural South Africa, including the lush mountainous Bolobedu South area in Limpopo where Boima lives. He says he "loves insects", for their earthy, nutty-flavor. "Any way that you want to cook them, they're always nice."

Boima, as well as other field workers, share the names, whereabouts and behaviors of local edible species with Egan, to support the protection and promotion of the insects and the traditional knowledge he holds dear.

Today he is showing her how he catches his evening meal in the fields beside his village. He shakes plants with a leafy branch, prompting grasshoppers, or "ditšie", to hop out into his waiting hands.

#### **Barcoding biodiversity**

Some of his bounty goes into a plastic bag destined for Egan's laboratory, where she preserves the specimens in alcohol and records their identity information. A selection of the preserved specimens is then sent across the country to Barbara van Asch, senior lecturer in the department of genetics at Stellenbosch University.

Van Asch sequences the insects' DNA to create a genetic barcode. This information, together with other classifications such as genus and the scientific name, are then added to databases such as the International Barcode of Life – a global library of genetic information for various species that aims to protect biodiversity.

So far, the Limpopo samples have provided van Asch with nine "ethno-species" – animal groupings identified by local communities rather than Western scientific classification systems. This type of work has been done on other edible insect populations in Asian



## Article 3 Modul III

countries, but African knowledge has often been overlooked by academic science, van Asch explained. "It's like we're bringing them to life," she said. "But only on our side because from the side of the communities they (already) exist."



Martin Boima is happy to donate his grasshoppers to help with scientific research

#### **Environmental threats**

From the field where he caught the grasshoppers, Boima points to a spot on the other side of a green valley which used to be rich in insect life. Now there are barely any, he explains, and the leaves have started turning brown. He suspects the landowner sprayed pesticides in preparation for converting the land for development or farming.

Egan and van Asch see their identification work as an essential first step in conservation. "If it doesn't have a name, nobody is going to stop a building being put up for a nameless thing," Egan says. They hope this foundation of scientific knowledge will inform researchers and activists who want to track and defend insect populations.

#### **Commercializing insects**

They also see the potential it has to support the commercialization of insect-based human food and animal feed, which has gained momentum in recent years. Consumers can now buy cricket protein in the US or insect ice cream in South Africa. "They need a very small amount of resources compared to the nutritional value that they hold," said van Asch.

Insects have been highlighted as a more sustainable alternative meat protein, as they require less water and land, and produce fewer greenhouse gas emissions.

Beyond the continued barcoding work, van Asch plans to source funding to set up pilot projects that test how households in South Africa could establish small-scale farms. The results of her research with Egan will help determine which species could be suitable.

A study this year from University of Bonn, Germany, concluded that although insect-farming has potential for growth as a sector, more research is needed into species suitability, as well as the investment and policy frameworks needed to support it.

Yet Egan thinks connecting traditional knowledge from areas like Limpopo to scientific data could help identify which species could be commercialized. For instance, that soldier termites, which appear all year, would be a better choice than the seasonal flying termite.

Boima plans to start selling his termite protein bars soon and eventually hopes to employ others in the area. He is also keen to teach people about the value of this traditional knowledge. "We have to know that those insects are very important to our culture, that we can live because of them," he said. "So we have to take care of them."

22.05.2021 | Author: Elna Schutz | dw.com/p/3mku1





## TikTok, Instagram, etc. in the rainforest

Young Indigenous people are proving that their traditions and social media do not have to be kept apart. On the contrary. Some are using social media platforms for the benefit of their people.

Read the > article "Cultural war with bow, arrow and smartphone".

1.	Using the article, collect <b>examples</b> of how Indigenous influencers support their people.	
2.	Write <b>comments</b> for social media	
	Using a social media platform of your choice, take on the role of influencer Alice or Cristian.	
2 a) A follower confronts you with a quote from the article. He wants to know when mean:		
	Alice: "If we don't live in total isolation, we are apparently not Indigenous. That is the colonial thinking we are up against day after day."	
	Cristian: "I want to produce high-quality content, and simply by doing that, I am breaking the stereotype of being a lazy Indio who doesn't care."	
	Write a comment that answers the follower from the point of view of Alice or Cristian.	
2 b)	Another follower wants to know why you think social media is the best way of making Indigenous culture visible for the world. Answer him too.	

# Cultural war with bow, arrow and smartphone

Indigenous influencers are tackling prejudice and fighting for survival by using social media to show how they combine tradition with the modern world.



Indigenous influencer, Alice Pataxo

"Whaaat? You have internet?" a moderator asked in exaggerated surprise when interviewing 19-year-old influencer Alice Pataxo for the YouTube children's channel Canal IN.

Wearing a headdress and traditional face paint, Pataxo, who was being interviewed online, sat in front of a light-colored fabric wall, speaking into her mobile phone camera. She told the audience she was at home in her village in the Monte Pascoal nature reserve in Brazil's Bahia state. The closest supermarket is some 40 kilometers away.

"We don't have telephones here, but our satellite internet connection is stable," she said.

During the course of the show, Pataxo talked about her people's traditions, customs and way of life. It is part of her role as an Indigenous activist to dispel the belief that it is a contradiction for her people to live from the land and use the internet. Or that her school classes were sometimes held in the forest, and that she now studies at the Federal University of Southern Bahia.

## The internet as a mouthpiece

But Alice Pataxo doesn't always explain things with the same calm and friendliness she exuded in the children's show. On her own social media channels, she comes across as combative and irritated by the cliches she regularly has to contend with – that her skin is much too light for her to really be Indigenous and that her traditional headdress and face paint are just a masquerade.

In one of her recent tweets, she asked "Who are Brazil's Indigenous people?" Answering her own question, she said that though there is a large element of tradition in the Indigenous way of life, that doesn't make it backward. The sense of identity, she added, is connected to a feeling of belonging, and from the eternal fight against colonization. Even today, she continued, Brazilian society wants to strip Indigenous groups of everything that makes them who they are from their land to their own identity. "If we don't live in total isolation, we are apparently not Indigenous. That is the colonial thinking we are up against day after day."

#### Used to the fight

Her activism is not her first battle. At the age of 15, she and her family camped at the side of a federal highway for a while after the police cleared her village. The area had been earmarked for real estate speculation. Pataxo says the fight for survival has made her strong.

"Nowadays if I have the feeling I can't do something, I remember that I've already survived worse," she said. "I do what I do so other Indigenous children don't have to go through the same thing."

She has over 88,000 followers on Instagram and even more on Twitter, including some Brazilian celebrities such as the singer Emicida, comedian Marcelo Adnet and the politician Marina da Silva.

#### Rituals help to endure prejudice

Cristian Wariu Tseremey'wa has about 75,000 Instagram followers and more than 38,000 subscribers to his YouTube channel. Cristian Wariu, as he usually calls himself, belongs to the Xavante, who live in central Brazil. But he also has Guarani ancestors that come from further south.

#### Proud of his Indigenous heritage

"If there is space for a discussion, I'll join in, but I have no problem moving on if it is meaningless," said Wariu, who is the son of a chief. "There are lots of tests in Xavante rituals, both physical and psychological. At some point or another, life will be hard on you and you have to learn to be able to stand it."



When he talks about being able to endure prejudice, he is talking about his mental health, not his outward attitude. Because like Alice Pataxo, he has taken it on himself to spread knowledge of the Xavante and other Indigenous peoples as a way of changing stereotypical thinking.

"My parents taught me to be proud of my origins," he said. "We can use the internet to strengthen our sense of identity and boost our self-confidence."

#### **Breaking stereotypes**

Cristian Wariu studied organizational communication in the Brazilian capital, Brasilia. But he taught himself to do what he does now by playing around with photo and video editing programs on old computers his father brought back from his travels.

"I want to produce high-quality content, and simply by doing that, I'm breaking the stereotype of being a lazy Indio who doesn't care."

Although the goals of the two influencers are similar, their approaches are very different. Alice Pataxo positions herself as a youth activist, who writes politically loaded tweets and comments, and posts images that seem to show off her femininity.

Cristian Wariu, on the other hand, wears T-shirts and only rarely wears face paint or the Xavante's traditional ear pins. Far from making pithy statements, he tries to explain the Indigenous world in a calm and low-key manner.

#### Support from the elders

Both influencers are supported by their communities in the work they do online. At a large gathering, the leaders of the Xavante described Cristian Wariu as a "digital warrior." Though because many of the older members hardly use the internet, he says they only really started to take his commitment seriously when he was a guest on a national talk show.

"The elders always wanted this visibility, but never achieved it because they were too busy defending their territory," Wariu said. "So, it gives them a great sense of satisfaction to see an Indigenous face on television, who on top of that, also has a presence on a modern medium like the internet."

26.04.2021 Authors João Soares, Jan D. Walter









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Present your text.

**Copyright:** Before you publish your text (for example on social media networks or on a homepage), make sure all the writing is your own work, or if you have used passages of text from other authors, be sure to mark them accordingly and to quote your sources.



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