

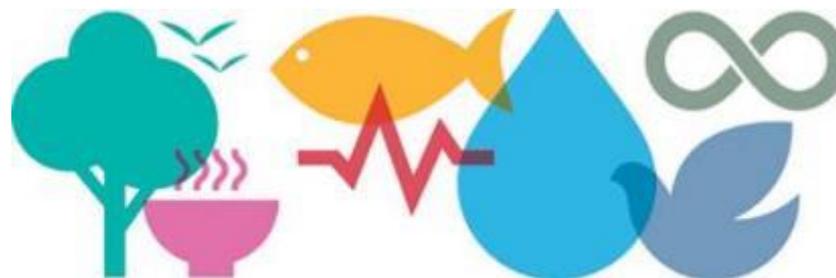
Supply chain management and the UN Sustainable Development Goals: opportunities and challenges for rainforest conservation at local and global scales

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“Scoping the performance indicators and data architectures for sustainable supply chain development in forest communities using the UN Sustainable Development Goals”



SUSTAINABLE DEVELOPMENT GOALS

Linking social, economic and environmental...



17 Goals, 174 targets, 232 metric indicators.

**Supported by governments and businesses as new reporting standard
(but not yet clear how this translates with existing standards)**

Interconnections between them – how does one goal affect others?

SDG Target 15.2:

“By 2020, promote the implementation of sustainable management of all types of forests, halt deforestation, restore degraded forests and substantially increase afforestation and reforestation globally”



For the SDGs, a supply chain partnership could aim to record progress on multiple SDGs:

SDG 9: sustainable, small scale industry into value-chains and markets

+

SDG 17: partnerships (with global buyers of commodities)



SDG 8: sustainable economic growth (increase revenue)

+

SDG 15: protect eco-systems (through community conservation / effective agro-ecology)



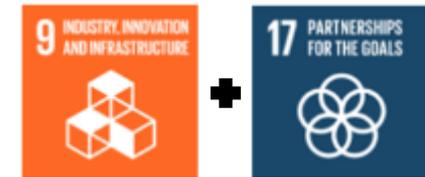
SDG 3: ensure health and well-being

+

SDG 4: ensure education

+

SDG 1: eliminate poverty



Relevant SDG performance indicators / metrics for benchmark

15.2.1 Progress towards **sustainable forest management**

17.11.1 Developing countries' and least developed countries' share of **global exports**

17.16.1 Number of countries reporting progress in multi-stakeholder development effectiveness monitoring frameworks that support the achievement of the sustainable development goals

8.2 Achieve **higher levels of economic productivity** through diversification, technological upgrading and innovation, including through a focus on high-value added and labour-intensive sectors

8.3 Promote development-oriented policies that support **productive activities**, decent job creation, **entrepreneurship**, creativity and innovation, and encourage the formalization and growth of **micro-, small- and medium-sized enterprises**, including through access to financial services

9.1.1 **Proportion of the rural population who live within 2 km of an all-season road**

9.c Significantly increase access to **information and communications technology** and strive to provide universal and affordable access to the Internet in least developed countries by 2020

3.1.1 Maternal mortality ratio

3.1.2 Proportion of births attended by skilled health personnel

3.2.1 Under-5 mortality rate

3.b.1 Proportion of the target population covered by all vaccines included in their national programme

4.4.1 Proportion of youth and adults with **information and communications technology (ICT) skills**

1.1.1 Proportion of population below the international poverty line, by sex, age, employment status and geographical location (urban/rural)

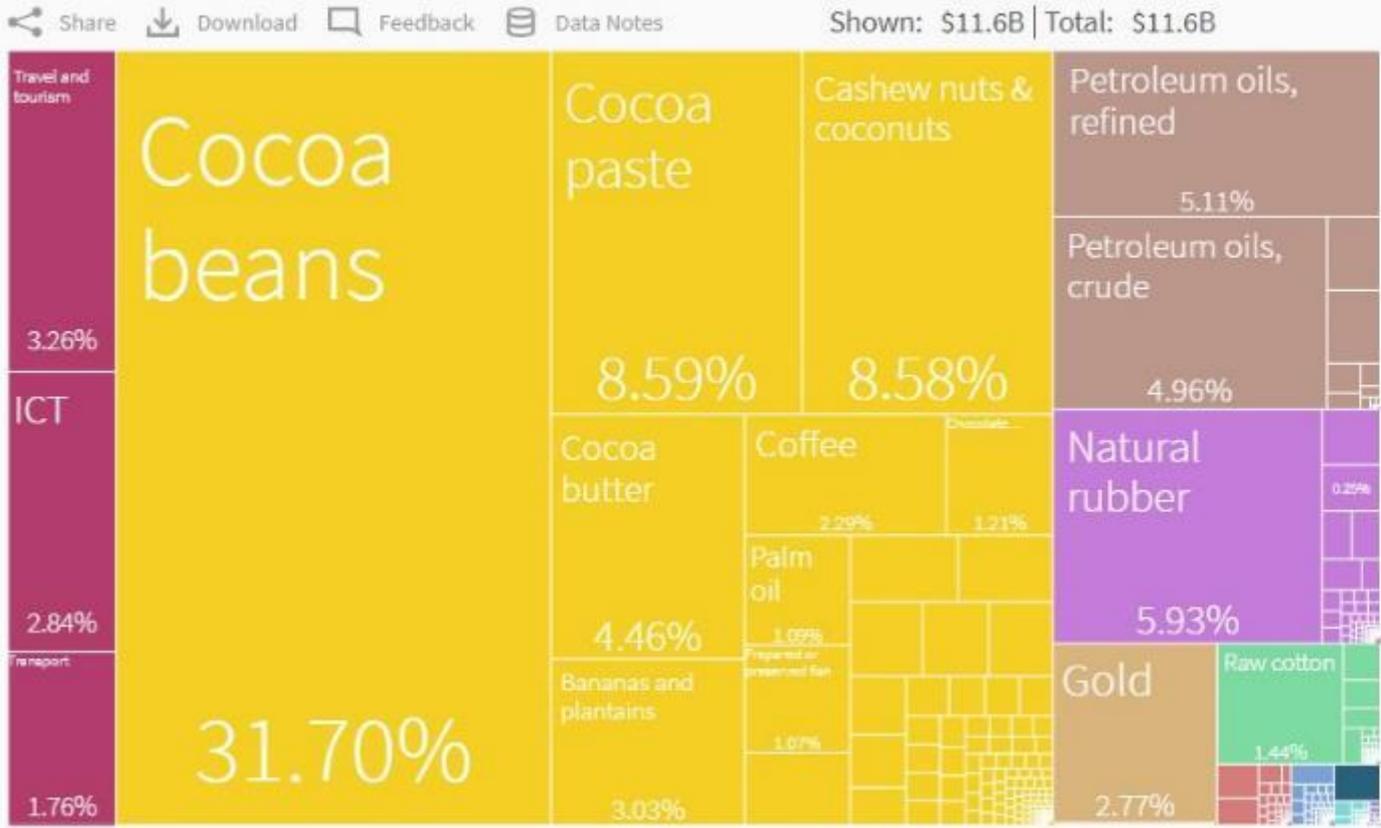
1.4.1 Proportion of population living in households with access to basic services

1.4.2 Proportion of total adult population with **secure tenure rights to land**, (a) with legally recognized documentation, and (b) who perceive their rights to land as secure, by sex and type of tenure



How significant are buyers?

What did Côte d'Ivoire export in 2016?



Cocoa beans, whole or broken, raw or roasted

Code **1801 HS4**

Year **2016**

Gross Export **\$3.68B**

Share **31.70%**

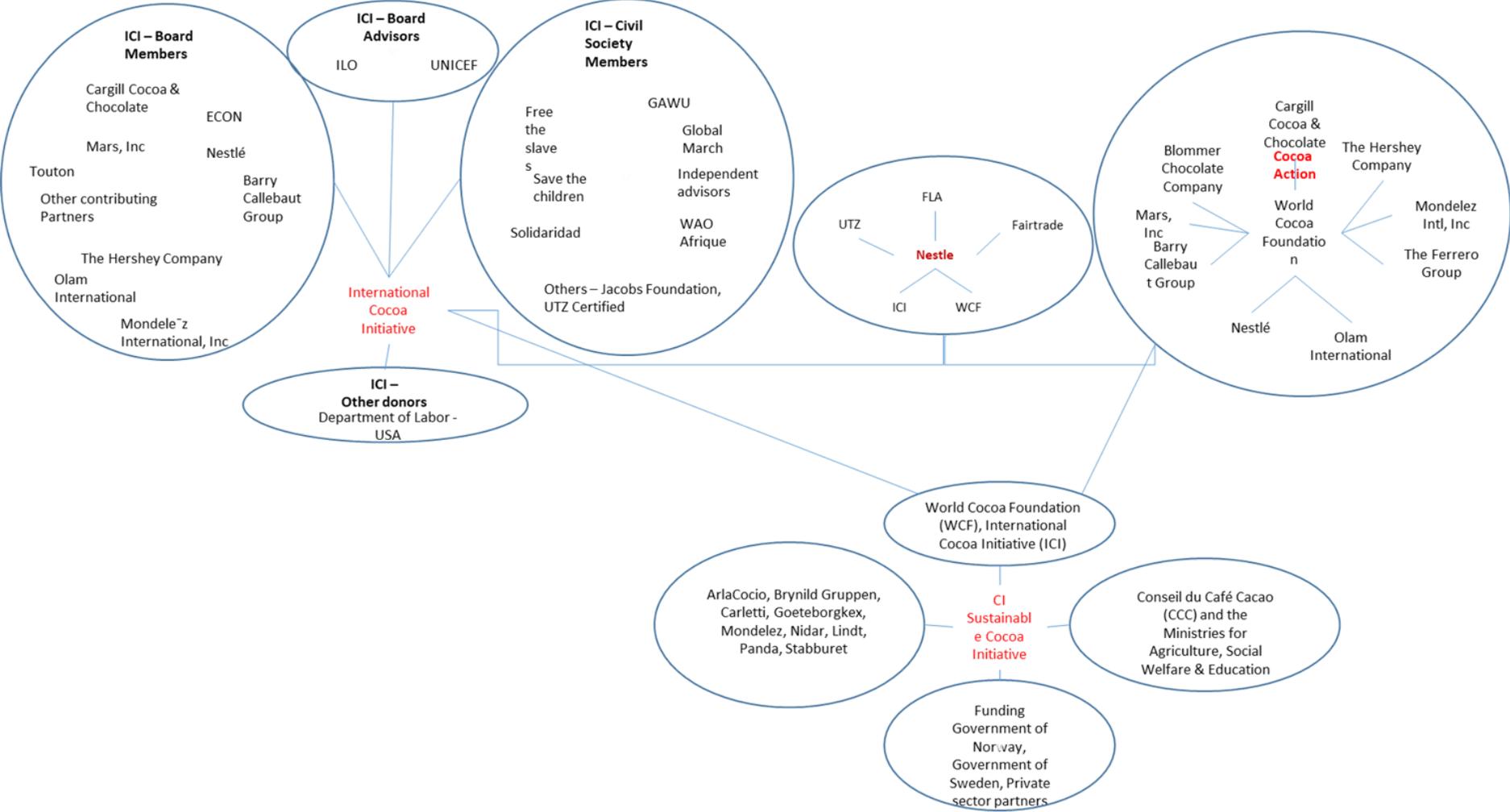
Revealed Comparative Advantage (RCA) **523**

Distance **0.867**

Product Complexity Index (PCI) **-2.46**

Source: <http://atlas.cid.harvard.edu>

Mapping Actors (Cocoa – Cote D'Ivoire)



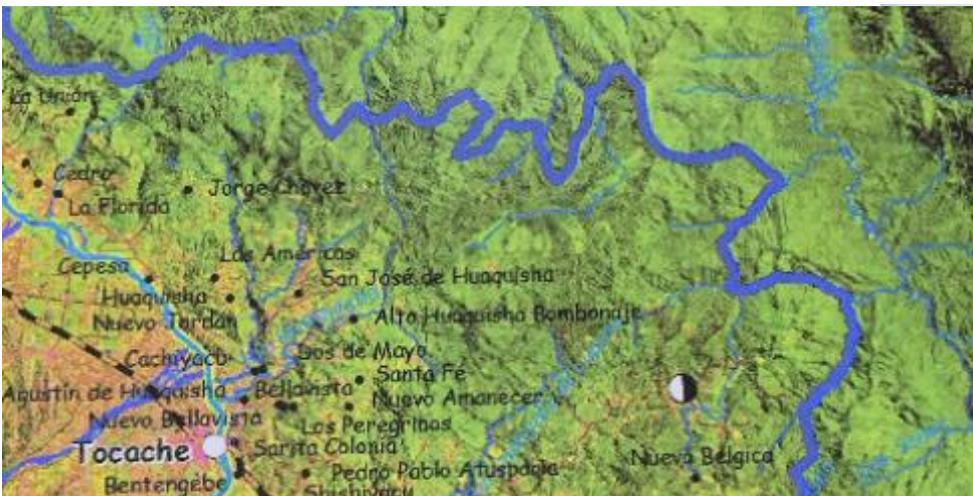
- For different actors, how are SDGs on ‘zero deforestation’ and ‘rural development’ understood, and what is the impact?
- **Research Method:** Discourse analysis of documents and interviews with NGOs representing suppliers (farmers) and corporate policies and statements of major buyers.



Supplier area 1: Peru. Western Amazon frontier



- CIMA manages a 23,000km² reserve of protected area rainforest, but the buffer zone has a population of around 300,000 in 450 villages. Small-scale logging, and mainly cacao and coffee production is expanding towards the protected area, with growing levels of inward migration.
- No data collected using SDG metrics, but impact investment metrics are being developed. Many gaps. E.g. no definite population metrics...Sustainable supply chains being set up for cacao (Althelia and Fair Trade certification)

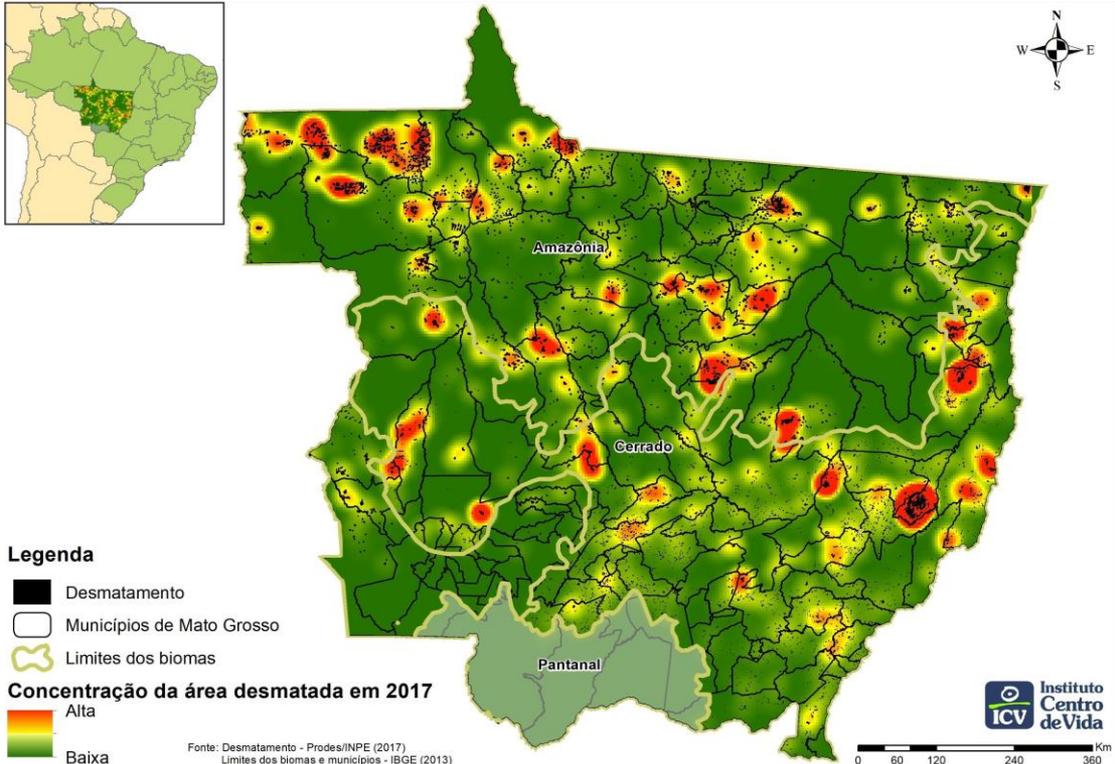


Supplier area 2: Brazil. Southern Amazon frontier

Instituto Centro de Vida (ICV) works with a large number of farmers and harvesters in Mato Grosso, Brazil, on improving productivity, market access and negotiations with buyers, whilst also using satellite data to monitor deforestation and promote conservation. PCI Initiative: jurisdictional approach

Socio-productive networks project, Sustainable Livestock Initiative

Community Rural Development Initiative, Forest Transparency Initiative



Buyer: Unilever, UK

The Unilever Sustainable Living Plan



“We believe that sustainable and equitable growth is the only way to create long-term value for our stakeholders.”

“We're working with farmers and suppliers to drive up social and environmental standards in our supply of agricultural raw materials.”

“By connecting us to millions of people in farming communities, our agricultural supply chain will be central to achieving the social ambitions of the Unilever Sustainable Living Plan - for example, by creating inclusive supply chains for smallholder farmers...”

Improving Health & Well-being

- > Health & hygiene
- > Improving nutrition

Reducing Environmental Impact

- > Greenhouse gases
- > Water use
- > Waste & packaging
- > Sustainable sourcing

Enhancing Livelihoods

- > Fairness in the workplace
- > Opportunities for women
- > Inclusive business

Findings (1) : Whose resilience and sustainability?

Unilever, ICV and the UN SDGs, all mention 'resilience' but there is a misalignment in meaning...

- For ICV, resilience means farmers should grow a diversity of crops, increase bargaining power, whilst maintaining ecosystems
- For Unilever, resilience means farmers have financial services to cover insurance, savings, etc.

Implications: Enhancing community livelihood resilience through diversity OR farmers (or monocultures) providing the maximum short-term yield of a specific crop to a multinational buyer

Findings (2) : Power imbalances

Divergent interests: ICV works with farmers to increase their resilience through negotiating power with buyers and by promoting crop diversity; Unilever's strategy supports yield maximisation of single commodities.

Weak communication: Farmers have seen no change in how companies buy so do not believe that deforestation is a concern for these companies. They think that zero deforestation is 'an NGO agenda'.

Financial imperatives: Unilever (and other firms) are constrained by short-term demands of financial markets, and price sensitivity of consumers (main competitive strategy).

Leakage and spillover: "Clean" supply chains for whom? Excluding non-compliant suppliers linked to deforestation may just displace impacts. How is this addressed?

Key points

- How to reconcile competing interpretations of resilience and sustainability? Implementing Agenda 30 presents challenges through ‘politics of translation’.
- Data architectures for SDG benchmarking sustainable supply chains are immature – how is data gathered, how is it used, by whom?
- SDGs are a potential *lingua franca* but are not there yet.
- Better awareness needed of the politics and power relations across the commodity supply chain in relation to the no deforestation agenda. Companies may impose due diligence – considerable capacity building for buyers and suppliers needed.
- Potential for landscape approaches to strengthen governance and local-global links? Specific commodities, specific places and specific buyer-supplier-development programmes offer key sites for investigation.

INTERNATIONAL

Rainforest warriors prepare to fight Bolsonaro

Indigenous tribes and their supporters are furious at Brazil president's plan to open protected land for commercial use

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The Kayapó of the Amazon, est. Four do dresses mad feathers, its carrying sbo rior women, shaven, sang waved mach

Kruwyt, ti A'Ukre vill the pry ongi "chasing a declared ene all's new pre rightwing fr office in Jan sees as the afforded to and the "em tionally man "We are re mis-step frd Kruwyt told terned with l "He wants t to end our trs ors defendit our culture."

The 5.2m the Xingu riv the largest r enous lands past several have fought l tribal neigh loggers and

standing up to a government that is keen to open indigenous lands to commercial activity.

The struggle of indigenous peoples to maintain their way of life, documented by French anthropologist Claude Lévi-Strauss, is not new. But now Mr Bolsonaro has made access to this land a central part of his development policy, triggering an outcry at home and abroad.

The American Museum of Natural History last week scrapped an event to honour the president, citing concerns about the Amazon rainforest.

Mr Bolsonaro has in recent weeks

They have electricity from generators and clean water from a well. While there is a school in the village, literacy rates are lower in indigenous communities than in other parts of Brazil, IGBE said, and child mortality rates are higher, a 2017 study shows.

The Kayapó would like access to better healthcare, but otherwise, said Pat-i "I don't think we are poor. In the cities, the white man lives with money. Here we don't, we farm, we hunt, we fish, we dance. With all of that, we are rich."

tribal meeting in A'Ukre village: top right, villagers perform a war ritual; tribal chief Kruwyt receives a layer of red paint

Dario Calderin

The president, who prides himself on his relationship with Donald Trump, US president, added he would like to explore the rainforest for riches "in partnership" with the US.

Shortly after taking office, he stripped Brazil's indigenous agency of its authority in demarcating indigenous lands, transferring it to the agriculture ministry, which critics say is dominated by agribusiness interests.

Federal prosecutors warn that the measure is illegal, as the Brazilian constitution guarantees ethnic groups' rights to their ancestral lands.

"Today, we are seeing the biggest

ests is absurd," she said.

Mr Bolsonaro's critics accuse him of pandering to the conservative farming constituency that brought him to power. Brazil is one of the world's largest soy producers, and environmentalists see the crop as a driver of deforestation.

The heart of the matter, indigenous chiefs, anthropologists, and environmentalists say, is access to land. Indeed, 12.5 per cent of Brazil's vast territory — an area the size of Venezuela — is home to more than half a million indigenous people, mainly in the Amazon rainforest, according to the national statistics institute (IGBE). Overall, indigenous



people make up less than 1 per cent of Brazil's 210m population.

"This is our land, we were here before the *Rubão*," said Pat-i, A'Ukre's young chief-in-waiting, referring to white people. "If we let them in, they will destroy the rainforest and everything in it under the excuse we need 'their' development," he added.

Such development has not helped other Kayapó villages, he said, referring to nearby settlements that have fallen into the hands of illegal gold miners and been wrecked by deforestation, drinking, and prostitution. There are frequent conflicts with miners, loggers and ranchers, said the Indigenous Missionary Council, an advocacy group.

Opening indigenous lands for development will ease such tensions by

improving living standards, the government believes. "Are the Indians of Brazil all fine? They live in a poverty that is indigent. A country like ours, where the Indians have some 13 per cent of the national territory, and leave them in the poverty that they live? There's something wrong," Terça Cristina Cordeira, agriculture minister, said.

The roughly 350 people in A'Ukre hunt wild boar for food and harvest Brazil nuts for sale.

They have electricity from generators and clean water from a well. While there is a school in the village, literacy rates are lower in indigenous communities than in other parts of Brazil, IGBE said, and child mortality rates are higher, a 2017 study shows.

The Kayapó would like access to better healthcare, but otherwise, said Pat-i "I don't think we are poor. In the cities, the white man lives with money. Here we don't, we farm, we hunt, we fish, we dance. With all of that, we are rich."

Glenn Shepard, an anthropologist and ethnobotanist with the Museum Emilio Goeldi in Belém, who studies the Kayapó, added: "This is their land, they owe nothing to anybody." Crucially, he said, "without them holding the fort, deforestation would advance rapidly".

Already in the first two months of 2019, 8,500 hectares of rainforest were cut down in the Xingu river basin. This represents a 54 per cent spike from the same period last year, said Instituto Socioambiental, an advocacy and research group, amid pressure from farmers and land grabbers.

For the Kayapó, the fate of the rainforest is inextricably linked with their own survival.

Amid the cries of howler monkeys in the forest canopy, Nygrekamiró, the A'Ukre's female chief, put it more forcefully. If the president opens up indigenous lands, and does not stop "speaking ill" of indigenous people, she said she would go to Brasília to meet him and there she will put her machete flat against his chest.

"I will do that to defend our river, to defend our rainforest," she said. Then "I will cut his mouth off".

If we let them in, they will destroy the rainforest and everything in it