

A novel generation fund for rainforest conservation and indigenous peoples

BI

A draft for Amazon Sacred Headwaters Alliance & Fund. Pachamama Slide-deck by Per Espen Stoknes, BI, 12.Oct.2023



“The stark fact is that there is no way to stay on a 1.5°C pathway without all but halting deforestation by 2030”
(Emergent report, 2022)





Photo by Joel Koupermann, FP



The Amazon Rainforest May Be Nearing a Point of No Return
If rainforest transforms into savanna, will have profound implications for the whole planet.

Source: Boulton (2022) *Nature Climate Change*, <https://doi.org/10.1038/s41558-022-01287-8>



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**“if tropical deforestation were
a country it would be the third largest
emitter after China and the United States.”
(Emergent report, 2022)**

**Illegal logging puts cash in the hands of individuals / families,
that then causes conflict within communities.
The value of the hardwood is ~100X higher at the pacific coast**

Ecuadorian Amazon:



**Lower Pastaza
river / region**

Threats from roadbuilding
(red = existing, yellow=plans)

“Hold the line” - a “shield” of 4 communities resisting incursions

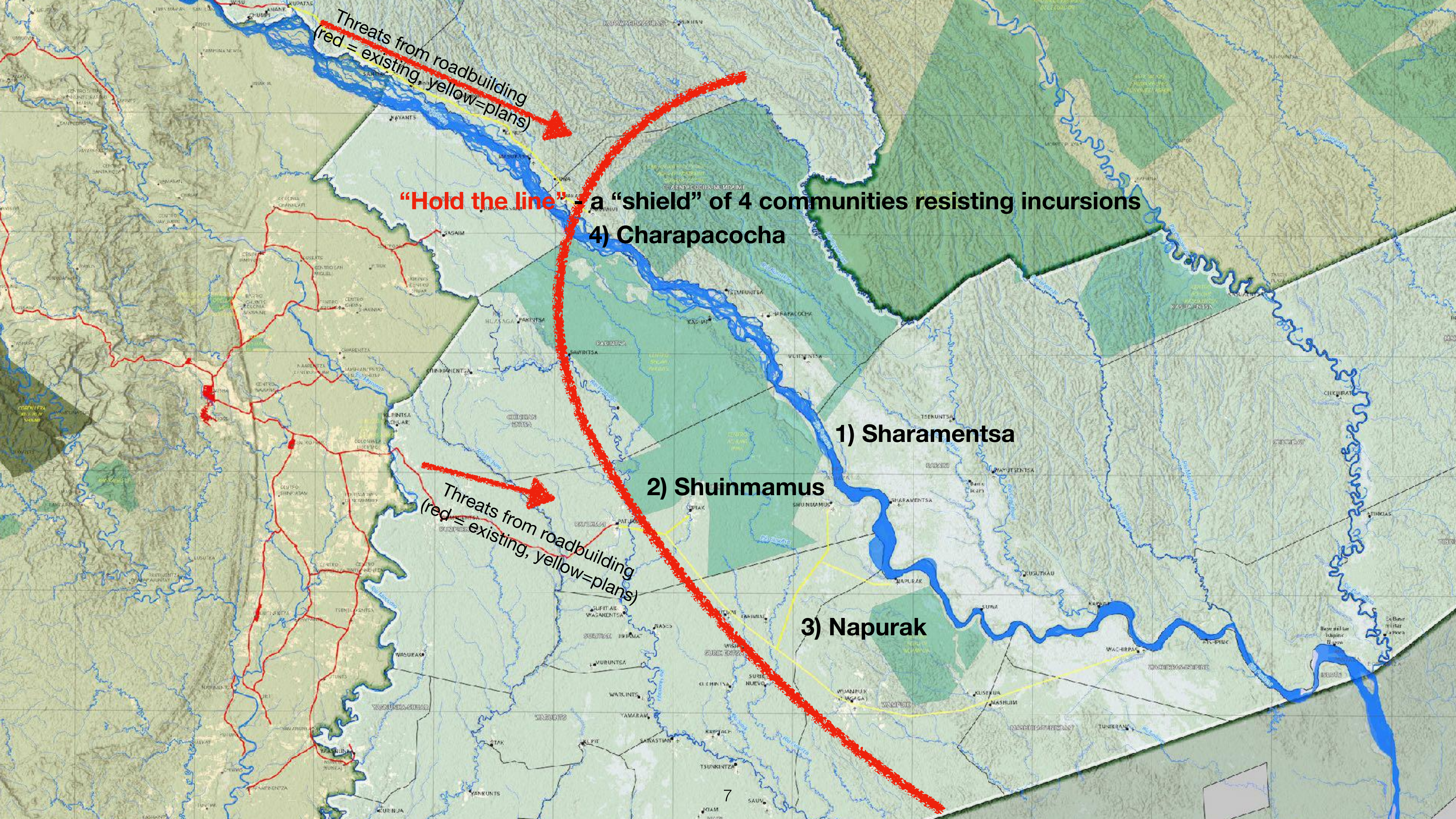
4) Charapacocha

1) Sharamentsa

2) Shuinmamus

3) Napurak

Threats from roadbuilding
(red = existing, yellow=plans)





**Sharamentsa - is a frontline community at the Pastaza river;
and a well-organised, leading community in Achuar nation.
This is where boats pass, on their way to the new road further up.**



Pink river-dolphins
surface sometimes...





The best protection of rainforests, as 300 scientific studies show, happens by the indigenous peoples, particularly if they get support to both develop their communities and fight deforestation.

Overview - the Achuar fund model

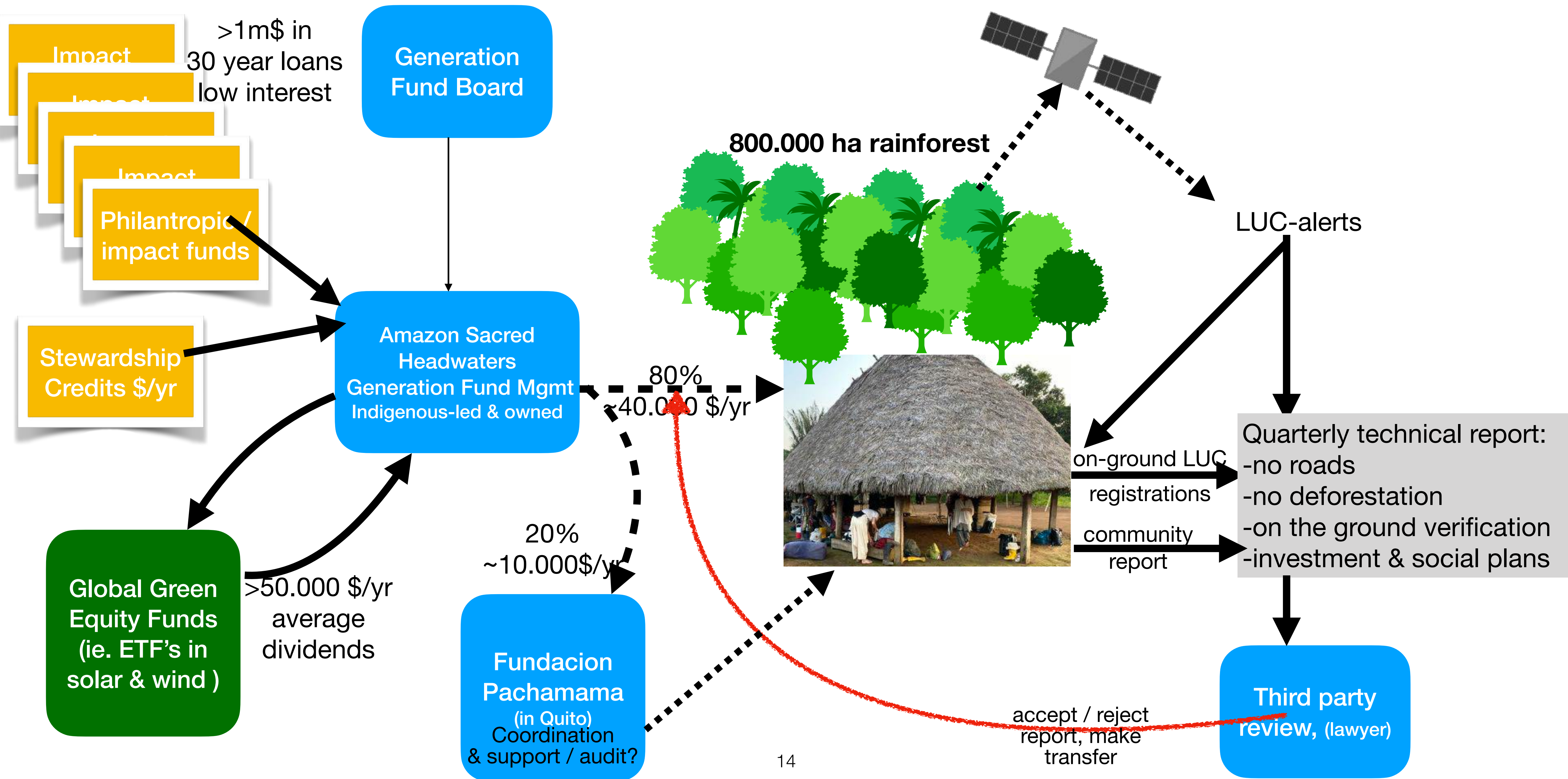
- **What:** Bottom-up legal landrights-based fund to support indigenous communities conservation efforts. Go beyond top-down central governmental forest support, providing a type of UBI for communities
- **Where:** eastern Amazonian Ecuador, ~7.000 - 40.000 km². Then - if successful - expand to other indigen. communities, accross the “Amazonian Sacred Headwaters” up to 300.000 km²
- **For whom:** Indigenous communities and nations such as Achuar Nation of Ecuador (NAE), with Sharamensa community as a pilot (10.000 ha intact forest)
- **Why now:** “Perfect storm” of Covid, climate change, high balsa-wood demand, new road(s) and money-ification threats to Achuar community life (need \$ for health-care, transport, schools, food security)
- **How:** Set up a new type of generation fund, where we reconfigure capitalism to work for the forest, more than destroying it; encouraging sustainable agroforestry skills.
- **Money:** Impact investments and/or philanthropic funds, plus biodiversity credits, ie “Jaguar Credits”
- **When:** Local involvement and acceptance (with Sharamentsa, MAANA) been built since Feb2020. Project has started with Sharamensa, first payment distributed. Fund to be established 2023.
- **Who?** *Fundacion Pachamama* is Ecuadorian main partner, supported by Pachamama Alliance - USA, WWF, San Francisco Univ, Per Espen Stoknes - Norwegian Business School
- **How much?** payments from 130 k\$/yr now to eventually ~20 M\$/yr backed by a scalable, 30-year wealth fund with principal capital of 5-200 M\$



Community-based conservation involves not just consulting those involved but ensuring that *they play an active role in the governance, management and decision-making* of projects and their interventions.

Source: [The Economist Impact](#)

Achuar nation forest generation fund



Community Budget start-year 2021

	2021 Compensation for Conservation Fund/Sharamentsa - ITEMS	Q1 - 2021	Q2 - 2021	Q3 - 2021	Q4 - 2021
1	Construction of new school	\$ 2 000			
2	Internet service, installation and 12 months of service	\$ 1 500			
3	Sharamentsa community fund	\$ 5 000	\$ 5 000	\$ 5 000	\$ 5 000
4	Alternative production fund	\$ 2 000	\$ 2 500	\$ 2 500	\$ 2 500
5	Health fund	\$ 2 000	\$ 5 000	\$ 5 000	\$ 5 000
6					
	Quartely funds	\$ 12 500	\$ 12 500	\$ 12 500	\$ 12 500
	Project Total	\$ 50 000			

Specific request made by the community to improve infra
 USD 400 installation and USD 67 monthly charges
 For community related needs, including logistical, materi
 To support local community enterprises and projects
 For Medical emergencies

		\$ 10 000,00	30\$/tree	\$ 300 000	every 4-5 years
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So far (2021, 2022) the transfers are covered 50% - 50% from Fundachion Pachamama and Stoknes Futures AS

Overview - the Sharamentsa pilot


- ***Local monitoring team***
- ***Remote sensing satelites***
- ***SmartPhone technology + Starlink***
- **Local food production**
- **Quarterly Reporting**



Sharamentsa's Plan for Territory (2022)

“Proyecto Sharam”

1. Community **articles of association** / “Normativas”
2. **Land** Management Plan: Area of family production:
 - 3 hectares per family for production.
 - help with chicken production / nets
3. **Felling of fine woods**
 - Plant 10 plants of fine wood for each cut
 - Do not sell balsa or others wood to outsiders
4. **Hunting**
 - weapons: use guns only 5% {of trips?, of meat kgs?}
 - Species: Do not hunt endangered species, (Jaguar, Tapir, Macaw, Monkeys)
 - Quantity: Only Family Consumption.
 - Distance: more than 2kms away from the community.
5. **River Fishing**
 - no Dynamite, NO foreign fishermen!
 - Barbasco (Natural Rotenone) : only Every 1 of 3 years
6. **Aquaculture:**
 - Produce only native (endemic) fish in the community
 - No tilapia!

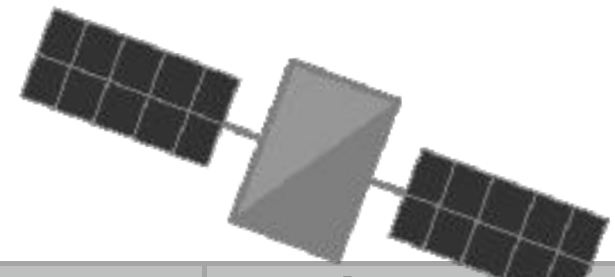


“PROYECTO SHARAM”

1. **Producción:**
 - i. Superficie de producción familiar de hasta máximo 3 hectáreas por familia.
2. **Tala de maderas finas: Son maderas finas las siguientes: Bálsamo, Guayacán, Guanbula, Abío, Chuncho, Cedro, Laurel, Arrayán, Pechiche, Guayabillo, Caimito, entre otros.**
 - ii. De requerir por parte de las familias, talar una madera fina, se deberá solicitar permiso al presidente de la comunidad y se deberá tener la aprobación del coordinador de monitores, previa inspección.
 - iii. La persona que haya aprovechado una madera fina previa aprobación, deberá reforestar con la misma especie, con 10 árboles y con el acompañamiento de los monitores.
 - iv. En esta obligación también se incrementará las palmas en general.
3. **Balsa:**
 - v. Está prohibida la tala y venta de Balsa.
 - vi. Está prohibida la siembra de Balsa
 - vii. La Balsa se podrá aprovechar solamente para iniciativas que no ameriten cortar toda la plantación, y principalmente para actividades turísticas y de generación de artesanías.
4. **Cacería:**
 - viii. Hay prohibición estricta de cazar los siguientes animales:
 - Tapir 2000
 - Jaguar 3000
 - Monos (todas las especies) 500
 - Paujil 1000, Guacamayo 1500
 - Loras 500, Pava negra 600
 - Tucán 500. No se podrá cazar a menos de 2Km de la comunidad.
 - ix. Solo se podrá cazar para consumo familiar los siguientes animales.
 1. Guanganas máximo 2
 2. Sajino máximo 1
 3. Pavas coloradas máximo 2
 4. Resto de animales, máximo 2
 - x. El uso de armas será permitido en un 5%
 - xi. En caso de invasión de otras comunidades con el fin de cazar, se requisarán las armas y/o el transporte hasta que la multa correspondiente sea cancelada.

Sr. Canelos Rene
**PRESIDENTE DE LA COMUNIDAD
ACHUAR SHARAMENTSÁ**

Quarterly report Q1-2023



#	Satelite / Fecha de alerta	hectáreas	Categoría	Territorio monitor Fecha	GPS	hect áreas	Foto	Actividades	# de veneficierios	#	Comunidad	Comentario
1	2.Ene.2023	2,5	¿Fuego?	1-enero-23	✓	2,5	✓	Verificación de estanques	14 familias	1	Proceso:	Un nuevo miembro del equipo (Manuel)
2	6.Ene.2023	1,0	cambio de portada	01-enero-23	✓	4,5	✓	Verificacion de galpones	12 familias			45 dias trabajados
3	7-Ene-23	4,0	cambio de portada	16-enero-23	✓	0,0	✓	Verificacion de piscicultura	14 familias	2	Género:	En el mes de abril se incluye 1 mujer de 4 en equipo de Amasank.
4	12-Feb-23	0,5	cambio de portada	01-feb-23	✓	0,5	✓	Punto de referencia	Cendero Wanchantsa			El presiente y el vicepresidente ambos son hombres, en la escuela los ninos y
5				25-ene-23	✓	4,0	✓	Punto de referencia de maderas finas	Terreno Entsakua Yunkar	3	Gobernancia:	24 de 30 familias participaron en el asamblea T1
6	25-Mar-23	1,2	¿Edificio?	07-mar-23	✓	1,2	✓	Verificacion de galpones	12 familias			la asamblea del 18 de abril se verifico el avance del trabajo del proyecto Sharam.
7	6-Mar-23	0,8	cambio de portada	08-mar-23	✓	0,8	✓	Verificacion de piscicultura	14 familias	4	Asuntos:	En Sharamentsa se necesita un contador profesional, para el manejo de dinero en
8				15-mar-23	✓		✓	Inicio de la contruccion	3 cabanas			En febrero una buena aclaración de fronteras con Charapacocha
				16-mar-23	✓		✓	Verificacion de limites	Barrio Ikiam-Sharamentsa	5	Conocimiento tradicional	En marzo, dos ancianos realizaton talleres para los jovenes.
				16-mar-23	✓		✓	Verificion de la chacra de barbasco	Pitiur Tsamarin		Plan de inversión:	entrega de alevines, la terminacion de la casa comunal la terminación de la casa del docente de la escuela Rio Pastaza.
				17-mar-23	✓		✓	Verificacion de limite territorial	Suwa-Sharamentsa			entrega de los pollos
				27-mar-23	✓		✓	Punto de referencia de 2km.	Sharamentsa (terreno de entsakua)	S	10.000\$ recibidos	8.000\$ usado
				28-mar-23	✓		✓	Verificacion de contratistas (siembra de madera fina)	Carlos Tentets, Entsakua Yunkar, Snata Tentets		En la cuenta despues del T1	4000\$
9												

Can we start now with “Jaguar Credits”?



Can we start now with “Jaguar Credits”?

With “Jaguar Credits” we refer to *high-quality biodiversity credits*, based on ancestral stewardship practices of indigenous communities.

more precisely:

“Amazonian Stewardship credits”



Biodiversity science methodology:

from ERA (Brazil) /
Regen Network (USA)

Biodiversity Stewardship Tokens Methodology

Protocol for Ideation, Implementation &
Monitoring

ERA CARBON SERVIÇOS AMBIENTAIS LTDA.

Authors: Hannah Simmons – *Chief Executive Officer*

João Daniel de Carvalho – *Director & Environmental Manager*

Olivia Marques – *Director & Environmental Engineer*

Yanna Fernanda Coelho Leite – *Biodiversity Coordinator*

Letícia Larcher – *Biodiversity and Ecology Expert*

Collaborators:

Christianne Corsini – *Chief Technical Officer*

Yanka Alves – *REDD+ Coordinator*

Ismael Angelo Hall – *Tech Lead, Full Stack Developer*



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hannah@erabrazil.com

jd@erabrazil.com

www.erabrazil.com.br

METHODOLOGY STRUCTURE

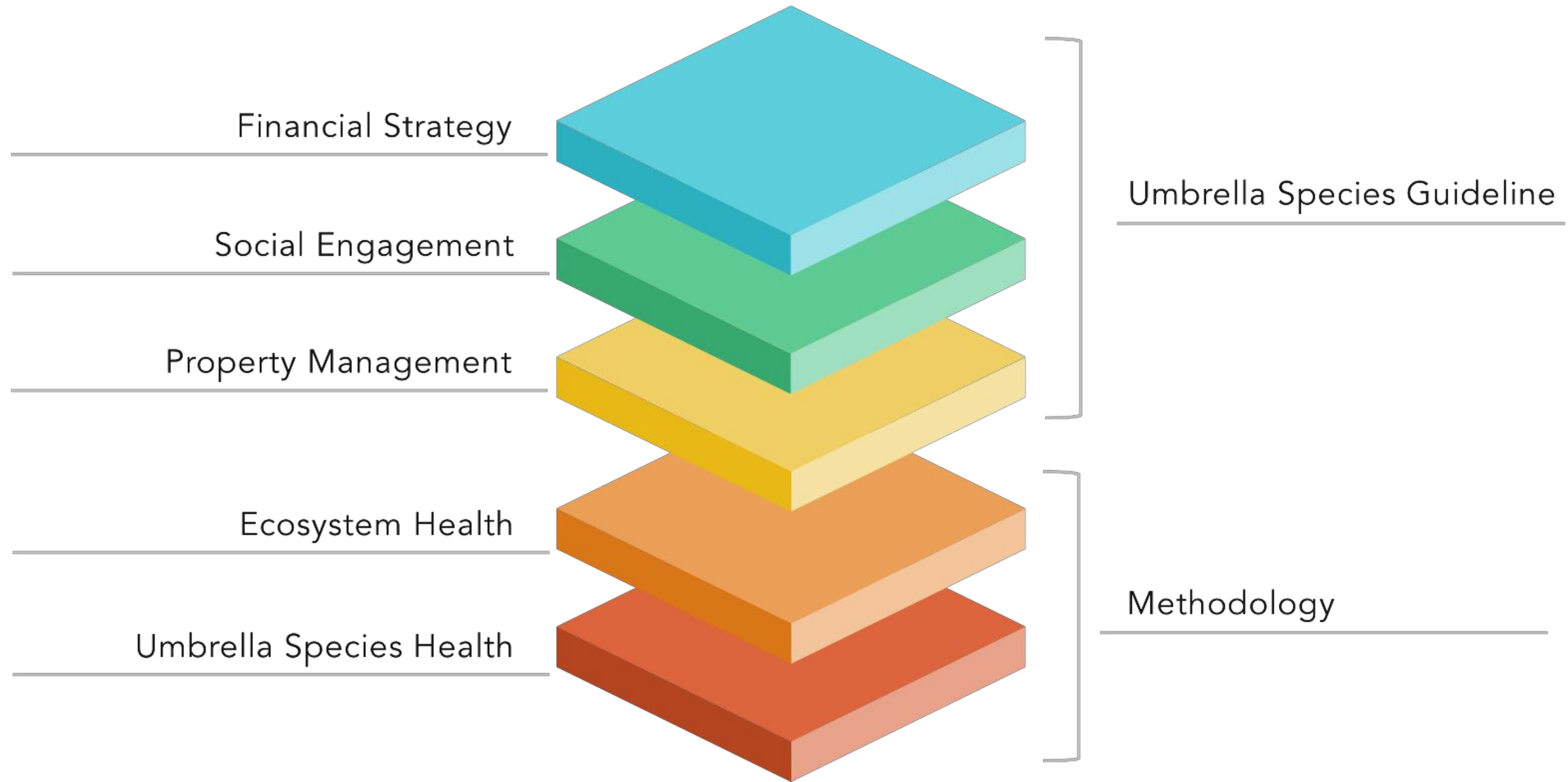


Figure 2 Illustrative representation of the structure of the Biodiversity Methodology for Umbrella Species Stewardship.

Umbrella Species Health

Final Number of Tokens Issued = USH Score + EH Score + USp Guideline Score

It is important to remember that:

- USH Score was calculated at section 4.4.
- EH Score was calculated at section 5.3.
- USp Guideline was calculated at section 6.3.

The figure below has a scheme of the total biodiversity tokens that is possible to emit.



Figure 5 Biodiversity token calculation summary.

The Demand side?



dev.app.regen.network

Luntz global... Our Team - L... solitair town... Solitaire Tow...

CREDIT CLASS *i*

Ancestral Jaguar Stewardship for Protection of Standing Forest

OFFSET GENERATION METHOD
N/A

TRUST & TRANSPARENCY

Credit Class Details

These credits use the most scientifically rigorous and strict criteria to ensure that every purchase is real and quantifiable.

[VIEW METHODOLOGY](#)

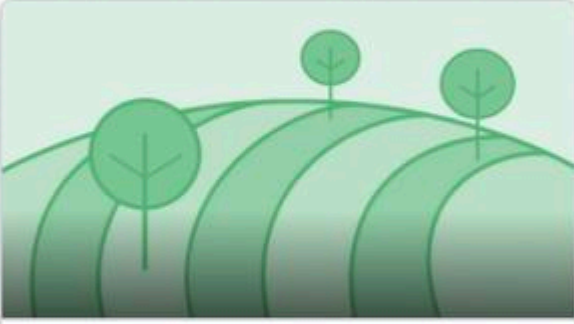
1 credit = 1 metric ton CO2 equivalent

ADMIN *o*

ISSUERS *o*

regen13m...cdyll8 regen13m...cdyll8

Projects



Sharamentsa pilot (Ecuador)

Sharamentsa Pastaza - Pastaza, 1601, Ecuador | 100 ha.

AVG PRICE *1* CREDITS AVAILABLE

\$- 20

[BUY ECOCREDITS](#)

Now on the blockchain ledger



- by the Regen Network team
- Among the world's first blockchain biodiversity credits

Why blockchain for Biodiversity Credits?

OFF-CHAIN

Incumbents fail to facilitate supply & demand

Intermediaries with high fees

Fragmented across standards and registries

Market opacity hinders price signals

Low level of digitization (you only get a PDF)

Greenwashing and market liquidity concerns

ON-CHAIN

Market adjustment by supply & demand

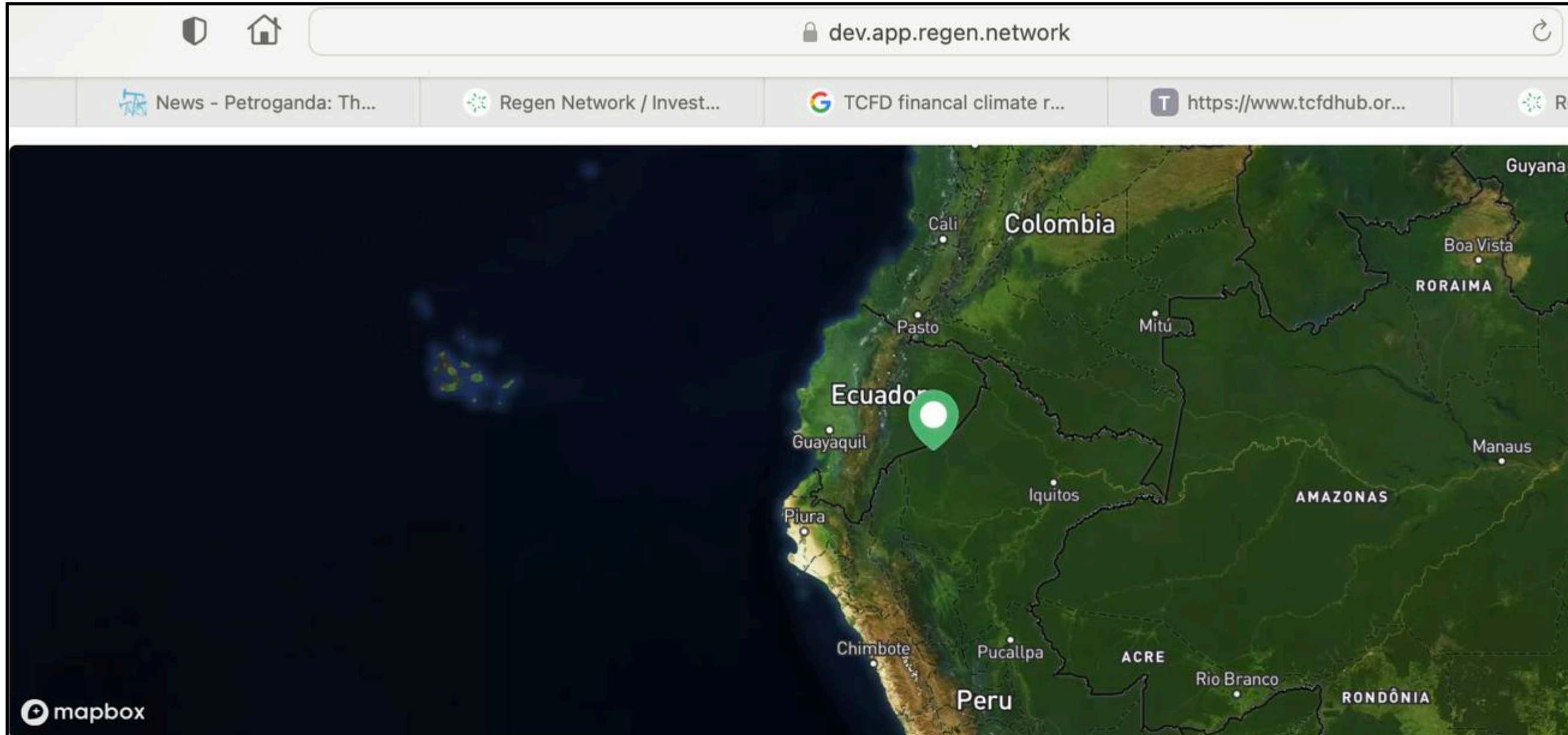
Less information asymmetries → low fees

Interoperable and composable by default

Open ledger of transactions better price discovery

Web-native transfers of value and ownership

Traceable offsets auditable by anyone at any time



Sharamentsa pilot (Ecuador)

📍 Sharamentsa Pastaza - Pastaza, 1601, Ecuador | 100 hectares

PROJECT ACTIVITY

Forest Ancestral Stewardship

CARBON



CREDIT CLASS ⓘ

Ancestral Jaguar Stewardship for Protection of Standing Forest

OFFSET GENERATION METHOD	PROJECT METHODOLOGY
N/A	Planet - Hold The Line

CREDITS ISSUED ⓘ

↑ **100**

CREDITS TRADABLE ⓘ

↔ **90**

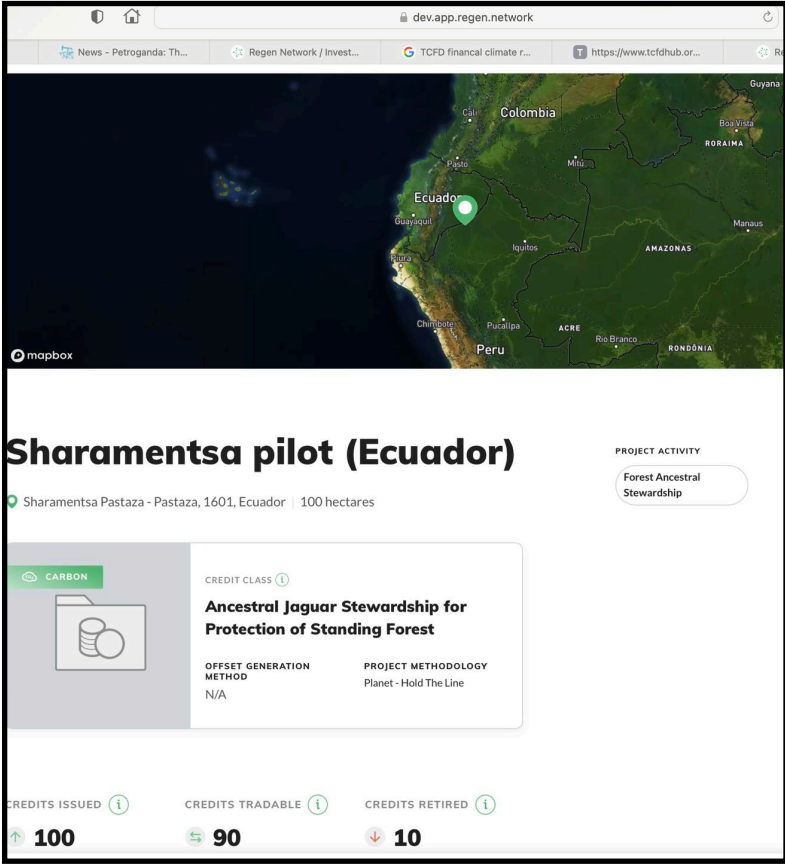
CREDITS RETIRED ⓘ

↓ **10**

Now on the
blockchain ledger,

but...
more project
documentation
needed

Regenerative Finance for Social and Ecological Sustainability



Supply

**Blockchain market-place,
science-based methodology**

Demand for credits



Community Stewardship Services



with verified high quality

Jaguar Credits

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				16-mar-23	✓	✓	Verificación de la chacra de barbasco	Pitir Ysamun		seguir monitoreando
				17-mar-23	✓	✓	Verificación de límite territorial	Sawa-Sharamentsa		Plan de inversión: Se realizó la reunión de la casa comunal para la revisión de la línea de demarcación de la escuela No. Pemas.
				27-mar-23	✓	✓	Punto de referencia de 2km.	Sharamentsa (terreno de entabauk)	6	10.000\$ recibidos
				28-mar-23	✓	✓	Verificación de comestibles (siembra de madera fina)	Carlos Tenets, Entabauk Yunkar, Shuts Tenets		8.000\$ usado en la cuenta después del T1

3.rd party verification

What's in it for you and your children?

Do you want to:

- **stop roads and reverse deforestation in primary rainforest?**
- **improve climate, biodiversity, economic inequality**
- **contribute to developing novel long-term finance solutions for the above**

for corporations:

- **enabling net-zero, climate-positive and nature-positive targets**

for philanthropic / impact investors:

- **a money-back guarantee: get your principal returned if the fund doesn't work or the areas invested in collapses,**
- **get a large potential impact-investment upside: 7-10% financial returns on investment in real terms over 8-10 years.**

Spørsmål? og neste skritt

- Gjenstår: full dokumentasjon og eksakt antall jaguar kreditter
- Vi arrangerer tur for interesserte 16-25 Februar 2024
- Spørsmål og interesse, ta gjerne kontakt:



per.e.stoknes@bi.no