Cultivating Just Resilience



The Chakra Group as a community mechanism for sustainable conservation in Napo

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A compilation of good practices and lessons learned to bring innovative subnational solutions to global problems

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Introduction

The province of Napo, in the Ecuadorian Amazon, is a territory of extraordinary natural and cultural wealth, where Kichwa communities have carried out sustainable agroforestry practices for centuries. Among these practices, the Amazonian Chakra stands out as a traditional system that not only guarantees food security and the generation of income, but also helps conserve biodiversity and ancestral knowledge. However, this model faces challenges such as economic pressure, deforestation and lack of access to differentiated markets.

Project summary

The Chakra Group is an inter-institutional platform created in 2017 by the Prefecture of Napo to strengthen and preserve the Amazonian Chakra, an ancestral Kichwa agroforestry system. Comprising indigenous communities, the prefectural government, local authorities, academia and cooperation agencies, this mechanism promotes climate resilience and food security through public policies, training and certifications. It has promoted public policies such as the provincial ordinance on the recognition of the Chakra, as well as certification mechanisms such as the Participatory Guarantee System (SPG) and the Chakra Seal, which allow producers to access fair and differentiated markets.

Key information

Location: Napo, Ecuador

Focus areas: Just resilience; participatory governance; agricultural biodiversity; bioeconomy; capacity building; climate change and biodiversity; gender and biodiversity; sustainable use of biodiversity.

Founded in: 2017

Sustainable Development Goals addressed:

SDG 1, 2, 3, 4, 5, 8, 11, 12, 13, 15, 16, 17.

Kunming-Montreal Global Biodiversity Framework targets addressed:

Targets 4, 8, 9, 10, 11, 13, 14, 20, 22 and 23

Special Collection

This case study is part of a special collection developed within the framework of Regions4's work on **Subnational Just Resilience**, with the support of the **Government of Scotland**. Its objective is to identify, highlight, and analyze experiences led by regional governments in the Global South that exemplify approaches and actions integrating environmental sustainability with social and/or economic justice. Each case is analyzed based on Just Resilience criteria (available here).

Just Resilience criteria addressed:

1.1.1.; 1.1.3.; 1.1.5.; 2.1.1.; 2.1.2.; 2.1.3.; 2.1.4.; 2.1.5.; 3.1.2.; 4.1.3.; 4.2.2.; 5.1.1.; 5.1.3.

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BACKGROUND AND CONTEXT

Ecuador is a country with a diverse geography that includes the coastal region, the Andean highlands and the Amazon region. The province of Napo, located in the Ecuadorian Amazon, extends over a territory characterised by tropical rainforests and a network of rivers that feed the Amazon basin. The Napo River, which originates in the region known as Jatun Yaku ("big river" in Kichwa), is one of the Amazon's main tributaries and plays a crucial role in the lives of local communities.

Napo has a population of approximately 131,360 inhabitants, 65.8% of whom live in rural areas and depend on agriculture and livestock. The province is mostly inhabited by indigenous peoples (56.24%), with a strong presence of Kichwa communities. However, it faces high poverty rates, with 79.2% of the population living in poverty according to indicators on unsatisfied basic needs.

Despite this, the province is a land of exceptional natural and cultural wealth. Its ecosystem harbours significant biodiversity and is home to numerous indigenous communities that have developed sustainable agroforestry systems over the centuries. Among them, the Amazonian Chakra system stands out as an ancestral land management practice that combines traditional knowledge with the preservation of biodiversity and food sovereignty.



The Amazonian Chakra system

The Amazonian Chakra is a traditional agroforestry system managed mainly by the Kichwa communities of Napo. This system is more than a production method; it represents a way of life based on being in harmony with nature and ancestral knowledge. The Chakra is a diversified production space within the family farm, where species used for food, medicine, handicrafts, and commerce are cultivated, combining agro-ecological practices with the preservation of the Amazonian ecosystem.

Crops grown in the Chakra include cassava, banana, maize, cocoa, coffee, guayusa (a type of caffeinated holly tree) and various fruit and medicinal species. This agroforestry system guarantees food security for the communities and generates income through the commercialisation of products such as fine flavour cocoa and guayusa, both of which are increasingly in demand in specialised markets.



Beyond its economic and agricultural importance, the Chakra plays a key role in environmental conservation. Its design mimics the structure of the Amazon rainforest, with different strata of vegetation that protect the soil, promote biodiversity and contribute to carbon sequestration.

The Chakra not only provides food and material resources, but is also a space for the transfer of ancestral knowledge. The chakramamas, women in charge of the Chakra's management, play an essential role in teaching cultivation techniques, seed selection and conservation practices. Through rituals and oral teachings, this knowledge is passed on from generation to generation, ensuring the continuity of the agroforestry system.

The community approach is key to the sustainability of the Chakra. The collective organisation of producers has led to the creation of associations such as Kallari, Wiñak and Tsatsayaku, which seek to strengthen fair marketing and product certification. This SPG recognises the social, environmental and cultural value of the products generated in the Chakra.

Despite its benefits, the Amazonian Chakra faces several challenges. One of the main ones is the economic pressure that forces many families to engage in conventional farming activities or seek outside employment, which could lead to the progressive abandonment of this practice. In addition, illegal mining and deforestation constitute significant threats to the ecosystem, as they deteriorate biodiversity and affect the integrity of the ecosystem services on which communities depend. Also, the lack of access to differentiated markets and the high cost of external certifications limit the commercial potential of Chakra products, hindering their insertion in more sustainable markets.

To face these challenges, producer associations have promoted strategies such as crop diversification, research into new markets and the implementation of labels. In addition, community-based tourism rooted in the Chakra has emerged as a sustainable alternative, with more than 30 agro-tourism initiatives in the region that combine cultural experiences with environmental conservation.





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KEY ACTIVITIES AND INNOVATIONS

In response to the request of several Chakra organisations and producers, the Prefecture of Napo approved a provincial ordinance granting legal recognition to the Kichwa Amazonian Chakra. This ordinance, considered the "legal birth certificate" of the Chakra, was approved on 25 May 2017 by the Provincial Chamber of Napo at the request of the chakramama social movement, and subsequently sanctioned and promulgated on 15 June 2017 by the Prefecture.

The purpose of the ordinance is to establish a local public policy aimed at the conservation of the agro-ecosystem, the sustainable use of the ecosystem services provided by the Chakra, the preservation of the cultural identity of the Napo Runa, the promotion of social participation and the strengthening of their own institutions. It also seeks to encourage greater investment from both the public and private sectors, as well as from cooperation agencies.



This regulatory instrument establishes a guiding framework covering conceptual aspects, management principles, technical management, ancestral knowledge, good practices, marketing, processing, research, sustainability monitoring, incentives and participatory governance mechanisms.

The ordinance on the Kichwa Chakra (GAP Provincial Napo, 2017) defines the Chakra as:

a productive space located within the farm, managed by the family under an organic and biodiverse approach, valuing ancestral knowledge, where [commercial] timber, fruit, handicraft, edible, medicinal and ornamental species can be found, as well as endemic and domestic fauna. Managed with a distribution that allows a balanced and sustainable production that serves for family consumption and commercialisation, conserving the agro-ecological and cultural management of the productive processes, avoiding the production of monocultures.

Principles of the Kichwa Amazonian Chakra

In addition to the definition, the ordinance sets out several fundamental principles for Chakra management:

Principle I: The Chakra combines the goal of family nourishment with opportunities for income generation;

Principle II: Chakra management is natural and based on the ancestral practice of the Kichwa of the Amazon. The size of the Chakra accommodates the use of family labour.

Principle III: The Chakra is a family space for the passing on of knowledge and its dissemination.

Principle IV: The Chakra maintains a high level of biodiversity.

Principle V: La Chakra complies with several of the principles of agro-ecological production and biocommerce.

The Chakra Group was created with the aim of halting the disappearance of this ancestral system, revitalising it through the exchange of knowledge and native seeds, and encouraging Kichwa youth to work for its protection in the face of current climate challenges. The platform is made up of technical experts from the Napo provincial government (GAD Provincial Napo), the municipal government of the canton Archidona (GAD Municipal Archidona), the Ministry of Agriculture and Livestock and the Ministry of Environment, Water and Ecological Transition, the Universidad Regional Amazónica Ikiam, associations of chakramamas and cocoa and coffee producers and those engaged in community-based tourism. It is also supported by the programme “Increasing resilience to climate change through the protection and sustainable use of fragile ecosystems” (ProCamBío II) of the Ministry of Environment, Water and Ecological Transition, with technical assistance from the German Agency for International Cooperation (GIZ) and funding from the German Federal Ministry for Economic Cooperation and Development (BMZ).

The programme aims to ensure a climate-resilient Chakra by providing technical advice and support to key local communities and institutions to promote specific measures that enable their inhabitants to adapt their ways of living and producing in a context of climate hazards and impacts. These in situ management and participatory local governance actions are progressively increasing the resilience and reducing the vulnerability of the Chakra, thereby improving the food sovereignty and economic incomes of the Kichwa family.



Chakra Group management and governance

The Chakra Group, initially coordinated by GAD Provincial Napo with the support of GIZ, is an inter-institutional coordination platform that promotes participatory management and territorial governance. This group is divided into themed committees led by institutional partners and meets at least once a month to make technical and strategic decisions.

As part of this process, the GAD Provincial Napo has been working in collaboration with the project "Conservation and Sustainable Use of Biodiversity, Forests, Soil and Water to Achieve the Good Living (Buen Vivir / Sumac Kasay) in the Napo Province", implemented by the Food and Agriculture Organization (FAO) of the United Nations and the Ministry of Environment, Water and Ecological Transition of Ecuador, with funding from the Global Environment Facility (GEF) ; the Forest and Farm Facility (an alliance between FAO, IIED, Agricord and IUCN), and other cooperation entities to strengthen public policies, incentive programmes, technical advice, capacity building, infrastructure development, marketing and strategic territorial planning to ensure the recovery, conservation and promotion of the Chakra system.

ACTORES DEL GRUPO CHAKRA

Social sector

- Corporación Chakra
- Kallari
- Wiñak
- Tsatsayaku
- INTI
- Ally Wayusa
- Amupakin
- Palanda Mamas
- PKR
- Chakramamas Ahuano
- SPG Chakra Seal
- Community-based tourism centre (CTC) Chakra route, Chocolate and Tourism

Public sector

- GAD Provincial Napo
- GAD Municipal Tena
- GAD Municipal Archidona
- GAD Municipal Arosemena Tola
- Ministry of Agriculture and Livestock
- Ministry of Environment, Water and Ecological Transition
- Ministry of Tourism
- Ministry of Production, Foreign Trade, Investments and Fisheries
- Agrocalidad, the Agency for Plant and Animal Health Regulation and Control
- National Agricultural and Livestock Research Institute (INIAP)
- National Institute of Popular and Solidarity Economy (IEPS)
- Universidad Regional Amazónica Ikiam

Private sector

- APROIN
- Ecodecision
- Mamano Chocolate
- drinkGUYA
- Cadena + Asociados
- Shallari

Cooperation

- GIZ
- ENGIM
- FAO
- WWF
- INBAR
- FODESNA
- FECD
- CISS
- CEDERENA, FIEDS
- PPR Project
- Maquita
- YacuWarmi

Participatory guarantee system (SPG) and chakra seal

Among the actions implemented, one of the most significant advances has been the development of the Participatory Guarantee System (SPG) for the awarding of the Chakra Seal. This system certifies producers who comply with the principles and criteria of the Chakra, promoting agro-ecological production and sale in special markets. The SPG is based on the active participation of consumers and is built on trust and knowledge sharing, and seeks to reclaim, organise, give value to and promote the strategic importance of the ancestral Kichwa Amazonian Chakra production system. Its objectives include ensuring food sovereignty and security, conserving Amazonian ecosystems and increasing household incomes.

The SPG is organised on several levels:

1. Political level: Interaction between public authorities, leaders of organisations and technicians.

2. Technical level: Management and advice on new ideas and methodologies.

3. Operational level: Application of Chakra principles by producer organisations, chakramamas and chakrayayas.

The Ethics Committee, made up of representatives from various institutions, is the governing body of the SPG and is responsible for accrediting producer organisations and awarding the Chakra Seal.

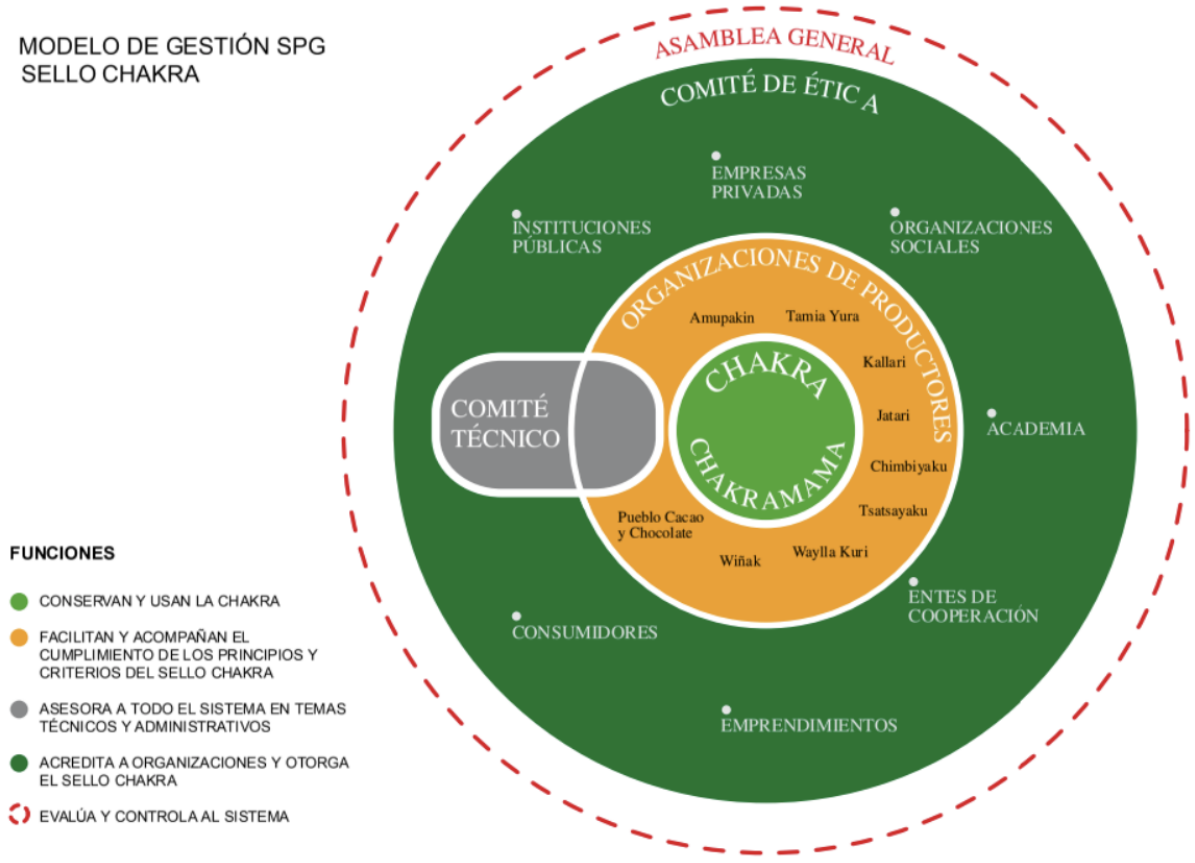


Image 1: SPG Management Model Chakra Seal.

The accreditation of organisations and the awarding of the Chakra Seal are carried out according to the procedures set out in the SPG handbook. Accredited organisations facilitate and accompany the implementation of Chakra principles by providing technical assistance and monitoring.

The SPG has achieved several important milestones:

1. Conceptual and regulatory framework: Technical, political and social endorsement of the SPG conceptual framework and its technical instruments.

2. Co-leadership: Active participation of producer organisations and public bodies, supported by technical and financial cooperation.

3. Accredited technicians: Training of technical observers to apply SPG principles.

4. Ethics Committee: Functioning of the Ethics Committee for accreditation and certification.

In parallel with the SPG's development, Napo's producer organisations led the process to draw up, present and follow-up on the Chakra system dossier with the aim of obtaining international recognition for the valuable goods and services it generates. Under the coordination of the Corporación de Asociaciones de la Chakra Amazónica, the Chakra system was recognised as a Globally Important Agricultural Heritage System (GIAHS) by the FAO. This recognition will help to promote new initiatives for the conservation of the system and to strengthen its global positioning, highlighting the benefits of the Chakra and its products at an international level.

GENDER IMPACTS

The work of selecting, sowing and transplanting the seeds in the Chakra is mostly done by women, who pass on this knowledge from generation to generation, from grandmother to granddaughter or from mother to daughter. This activity is deeply linked to sacred rites, and not all women have the paju necessary to select and exchange seeds; those who possess it adhere to strict diets and rituals, including observing the lunar calendar and using spiritually powerful plants to "cure" the seeds. The Chakra is mainly led by women in an environment of family integration and gender equity, and their role focuses on plant propagation and management, which generates benefits in key areas such as health, nutrition, economy, ecology, wisdom, and family and power relations.



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How does the project promote just resilience in the territory?

The Chakra Group significantly contributes to Just Resilience at the subnational level by integrating fundamental principles of environmental justice, community participation, and multilevel governance into its approach. By recognizing and addressing the specific needs of indigenous communities, particularly the Kichwa, the goal is not only to mitigate the immediate impacts of climate change and biodiversity loss but also to transform the underlying structures that perpetuate inequalities. Through a legal framework and specific actions with an inclusive and participatory governance model, the project contributes to strengthening and valuing the practices, worldview, and knowledge of local indigenous communities, ensuring equitable, sustainable climate and biodiversity solutions aligned with ancestral knowledge. Furthermore, the project promotes agroforestry and conservation practices that not only contribute to climate change adaptation but also foster economic justice by providing access to fair and differentiated markets that enhance community opportunities.

We define Subnational Just Resilience as a conceptual and operational framework that enables the development of climate and ecosystem adaptation and transformation strategies in the face of environmental and climate shocks in an equitable and inclusive manner. Based on the principles of environmental justice, community participation and multi-level governance, just resilience seeks to ensure that climate and biodiversity responses not only integrate the needs and capacities of the most vulnerable communities, but also address the root causes of vulnerability, such as poverty, discrimination and lack of access to resources, by creating just, inclusive and sustainable solutions.

Checklist of principles and criteria for Just Resilience available here

1. Social Equity and Inclusion

Does the action specifically address the needs of communities? Are attempts being made to reduce existing inequalities rather than reinforce them? **Criteria adressed: 1.1.1.; 1.1.3.; 1.1.5.**

The project has prioritised historically marginalised communities such as the Kichwa people, who represent 56.24% of Napo's population and suffer high poverty levels (79.2%). Through the Chakra Group, initiatives have been promoted that give new value to their ancestral knowledge, strengthen their food security and promote access to fair markets. The recognition of the role of the chakramamas, women who lead the management of the Chakra, is particularly crucial, as it guarantees the intergenerational transfer of agricultural knowledge.

2. Participatory Governance and Decision-Making

Did the affected population participate meaningfully in the decision-making process? Are the governance structures transparent and accountable? **Criteria adressed: 2.1.1.; 2.1.2.; 2.1.3.; 2.1.4.; 2.1.5.**

The Chakra Group has managed to consolidate a model of territorial governance characterised by broad participation and collaboration between various key stakeholders, such as local communities, ministries, academia and international cooperation agencies. This approach has facilitated inclusive and sustainable decision-making, where stakeholders have a say in the process.

The Chakra Corporation, representing 2,400 Kichwa families (of which 58% are women and 25% are youth) has a significant leadership role within the Chakra Group, as it is responsible for the coordination of SPG Chakra Seal.



3. Fair Distribution of Resources

Are funding mechanisms accessible to all communities, including those with fewer resources, and does the action prevent financial burdens falling disproportionately on disadvantaged groups? **Criteria adressed: 3.1.2.**

The project has promoted the differentiated marketing of agroforestry products, such as cocoa and guayusa, improving economic opportunities for Kichwa families. The creation of the seal for the Amazonian Chakra has been a key step in the generation of added value and differentiation in specialised markets. Despite these advances, significant economic barriers remain, such as the high cost of external certification and limited access to differentiated markets.

4. Intergenerational and Transformational Justice

Does the action consider the long-term impacts on future generations? Is there a strategy for sustaining resilience over time? **Criteria adressed: 4.1.3.; 4.2.2**

Consideration of the impacts on future generations and the transfer of ancestral knowledge are inherent to the culture and cosmovision of the Kichwa communities, especially through the role of the chakramamas, the women who lead Chakra management. The transfer of knowledge is not formally designed as part of the project itself, but it is part of the traditional and cultural practices of the families in the Chakra, where children learn from a young age how to manage natural resources, seeds and plants, understanding the interconnection with the territory and respecting nature. This ensures that key knowledge, which contributes to food security, sustainable agriculture and ecosystem management, is passed on without the need for formal structures, as it is part of the life cycle and everyday practices of the community.

The recognition of the Chakra as a Globally Important Agricultural Heritage System (GIAHS) by FAO reinforces its long-term sustainability and continuity, raising its value both nationally and internationally. This recognition also provides a platform for the preservation and dissemination of these practices on a global scale. Furthermore, the sustainability of the SPG for the Chakra system is underpinned by a systemic cycle that integrates political, technical decisions and strong social legitimacy, ensuring that local communities have a voice in decision-making and that principles of social and environmental justice are respected.

5. Social, Economic, and Ecological Sustainability

Does the action promote sustainable environmental practices while addressing resilience? Where possible, is priority given to nature-based solutions? **Criteria adressed: 5.1.1.; 5.1.3.**

The agroforestry structure of the Amazonian Chakra system, which mimics the rainforest, provides important environmental services such as prevention of soil erosion, retention of nutrients and conservation of biodiversity, including endemic and vulnerable species. The interrelationship between cultural practices and the natural environment, together with high biodiversity and connectivity between protected areas, strengthens ecosystem resilience and functionality.

The Amazonian Chakra also plays a key role in climate change mitigation by acting as a carbon sink, especially in agroforestry systems such as cocoa. The tree and fruit species present in the Chakra help in carbon storage, with recent studies showing that it can store between 140.33 and 206.65 Mg C/ha, which represents a significant contribution to carbon sequestration compared to primary forests. Ecological connectivity, especially in Napo province, is essential to guarantee the functional continuity of ecosystems and strengthen protected areas within the National System of Protected Areas, such as the Sumaco Biosphere Reserve.



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BIBLIOGRAPHY

Corporación de Asociaciones de la Chakra Amazónica. (2023). La Chakra Amazónica, un sistema agroforestal tradicional gestionado por comunidades indígenas en la provincia de Napo - Ecuador. *Disponible en: https://openknowledge.fao.org/server/api/core/bitstreams/c55b4bcf-d921-44da-8cdb-5e0a4cc2f92f/content*

Un sistema ancestral e innovador que permite a las familias Kichwas y Quijos del Ecuador mejorar sus medios de vida en armonía con el frágil ecosistema amazónico. La Chakra. *Disponible en: https://foris fao.org/fff2/api/file/5d9b4d0b4b05f6790c8a79e1/b284e606-8843-439f-be3b-558f9f5132b3.pdf*

Chapalbay, R., Ramírez, P., & Murgueytio, A. (2020). La Chakra Kichwa Amazónica: Gobernanza local y resiliencia climática en la provincia de Napo. Zona de intervención Bosque Siempreverde Piemontano. Sistematización Programa ProCamBío II. Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH. *Disponible en: https://derechoforestalecuador.org/wp-content/uploads/2022/08/sistematizacion_chakra_gobernanza_resiliencia_climatica_14.12.20.pdf*

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ABOUT REGIONS4

Regions4 (formerly known as nrg4SD) is a global network that exclusively represents regional governments (states, regions, and provinces) in UN processes, European Union initiatives, and global discussions on climate change, biodiversity, and sustainable development. Regions4 was established in 2002 at the World Summit in Johannesburg and currently represents more than 40 members from 20 countries across 4 continents. Through advocacy, cooperation, and capacity building, Regions4 empowers regional governments to accelerate global action.

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