

ENVIRONMENTAL
TRANSFORMATIONS
AND CLIMATE CHANGE
ON INDIGENOUS LANDS:
A CURRICULAR PROPOSAL

OIAPOQUE - AMAPÁ - BRAZIL



Rita Becker Lewkowicz



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Rita Becker Lewkowicz | 2024

THE CONTEXT AND HISTORY OF THE TRAINING PROGRAM



The Galibi Kali'na, Palikur Arukwayene, Galibi Marworno and Karipuna indigenous peoples, today numbering approximately 10,000 people, live in 67 villages spread across three Indigenous Lands in the Oiapoque region of Amapá state (Brazil). They maintain their historically constructed sociocultural specificities, along with their distinct cosmologies, knowledge, languages and social organization. Each group lives in a different region, associated with the principal rivers of the territory. Despite these differences, politically they form a collective self-designated as the 'indigenous peoples of the Oiapoque,' which is mainly a conduit for relations with non-indigenous people, with whom they have a long history of contact dating back to the early sixteenth century.

The socio-environmental management of the indigenous lands has become one of the main concerns of the leaderships of these four peoples. Sharing the same territorial complex, they have created spaces for discussion and collective decision-making about their territories since at least the 1970s, when the first large assemblies of caciques (political leaders) began. Through this organization, they achieved recognition for three indigenous lands (ILs) – Galibi, Uaçá and Juminã – forming a continuous area of 518,454 hectares, on the border with French Guiana. Today, these lands are demarcated and homologated, ensuring legal security over the territory, which is especially relevant in this border region marked by different colonial invasions and development projects, including the construction of the BR156 highway, which crosses the southern part of the Uaçá IL.

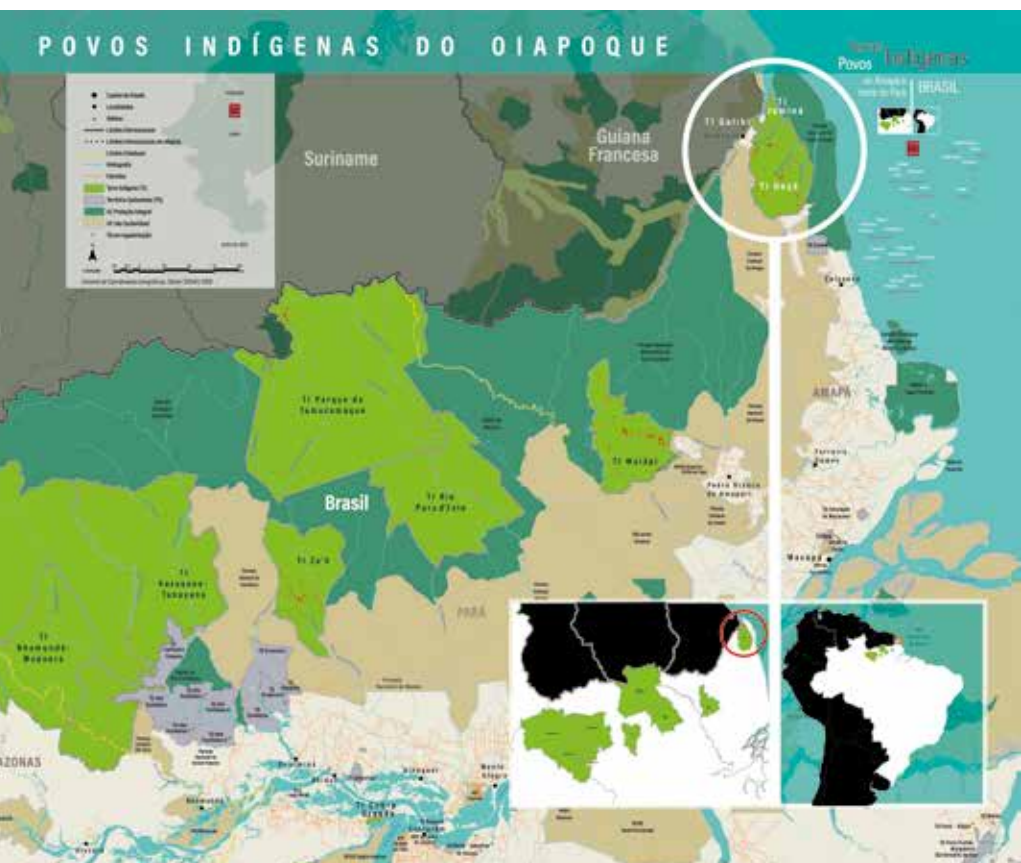


Figure 1: Map of Amapá and northern Pará indicating the Oiapoque region/AP. Source: Iepé.

After the demarcation of their lands, indigenous leaders began a series of collective discussions about their present and future, considering the context of the now delimited territory, population growth, and different internal and external pressures. In 2009, they published their 'Life Plan,' identifying guidelines and priorities for the areas of education, healthcare, the territory and environment, production, indigenous movements and culture. Based on this plan, in 2011, they discussed the drafting of an **Oiapoque Indigenous Lands Territorial and Environmental Management Program (PGTA)**, highlighting three priority areas: territorial protection, the management and use of natural resources, and training for indigenous territorial management. These two documents focus primarily on internal agreements and the dynamics and issues within the territory, thinking about strengthening diverse modes of life and ways to ensure its sustainability.

Subsequently, the focus shifted to discussing what comes from outside, the projects and enterprises that have impacts on the territories. They collectively discussed their rules for decision-making in response to these projects and also the best way to establish a respectful dialog between indigenous people and the government, breaking away from the history of unsuccessful projects and unfulfilled agreements. These rules supported the creation of the **Oiapoque Indigenous Peoples Consultation Protocol**, published in 2019. As protagonists in the elaboration of these governance tools, the Oiapoque leaders also played a significant role in the national indigenous movement's discussions concerning the development of the National Policy for Territorial and Environmental Management of Indigenous Lands (PNGATI), which has just marked the 20th anniversary of its creation (in 2022).

As part of the process of implementing the PGTA for the Oiapoque Indigenous Lands, training was provided to the **Oiapoque Indigenous**

Environmental Agents by the Indigenous Research and Training Institute (Iepé) in partnership with the Oiapoque Indigenous Leaders Council (CCPIO), with support from The Nature Conservancy (TNC) and the National Indigenous Peoples Foundation (FUNAI).

The Oiapoque Indigenous Environmental Agents Training Course ran between 2016 and 2019 and trained 38 indigenous people who were certified by the Federal Institute of Amapá (IFAP) as Environmental Technicians. The training was provided using the pedagogy of alternation model, with in-person modules and practical activities in the villages, promoting and strengthening sustainable initiatives in the communities. The course involved a total duration of 1,402 hours, taking into account face-to-face classes, practical lessons and complementary activities.

The proposed multidisciplinary curriculum included diverse themes adopting an intercultural methodological approach, designed to value and systematize indigenous knowledge, as well as promote a symmetrical dialogue with other forms of knowledge and technologies, based on a historical and comparative perspective.

The course had eight curricular components, each with four modules:

- 1) **KNOWLEDGE SYSTEMS**: focused on forms of knowledge production, their specificities and relationships with ways of life in the territories, as well as research methodologies and techniques;
- 2) **PRODUCTION AND SUSTAINABILITY**: discussion and comparison between different production systems and on the relationships between environment, economy and sustainability;
- 3) **SUSTAINABLE MANAGEMENT PRACTICES**: systematization of the characteristics of the main ecosystems, the changes that have occurred in indigenous lands over time, and a reflection on the possibilities for sustainable productions and practices adapted to these realities;

4) **SOCIO-ENVIRONMENTAL CONCEPTS AND POLICIES**: problematization of concepts related to socio-environmental management, considering the history of environmental and indigenous debates and seeking to understand public policies and legislation specifically relating to socio-environmental issues;

5) **TERRITORIAL MONITORING INSTRUMENTS**: discussion and use of new technologies for monitoring indigenous lands, deepening knowledge on topics related to surveillance, cartography, mobility, territorial occupation, solid waste and other issues;

6) **SOCIO-ENVIRONMENTAL MANAGEMENT OF INDIGENOUS LANDS**: focus on national policies for territorial and environmental management of ILs, PGTA and other governance instruments with the aim of analysing the problems experienced on indigenous lands and discussing the inseparable relationships between environmental and social problems;

7) **MODELS OF DEVELOPMENT AND INDIGENOUS LANDS**: discussion of the different development models and the history of the Amazon region's occupation and colonization, relating them to the growing pressure on natural resources and the knowledge of indigenous peoples;

8) **PRACTICES AND KNOWLEDGE RELATING TO AGRICULTURE AND FOOD**: focus on indigenous agricultural practices, family farming and industrial agriculture, differentiating processes of agroecology, permaculture, monoculture, agroforestry, agricultural biodiversity, degraded areas and forest recuperation.

As well as the face-to-face meetings and practical activities in the villages, the course included a series of exchanges within the indigenous lands, giving young people the opportunity to learn more about their own territory, as well as exchanges of experiences in other regions on various topics (Tumucumaque Park, Acre, French Guiana, among others) and participations in congresses and seminars (in the cities of Belém, Brasília

and Manaus). In addition, technical visits were made for educational and research purposes to the municipal urban centre, including visits to sites such as the landfill and municipal market in the city of Oiapoque and the Porto Grande Campus of the Federal Institute of Amapá – IFAP.

The Oiapoque indigenous students have become known as *AGAMIN* – which, as well as being an acronym for *Agentes Ambientais Indígenas* (Indigenous Environmental Agents), is also the name of a bird that tends and cleans the forest. The group is highly diverse with representatives of different peoples (15 Galibi Marworno, 14 Karipuna and 9 Palikur), with different educational backgrounds, familiarity with Portuguese, skills and interests. The majority (55%) are aged between 18 and 29 and most are men, with only two women in the class. Although this diversity was a challenge, it was also one of the main qualities of the training, allowing for dialogue about the knowledge of each people, intercultural translation exercises and explanations between the students and leaders, as well as allowing the potential of each participant to be valued.

In the final stage of their training as ‘Environmental Technicians’, each student chose a research topic of interest to them for their final project. A course was run to work on research methodologies and design the projects. The supervisors were defined according to their disciplinary specialization and thematic affinity. Based on the research conducted in the villages, a partnership was set up with the Intercultural Indigenous Degree course at the Federal University of Amapá (Unifap) to make the computer lab available for transcribing, systematizing and formatting the studies. These studies have been united in the publication: *Views of the Territory: Research by Indigenous Environmental Agents of the Oiapoque*.¹

¹ <https://institutoiepe.org.br/wp-content/uploads/2022/08/2022.-Olhares-sobre-o-territorio.pdf>

This was the first stage of training held in Oiapoque, which generated the proposal for a new training program on the issue of environmental transformations and climate change, continuing to develop the skills and knowledge of this first group, but also creating the possibility for new indigenous researchers to join, especially women, with a view to greater gender equality.

This new training process, entitled “**Training on environmental transformations and climate change**,” focused on training indigenous researchers to understand and monitor certain environmental transformations that are already having impacts on their ways of life, as well as systematizing their knowledge and their perceptions of seasonal cycles and rainfall patterns. Additionally, following a pest outbreak that affected more than 80% of the indigenous swiddens in Oiapoque, the theme of traditional agricultural systems was also incorporated into the training program, based on surveys of the manioc folk varieties before and after the infestation, as well as management practices and adaptation strategies for this new context.

The “**Training on environmental transformations and climate change**” program can be divided into two stages. The first, which unfolded between 2019 and 2022, focused on a survey of indigenous concepts, perceptions and indicators on environmental transformations and their effects on indigenous peoples’ ways of life. During this period, the Covid-19 pandemic made it necessary to readjust the training methodology, replacing in-person modules with virtual research supervision. The material already collected prior to the pandemic was digitized and on-line conversations were conducted with indigenous researchers to guide the continuation of data collection and in-depth analysis of the texts and interviews already collected. Although challenging, the method proved to be highly effective. It promoted greater autonomy for indigenous researchers, while facilitated the process of drafting the publication, completed in

the post-pandemic period: "A Book of Time Markers: Indigenous Research on Environmental Perceptions and Climate Change" (2023).²

The second stage of training, which began in 2022 and is still on-going (2024), focuses on systematizing knowledge related to traditional agricultural systems. They have been carrying out a research on the impacts of the manioc pest outbreak on indigenous swiddens, considering the impact of its spread aggravated by climate change. This also includes empirical research and experiments related to the revival of traditional swidden care practices, combined with the incorporation of new agroecological methods. A second publication on this theme is planned to be released in 2025.

It is worth pointing out that, unlike the earlier program, this training does not have a technical certification. This fact allows for greater flexibility in defining the syllabus and the course format, responding more flexibly to indigenous demands. Likewise, there is space to incorporate new researchers throughout the training course program. The class currently has 30 indigenous students from the Karipuna, Galibi Marworno and Palikur peoples, 7 women and 23 men.

² In Portuguese, "*Livro dos Marcadores do Tempo: pesquisas indígenas sobre percepções ambientais e mudanças do clima*." See <https://institutoiepe.org.br/2023/09/livro-dos-marcadores-do-tempo/>.

OBJECTIVES OF THE TRAINING ON ENVIRONMENTAL TRANSFORMATIONS AND CLIMATE CHANGE

- Systematization of indigenous concepts, perceptions and indicators on environmental transformations, their causes and their effects on indigenous ways of life;
- Systematization and monitoring of practical activities understood as adaptation strategies;
- Systematization of knowledge associated with traditional agricultural systems and a diagnosis of the impact of climate regime changes on these systems;
- Systematization of management practices and experiments in adapting traditional agricultural systems, in the context of the pest outbreak that affected 80% of indigenous crops in the Oiapoque region;
- Professional qualification of indigenous environmental technicians on the theme of environmental transformations and climate change.

TOTAL COURSE DURATION:
1,712 hours

COURSE DURATION	MODALITY
576 hours	Face-to-face modules at the Domingos Santa Rosa Training Centre (located at CF18km in the Uaçá Indigenous Land)
80 hours	On-line supervision
960 hours	Data collection by indigenous researchers in the villages
96 hours	Accompanying activities in the villages
1,712 hours	Total course load (2019-2024)



TARGET PUBLIC

Members of the Karipuna, Palikur, Galibi Marworno and Galibi Kali'na indigenous peoples. In selecting the class groups, priority was given to Indigenous Environmental Agents, trained as Environmental Technicians, but places were also made available to new indigenous researchers, especially women.



TRAINING STRUCTURE

STAGE	ACTIVITIES IMPLEMENTED/PLANNED	DATE	PEOPLE RESPONSIBLE	LOCALITY	HOURS
1	In-person course with 4 subjects: 1) State, indigenous rights and environmental legislation; 2) Development models and their environmental effects; 3) Knowledge systems and research methodology; 4) Socio-environmental management and practices for adapting to environmental transformations. At this stage, the research scripts were drawn up to conduct interviews in the villages	December/2019	4 trainers 26 indigenous researchers	CF18km	96 h
2	Collecting research data (interviews and diaries) and performing mitigatory actions in the villages during the winter season	January to August/2020	26 indigenous researchers	Villages	160 h
3	Submission of materials developed so far and receipt of new activities to be conducted in the villages	September/2020	26 indigenous researchers	Oiapoque	-
4	Virtual research supervision, based on the systematization of the collected data (transcription and systematization of materials) and accompanying the new data collection process	October/2020	4 trainers 26 indigenous researchers	Virtual	40 h
5	Period of data collection for research projects and implementation of mitigatory actions in villages	November/2020 to April/2021	26 indigenous researchers	Villages	100 h
6	Systematization of individual research project data	May/2021	2 trainers	Virtual	40 h

STAGE	ACTIVITIES IMPLEMENTED/PLANNED	DATE	PEOPLE RESPONSIBLE	LOCALITY	HOURS
7	In-person course involving a conceptual recap and general systematization of research results (new participants were admitted during this stage)	June/2021	2 trainers 40 indigenous researchers	CF18km	48 h
8	In-person course with 2 subjects: a) indigenist legislation and b) rainfall and river level monitoring	August/2021	4 trainers 40 indigenous researchers	CF18km	48 h
9	Period of data collection for research projects and implementation of mitigatory actions in the villages	September/2021 to January/2022	40 indigenous researchers	Villages	100 h
10	Mobile accompaniment and supervision of research projects in the villages	December/2021	1 trainer 40 indigenous researchers	Villages	48 h
11	In-person course for drafting the publication on environmental markers for climate and seasonal changes	February/2022	4 trainers 40 indigenous researchers	CF18km	48 h
12	Period of data collection for research projects and implementation of mitigatory actions in the villages	March to May/2022	40 indigenous researchers	Villages	100 h
13	In-person course on research methodology and discussion of the concept of "forest/territorial health" and elaboration of a new thematic research roadmap	June/2022	2 trainers 40 indigenous researchers	Curipi Village	48 h
14	Period of data collection for research projects and implementation of mitigatory actions in the villages	July to October/2022	40 indigenous researchers	Villages	100 h
15	In-person course on agroforestry systems and capoeira (secondary forest) recuperation	November/2022	2 trainers 40 indigenous researchers	CF18km	48 h
16	Period of data collection for research projects and implementation of mitigatory actions in the villages	December/2022 to February/2023	40 indigenous researchers	Villages	100 h

STAGE	ACTIVITIES IMPLEMENTED/PLANNED	DATE	PEOPLE RESPONSIBLE	LOCALITY	HOURS
17	In-person course on recuperating degraded areas/ capoeiras through the implementation of agroforestry systems, based on an agroecological approach	March/2023	2 trainers 30 indigenous researchers	CF18km	48 h
18	Period of data collection for research projects and implementation of mitigatory actions in the villages	April to July/2023	30 indigenous researchers	Villages	100 h
19	Monitoring activities related to the capoeira recuperation project and the implementation of agroforestry experiments	June/2023	2 trainers 30 indigenous researchers	Villages	48 h
20	In-person course on management methods for the recuperation of manioc plantations in swiddens affected by pests; and reflections and planning on the management of river turtles	August/2023	2 trainers 30 indigenous researchers	CF18km	48 h
21	In-person course on research methodology and discussion of indigenous theories concerning environmental transformations	November/2023	2 trainers 30 indigenous researchers	CF18km	48 h
22	Period of data collection for research projects and implementation of mitigatory actions in the villages	December/2023 to March/2024	30 indigenous researchers	Villages	100 h
23	In-person course on actions to restore and maintain the health of manioc swidden crops, control of fires of anthropogenic origin in savannah areas, and annual management of turtles	March/2024	4 trainers 30 indigenous researchers	CF18km	48 h
24	Period of data collection for research projects and implementation of mitigatory actions in the villages	April to August/2024	30 indigenous researchers	Villages	100 h
25	In-person course on traditional practices, agrobiodiversity and crop management during manioc pest outbreaks	August/2024	2 trainers 30 indigenous researchers	CF18km	48 h
TOTAL COURSE DURATION (2019-2024)					1,712 h



SUPPORT FOR THE WORK OF INDIGENOUS ENVIRONMENTAL AGENTS IN THE VILLAGES

In response to indigenous demand, research grants were offered during the training to support the work of the indigenous students in the villages. For each in-person module, the activities to be implemented in the villages are agreed, taking into account the course workload, and these are submitted in the following module. Examples of activities include: reports on actions conducted in the villages, transcription of interviews, writing reflective texts, collecting rainfall and river level data, field diaries, and so on. This support is understood as essential to strengthen the students' training and to ensure that they can dedicate time to this activity within their day-to-day lives.

INDIGENOUS RESEARCHERS

In total, from 2019 to 2024, we have 44 indigenous researchers who have been undergoing training, 14 women, 30 men, mostly young, but including some older specialists from the three indigenous peoples: Karipuna, Palikur and Galibi Marworno. Currently, in 2024, we have 30 indigenous researchers participating on the course.

FULL NAME	VILLAGE	PEOPLE
Adilauo dos Santos	Ahumã	Karipuna
Alessandra dos Santos Forte	Manga	Karipuna
Antiele Aniká da Paixão	Manga	Karipuna
Ariane Batista Ioiô	Kamuywa	Palikur
Caviano Benjamim Forte	Karibuen	Galibi Marworno
Ciliano Loriano dos Santos	Kaxiwahi	Galibi Marworno
Dieldo Charles dos Santos	Kumarumã	Galibi Marworno
Edervan dos Santos Forte	Galibi	Karipuna
Edivaldo Labontê	Kumenê	Palikur
Egson M. Clarindo	Flamã	Galibi Marworno
Elbson Henrique Leonel	Paraiko	Galibi Marworno
Evandinho Narciso	Kumarumã	Galibi Marworno
Fabson dos Santos Oliveira	Curipi	Karipuna
Garcia Narciso	Flecha	Palikur
Geô Ioiô	Kumenê	Palikur

FULL NAME	VILLAGE	PEOPLE
Gesilene Pimentel Forte	Manga	Karipuna
Gilmar Nunes André	Uahá	Galibi Marworno
Gilson dos Santos	Açaizal	Karipuna
Jarina dos Santos	Ahumã	Karipuna
Jessinaldo Labontê Ioiô	Kamuywa	Palikur
Josilena Benjamim Forte	Kumarumã	Galibi Marworno
Judson dos Santos Batista	Espírito Santo	Karipuna
Leani Ramos Oliveira	Manga	Karipuna
Lilia Ramos Oliveira	Manga	Karipuna
Maicon Pimentel	Jondef	Karipuna
Manoel Severino dos Santos	Kumarumã	Galibi Marworno
Maria Aniká Valente	Manga	Karipuna
Marinelson dos Santos	Açaizal	Karipuna
Marliane dos Santos Aniká	Curipi	Karipuna
Mayke de Oliveira dos Santos	Curipi	Karipuna
Mercias Silva Narciso	Tukay	Galibi Marworno
Nerio Forte Karipuna	Taminã	Karipuna
Pedro dos Santos	Manga	Karipuna
Rafael Monteiro	Tuluhi	Galibi Marworno
Rivaldo dos Santos Forte	Flamã	Galibi Marworno
Ronaldo Narciso Anicá	Tukay	Galibi Marworno
Ronivaldo Severino	Kunanã	Galibi Marworno
Sandrina Aniká dos Santos	Manga	Karipuna
Sedrick Anicá dos Santos	Santa Izabel	Karipuna
Sidelvan Monteiro	Aruatu	Galibi Marworno
Sielton Forte	Espírito Santo	Karipuna
Taís dos Santos	Manga	Karipuna
Teraina Batista Felipe	Manga	Karipuna
Valdene Narciso Felício	Kamuywa	Palikur

TRAINING TEAM

NAME	FUNCTION	SHORT CV
Igor Scaramuzzi	Trainer	Bachelor's degree and teaching degree in History from the Júlio de Mesquita Filho São Paulo State University/UNESP (2001). Master's degree in Social Anthropology from the University of São Paulo (2008). PhD in Social Anthropology from the University of Campinas.
Claudiane Menezes	Trainer	PhD in Environmental Sciences and the Sustainability of Amazonia from the Federal University of Amazonas (UFAM). Master's degree in Agroecology and Rural Development from the Federal University of São Carlos (UFSCar). Professor at the Federal University of Amapá (Oiapoque Binational Campus) on the Indigenous Intercultural Teaching Degree Course.
Vinicius Benvegno	Trainer	PhD in Social Anthropology from the Federal University of Amazonas (PPGAS/UFAM). Master's degree in Rural Development from the Postgraduate Program in Rural Development at the Federal University of Rio Grande do Sul (PGDR/UFRGS). Graduated in Social Sciences from the Federal University of Rio Grande do Sul. Graduated in Biomedicine from the Lutheran University of Brazil. Researcher on the New Social Cartography of Amazonia Project.
Roselis Mazurek	Trainer	Graduated in Biology from the Federal University of Santa Catarina (1986), Master's degree in Biology (Ecology) from the National Institute of Amazonian Research (1992) and PhD in Ecology and Evolution with Emphasis on Human Ecology from the University of Illinois at Chicago (2001).
Rita Lewkowicz	Pedagogical coordinator	Master's degree in Anthropology from the Postgraduate Program in Social Anthropology at the Federal University of Rio Grande do Sul (PPGAS/UFRGS 2016). Graduated in Social Sciences from the Federal University of Rio Grande do Sul (2013). Since 2018, coordinator of the Oiapoque Program run by do Iepé (Indigenous Research and Training Institute) with the Karipuna, Palikur, Galibi Marworno and Galibi Kali'na peoples.
Michele Conceição	Intern	Undergraduate student on the Geography course at the Federal University of Amapá (UNIFAP).

RESULTS AND LESSONS FROM THE EXPERIENCE

The training program on environmental transformations and climate change has been an important process in terms of studying the complex and detailed knowledge of the indigenous peoples of Oiapoque concerning annual cycles, indicators of expected seasonal changes and the changes now deviating from expected patterns. The research data shows that these peoples have noted more instability and unpredictability in the seasonal patterns known and described by their elders. These alterations, in turn, have had a direct impact on aspects of daily life, such as swidden management. Changes in rainfall patterns, associated with the emergence of new pests, are having serious impacts on indigenous ways of life in the region, directly affecting traditional agricultural systems, the main subsistence activity of the residents of these communities.

It should be emphasized that indigenous researchers have not defined any single factor, nor a closed set of factors, to explain the causes of these environmental transformations. It is also true that the changes occurring in the Oiapoque Indigenous Lands cannot simply be summarized as changes in the climate on a global scale, without a careful process of long-term monitoring and a multifaceted approach that includes an analysis of the entire context (new patterns of occupation of the territory, development projects in the region, predatory actions in the surroundings of the Indigenous Lands, and so on). At the same time, it was important during the training process to place indigenous researchers and theories in dialogue with western theories of climate change, highlighting the contribu-

tion of indigenous perceptions at the local level (especially in this coastal region of Amazonia) to this global debate.³

Another lesson learnt over the training program was the importance of producing publications that systematize the results of research conducted by indigenous people. These books have been used in village schools as teaching material for a differentiated (culturally appropriate) school education, and even at university as bibliographical references specific to the indigenous peoples of the Oiapoque region. Additionally, indigenous authors have presented this work in different villages, reinforcing the importance of the role of indigenous environmental agents in promoting a collective discussion on the socio-environmental management of indigenous lands, in light of issues relating to environmental transformations. This process also led to a request to update the Oiapoque PGTA, contemplating actions and strategies for responding to this new scenario.

In this sense, the training program has been a process of experimenting with strategies to respond to environmental changes, especially the manioc pest. These actions have progressed in terms of valuing and reviving previously abandoned traditional practices and also in incorporating new agroecological practices. Theoretical reflection combined with practical experience has shown the possibility of creative solutions to confront the impact of environmental changes in the Oiapoque Indigenous Lands. Hence, the continued training of these indigenous researchers is considered essential to guarantee long-term monitoring of these changes, as well as to open up new avenues of research and reflection that can develop from it.

3 SCARAMUZZI, LEWKOWICZ, MAZUREK, BENVENU. "Percepções locais sobre transformações ambientais na região do Oiapoque: reflexões a partir da experiência de formação de pesquisadores indígenas." *Horizontes Antropológicos*, Porto Alegre, year 29, n. 66, e660413, May/August 2023. Doi: <https://doi.org/10.1590/1806-9983e660413>.

PUBLICATIONS EMERGING FROM THE TRAINING PROGRAM



Olhares sobre o Território: pesquisas dos Agentes Ambientais Indígenas do Oiapoque (Views of the Territory: Research by Indigenous Environmental Agents of the Oiapoque). The book brings together a set of 37 essays written by Indigenous Environmental Agents of the Oiapoque region, as part of their training as environmental technicians. Participants in an Indigenous Environmental Agents training course conducted between 2016 and 2019 by Iepé, in partnership with the Council of Chiefs of the Indigenous Peoples of Oiapoque, FUNAI and TNC, these young people had theoretical and practical classes, using the pedagogy of alternation model, conducted experiments in the villages, participated in exchanges and committed to becoming involved in the management of the indigenous territories of Oiapoque.



Livro dos marcadores do tempo: pesquisas indígenas sobre percepções ambientais e mudanças do clima (A Book of Time Markers: Indigenous Research on Environmental Perceptions and Climate Change). This book is the result of a collective project by indigenous researchers from Oiapoque, within the scope of the Training Program in Environmental Transformations and Climate Change, organized by Iepé, between 2019 and 2022. A survey was made of a broad set of time markers that signal the transformations related to the rhythms of nature that occur in the environments of Indigenous Lands, at different spatial scales and time gradients.



Fogo: usos e cuidados (Fire: Uses and Precautions). This multilingual booklet is the result of a project conducted by the Indigenous Environmental Agents of Oiapoque (AGAMIN) and the Association of Indigenous Women and Mutual Support (AMIM) in partnership with the Iepé Institute and the Cabo Orange National Park (ICMBio). The booklet contains texts and drawings on the uses of fire by Oiapoque's indigenous peoples, focusing especially on the dangers and problems that fire can cause to these communities when it spreads out of control. The aim is for the booklet to be used by indigenous teachers as teaching material in indigenous schools in the Oiapoque ILs, informing and educating children and young people about fire and its uses and dangers.

SUPPORT AND FINANCERS

The training program on environmental transformations and climate change has been supported by various financiers in the context of international and national cooperation. These are:

- Rainforest Foundation Norway
- The Nature Conservancy – TNC
- Agence Française de Développement – AFD
- Fonds Français pour l'Environnement Mondial – FFEM
- Environmental Defense Fund – EDF
- Instituto Clima e Sociedade – ICS

We also receive logistical support from the Regional Coordination of Amapá and Northern Pará of the National Indigenous Peoples Foundation – CRANP/FUNAI.





Document submitted by Iepé – Instituto de Pesquisa e Formação Indígena, in 2024, to the Facilitative Working Group (FWG) of the Local Communities and Indigenous Peoples Platform (LCIPP) of the UN Framework Convention on Climate Change (UNFCCC), as part of the call to share relevant practices and stories pertaining to the development and use of curricula and materials generated by Indigenous Peoples in the context of climate change, and to highlight Indigenous knowledge in formal and informal education systems.

