



Generating Skills and Abilities among Traditional Peoples in the Western Amazon

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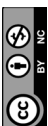
Abstract:

This research is the product of a task related to the training and qualification of tribal people for social innovation and sustainability in the Amazon. It seeks to generate competencies and skills while preserving the culture and tradition of traditional peoples in the scenario of the Western Brazilian Amazon; as an effect, it is expected to construct multiplying talents among the peoples of the Amazon Forest through imaginary games, using also information and communication technology for development (ICT4D), if possible. This work considers the reference of the Ashaninkas for elaborating sustainability concepts, which help improve the quality of life in the various Amazonian tribes. It is proposed to develop indigenous skills through correlation treatment. It is proposed the creation of a scenario, individual and group inclusion, survey of propositions, and monitoring of the development of these skills using ICT4D that should be consistent with the culture and tradition of

those involved. As a result, it is concluded that the complexity of technical preparation is an innovation, given that there is no task like this published in the annals of events that deal with traditional peoples. However, the need for this task is entirely conceivable, given the accelerated development that oppresses the indigenous people and reduces their food availability. Worrying; mining activities without strict supervision have contaminated the region's rivers with mercury, which is dangerous for aquatic life and for the indigenous people who feed on these free lives. It is possible to admit a solution, and the workshop for constructing multiplier talents among tribal societies is one of the solutions. This work is of interest to public managers when creating government policies. It is also of interest to anthropologists, environmentalists, administrators, economists, sociologists, pedagogues, and others committed to this issue addressed here. This is yet another contribution from the academy to the solution in the matter.

1. Introduction

This study is focused on constructing a practical workshop aimed at induced sustainability, which results in the generation of competencies and skills among workers (using for instance emotional intelligence) in the Western Brazilian Amazon for its social innovation, sustainability, and preservation of its traditional culture (Caruso & Salovey, 2007; De São Pedro Filho, 2004, 2009, 2011). Here, the model developed by the Ashaninka People, direct descendants of the Incas, who inhabit lands from Peru to the extreme of the State of Acre in Brazil, is taken. In this workshop, the presentation of the tasks for sustainability practiced among those indigenous people aims to open understanding among the actors present to raise the reality of the people of the Forest in the Western Brazilian Amazon.



The expectation is to generate knowledge on producing food in a demarcated Reserve through a preservationist and conservationist attitude without altering the traditional attributes of the Tupy culture. The Sustainable Development Goals foreseen by the United Nations were also considered, now with a vision focused on the tribal peoples (Arts & Misiedjan, 2022) established in the Brazilian Western Amazon, being able to serve as a reference in the construction of modeling for intervention in public policies, as well as as a guide to professionals interested in the development and skills of vulnerable individuals, such as indigenous peoples.

The relationship between Applied Social Sciences and Ecology raises a pending issue of objective Resolution: how to explore without degrading? A path to some concrete result could be the treatment in the substantive sciences, such as the Administration of Self-Sustainable Systems (Hirani, 2022), treated in Filho (2007), which refers to the work presented at the Research Directorate of the Universidad Autónoma de Asunción, in the Family Business Research Line, of the Doctoral Course in Business Management. Surrounding this approach is, among others, the interpretation of ethnobiology (ethnobotany and ethnozoology) in a methodological construction specially built to launch a critical look at the theme (Albuquerque, 2022).

We assume usage of Information and Communication Technology for Development (ICT4D). For example, the design of online platforms using ICT4D for open-managed knowledge sharing by researchers, educators, teachers, students, or learners is of particular importance to developing countries in the socio-economic development of countries in systemic transition or developing countries (van Biljon et al., 2017). Information technology (IT), such as through specialized regional platforms, using video, different applications, like POWERPOINT, or games, provides opportunities to lower barriers to knowledge and technology sharing and increase collaboration, which is essential in regions exposed to environmental and economic crises that hinder their development (Rao & McNaughton, 2019).

2. Problem Situation and Justification for this Intervention

Sustainable consumption is one of the sensitive points in man's involvement with the environment from which he progressively derives his sustenance (Mitra et al., 2022). On this road of understanding, it will be noted that the Peoples of the Forest have always lived free in the Western Amazon Region, in a vast space of intact biodiversity that existed at the beginning (Weber et al., 2021). Today, these people are held in Indigenous Reserves, such as the one settled between the current Municipalities of Cacoal in the State of Rondônia, and Rondolândia, in the neighboring State of Mato Grosso. There, the relative clan authenticity has been maintained due to the severe struggles fought in different phases since the arrival of the trailblazer in the Region of Cacoal.

It so happens that these clans were involved in a poorly interpreted strategy concerning their food sustenance in the demarcating geography. The regulatory body that oversees Brazilian indigenous people has urged them to adopt a new diet based on eating beef with pasta, beans, rice, cookies, sugar, and other nutrients that were not part of their daily habits. This new situation encourages them to plant and harvest crops with an effort similar to that of non-Indians. However, it can take a toll on their physical condition leading to obesity. They no longer have time for hunting and fishing, while free life in the wild continues declining (Banini & Tabai, 2022).

Before its basic food cultural tradition is extinguished, it is possible to return some skills supported by induced sustainability, as long as it rescues its authentic habits and customs for the learning of the next generations; own accounts, descriptive in the mother tongue, designators of shared understanding and registration in traditional expression could be some of the valid artifacts (Grant & McGhee, 2016).

For this reason, it is proposed to build teaching-learning workshops involving indigenous teachers as multipliers of their knowledge. The perspective is, knowing the form, the agents can lift and restore in order to practice a tradition relegated from the accidental mixture that befell the Traditional Peoples. Furthermore, the Ashaninka tribals, Figure 1, endowed with different types of traditional knowledge, could point out some techniques, not so they can be copied, but so that they can awaken the resurgence of forgotten traditions on the management and management of the indigenous productive space.



Figure 1. Benki Piyanco, Ashaninka leader, UN Human Rights Award Winner



Source: Public domain internet, by the link
<https://indigenasbrasileiros.blogspot.com/2016/02/ashaninka.html>

3. Theoretical-conceptual Review

This study is based on the Theory of Ethnodevelopment (Sujadmiko, 2022), discussed also in Azanha (2002), and cites Stavenhagen to establish state-of-the-art. For the author, ethn-odevelopment is the development that maintains the sociocultural differential of a society, that is, its ethnicity. In this sense, development has little or nothing to do with indicators of 'progress' in the usual sense of the term; ethnic development means that an autochthonous ethnic group, tribal or otherwise, has control over its lands, resources, social organization, and culture, and is free to negotiate with the State to establish relations according to its interests (Burger et al., 2022).

Ethnicity in Descola & Pálsson (1996) has been treated by confronting the relationship between communities and nature. This vision, unprecedented concerning environmental management, should qualify, reconstitute and provide spontaneous practices in exotic spaces, enabling the exchange of knowledge without deforming the origin. Moreover, it will also prevent the degradation of forests, bringing compatible, rational, and disciplined exploratory action while warding off accusations that indigenous people are deploring the forests where they live (File, 2022).

When investigating the relationship between ecology and the society of the excluded, Alimonda (2002) makes it clear that the traditionally poor are accused of destroying their surroundings with their undisciplined production systems. For the author, modern societies mistakenly blame victims for their lack of progress. However, the reality is that the exclusion of minorities weakens them in the discourse on the result of their performance (Foucault, 1996). As they will have to feed themselves, there would be no other alternative but to exploit the current availability in their environmental surroundings. Exploring an Indigenous Reserve is no different when the inhabitant, a traditional nomad, finds himself cut off from the freedom to expand its extractive borders. Is an area of approximately two hundred thousand hectares large enough to sustain a food chain for approximately twelve hundred indigenous individuals in the primary condition of hunting, fishing, and extracting wild fruits and roots? If possible, what is the deadline for this supply? How is the destruction resulting from pesticides applied in the agro-industrial exploitation established in the surroundings of an Indigenous Reserve evaluated?

For Ribeiro (2013), the clan peoples are in search of balance, having indicated by Gross (1975) and Maggers (1977) when explaining the cultural mechanisms that maximize food yield, adopting the following logical systems: preserving small spaces or adopting fission in the village; community dispersion to avoid overpopulation; separation of areas for specimen reproduction; mobilize the village to impact the overpopulation, and

in this situation, it becomes a nomad. These techniques were being trivialized from colonialist assistance in the Amazon region, as Pedro Filho (2007) focuses on in his overview of the Resident in the Forest culture. Furthermore, nowadays, it remains to understand the mixture in the food production system once a particular caboclo culture has been identified among the tribals, as the Tupy People develop some of their management techniques to obtain and consume the knowledge discussed in Table 1 below.

Table 1. Ethnobotanical food knowledge of the Tupy People.

Order	Ethnobotanical name (Scientific name)	Functional representation
3	Cocoa (<i>Theobroma</i> sp.)	Wild Amazonian fruit, rich in proteins and vitamins. It is also recognized in biotechnology as a valuable component in producing several human food nutrients.
4	Amazonyan (<i>Dioscorea</i> sp.)	Roasted or boiled edible wild potato, rich in protein, carbohydrates and vitamins. It is used among the tribals as a food source in their diet.
5	Beans (<i>Phaseolus</i> sp.)	Protein-rich legume. It is an herb that contains essential nutrients such as iron, calcium, vitamins, carbohydrates and fiber.
1	Peanut (<i>Arachis hypogaea</i>)	Great tasting grain, edible roasted or boiled. It has economic value, and it is rich in sodium, potassium, carbohydrates, proteins, vitamins, iron, and magnesium.
2	Banana (<i>Musa paradisiaca</i> <i>M. Sapientum</i>)	Edible wild fruit, rich in vitamins and energy potential. It is used in juices and other domestic preparations. In biotechnology, it is a fruit that allows the production of numerous nutritional compounds.
6	Manioc (<i>Manihot esculenta</i>)	Plant native to Brazil, whose root is edible roasted, or cooked, helps prepare flour rich in proteins. It has several uses in human cooking.

Source: Prepared by the author based on Ribeiro (2013).

From the point of view of the cultural food system, Ribeiro (2013) highlights the miscegenation between the practices developed by the indigenous Tupi of the coastal regions, with some adaptation to the techniques of the Amazonian foresters. For example, in the region of Ilha de Marajó, he states that these techniques were compared. Due to their artistic model, they can be considered similar to those practiced in the Caribbean Region. In the Western Amazon Region, data obtained on the agricultural front practiced by the Tupi indicate that the northeastern migration to their neighborhood did not change the region's adaptive caboclo. They adopt slash-and-burn on land and plant cassava, bananas, yams, peanuts, and other food derivatives using the same techniques that have always been practiced by Northeastern migrants who came to the villages. Did the agricultural system they apprehend come from the Caribbean region, the coastal Tupi who fled to the Amazon, or from the mixture learned from their new neighbors? We need to understand the process.

4. Basic Methodological Design

The methodological construction in this task indicates evidence of an empirical nature, having as a starting point a set of procedural rules defined in the triple articulation between the theoretical framework, the objectives, and the methodology (Bradley, 1993; Lee et al., 2022). This circularity refers to clippings that lead to a validated result. It contains levels of abstraction for the apprehension of the reality to be evidenced, from the general social functioning that explains the specific to be analyzed. This methodological proposal focuses on the whole of the triple relationship, taking the parts to understand the whole of the investigative scenario. It would be like returning to the classic Cartesian model of the analysis of generalities, selecting a conceptual framework to satisfy the excellent circularity sufficiently (Goldman, 1986; Blanc, 2016).

4.1. The method of preparing this study

The structural-functionalist method was considered, which allows the interpretation and explanation of the phenomenon of integration through the empowerment of tribals based on the truth obtained from the analysis



of interdependence that leads to deductive knowledge (Hart, 1985). A simulated SWOT can be applied in the same format in which it is practiced in modern organizations. If there is logic in knowledge induction, it is worth knowing a strategy for such a methodology (Ng & Bloemraad, 2015). Moreover, in this argument, raising the knowledge of the form will be possible when the strengths and weaknesses of the environment where individuals and groups are present and the opportunities and threats that are present in the external environment in which it can result in the acculturation of the indigenous (United Nations, 2021).

A search in Corrêa (2021) indicates that the functionalist method can be considered interpretive rather than investigative. It consists of analyzing elements within the scope of ethnography to understand society through its mechanisms, which will lead to an understanding of the complexities addressed by the anthropologist Malinowski from the interrelationship of the parts. Thus, for analyses involving the depth of the logic of tribal peoples, it is crucial to interpret the conjuncture in their reality within the framework of the scientific research method proposed in this article.

4.2. Of the procedures considered in this work

The procedures practiced for the methodological development in this work follow the concepts and definitions provided by the bibliography that prescribe. It was decided to operate a Focus Group, an adequate measure for recording valuable insights in elaborating idealizers and constructs, as shown in Table 2 below.

Table 2. Treatment of the methodological procedures used

Procedures	Description
Analysis of results	The analysis followed the concepts in the research typology. As treated by the structural functionalist method, the truth obtained with the analysis was treated deductively; the truth belongs to the tribal and not to the Researcher who carries out the analysis.
Survey of bibliographic collections	Text searches were carried out in books and articles; a collection of publications on websites, newspapers, and electronic magazines, selection of specific themes, mainly to interpret the indigenous reality in the Amazon.
Preparation of the report	The critical interpretation of the results was entered with inferences, conclusions, and indications of the methodology to be used for training in innovation with sustainability. The rite of routine guided by the lead Researcher in this task was followed.
Focus Group Construction.	Initially, collaborative Focus Groups were formed. They supported the questions to be interpreted. As various aspects of the critical perception of the actors were involved in this task, a filter was applied to satisfy the interested parties' socio-environmental relationship.
Appropriation of concepts and criticized interpretations	The overview brings descriptors and subscribers transformed into valid concepts and theories, helping interpret the relationship between the natural food needs of individuals in the Forest. Consumption, limitations, endogeneity, and sustainability were considered.

Source: Prepared by the authors.

5. Results

The Amazon region is undergoing a significant transformation with population pressures resulting from the race for mineral exploration that causes severe damage to the environment. Fires and mining have reduced the tribals' food supply; now, the fish is contaminated with mercury, as is reported daily, without obtaining an emergency solution of this gravity. The situation worsens with attacks by miners and loggers against tribal populations. In addition to the lack of sufficient assistance to vulnerable indigenous people, there is a lack of stricter supervision of the practices of these invasions by non-Indian individuals.

The animals in the indigenous food chain have been significantly reduced, and they start to fear the hunger that is getting closer every day. The isolated indigenous peoples began to stealthily approach residents in the municipalities, an extraordinary phenomenon, as seen in Figure 2 below.

Figure 2. Isolated people lurking at the residence of non-Indians in the municipality of Seringueiras, State of Rondonia



Source: Available on the Internet in the public domain, through the link <https://www.rondoniadinamica.com/noticias/2020/09/populacao-deve-chamar-funai-ou-policia-em-caso-de-avistar-indigenas-isolados-alerta-mpf,84858.shtml>

With the invasions carried out by isolated Indians, in the face of their despair over the lack of free food in the Amazon Forest, the residents' domestic farms began to supply them with food, which they did in the form of an assault on the caboclos' homes and riverside dwellers. They bring them the laying hens and eggs, in addition to the pigs, for family consumption; they devastate the manioc, corn, and other plantations of the private swiddens, productions that are utilitarian for the consumption of families and local communities. Therefore, it is urgent to take action to enable the tribals to produce their own food around their villages, in an intervention that respects their culture and tradition, keeping their diet in line with the dictates of the endogenous reality.

5.1. Resumption of practices by the Tupy People in the Western Amazon

This section of the document will deal with the resumption of the practices of the Tupy People in the Western Amazon and the objectives of the sustainability workshops. The Tupy People's knowledge may be explored through autochthonous management, in a learning process transferred by the clan leaders to indigenous teachers, who will compose texts in their mother tongue and pass them on to future literate generations. Provided the relevant legislation supports it, and with guidance from the Brazilian Institute for the Environment and Renewable Natural Resources, the study of wild animal management could be provided. There are real benefits from tribal brooder structures or free handling, with legal authorization, for the production of eggs from birds such as jaculating (*Pipile jacutinga*), gypsy guan (*Opisthocomus hoazin*), macuco (*Tinamus solitarius*), rufous jacamim -greens (*Psophia viridis*), partridge (*Rhynchotus rufescens*), quail or quail (*Coturnix coturnix*); and useful reptiles for clan food, such as the alligator (*Alligatoridae*), the turtle (*Chelonioida*), among many others from the production systems in captivity in the village itself. This interpretative concept will also include the possibility of raising wild pigs (*Tayassu pecari*), tapirs or tapirs (*Tapirus terrestris*), capybaras (*Hydrochoerus hydrochaeris*), agoutis (*Dasyprocta aguti*), tatupeba (*Euphractus sexcinctus*), red deer campeiro (*Ozotoceros bezoarticus*) and other mammals in the daily food chain of this people. Furthermore, the public service of indigenous education could bring its trainers to materialize the success of the results.

5.2. Task focus in Sustainability Workshops

The logic of ethnic development is directed towards the technical opportunity with one of the purposes discussed here. Consider the knowledge and practices of the Ashaninka People, a direct descendant of the Incans, in order to survey the reality of the Tupy People, assess their operation, the management, and management of plant and animal production through sustainability; for the success of the results, it is recommended as



essential focuses: (1) Knowing the sustainability practices of the Ashaninka People; (2) Open understanding of the Tupy People's practices; (3) Build a text of technical-pedagogical guidance on sustainability management for the teaching-learning activity; (4) Offer an outcome report of this intervention process for future improvements. It is worth mentioning the implementation of a didactic workshop for indigenous teachers and other interested parties.

5.3. Operating a sustainability workshop

This section will discuss the ideal methodology and procedures for a sustainability workshop. The intervention process for a successful approach to ethnic development still lacks its own theoretical and conceptual models.

However, the constructivist method, of a qualitative nature, with an exploratory and descriptive approach, would be the most convenient of the methods for involving knowledge among the Forest Peoples; this in the function of the reality as inmates of the controlling state organization, with a tradition that must be preserved, and a culture to be trimmed with due attention and respect. We will use ICT4D at various stages of study, workshops and analysis. This method will be supported by Social Sciences Applied to the Administration of Self-Sustaining Systems, and some procedures are recommended, such as (1) Projection of images through video and PowerPoint in order to provide common knowledge and build scientific knowledge; (2) Formation of multiplier groups for a roundtable discussion, in order to identify and adopt practices in sustainable management in the tribes, with the presence of tribal leaders; (3) Preparation of texts on sustainability in Portuguese with translation into the tribal language, enabling knowledge artifacts, such as books, handouts, texts, and others; (4) Presentation of the work of the round table, expressed in the mother tongue, with simultaneous translation into Portuguese, allowing for criticism and adjustments. The ways of using information technology for communities in the Amazon were also described by Schneider (2022).

5.3.1. Construction of the cognitive scenario for the workshop

Establishing a unique scenario would be necessary for an important task. It is proposed to follow the procedures for eight hours a week. The workshop venue should be free of distractions, and it is recommended that working meetings be held in the tribe. Some recommendations are written for judging the results of responsible work involving sustainability management among Forest Peoples. The observation of the Resident's reality allows us to recommend the following: (1) dissolve the mental currents or set of negative experiences that block the individual, constituting obstacles to his ethnic development and prosperity of the indigenous; (2) consider the formal constructs offered by tribal leaders; (3) obtain support from parent organizations to avoid conflicting ideology and institutional policies; (4) for the materialization of the sustainability workshop, gather empowerment techniques; (5) rely on andragogy or adult education to generate valid concepts; in the case of the Western Amazon, it is essential to remove the "anhangüera" installed among the peoples of the Forest, in order to enable the maintenance of their tradition and their original culture, an essential condition for ethnic development and progress with endogeny.

At the end of the workshop, some questions should be defined by the resident actors, such as: what are the natural attractions, and how do the People of the Forest present at the workshop interpret their environment; how to meet legal requirements for handling animals and plants in the tribe; which techniques leaders consider for tribal practice; what types of animals could be bred in captivity, as well as how to handle them; what types of vegetables could be grown in home gardens in the tribe; how surpluses would be stored in the event of overproduction; how the production and results could be shared among the other tribes the scenario requires data-show equipment with multimedia, in an adequate infrastructure previously organized for the installation of a computer, use of DVD, sound and necessary lighting. The scenario proposed in Gramigna (2007) consists of the devices listed in Table 3 below.

Table 3. Cognitive scenario for the development of indigenous skills

Order	Components of Scenario	Activity to be performed
1	Experience in the game	Playful activities of interest to the indigenous people present. It is recommended to use musicality, dance, and art as a resource according to the tradition of the participating tribe.
2	Processing	A moment in which each member starts to deal with their difficulties and how they imagine it is possible to solve possible problems considered. The workshop facilitator will develop the balance of the group's interests and present propositions evidenced by the attendees. It is recommended to use brainstorming as a resource to appropriate strengths, weaknesses, threats, and opportunities.
3	Report	The moment in which each participant exposes their understanding of lived experiences. It is recommended to use the symbology and imagination of each individual reporter as resources.
4	Application	At this point, the possibilities and the way the tribal group validates them are considered. Commitments according to the tradition of indigenous leaders are affirmed. It is recommended to use orality as a resource.
5	Generalization	At this point, the playful elements and imaginary approaches are removed, starting to deal with the State of the art (the reality of the tribe). The rapporteur will be the leader of the tribe, who will point out the correlations between the ludic and the imaginary perceptions with concrete fact. It is recommended to use orality as a resource, analyze similarities and differences, and criticize conformity according to their tradition and known culture.
6	Closing	At this point, a stage of the game will be closed. The facilitator will collect the working papers for notes and possible records for future workshops.

Source: Adapted from Gramigna (2007).

5.3.2. Breaking paradigms

If, on the one hand, the individual punished by degradation experiences the consequences for adaptability, on the other hand, advanced studies of human behavior can guide essential constructs for situational reversal. Such studies lead to experiments while focusing on possible guides to the decision-making behavior of the innovative subject. Moreover, this is where creative possibilities come in, including modern training workshops generated from knowledge extracted from the endogenous tribes, from their transforming tacit knowledge (Plavnick, & Ferreri, 2013).

I) How to dissolve mental currents.

A set of negative experiences block the individual, constituting obstacles to his ethnic development and the prosperity of the indigenous. So it deserves to interpret the valid arguments of learning. Scholar Peter Senge argues that organizational learning, with a meaningful approach to the individual cognitive process in the institutional collective, evokes mental models made up of interdependent interconnectors of a behavioral nature, which does not exclude the functional physical field (Guaragna, 2007). The tribal community will then be the organic structure, which brings together its agents in the discussion of the facts related to food shortages, and the importance of modifying the State of order, generating food through the multiplication of wild animals that can be domesticated or kept. In captivity for volume breeding for tribal consumption.

II) How to raise formal constructs offered by tribal leaders

Search in Oliveira et al. (2021) brought about the Theory of Personal Constructs of the American Psychologist George Kelly. This argument can enter a task like this to increase individuals' learning, as proposed here. The reading made it possible to learn about the contributions of the culture passed from generation to generation in continuous learning that is transferred. Then the tribal leaders will get involved with the participants, who will be able to organize a workshop for food inductors; from here, within the scope of their culture and tradition, they will develop initiatives for the generation of food in their lands, being very well absorbed



the knowledge of these practices, it can be passed on to other generations. There will be no shortage of food since, aware of the structural reality. They will build constructs to overcome scarcity. They will produce much more food from this initiative matrix, including reinforcing their dispensary to an ideal limit. So one asks, others answer; the intervention observer records cuts and involves them in the cognitive ability of the generated construct, as needed after specialist universities to reinforce this support.

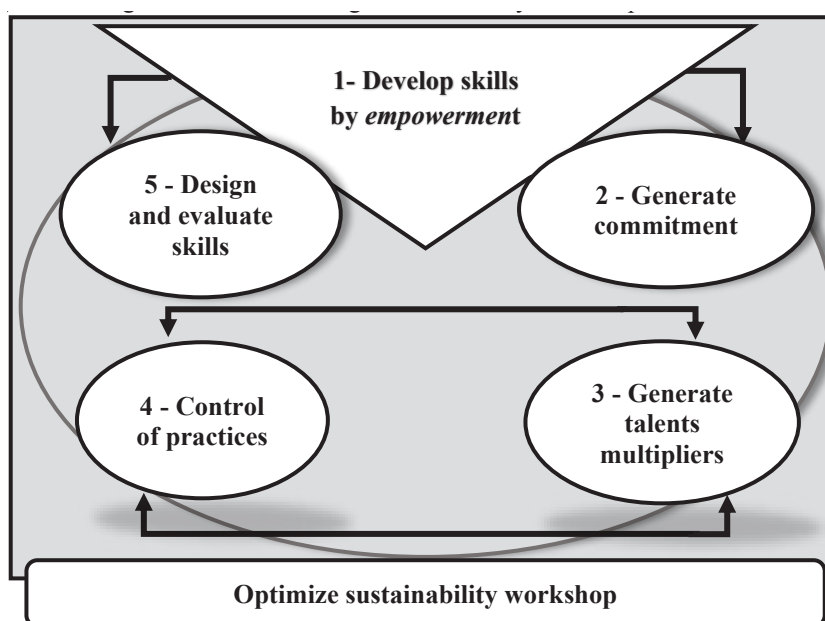
III) How to get support from parent organizations.

The support of controlling organizations such as the Fundação Nacional do Índio and the Federal Public Ministry reinforces the success of interventions of this nature. Compliance with ethical and procedural standards is essential, as provided for in the Research Ethics Committees of the Ministry of Health. This measure can avoid conflicts of ideology and institutional policies, which significantly benefits positivist actions such as those proposed in this work. Resolution 196/96 of the National Health Council establishes rules of an ethical nature involving research with indigenous people; Reading Pequeno et al. (2019) makes it possible to provide significant arguments for formulating a protocol in research involving traditional peoples. In addition, a search in the literature on ethical control in research points to Resolution 671 of April 5, 2022, which deals in its Item VII with the improvement of the Indigenous Health Care Subsystem, articulated with the Unified Health System, based on differentiated care, in critical and intercultural care, observing traditional health practices, with social control, guaranteeing respect for cultural specificities, with priority to guarantee food security. Therefore, a proposal such as those envisaged in this study would reinforce the food security of the peoples of the Forest in a strategy to face the risks of the scarcity of food resources, which in some way will be exposed to the Amazonian tribes. Still within the scope of the investigation, Resolution No. 674 of May 6, 2022, establishes the processing of scientific research protocols involving human beings, in the CEP/CONEP System, according to the type of research and the modulation factors, in the form defined by this Resolution; and studies like this one, involving indigenous people, must comply with this regulation.

IV) How to achieve the materialization of the sustainability workshop.

The primary provision is to bring together empowerment techniques through which the tribal will engage in credible commitment. Figure 3 below shows the elements of this initiative, which may take place alongside tribal leaders, allowing the generation of constructs and actions with them; and in Table 4 below, the operational treatment of what was diagrammed is shown.

Figure 3. Diagram for materializing a sustainability workshop with tribal individuals



Source: Prepared by the authors.

Table 4. Describes the diagrammed form for materializing a tribal sustainability workshop.

Diagrammed elements	operational breakdown
1-Develop skills by empowerment	1.1 Identify and recognize the tribal leaders involved. 1.2 Keep leaders well informed about the workshop to be operationalized. 1.3 Receive from tribal leadership indications of their understanding of form in their culture and tradition.
2 – Generate commitment	2.1 The tribal leadership will announce their leaders’ agreement regarding participation in the dynamics to be operationalized during the workshops. 2.2 Detach us from observing tribal disinterest in order to avoid animosity. 2.3 Relying, as far as possible, on Tribal Forum, if any.
3- Generate talents multipliers	3.1 Gather guarantees that tribal leaders can proceed with the task of training talents among their oars. 3.2 Make sure that the tribal leader has the skills and abilities to proceed with the task of creating multiplier talent. 3.3 Produce a detailed report covering the progress of this task.
4- Control of practices	4.1 The Workshop will have a record of each event, tribal records, and other important notes for the history of the workshops. 4.2 Maintain up-to-date agendas and detailed schedules for each workshop session. 4.3 Ensure every event was included with annotation and registration in the Minutes.
5- Design and evaluate skills	5.1 Engage the tribal leader in guided practice to measure their ability to deliver workshop results. 5.2 Make sure those being led understand the tribal leader’s guidance.

Source: Prepared by the authors.

V) How andragogy or adult education can generate valid concepts.

Valid concepts are those that achieve the purposes of a sustainability workshop and that would facilitate intervention in the indigenous tribe. Table 5 below contains details on this pedagogical focus.

Table 5. Treatment of andragogy elements in the face of the context to be worked with the tribals

Elements of andragogy	Conceptualizing to intervene
1. Necessity of those who want to learn.	1.1 Engage the need of the tribal with what is offered as learning. 1.2 Clarify the degree of importance of the concepts discussed. 1.3 Point out the possible effects on tribal reality.
2. Self-concepts of those who want to learn.	2.1 Confronting the general to the specific demonstrating the paradigm. 2.2 Exercise tribal cognition in the face of operated comparative. 2.3 Stimulating in the tribal the conceptual multiplicity to which it serves.
3. Existence of previous experience.	3.1 History of life in the forest fostering resignification. 3.2 Develop similar and correlated examples to learned situations. 3.3 Stimulate the understanding of diverse situational examples.
4. Readiness to learn.	4.1 Do not discourage and continue in mutual learning with the tribal. 4.2 Maintain availability whenever requested. 4.3 Stimulate curiosity and tribal knowledge for new skills.
5. Learning orientation.	5.1 Test competencies achieved, always with demonstration. 5.2 Focus learning on what it serves. 5.3 Bringing news and encouraging the tribal to bring knowledge.
6. Motivation for learning.	6.1 Mobilize effort so that the intervention is pleasant. 6.2 Innovate in the face of added reality in the context of learning. 6.3 Demonstrate how interesting the intervention with the tribal has been.

Source: Prepared by the authors.

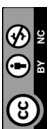


6. Conclusion

An initiative like this to generate multiplying talents among the people of the Amazon Rainforest is a rewarding task (De São Pedro Filho, 2009, 2011). The complexity of technical preparation is an innovation, given that there is no task like this published in the annals of events that deal with traditional peoples. However, the need for this task is entirely conceivable, given the accelerated development that oppresses the indigenous people and reduces their food availability. Worrysome, mining activities without strict supervision have contaminated the region's rivers with mercury that is dangerous for aquatic life and for the Eu indigenous people who feed on these free lives. It is possible to admit a solution, and the workshops for constructing multipliers among tribal peoples are one of the solutions. This work is of interest to public managers when creating government policies. It is also of interest to anthropologists, environmentalists, administrators, economists, sociologists, and others committed to this theme discussed here. This interest is yet another contribution from the academy to the solution in the mister.

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