



THE FUTURE OF IBOGA: PERSPECTIVES FROM CENTRAL AFRICA

**Iboga Community
Engagement Initiative**

PHASE II REPORT

December 2020

**A project by**

International Center for Ethnobotanical Education, Research and Service (ICEERS)

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In collaboration with....

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Thank you....

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Dedication...

This report is dedicated to the Bwiti communities of Gabon for stewarding iboga for generations.

May we continue to recognize this gift that has been preserved for humanity.

May reciprocity be a driving force for relationships between communities, peoples, and plants.

THE FUTURE OF IBOGA: PERSPECTIVES FROM CENTRAL AFRICA

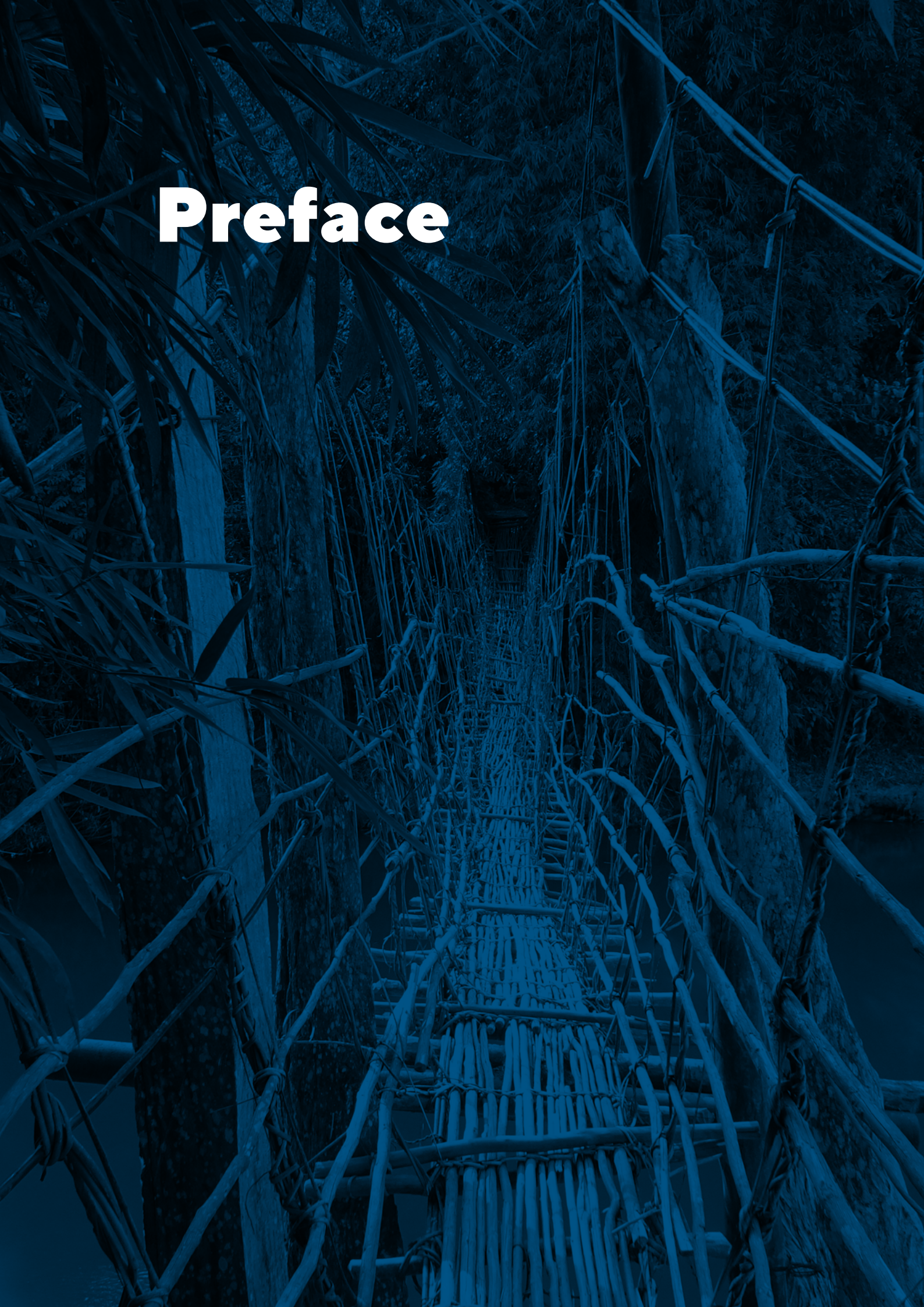
Iboga Community Engagement Initiative

PHASE II REPORT

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Preface



PREFACE

In Gabon, and among those initiated into Bwiti, introducing oneself is an act of respect that lays the foundation for meaningful interactions and right relationship. Introducing oneself is also, and above all, a way of calling in the support we've received and our teachers, sharing the location from which we speak, and honoring an ancestral spiritual form of situated knowledge. Because of all this, and since the spiritual leaders of Gabon are important readers of this text, we will begin with the formality of introducing ourselves.

My name is Ricard Faura. I am originally from Barcelona, Catalonia, Spain. My *Kombo* is Aguélégué, and that of my spiritual mother is Anevikoa. Also known as Cogué Madeleine, she is the one who initiated me into the Mabandzi rite in September 2019 in Mikoudi, Mimomgo. Cogué conducted the initiation along with eight spiritual mothers from the Tsogho and Sango peoples, in a ceremony that lasted five days and four nights.

During my seven-week stay in Gabon, I had the honor and privilege of speaking with dozens of spiritual leaders (Ngangas and Nimas) from various Bwiti traditions in the southern and northern parts of the country. They were generous with their time and patience, sharing in their own words what iboga and Bwiti mean to them, perspectives about the current situation with regard to the plant and its ritual uses, and their wishes for the future of their communities in Gabon. They gave us explicit permission to speak about it to the world. It is therefore of the utmost importance to begin by expressing our deepest respect, admiration, and gratitude to all these women and men of deep spirituality, who also work tirelessly as healers, counsellors, and leaders within their respective communities.

We also extend our thanks to the other individuals we interviewed—ministers and government representatives, representatives of civil society, business people, *bandzis* and *villageois*—who graciously took time to speak with us.

And my name is Andrea Langlois. I live in Victoria, British Columbia, Canada, on the unceded traditional territory of the Lekwungen speaking people of the Esquimalt and Songhees First Nations. I am co-lead of this project, helped to lay its methodological foundations, and collaborated in writing this report. While not initiated into Bwiti, I share a commitment to working in service to the precious knowledge imparted by iboga and other plant teachers. I am grateful to the guidance of the plants in my waking and dreaming life. It is an honor to support bringing the perspectives shared in this report to a wider audience.

Together we have made several methodological decisions, the most important being to apply a qualitative approach to presenting the diverse perspectives of those interviewed in Gabon. The objective of qualitative research is not to seek representation from general populations, but rather to focus on bringing deep or shared meanings to the surface. Its focus therefore moves away from measurement, concentrating instead on understanding. In this sense, qualitative research does not pretend to be representative, but rather significant. What follows is therefore a text that orders, interprets, and weaves together diverse voices from Gabon. We ask that the reader not interpret what follows as a literal representation of reality in Gabon, but rather as a map of meanings, an interpretative story that aims to give voice to Gabonese actors, and to increase the general understanding of iboga's situation in that country.

Before we begin, we would like to express our most sincere humility in the face of the great responsibility involved in translating, interpreting, and succinctly presenting the words of the wise people we have interviewed and apologize in advance for any possible error through interpretation.

The research was conducted in Gabon in September and October of 2019. The aim of this fieldwork was to record the voices of the people and communities who have personal

experience with iboga, in order to understand how relationships with this plant are built within these communities, with their natural and spiritual environment, and with the global society and the international markets. The methodological limitations of this perspective are important to acknowledge. To begin, the wider the cultural distance between the communities that relate to and communicate with each other, the greater and more complex the challenge of mutual understanding. In this case, the authors of this text are a white man and woman from European and North American cultural contexts, who have advanced professional and academic training in psychology, anthropology, communications, psychoactive substances, and master plants, among other subjects. The challenge of understanding that emerges between our standpoints in the world and those of the Central African informants we spoke with necessarily implies the establishment of translation processes at a cultural and conceptual level and between very different symbolic worlds.

It is also worth noting that a deep and necessary process of translation has also taken place at a purely linguistic level. Those interviewed in Gabon had several mother tongues, whether it was the Pygmy or different Bantu languages (such as Mitsogho, Massango, Fang, Punu, etc.), yet, we communicated in the adopted colonial language of French. The internal working languages of the international team of ICEERS are English and Spanish, and our primary field researcher and author's mother language is Catalan, another Romance language. The important process of cultural, symbolic, and linguistic translation is therefore a challenge and presents limitations that must always be considered when approaching intercultural readings, such as this one.

In order to narrow the gaps in symbolic and linguistic translation, we have had the invaluable help of a few people of European origin, who have long histories in Gabon in relation to Bwiti. We extend our sincere gratitude to Yann Guignon (co-director of BOTF and intercultural advisor), Hugues Obiang Poitevin (co-founder of Ebando and Nima), Süster Strubelt (author on Bwiti and specialist on possession trance), and Dr. Uwe Maas (author on Bwiti and former president of ICEERS). Long and intricate conversations with them served to develop and nuance many of the dialogues with the spiritual and lay women and men of Gabon.

In spite of all the limitations expressed, we have dedicated ourselves to writing this report because we sincerely hope that this effort can give readers a greater understanding of the situation and the desires of the iboga communities in Gabon. In doing so, our aim is to contribute to an international dialogue within which these Gabonese voices have a presence so that they are considered and included in proposals developed internationally. Lastly, we believe that developing an interconnected global approach to iboga requires establishing a foundation built on respect and reciprocity, so that all communities that benefit from iboga or its active components share in the benefits of this relationship.

As le Célèbre Moueny says to his community in Libreville, "the Word is the Spirit." It is our sincere hope that the words presented here will honor the spirit of iboga, of Bwiti, and of community.

On est ensemble,

Ricard Faura and Andrea Langlois

December, 2020

Overview of phase two

This project was developed in two phases and, among other outcomes, has resulted in three reports. The objective of phase 1 (2018–2019) was to engage with international communities and international actors on iboga/ine to assess current key issues and develop a collective vision. To collect the voices and opinions of the international communities, qualitative (individual interviews, focus groups, and expert dialogue sessions) and quantitative (a survey with closed and open questions in English, Spanish, French, and Portuguese) methods were deployed and combined. This was done mainly online and by videoconference, which allowed contact with people and communities located on all five continents.

The development of phase 1 revealed, on the one hand, the need to incorporate the voices of the communities and actors of Gabon, and on the other hand, that this would only be possible if we personally went to this country and collected the data on site. Phase 2 (2019–2020) of the project was therefore designed, the research of which was to be carried out through a field visit so that the various local actors linked to iboga in Gabon (spiritual healers, activists, policy makers, Bwiti practitioners, scientists, etc.), who would otherwise have been excluded, could participate. In this case, the methodology deployed was strictly qualitative, through ethnographic interviews, semi-structured in-depth interviews, and participant observation. This methodology was more appropriate in this context and allowed for the collection of perspectives and visions for the present and future of iboga in Gabon and for the world.

Three reports have come out of this two-phase project:

- [1] [Visions on Iboga/ine from the International Community](#). Phase 1 report.
- [2] **The Future of Iboga: Perspectives from Central Africa**. Phase 2 report (this one).
- [3] **Charting a Path forward for Iboga**. Conclusions and recommendations report.

Neither of the phase reports contains a “Conclusions” section. Conclusions and recommendations are found in the report by that name. The phase reports do include a list of aspirations and visions for the future, followed by “General Findings” that describe and discuss the relevant data set.

Harnessing a collective vision



HARNESSING A COLLECTIVE VISION

It is hard to walk a path you cannot see. A collective vision can serve as a North Star, supporting community leaders, visionaries, practitioners, and policy-makers as they navigate through unknown terrain. It helps them remain focused on a future even though the exact path there is not yet fully illuminated. Developing a collective vision required harnessing the knowledge that lives in various sectors of the Gabonese communities and we are grateful to all who participated.

Desires for the future are aspirations, and to build these we draw on the perspectives of the 56 people interviewed in Gabon. Among other questions, we asked, “What is the future you would like to see 10 years from now?” We grouped responses according to themes and categories. They were then translated and synthesized. The aspirations are formulated in the form of a vision, in which everything that was envisioned has already been achieved and is already happening, and is therefore formulated in the present tense. It is the collective chorus of a symphony of voices that speaks from a future that is already present to a present that will soon be the past. The result of this qualitative process of dreaming, exploring, grouping, translation, and synthesis has led to the following seven aspirations.

Aspirations

1. All actions related to iboga in Gabon are informed by a shared vision for the regeneration of sacred forests

- » Local and global communities share a vision for the responsible stewardship of nature. Gabon’s forests and their rich biodiversity are considered by locals and foreigners alike as a sacred place on Mother Earth, to be cared for and revered. Iboga is valued and respected as an intrinsic part of this vibrant ecosystem.
- » There is increased awareness among Gabonese people regarding the value of forests that contain diverse species of flora and fauna, clean and abundant water, and shared resources and this inspires initiatives that contribute to regeneration.
- » The Gabonese population, governing bodies, and private sector collaborate to manage forest resources in sustainable ways that ensure their regeneration and protection for future generations. Iboga sustainability is a shared responsibility.

2. The Gabonese government has implemented a national strategy for the development of ethical and sustainable iboga markets

- » The Government of Gabon has designed and implemented a national strategy for the regeneration, study, and revaluation of iboga. This strategy enables the production of larger quantities of high quality, traceable iboga for ceremonial use within the country (particularly in urban areas) and supplying international markets.
- » Infrastructure is in place and products derived from iboga (such as ibogaine) are produced within Gabon, employing local people and benefiting local economies. A portion of profits from the sale of these products are channeled back to traditional iboga communities.
- » Other countries have learned from Gabon’s strategy and are implementing policy and regulation to support an ethical market for iboga.

3. International trade benefits Bwiti communities

- » An ideal future for iboga is one where iboga and the sacred practices that surround it contribute to the spiritual and economic emancipation of traditional communities in Gabon. This future is built on a widespread recognition of the value of iboga and honors the communities who have stewarded these teachings and practices, particularly the Pygmy peoples and the Bwiti communities.
- » Respect for Gabonese stewards and spiritual communities engenders ongoing and equitable sharing of the benefits derived from international interest in iboga (and ibogaine). Models for flowing benefits to traditional communities are guided by the Nagoya Protocol and are regulated, ethical, and fair.
- » Within this regulated model for ethical trade, international support contributes to the development of Gabonese iboga plantations with the aim of supplying both local and foreign markets.

4. Gabon is recognized as a place for healing and traditional wisdom

- » Gabon is regarded as a sacred place for healing and traditional wisdom. This reputation extends beyond the recognition of the iboga plant and its traditional uses and includes acknowledgement of the rich and diverse knowledge found within Gabonese spiritual and traditional medicine practices.
- » All non-Gabonese people, including those who do not have a relationship with Bwiti practices, are welcomed in Gabon to learn from traditional teachers and healers about iboga. All travelers to Gabon are taught how to show respect for the plant and local culture and supported to understand their own spirituality. This approach serves to re-integrate iboga into its traditional knowledge system, ensuring that what is shared with the world is not simply physical products derived from the iboga plant.
- » This deepening respect and recognition leads to a future where practices with iboga are accessible and valued within global decision-making circles, providing a valued tool for helping to uncover solutions to the great problems of humanity.

5. Bwiti is respected in Gabon and the world

- » Rejection and stigmatization of Bwiti is eliminated and Gabonese society holds Bwiti and other spiritual traditions in great regard. Iboga traditions and heritages are sincerely appreciated as a cultural treasure to be celebrated, protected, and shared with the world.
- » The internationalization of Bwiti respects protocols for sharing local rites and ceremonies. There are mechanisms for sharing clear and up-to-date information from spiritual mothers and fathers regarding the spiritual uses and traditions. Information about international Bwiti communities is accessible to people in Gabon, and this international community supports each other through reciprocity and respect.

6. Traditional medicine is legally protected and promoted in Gabon

- » Gabon, Africa, and the world have learned the value of both traditional and modern medicines, drawing on the best of each to create a revolution in health care. Health care systems change and adapt to integrate traditional and modern medicine approaches.
- » International interest in iboga has played a role in the Gabonese government's formal recognition of Bwiti traditional practitioners. The Bwiti tradition is thus recognized as cultural heritage warranting protection, and Bwiti practitioners are consulted about efforts regarding iboga sustainability and any regulation of practices.

- » Nimas and Ngangas of the Bwiti traditions enjoy official governmental recognition and certification alongside other traditional medicine practitioners.

7. Gabonese science thrives

- » Gabon has the necessary infrastructure, regulations, and resources to carry out world-class research on iboga and other medicinal plants.
- » The international community has supported the transfer of technology to Gabonese research and development centers, and various research projects are under way with international and Gabonese teams. International resources flow into Gabon to enable research on iboga cultivation as well as on other medicinal plants, contributing to developing evidence on Gabon's agricultural diversity, as well as forest regeneration strategies.
- » Generated scientific knowledge is mobilized and shared with the world through mainstream and non-mainstream publications and international scientific platforms involve Gabonese people in knowledge exchange.



Executive summary

EXECUTIVE SUMMARY

Iboga has been used in the Congo Basin since time immemorial. Origin stories in Gabon, shared by those we interviewed and documented in the literature, state that iboga was first used by the Pygmies peoples, who have lived in Central Africa for tens of thousands of years. Iboga was first integrated into their spiritual practices and later shared with the Bantu peoples, who migrated to the region from the north over the last few centuries.

Iboga in Gabon

Although iboga grows in several places in Central Africa, its strongest roots are in Gabon, where it is used in ceremonies and rituals, and its use has also spread among Fang communities of Equatorial Guinea and southern Cameroon. Importantly, in Gabon, iboga cannot be understood outside of its link to the spirit world through Bwiti, an ancestral spiritual tradition practiced there today by communities of about fifty ethnicities. Iboga – also known as *bois sacré* – is a sacred medicine that plays a role in traditional rites of passage as well as in traditional healing processes.

Spirituality and the use of traditional therapists is a common and popular healing modality in Gabon, as it is all over Africa. A Nganga (spiritual practitioner) can help a person in any sphere of their life. In fact, in Gabon, modern Western medicine is often combined with traditional medicine. While the former deals mainly with the physical body, the latter specializes in matters of the spirit, and iboga and Bwiti are key components to this approach.

Iboga is often defined as a person with her own soul who connects humans to the spirit world. Iboga does not heal directly, but rather supports healing. According to Bwiti practitioners, iboga's healing properties regarding addictions, for which it has become well known in Western countries, are because this plant purifies and heals the spirit. It does this by opening the door for constructive examination of past experiences, including those on the margins of consciousness. Iboga connects people to themselves, allowing deactivation of spirit-related pathologies, such as addictions.

Practitioners of Bwiti strongly believe that it is not possible for someone to die from iboga. According to those we interviewed, if someone dies from taking iboga, the death may be attributed to other causes of illness that were already present. Three possible causes of death were identified. First, it was noted that someone may die from a previous serious health condition. Secondly, death may be caused by something related to spiritual dimensions that are not well understood in the West. Lastly, deaths may occur (although only one case, confirmed through an autopsy, has been noted) by the ingestion of another plant from the Apocynaceae family that has been mistaken for iboga.

Bwiti and the Globalization of Iboga

Although Bwiti is gaining popularity, respect, and even adherence among foreigners, these practices have yet to be fully respected by the majority Christian population of Gabon, especially by evangelical churches. Iboga, as an extension of Bwiti, is regarded in polarizing ways: from deep respect to total contempt, from admiration to fear. Practitioners of Bwiti often face rejection by their own neighbors who may even inspire fear among devout Christians. Therefore, while historically these sacred practices were held in secret and white foreigners were regarded suspiciously out of fear that they would take advantage of this knowledge for personal benefit, there is now more openness to the legitimacy and honor brought to the plant and practices by foreigners who seem to hold it in high respect. Bwiti practitioners are now

more likely to see this growing international interest as a new and unexpected source of allies in the face of the attacks and stigmatization their traditions are facing in their homelands.

In relation to the more clinical or treatment-focused uses of iboga seen in the West, these are generally accepted by the Bwiti communities because iboga is considered a universal medicine that has come into the world to save all humanity. Therefore, from their perspective, anyone in the world who is ill can take it without being initiated into Bwiti. However, the guardians of the plant claim that if it is to be used as a spiritual tool, initiation into Bwiti is recommended and they request that the plant and its spirit be respected by all. People interested in learning to work with iboga need to follow a lengthy path of learning from Bandzi (initiated), through Nganga (spiritual practitioner), and Kambo (temple guardian), to Nima (master initiator). These processes are important and need to be followed with care, otherwise negative consequences ensue. Therefore, while the Bwiti practitioners we spoke with were not opposed to international clinical applications, they referred to the importance of this training and care for the spiritual process and plants. With the commercialization of treatments, the exploitation of iboga as a natural resource and the lack of reciprocity with the Gabonese people and respect for the Congo Basin's forests are concerns that need to be addressed.

Bio-cultural Sustainability

Bio-cultural sustainability of iboga is of great concern. *Tabernanthe iboga* has traditionally grown freely and abundantly in the forests of the Congo Basin and therefore communities have never needed to cultivate it. While communities in rural areas do not seem to be very worried about access to iboga, concern about its increasing scarcity is greater in the urban areas of Libreville and the Estuary. Although iboga is still available in these areas, quality, quantity, and affordability have been affected by growing demand. The major factors influencing the regenerative capacity of iboga in the wild and its availability in urban areas, are the extensive illegal harvesting for sale in international markets, the seizure of domestic shipments by police, and the enclosure of lands by the logging industry. The Union for Conservation of Nature's Red List of Threatened Species has listed *Tabernanthe iboga* as a plant of concern, however not as endangered. In February 2019, the Gabonese government halted all exports, stating concerns for the sustainability of the plant.

The shortage situation that is being experienced in some areas is a new phenomenon that is leading to an unprecedented situation in which there is a growing need to cultivate iboga. Although historically iboga has not needed to be cultivated in Gabon, many villages hold this knowledge and are able to carry out small-scale cultivation. Within Bwiti communities, knowledge holders share that iboga can be propagated in four ways: a) wild propagation; b) propagation using the roots of an existing plant; c) cloning; and, d) seeds. At harvest time, the plant must be at least five years old, although 10 years is better, regardless of its height. When pulled out, it is convenient to leave a part of the root in the ground, and several cuttings should always be replanted to ensure the regeneration of each individual.

Cultivation of Iboga

The demand for both iboga root bark and ibogaine is expected to increase exponentially in the coming years. It is also likely (and desirable) that ibogaine production will move away from *T. iboga* as the main source alkaloid. There are various actors in the field who are looking for ways to optimize other alkaloid sources that are currently more expensive, such as *Voacanga africana*, or even develop a synthetic alkaloid. In the meanwhile, most of the iboga and ibogaine that reaches international markets is obtained from plants harvested in the forests of Gabon and whose origin cannot be traced. To meet the demand of the

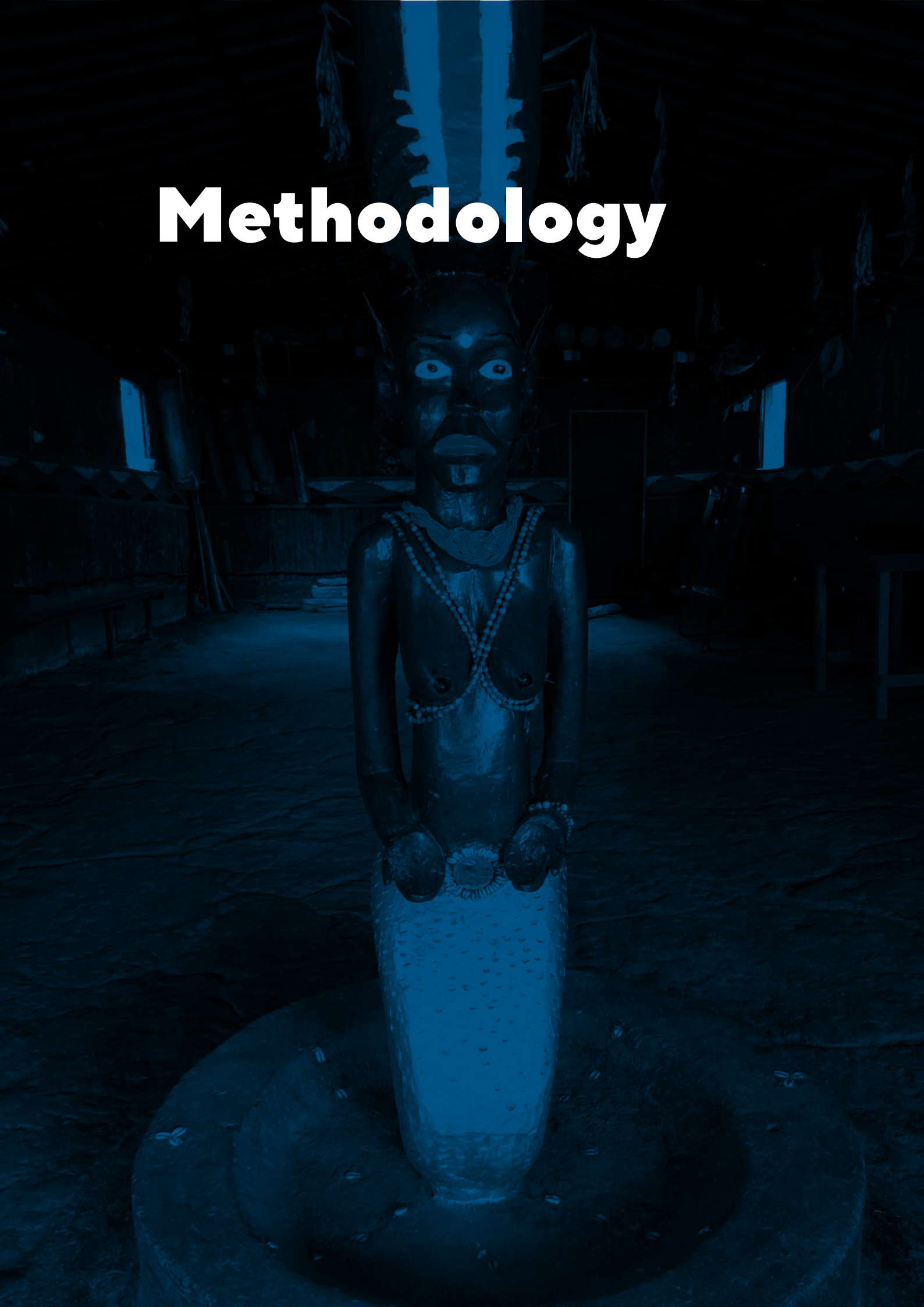
international market, a network of traffickers has established themselves in the region, and especially in Cameroon, who offer money to local people to harvest the wild plant in Gabon's forests. These harvesters uproot the trees without replanting cuttings, thus hampering the natural process of regeneration. The root bark is then sold to international resellers, who make extremely large profits.

To date, there are only a few plantations where traceable *T. iboga* is grown in Gabon. At the time of writing, the government had just begun the process of recognizing legal plantations that meet the requirements of traceability and reciprocity with local communities as outlined in the Nagoya Protocol. In our fieldwork we identified two different types of plantations, which may serve as pilot projects to inform the development of future models: community plantations and private plantations. The community plantation we visited has approximately 4,300 traceable plants with medium- to long-term plans to sell them internationally as fair trade. All the women, men, girls and boys of the community are actively integrated in the community association, and have great pride in the fact that the association's fiscal management is open and transparent. It is a modest plantation that sees the export of iboga as a means of raising funds to invest in the sustainable development of their community, while ensuring local access to iboga for Bwiti communities.

The second plantation is the largest private iboga plantation in the country and perhaps the world, with six hectares in cultivation, growing over 20,000 plants, numbers that will soon be doubled. On this plantation, fully traceable plants are being cultivated, and it is expected that international technology transfer will enable the development of the whole chain of extraction and commercialization of ibogaine inside Gabon, expanding the initiative beyond the mere production of raw materials. In addition, research is being done with regard to cultivation methods, which will serve to improve what remains limited knowledge of propagating *T. iboga*.

Lastly, there is a strong need for further research into all aspects of cultivation, production, and regeneration of *T. iboga* and its derived alkaloids. Research and science in Gabon, as in other parts of Africa, is of course considered the realm of modern theorists and technicians, but also is inextricably linked to ancestral knowledge. According to some Gabonese scientists, innovation in science and medicine must now incorporate traditional epistemological and methodological models into the practices of modern science. While modern biomedical models are based on the premise that understanding means generating knowledge about its physiological and chemical mechanisms, traditional models recognize that the effects generated by the plants in the material world are based on the intervention of Spirit. Both systems of knowledge are understood as complementary and suitable for iboga research, the *bois sacré*, and for the understanding of its roles in healing body and spirit.

Methodology



METHODOLOGY

Objectives

- » To create a powerful opportunity for African perspectives and voices to influence how iboga and ibogaine are globalizing, bridging perspectives, and strengthening intercultural connections between local, African stakeholders and the global iboga/ine “community.”

Specific objectives

- » To engage diverse actors from Gabon and Central Africa to capture different perspectives about iboga, generating new understanding of issues these important stakeholders consider relevant according to their traditions and current realities.
- » To gain perspective on key issues relating to iboga sustainability: ecological and cultural sustainability; the present and potential impact of the increasing international demand for iboga on African communities and ecosystems; and identifying progressive sustainability activities and policies.
- » To build solidarity, trust, and a culture of appreciation and generosity among diverse actors in Africa and the global iboga and ibogaine communities.

Qualitative approach

Qualitative methodology establishes that, in many dimensions, human actions cannot be reduced to numbers. According to this premise, priority is given to the analysis and interpretation of opinions and assessments that people hold about their actions and those of others. Thus, qualitative methods emphasize the significant character of human behavior, giving special importance to language and actions as a vehicle of meaning and to interpretation and understanding as fundamental strategies of approaching social phenomena.

Techniques

Literature and document review

We conducted a review of published and grey literature on Bwiti spirituality, iboga practices, policies and analyses, sustainability, trends, and other relevant topics.

In-depth, semi-structured interviews

We conducted 56 in-depth, semi-structured interviews with key stakeholders. These interviews explored a number of themes and issues defined a priori, while opening up the subject matter to include aspects that the interviewees themselves wished to incorporate on their own terms and from their own perspective.

Ethnographic interviews

Ethnographic interviews are non-scheduled and non-structured conversations that take place in a particular cultural context where meaningful interactions can occur.

Participant observation

There is an intrinsic difficulty in fully grasping the way in which local communities envision their spiritual relationship with the world through practices with sacred plants, as well as with attempting to understand their views of the opportunities and challenges that come with globalization. Sharing spaces and practices within the local cultural environment provided

the opportunity to develop a fuller understanding that complements the insights from in-depth and ethnographic interviews.

Audiovisual ethnography

Within ethnography, the inclusion of audio-visual materials is useful both to enhance the analysis as well as to enable the voices and images of interviewees to be shared with wider audiences. We worked with renowned documentary filmmaker Lucy Walker who works with an expert team with extensive audio-visual experience: Sam Kahn, Babas Denis, Georges Kamgoua, and Julian Cautherley.

Community outreach

Profiles

Nimas, ngangas, Bwiti practitioners, Bwiti musicians, government ministers and civil servants, village chiefs, NGO directors, activists, scientists, and researchers.

Interviewees

56 individuals

Field visit locations

The map below shows the different Bwiti villages and territories visited during our stay in Gabon.

Libreville City: (1) Village d'Ebando, (2) Village de Mbeng N'tam, (3) Village d'Itsamanghe Village, (4) Village de Maman Djedje

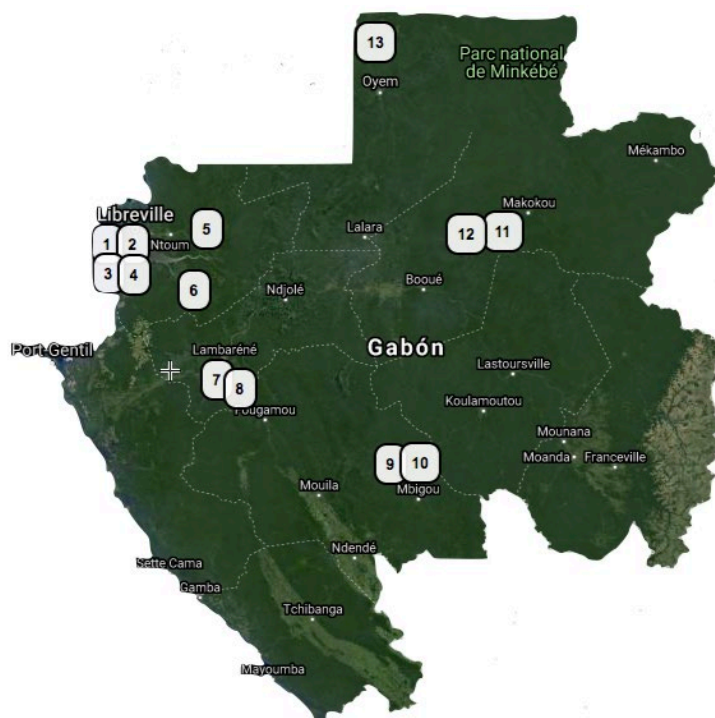
Estuaire Province: (5) Village d'Issica, (6) Village de La Harpe,

Moyen Ogooué Province: (7) Village de Mittoné, (8) Village de Komi,

Ngounié Province: (9) Village de Mandji, (10) Village de Mikudi,

Ogooué-Ivindo Province: (11) Village d'Ebyeng, (12) Village d'Adoué

Woleu-Ntem Province: (13) Village de Bibasse.



General findings



FINDINGS

Citation codes

The following text has been informed by 56 qualitative interviews, 19 of whom we quote directly. Within the text we attribute these quotations with the following codes (presented in order of appearance in the text).

- E1: Akouma Nlo (Delphine) [A2E Association, Ebyeng]
- E2: Nguema Aristide [BOTF Gabon Executive Manager]
- E3: Simon-Pierre Ovono [Nima, La Harpe]
- E4: N. Debora (Maman D) [Nima Moumbayano]
- E5: Hugues Obiang Poitevin (Tatayo) [Nima Ebando]
- E6: Ngamboya Mba (Ma Céline) [A2E Association, Ebyeng]
- E7: Stephanie Mousounda (Maman Djedje) [Nima]
- E8: Diane Ditengou [Ebando]
- E9: Maman Cadi [Nima Mittoné]
- E10: Daniel Laoundé Gensdedieux (Rekako) [Nima, Komi]
- E11: Hubert Bled Elie Nloh (Papa Elie) [President, A2E Association, Ebyeng]
- E12: Yann Guignon [BOTF Co-director]
- E13: Bayoi Debola [Nima, Komi]
- E14: Magamou Vincent [Nima Issica]
- E15: Cristophe Mathelin [Nganga Mbeng N'tam]
- E16: Luc Mathot [Conservation Justice Director]
- E17: Emmanuel Bayani Ngoyi [Environment Director General, Nagoya Protocol Conference]
- E18: Hervé Omva [Coordinator, IDRC Africa]
- E19: Professeur Henri-Paul Bourobou Bourobou [former Director, IPHAMETRA]

Gabon facts

Basic data

- » **Total Area:** 267,000 km² (similar in size to Texas, USA).
- » **Climate:** Equatorial climate with an extensive system of rainforests.
- » **Forest cover:** 89.3% of land area.¹
- » **Forest loss:** Gabon faces a relatively low loss of forest loss at 0.12% per year and an average degradation rate of 0.09%. Main causes for deforestation are small-scale agriculture established along roadways and urban development, while the main causes of forest degradation are industrial mining and illegal logging.²
- » **Population:** 2,120,000 (2018 estimate).
- » **Capital:** Libreville (approx. 700,000 inhabitants).
- » **Official language:** French, spoken by an estimated 80 per cent of the population, is the mother tongue of one third of Gabonese.
- » **Minority groups:** 50 languages including Fang (32%), Mpongwe (15%), Mbédé (14%), Punu (12%), etc.
- » **Political System:** Presidential republic.
- » **Economy:** Gabon is an upper-middle-income country with a GDP due to reach \$13 billion in 2020. It enjoys a per capita income four times that of most nations of sub-Saharan Africa. The fifth largest oil producer in Africa, it has had strong economic growth over the past decade, driven by its production of oil, manganese, and timber. Oil accounts for about 80% of the value of all exports.



Brief history

- » **Ancestral pygmies.** Pygmies were the first-known inhabitants of what is now Gabon. They were hunter-gatherers and settled at least 7,000 years ago, possibly much earlier.
- » **Bantu expansion.** A wave of Bantu settlements followed circa 1,000 to 2,000 BCE. Unlike the Pygmies, the Bantu peoples are traditionally semi-sedentary and practice animal husbandry. Successive waves of immigration, populated Gabon—first of Pygmies, then by larger waves of Bantu, who today constitute the vast majority of Gabonese.
- » **European arrival.** The first European visitors to Gabon were Portuguese traders who arrived in 1472 and called the country by the Portuguese word *gabão*, a coat with sleeves and a hood similar to the shape of the Komo river estuary. The coast became a center for the slave trade. Dutch, British, and French traders came in the 16th century.
- » **First written mention of iboga.** In 1819, the English traveler and author Edward Bowditch mentioned “eroga” as a “favorite but violent medicine” consumed in Gabon. He initially believed it to be a charred fungus since he probably saw it in its powdered state.³
- » **French colony.** France gradually occupied Gabon from the middle of the 19th century, after a treaty signed with Gabonese coastal chiefs between 1838 and 1841. In 1886, Gabon became a French colony which, in 1888, merged with Congo and was called Gabon-Congo and then, in 1898, French Congo. In 1904, Gabon again became a separate colony.



View of Mandji, Ngounié province, in the south of Gabon. The jungle literally knocks at the village gates. ©Ricard Faura

- » **Fang arrival.** At some undetermined time during the 19th century parallel to the French military and administrative conquest, the Fang migrated from the northeast and colonized an important part of the current territory of Gabon. Today they make up about 30% of the population.
- » **Iboga goes north.** The earliest known record of *Tabernanthe iboga* (from now on, *T. iboga*) dates from 1864, when Griffon du Bellay brought specimens to France.⁴
- » **Ibogaine extraction.** In 1901, ibogaine (one of the primary alkaloids found in iboga) was first isolated from *Tabernanthe iboga* by Dybowski and Landrin. In 1939, it was extracted from *Tabernanthe manii* and sold in France as a tablet under the name of Lambarène (the name of a city in Gabon) for the treatment of fatigue and depression. It contained 0.2g of extract per tablet, approximately 8mg of ibogaine.⁵
- » **Spiritual harassment.** In the 1940s, the French began harassing Bwiti practitioners and stigmatizing traditional Gabonese spirituality.
- » **Spiritual colonization.** The French introduced Catholicism in the 19th century. The second half of the 20th century, however, saw the wide spread of American-style,

conservative evangelical churches. Christianity is currently practiced by 88% of the population. Many Gabonese affiliated with evangelical churches characterize Bwiti as a “diabolical cult” and may represent the toughest opposition to the normalization of the Bwiti tradition in Gabon.

- » **Independence.** On August 17, 1960, like the vast majority of French colonies in sub-Saharan Africa, Gabon gained independence. Léon M'ba became the nation's first prime minister and then president. M'ba had practiced Fang Bwiti as a young man, yet Catholicism expanded comfortably throughout the country during his presidency.
- » **Omar Bongo.** In 1967, Mba died and was replaced by his former chief of staff, Omar Bongo. Bongo established a single-party system, the Democratic Party of Gabon (PDG), and was the head of state until his death June 8, 2009. At the beginning of the 1990s, a multi-party system was introduced and a new constitution written, which allowed for a less opaque electoral process. During this period, Bongo established a rather tolerant approach towards Bwiti, even if it was subject to stigmatization that persists.
- » **Maître Atome Ribenga.** As one of the most respected spiritual fathers in Gabon, Maître Atome Ribenga was featured in a historical TV program in 1996 taking a bold new stance on the Bwiti, dignifying the tradition in the eyes of most of the regular Christian Gabonese population.
- » **Ali Bongo.** In 2009, Omar Bongo's son Ali Bongo became Gabon's third President (he remains so at the time of this writing). In 2011, he signed the Nagoya Protocol. The illegal export of iboga was halted in 2019 until the government defines how exportation will be aligned with the Nagoya Protocol.

Communities in nature: The loss of paradise

Gabon is part of the “underpopulated zone” of the Gabon-Congo area with a very low population density (5.7 inhabitants per square kilometer, compared to 37/km² for the whole of the African continent) and a birthrate that is significantly lower than the average: in 2010 the total fertility rate was 4.6⁶ and the annual growth rate was 2 per cent, compared to 5.8 and 2.8 per cent for sub-Saharan Africa.⁷

The paradox of this sparsely populated country is that half of its population lives in the two major cities (Libreville and Port-Gentil), which gives Gabon one of the highest urbanization rates in Africa. In comparison, within the country, the density outside urban areas is similar to that of the Saharan desert countries, less than 2 inhabitants/km².⁸ Gabon is very rich in biodiversity and little populated. This makes it easy for widespread illegal logging and smuggling of ivory, pangolin scales, leopard skins, several protected animals, and other biocultural resources, such as iboga, to occur. Gabon's rural culture does not seem to have made a definitive leap from the hunter-gatherer culture to the agricultural culture. Symbiosis with the forest is so profound that we learned that most Gabonese cannot accept that the forest and its resources may one day run out.

The Spirit

Spirituality and Bwiti

BWITI. It is important to note that when we visited Gabon and asked about the relevance of iboga in people's lives, this question was often met with surprise. Why place iboga at the center? In Gabon, iboga is not necessarily discussed outside of spiritual matters and rites of passage, and more specifically outside of Bwiti, which is the ancestral spiritual tradition of the people of Gabon. Iboga, although very important in itself, seems not to be so central to beliefs and practices, but rather a part of the whole.

The iboga, itself, is not the most important thing, but it is part of something more, bigger than itself. [E2-N. Aristide_01:24]

Neither the plant nor its alkaloids on their own provide initiation into the spirit world; in fact, initiation requires a spiritual mother or father (the Nima) and a set of techniques and procedures that go beyond the sacred plant, such as sacred musical instruments (moungongo, harp, drums, choirs) and other ritual elements. Iboga is a part of Bwiti, and this in turn is an expression of the spiritual world, which presents all these elements combined as channels of transmission and connection between the two worlds.

According to some accounts, Bwiti already existed in various forms among the Bantu peoples prior to contact with the Pygmies and the incorporation of iboga into their rites. In fact, both the Bantu and Pygmies have different ways of modifying states of consciousness, which may involve elements such as dance, sound, perfumes, baths, light, and color. These elements are combined in rituals infused with energy and intentions. Some Bwiti initiation rites, such as the Moumbayano, use iboga only symbolically (it is worn on the head but not eaten). The medicine is presented to the *bandzi* (initiates), but at first, they are not given it to consume; they are brought into a deep trance through other means.

The Pygmies, for their part, while recognized as the transmitters of the spiritual knowledge of iboga, also do not always use iboga in spiritual initiations (this is especially true among the Baka Pygmies of the north). It is considered, however, that when the Pygmies introduced iboga into Bantu rites, this plant became a very important element (not necessarily the most central) within the complex bio-cultural system expressed in contemporary Bwiti.

THE SPIRIT(S). Speaking with Bwiti practitioners, we see that any explanation of what happens in a ceremony where iboga is consumed has to do with the spiritual world. Depending on Bwiti tradition, we also note that in some cases the stress is more on "the Spirit," as a singular force permeating everything, while in other cases the emphasis is more on "the spirits," in generic, as well as in "the spirit world," or even in "the genies." In some particular cases, like the Christian syncretic character of Bwiti Fang, for example, the Christian figure of God would be brought closer to that of the Bwiti Spirit. However, the Spirit of Bwiti Fang is immanent compared to the transcendent Christian God. Beyond this, the basic notions of a spirit world full of spiritual entities would be basically shared with the other various Bwiti rites of Gabon. In any case, understanding this issue requires a deeper discussion that we cannot provide in this text. What follows, therefore, presents the terms "Spirit" and "spirit world" in a generic and combined form and without entering into further distinctions concerning the profound meaning of each of these terms and the vision of the world that they contain.

In this cosmological background, the iboga has its own role as a doorway of connection between the *bandzi*—the initiate—and the spirit world. Among Bwiti practitioners then, under-

standing of the spirit world does not depend on iboga. Very often the Spirit and the spirit world is revealed to the *bandzi* long before they consume iboga. It is the spirit world that is in charge of everything, not the iboga. In fact, according to some, it was the Spirit itself that informed people of the existence of iboga so that this sacred plant could reveal Spirit to the people.



Fang Bwiti initiation in Adoué, in the province of Ogooué-Ivindo. ©Ricard Faura

The spiritual intelligence of the Gabonese people, especially the Bwiti practitioners who take iboga, is very deep. All of Nature is inhabited by spirits. All of Nature is Spirit. If we take something from Nature, from a tree, a river, or a nest, we must ask permission from its particular spirit and express our intentions. And, if we take something for our own spiritual benefit, we must pay for it. Trees are living individuals with souls, just like people. Plants also need to be healed. The belief in a spiritual connection is what allows the community to understand the spiritual language of Nature.

We cannot forget how to talk to Nature because to save a human being we must have faith in the Spirit. And it is this faith that will allow you to talk to the plants, talk to the trees, talk to the medicines... and will allow you to hear how they talk to you. [E6-N.Mba_36:23]

ONENESS. Health and illness are always governed by the community's spiritual world and by external spirits. Bwiti brings healing to the sick. In this sense, Bwiti is also understood as a body of knowledge within traditional medicine, in which plant medicines are related to spirituality. Iboga acts as a sacred medicine within this system that allows people to work with health on a spiritual level, and if it is effective, it is precisely because it acts on this level, and not merely on the material level.

The really good quality of Bwiti is love, because it's a way to spread love... To feel that you are one with everybody—that's very nice. [E5-Tatayo_56:25]

What of Bwiti contributes to healing, according to our informants, is the action of the Spirit, the feeling of protection and spiritual elevation and, ultimately, communion with the cosmos. Spirits are invoked to give clarity to a person's requests, and even to help them achieve them. The Bwiti purifies and at the same time brings positive visions that will be effectively realized in the life of the initiated person, the *bandzi*, once the rite has been performed.

ORIGIN. It is common among different cultures that consume sacred plants all over the world to find myths and stories that explain how animals or plants introduced them to humans.⁹ During our field visit to Gabon, we were told several stories that attribute the discovery of iboga to the Pygmies. Some recounted how they learned about the plant by observing

various animals that used it, such as baboons, gorillas, parrots, porcupines, and elephants. In fact, Bwiti practitioners know that animals (specifically elephants) eat the fruit of iboga, and new plants are seeded from their feces.

In the absence of written records or archaeological evidence, there are several versions of the history of iboga. There is a consensus among the communities of Gabon that the Pygmies were the first to use of iboga, and that they were the ones who transferred this knowledge to the Bantu peoples, who arrived in Gabon later. According to the oral stories our interviewees carry with them, there are at least four Bantu peoples claim to be the first to have received the knowledge of iboga from the Pygmies – the Mitsogo, Massango, Apindji, and Punu. The Fang were the last ethnic group to incorporate it, thereby creating a new form of Bwiti, syncretized with the Christian faith recently brought to the region by European missionaries.

rites. Bantu communities in Gabon have adapted the Bwiti tradition according to their own customs and previous traditions, giving rise to diverse rites (Ngondet, Miobé, Missoko, Mabandzi, Maboundi, Moumbayano, Dissoumba, Mbiri-Zilian, etc.). The profound particulars of each one of these rites are only revealed to initiates, leaving the layperson ignorant of this knowledge.

CEREMONIES. In ceremonies, every community member plays a role in connecting to the spirit world through the ritual and iboga. Everything in Bwiti is full of symbolism: the temple, clothing, body painting (*pemba*), gestures, songs. We are unable to further disclose matters of symbolic and initiatory order here, because the Bwiti belief system requires that its secrets be kept from the uninitiated.

Everything makes sense, everything, down to the smallest detail. But then again, those details are only explained to insiders. [E3-SP.Ovono: 01:35:06]

BANDZIS, NGANGAS, AND NIMAS. Bandzi is the name given to a person being initiated into Bwiti, or who has already been initiated but does not really follow the tradition in their daily life. In the initiation, the Bandzis will meet their kombo, the spiritual entity that accompanies them. When Bandzis integrate their kombo into their daily life, they become Ngangas. In Gabon, the Nganga is someone who is not only initiated in Bwiti but also practices it daily. A Nganga is someone who applies the knowledge of Bwiti in their life, work, music, and teachings. They are prophets, healers. It is the Nima, however, who has the knowledge and authority to train and anoint Ngangas, and it is in Nimas that the gift of initiation and knowledge of healing lies. The Nima is the spiritual leader of the village. Becoming a Nima, or even a Nganga, is a lengthy process that can take several years of study and practice. The process includes structured learning in several areas of traditional science, such as initiations, healings, natural pharmacopeia, and spiritual help to humanity. The role of a Nima carries great responsibility. It is not only about knowing the physical and spiritual dimensions of iboga but includes holding the knowledge and practices of healing plants, as well as the process for becoming a traditional therapist.

You can't initiate other people without knowing the elements. It is important because when you do a consultation you have in front of you someone who comes with serious problems... If you don't know the herbs, the procedures, you're not going to do a good detoxification treatment. You can't make the necessary leap. You can't hunt the black snake and so on. When people come with all these problems, you need to have learned how to solve them. [E4-Maman D_34:08]

According to the Nimas interviewed, obtaining this knowledge is within the reach of foreigners, but for that they would need to invest the necessary time to study, as they would for any other scientific training.

Bwiti's current situation in Gabon



Nkogué Madeleine, Nima from the village of Mikudi, Ngounié province, leading a Mabandzi rite initiation ceremony. ©Uwe Maas

IS BWITI A RELIGION? According to some informants, the Bwiti tradition differs from the so-called “religions of the book” (mainly Judaism, Christianity, and Islam), as it is not based on faith and dogma but rather on experience. Further, it has no founders but has many prophets. For some it is more of a spiritual path than a religion, although others object and say that it contains many of the virtues and flaws of any other religion. For example, Bwiti initiates are also subject to rules that if broken they will be severely punished for by mystical forces.

To me, Bwiti is not really a religion. It's a way of finding myself, to understand life, to understand what happens in everyday life. It's a way that allows us to connect a little bit with the invisible world. [E8-D.Ditengou_15:39]

For some there is no difference between the world's major religions and Bwiti, because deep down their practitioners seek the same: happiness, health, joy, love, and peace. There are even those who feel they are both Christian and Bwitists, or Jewish and Bwitists, or Muslim and Bwitists. Whereas in churches, synagogues and mosques, the word of God is transmitted through their respective holy books, in Bwiti each person is in direct dialogue with God and the spirit world without the mediation of the scriptures.

The use of iboga, moreover, opens the experiential door directly into this generally invisible world. According to interviewees, these elements are what makes Bwiti a practice of deep spiritual evolution and, therefore, the Bwiti would be higher on a spiritual level. This approach highlights the immanent character given to Bwiti spirituality, which places the sacred within all living things, and within the totality of existence. In the same way, it is a conception that contrasts with faith in an external and transcendent god, who is “above” the believers: the God of Christian doctrine and of the other Abrahamic religions that have recently come from the North. In this regard, some of those who were initially Christians and later became Bwiti initiates say that the latter helps them to know God better and therefore have a deeper understanding of their religion. Bwiti and scripture-based religions could therefore be seen by some as complementary, although many in Gabon may actually think exactly the opposite, and the reality seems to be that if someone from a Christian faith joins Bwiti, for example, they may be expelled from their religious community.

BWITI STATUS. While Bwiti is gaining popularity, respect, and even adherence among foreigners, it is still not very appreciated by the majority of Gabon's Christian population.

Iboga, as an extension of Bwiti, finds itself on the same continuum of respect and contempt. Bwiti practitioners often face rejection and may even inspire fear among devout Christians, especially in urban areas, and some still keep their spirituality secret. However, spirituality in Gabon remains strong, and there is a great interest in it among parts of the urban Gabonese population. This is why there is no fear of a decline of Bwiti in Gabon.

I think that the international interest in iboga is very good for everyone, because we, the Gabonese iboga practitioners to be precise, are considered in Gabon as aliens, as sorcerers, as vampires, as people who do not understand anything, people who have rejected imported religion, the religion of the Book, and who are rooted in tradition. Yet they are not going to be able to burn down an entire ancient library in that way. [E7-S. Mousounda_14:28]

For obvious reasons, many Bwiti practitioners have long mistrusted Western interest in iboga. However, the growing international interest in iboga is currently welcomed by the Bwiti communities we visited, who see in foreigners the arrival of prestigious allies who compensate for the profound stigma surrounding these traditions among the Gabonese in certain parts of the country. In rural areas, in particular, foreign interest is strengthening the prestige of Bwiti spiritual leaders and communities among local people. Additionally, foreigners bring money and resources to the communities where Bwiti initiations are performed and they show respect for the tradition, and therefore are generally very welcome in these communities. According to some interviewees, there is hope that the international interest in iboga will help the government of Gabon give practitioners the status they have long desired.

CONFLICT WITH CHRISTIAN CHURCHES. Bwiti has been under attack for a long time. The French colonial regime treated all the spiritual traditions of its African territories with animosity and even hostility. In Gabon, the Bwiti suffered the same hostile treatment. Later, with the presidencies of Léon M'ba and Omar Bongo, the Bwiti stopped being harassed, but suffered stigmatization, even though both presidents were initiated into this tradition as young men. Efforts to Christianize the Gabonese population have been under way for decades. Catholicism has traditionally allowed a certain degree of tolerance and even syncretism with Bwiti. But the arrival and rapid spread of evangelical churches in Gabon has emerged as the greatest threat to Bwiti. Historically and still today, members of these churches accuse the Bwiti of "witchcraft."

There are different popular versions that say, "Iboga is the devil." In any case, the whole world is discovering iboga and, in the meantime, Gabon is still wondering if it is the devil or if it is God. [E5-Tatayo_18:07]

Accusations of witchcraft seem to be common and to be made in both directions, also affecting Christians in Gabon. Some Bwiti practitioners believe that while in Bwiti, witches are easily identifiable; among the Christian churches there are many who go unnoticed and use black magic to keep sheep in the fold. It is argued that within the churches there are priests who practice magic and dark spiritual arts in order to stay with the faithful and accumulate power. Good and evil is everywhere, they say, and the external aesthetic aspect of Bwiti may seem more savage and indomitable to outsiders. They also claim that the Christian churches do not recognize good in evil and evil in good, and therefore cannot manage it, making it easy for witchcraft to run rampant within these institutions.

Iboga as a traditional medicine

COEXISTING WITH AND COMPLEMENTING MODERN MEDICINE. Spirituality and the use of traditional therapists is actually very common and popular healing modalities in Gabon. A Nganga can help a person in any sphere of their life. In fact, in Gabon modern Western medicine is very commonly combined with traditional, complementary, and alternative medicine (which we will refer to as traditional, cultural and alternative medicine, TCAM).¹⁰ According to interviewees, while modern Western medicine deals mainly with the flesh and physical matter, TCAM deals with the same area, but also, and above all, specializes in matters of the spirit, with iboga and Bwiti as important components of this approach.

According to interviewees who know the Gabonese health system from inside, some Gabonese health care professionals who have been educated under the Western system could be experiencing a love/hate relationship with traditional medicine. This stigma may mean that some doctors will not speak positively about traditional medicine to outsiders, yet some Gabonese health professionals did share with us that they believe that both approaches should be integrated into the health system because even if their methods, objectives, tools, and perspectives on humans and the world may be radically different, they are also complementary. Under this perspective, TCAM is applicable in instances when modern medicine is limited.

Bwiti healing approaches are based on two basic premises: the knowledge of the forest and plants and the intervention of Spirit. According to advanced practitioners, the quality of the methodologies deployed, as well as their positive results, raise this tradition up to the level of science. In Gabon, many people resort to TCAM (and Bwiti, and therefore iboga) to cure spiritual diseases, as they have no doubt that Bwiti (and the ritual use of iboga) can cure some diseases that modern medicine cannot. Therefore, it is thought that hospitals should employ both modern and traditional doctors, as the two are complementary.

There is a form of complementarity, of completeness, in bringing the spiritual dimension [traditional medicine] into a model that is already very, very, very strong in the knowledge of matter [modern medicine]. The ideal is an extremely ambitious goal, and we believe we will achieve it. [E2-N.Aristide_07:57]

Depending on the case, people themselves often decide whether they need a modern doctor or a traditional treatment. For example, TCAM would be considered much more effective in treating issues such as mental health problems, which are not really cured by modern medicine. In cases such as these, people routinely seek out TCAM solutions. Note that addictions are considered within this model as an affliction of the spirit and therefore as a mental health problem.

As a complement to community work and the use of TCAM to treat mental illness, the Ngangas use iboga to seek information (because it is a transmitter of Spirit) about how to proceed with the patient, and learn what additional plants to give the patient. Some informants also shared that they believe that the growing interest in iboga, locally and internationally, may be the key that finally unites or connects traditional and modern medicine.

LACK OF LEGAL STATUS FOR TCAM. The World Health Organization (WHO) estimates that a significant number of people in sub-Saharan Africa rely on TCAM for their primary health care needs, however there remains a lack of research evidence describing the overall picture of TCAM use in the region. Over the past 20 years, the WHO regional office for Africa led the implementation of a regional strategy endorsed by African heads of state in Lusaka, Zambia¹¹ to promote the role of TCAM in African health systems.

TCAM is legal in Gabon. Therefore, to be authorized to harvest iboga in the wild and transport it across the country, a person must be registered as a traditional healer, which provides certain protection and rights. However, the state does not have official legislative or regulatory texts governing the practice of traditional medicine.¹²

Because of this lack of state-level guidance, traditional therapists have organized themselves to advocate for regulated legal status, but have not yet succeeded.

If they [the government] don't even want to recognize our medicines, well we'll keep working on it. People who come to us are treated, cared for, and happy. And that's what we find useful. We are useful to humanity. We bring solutions where there are difficulties. [E7-S.Mousounda_19:50]



Traditional medicine products on display at the Institute of Pharmacopeia and Traditional Medicine (IPHAMETRA), Libreville. ©Ricard Faura

The Plant



Iboga plants (foreground) and an initiation ceremony at a community plantation in Adoué, Ogooué-Ivindo province. ©Ricard Faura

Iboga

WHAT IS IBOGA? When we ask this question in Gabon to people who have relationships with this plant, there are usually different views that are very connected. A common perspective is that iboga is a therapeutic and initiatory medicinal plant. There is also consensus that it is a spiritual medicine of proven effectiveness, and that this is due to the sacred characteristics of this teacher plant.

But what or who is iboga? Iboga is often defined as a person, with his or her own soul, who connects us to Spirit or to the spirit world. We have been able to talk to some people who explain that their community is “made,” or even “built” by the action of iboga. They understand that the whole of human relations worked out over generations in their community has been woven by iboga. The *bois sacré* (a term commonly used for iboga that translates as “sacred wood”) is conceived of as all these things and above all it is considered to be an intrinsic part of the conformation and survival of the community.

This town could never run out of iboga. Why not? Because my husband, our spiritual father, all you see around here in the neighborhood, it is the iboga that did it... This town could never be without iboga. Because without the iboga the town wouldn't really exist. The town exists, all these children there, all the women here exist because of this sacred plant. [E6-N.Mba_23:57]

HOW DOES IBOGA SUPPORT HEALING? The word ‘iboga’ finds its etymological root in the Tsogho language, specifically in the verb ‘boghagha,’ which means ‘to heal.’¹³ Iboga is therefore ‘plant that heals.’ In Gabon, iboga is considered an anti-poison agent that intervenes satisfactorily in various physical, mental, emotional, or spiritual conditions. It is believed that iboga can potentially put out any fire that is not good for the person. The Pygmies affirm that this plant acts against all kinds of poisons. This is why someone who is doing a physical purge with this plant is told that they are also purging toxic thoughts and emotions, as well as spiritual grievances. Therefore, it could be said that the Pygmies have a deep and ancient explanation of iboga’s anti-addiction mechanisms that only became known to the rest of the world when Howard Lotsof made it public in the 1960s.

But how is this healing mechanism understood within Bwiti? When used in initiation or healing rituals, iboga connects with a person’s inner being, with their spirit. According to interviewees, this is a key element that needs to be fully understood if one is to grasp why iboga shows such impressive therapeutic results. It is conceived of as the plant of pure love, a plant that connects us with the deepest honesty of our being. Iboga shows someone their defects and also their good qualities, thereby opening them up to possible new ways of living. It allows people to know themselves deeply.

Iboga awakens your spirit; it really allows you to open many, many reflexes... many senses are awakened, many of them. It develops your sense of observation. It develops your sense of speech. It develops you in the field where you want it to take you. [E10-Rekako_50:11]

In the perspective of those in Gabon who act as stewards of this plant, it does so by purifying and healing the spirit through a constructive review of past experiences, including those that remain at the margins of consciousness. Iboga provides the ability to see clearly the connection between the interior and exterior of one’s being, providing insights into the deeper nature of the suffering or problem that afflicts the individual, their family, or community. It is therefore referred to by some as the “tree of truth.” Within the experience, iboga presents as an ineffable voice revealing aspects of the self that usually go unnoticed, an experience that also includes a strong visionary and moral component.

According to some respondents, it is precisely these elements that explain, in large part, why iboga is so effective in treating problematic use of substances, such as opioids. They insist that if it were simply the alkaloids that treat substance dependency, then the benefits would disappear after the effects wore off. However, this is not the case with iboga, where the effects are often lasting. They suggest that following the experience, a small space remains open in the consciousness of the individual, which allows for the effects to stick and to last.

Iboga is the tree of truth. I even said it yesterday to one of my daughters who asked me about iboga. The entities do not lie. They show you the naked truth, just as it is; it is up to you to learn it as you wish, but they will tell you the truth. [E7-S. Mousounda_55:05]

According to these communities, iboga’s healing qualities for addiction are related to the plant’s spirit. Iboga connects people with themselves and thus makes it possible to deactivate pathologies linked to the spirit.

Iboga helps those who are far away to find themselves within themselves. And it’s a process by which many pathologies fall by themselves. Care is found in the person’s journey toward a better knowledge of themselves. This is the journey. When he has managed to take this step, he is no longer interested in going forward with drugs, alcohol, because he is within himself, very good with himself. That’s the secret of these pathologies in which we’ve been able to see really extraordinary results. [E2-N. Aristide_11:01]

The spiritual abilities attributed to iboga fall outside of Western biomedical models and epistemological paradigms. The therapeutic characteristics of iboga could be described by the Bwiti through the language of what is understood in the West as improvements in mental health and personal growth (i.e. obtaining the skills for living a better life). One of the challenges for this process of cultural translation is that iboga has an effect on the human psyche in a way that is not easily described in biomedical terms, nor is it easily measured with scientific instruments. Among the Bwiti communities, however, it is clear that this plant's healing powers are spiritual and that the strength and direction of the medicine are channeled from the spirit world, or from the Spirit. It is due to these extraordinary characteristics of iboga that therapies with this plant offer healing for ailments (such as addiction) that are not easily treated with other medicines, not even Western psychological or pharmacological therapies. According to these practitioners of traditional medicine, this is why iboga is a suitable complementary medicine.

BETTER THAN WELL According to the Bwiti initiates, a person can decide to do his or her initiation even if they do not have the need for concrete healing. Iboga brings about a greater spiritual awareness and a change in perspective. It offers the opportunity for growth on a psycho-spiritual level and the opportunity to be better than well. Iboga engenders spirituality and fosters connectivity with the visible and invisible world, and thus supports enhancing meaningful relationships with others, community, and the natural world. These improvements point to iboga's therapeutic benefits for the initiate and potential as a tool for preventative health.

In addition, initiation can also be undertaken by someone who wants to understand the nature of family or community problems. According to interviewees, iboga provides the opportunity to find clarity and to understand systemic problems beyond the individual. As noted above, iboga not only connects the initiated person with their deeper self, but opens the door for them to connect with other spiritual knowledge usually beyond their reach.

We do the initiation when we have a problem that breaks our heads, whether my parents are sick, or my son or husband. If there is a serious problem you get initiated, you eat the bois sacré to see what happens. There you go. [E9-M.Cadi_14:30]

Traditional therapists explain that iboga gives them access to knowledge, insight, and clarity to which plants or therapies are most appropriate for each particular patient. It is important to be clear that according to those interviewed, it is not iboga that provides this knowledge, but rather the spiritual forces that connect with the practitioners within the ceremonial space. They also stress that in order to connect with these spiritual influences, the practitioner must first purify themselves by humbly asking the spirits (or the Spirit) for help.

INITIATION DOSAGE. In Gabon, iboga is taken in different forms and quantities, primarily in initiatory and healing settings. According to some Ngangas, the plant contains alkaloids not only in the root bark, but also in the stem, leaves and fruit, although in much smaller amounts. In initiation rites, iboga is consumed in various forms, such as in the form of a type of dumpling where the root bark is combined with other parts of the iboga shrub, along with other sacred forest plants and mixed with honey. A very common method of ingestion is that of consuming dried root bark, either on its own or with water.

There are many ways to prepare it. You can grate it and grind it to eat it fresh. You can also dry it and grind it into powder. [E11-H.B.Elle_17:54:56]

Doses are often measured in teaspoons. However, during our field visit we were able to observe how in a ceremony one initiate (*bandzi*) was given about seven teaspoons, while on

another occasion someone was given up to 42. In both cases the plant produced significant effects and it was noted that both initiates were treated in a controlled and safe way, according to what the ceremony leaders understood would be an appropriate dose. Further, it seems that on some circumstances, such as in a Dissoumba initiation, portions equivalent to 80–100 teaspoons might be eaten. In these initiations, the person is expected to enter a kind of coma, so they are given iboga until no reaction is observed when poked with a needle. Someone who aspires to become a Dissoumba master (a Nima) must overcome this trance. In this specific rite the person must die and be reborn, although only on the psycho-spiritual level. Whereas in some initiations, none or a very small dose of iboga is consumed, in others the initiate will eat iboga until they enter a deep trance state.

Regarding how the size of dose is determined, various factors are considered, such as age, experience, type of iboga, intention, etc. However, interviewees make it clear that the appropriate dose is determined by the Nganga, who is provided this information by Spirit.

What you seem to ignore, what you really ignore, is that initiation is not about the bois sacré. Initiation is not about the wood, but about the Spirit. During initiation, we can't give you a standard amount of iboga. Why? Because it is the Spirit that reveals itself to you. Iboga is only a support that facilitates, a facilitator that allows you to be in contact with the Spirit. So, if the Bwiti allows me, when I talk to it, the Spirit reveals itself to the initiate. It would be difficult for me to measure the amount of wood I should give without the guidance of the Spirit. [E3-SP.Ovono_01:52:19]

MINI OR MICRODOSES. Most informants in Gabon shared that their experience was with high doses of iboga, taken in a ceremonial setting as initiates. In some cases, this was the first and last time they consumed iboga. In other cases, initiated individuals go on to consume low doses when accompanying others in ceremonies. There are some individuals—having been initiated some time ago—who occasionally take a microdose of iboga, outside of ceremonial contexts, either once in a while or according to regular schedule (e.g. every few days).

The motivations for this practice of microdosing are diverse, and may include wanting certain health benefits or to seek insights into issues of concern. When iboga is consumed in small doses it is said to reduce tiredness, hunger, and sleep, and increases attention spans. According to those interviewed, iboga taken in small quantities can also enhance sexual energy and increase virility in men.

I happen to take iboga sometimes, if I'm tired, if I feel like... As an initiate, I can take a dose of iboga to feel better, to have clearer ideas, that happens to me... And I always do very well. [E8-D. Ditengou_08:14]



Iboga fruit, microdose capsules, and half a bottle of iboga rootbark on display at an information meeting on the Nagoya Protocol, organized by the Ministry of Waters and Forests. ©Ricard Faura

Iboga regeneration and sustainability

THE HEALTH OF IBOGA. Iboga has traditionally grown freely and abundantly in the forests of the Congo Basin, and therefore communities have never needed to cultivate it. If they needed iboga, they would go out into the forest and collect it. In some places, people might plant some in their villages, especially on the graves of the dead. In these cases, the plant acts as a protection for the grave and at the same time as a manifestation of the spirit of the person buried there. Healers, for their part, may also have some plants in their yards, however it seems that they usually serve more as protection and to attract spirits than as a source of iboga for rituals. Therefore, although there is some knowledge on how to cultivate on a small scale, there is not actually a strong tradition of iboga cultivation and very little is known about the process. What is known is that iboga grows well in some areas of the forest, while in others it does not thrive. In recent years, iboga in the wild has become more difficult to find for local communities, and the cost of buying it has become inflated. According to several Ngangas interviewed, iboga has indeed disappeared from many of the public forests, however they also shared that it is still abundantly found in certain locations. Information provided by Ngangas pointed to the fact that the ability to harvest or purchase iboga is not the same throughout Gabon. In some parts of the country (e.g. in some southern regions), informants did not experience great difficulty in obtaining iboga, while in other areas the shortage seemed to be more acute. This situation speaks to the need for inventories and in-depth sustainability studies that can provide systematic evidence.

ACCESS TO THE *BOIS SACRÉ* IN URBAN AREAS. While communities in rural areas do not seem to have significant concerns about access to iboga, concerns regarding shortage are higher in the urban areas of Libreville and the Estuary. Even though there is availability in urban areas, quality, quantity, and affordability have been impacted. Although on very rare occasions problems with the quality of the wood are reported, which would have to do with the occasional acquisition of other plants similar to *T. iboga* instead (see details about iboga's false siblings in the following section). However, as far as quality is concerned, none of the Nimas or Ngangas we spoke to were really concerned about this. The greatest concern is around scarcity and rising prices in urban areas.

Based on the perspectives shared by informants, several factors influence iboga availability:

» 1. Illegal harvest for sale in the international market

For several years, the grassroots organization Blessings of the Forest (BOTF)¹⁴ has issued warnings about how international markets are putting pressure on the sustainability of iboga. These markets revolve around two main uses: (1) the use of ibogaine extracted from *T. iboga* for the treatment of problematic substance use, mainly opioid use disorders; and (2) the use of its alkaloid-rich root bark for the development of ceremonies by international psycho-spiritual communities. BOTF has warned of the serious risk of iboga disappearing from the public domain soon if urgent action is not taken. This organization collaborates with the wildlife law enforcement organization Conservation Justice,¹⁵ and together they have documented numerous cases of iboga being illegally harvested in Gabon and traded internationally from Cameroon by individuals, groups and even poaching organizations.

Cameroonian poachers are 90% of the business on the web. Cameroonians go to Gabon, they poach in Gabon, they go back from Gabon, and they say that they sell from Cameroon. [E12a-Y.Guignon_59:48]

Iboga that is being poached is destined for an international market for iboga and ibogaine for addictions treatment and increasingly for use in psycho-spiritual ceremonies. In the urban areas of Gabon, where there is hardly any *T. iboga*, the local market is directly affected as various suppliers and smugglers prefer to sell to an international market that is much more profitable than the local markets of Libreville.

» **2. Police seizing domestic shipments**

According to different sources, transporting iboga internally within Gabon is a challenge. This is attributed by some to the fact that the police systematically intercept many of the shipments of iboga intended for Libreville. All international exports of iboga were suspended in February 2019. However, although local use is still permitted, the amount of iboga that someone can deliver for local use has not yet been articulated. Within this context, when iboga that is being transported domestically is intercepted by police, it is difficult for them to determine whether it is for domestic use or the illicit international market.

You know we're in town. In the city, iboga is extremely rare, so it comes from the interior. Now, on route from the interior, we are more or less harassed by the public authorities who stop the shipments of iboga at the gendarmeries and at checkpoints, often on the pretext that iboga is forbidden. But in the interior it is not forbidden! It should be forbidden outside, not inside! And we have been fighting for a few years, we have organized ourselves to make a petition that can go to the National Assembly or the Senate to have us released, because the suppliers, the iboga harvesters are upset, and they raise the prices, while others are in prison because they are selling again, as they are coming to bring us the supply of iboga that we need. [E7-S.Mousounda_23:11]

Several Ngangas shared that they have experienced incidents with policy during which the officers inform them that they can no longer use iboga or carry it around according to new regulations, which is a misinterpretation of the order. Although the order does not regulate iboga within the country, the reality is that if the police find iboga, they can confiscate it. Several informants indicated that this is indeed happening.

We could say that the existing laws are poorly communicated, explained, and are not understood by police forces on the ground. Since I have been doing my research, we have heard Gabonese traditionalists, particularly those from Libreville, complaining for years about the many arbitrary arrests of iboga transporters from Mayoumba to Libreville, in the name of the fight against iboga trafficking. [E12c-Y.Guignon_20:15]

It is important to note that according to several interviewees, police seizures of iboga have been happening for at least 10 years, long before its export became illegal. What happens with seized shipments is unknown.

» **3. Logging industry**

Although 100% of the forest is publicly owned, more than half is destined for logging concession.¹⁶

Over the past few years, private companies (mainly logging companies) have been fencing off forestlands in order to exploit them intensively. Some of these are where communities traditionally harvested iboga. Often, logging companies will not allow the villagers to enter these ancestral forests to collect medicinal plants. This enclosure of land previously accessible to the community means that the local Ngangas have to walk farther and farther, camping for days in their search for mature iboga for use in their villages.

[And there came] this logging company that occupied all the territory in that area. So, to get iboga from there now you can't, because they forbid people to go and collect iboga from there. [...] We used to be able to go there. And right now, there's an area to the left of [name of place]. That's where iboga is now. And there too, to get there, you can't go and come back easily. You have to go and camp for two, three or four days to get out again. [E13-B.Debola_10:17]

The increasing scarcity of *bois sacré*, especially in and around urban areas, is leading to an awakening of collective awareness around the importance of regeneration and cultivation. One fact is clear: the growing iboga market at both national and international levels cannot be met by existing wild sources.

... *If the whole world wants iboga, there won't be enough for everyone. [E5-Tatayo_01:20:49]*

There is a growing consensus among all actors in Gabon that strategies and actions need to be guided by the mantra: cultivate, cultivate, cultivate.

Cultivation and harvesting of iboga

IBOGA AS A SPECIES. *Tabernanthe iboga*, or simply iboga, is a shrub of the Apocynaceae family that is native to several countries in mostly Central Africa, mainly in or around the Congo Basin—Gabon, Cameroon, Equatorial Guinea, Central African Republic, Republic of Congo, and the Democratic Republic of Congo. Although *T. iboga* is beginning to be cultivated in the private domain in some countries neighboring the Gulf of Guinea, such as Ghana and the Ivory Coast, there is no evidence that it previously grew in the wild in these regions. Although the plant grows naturally in Central Africa, the ceremonial and initiatory use of its root bark is found mainly in Gabonese rural villages, and to a lesser extent in the adjacent regions of Equatorial Guinea and Cameroon, inhabited by the Fang ethnic group. Their ceremonial practices appear to have been adopted more recently. The root bark contains the principal alkaloid ibogaine and 12 other iboga alkaloids.¹⁷

Although the English explorer Edward Bowditch mentioned the medicinal use of this plant in 1819,¹⁸ it was not until 1864 when a French Navy doctor, Griffon du Bellay, documented in scientific literature the use of the root of this plant used as a stimulant and aphrodisiac in Gabon and the Congo.¹⁹ Bellay collected samples of the plant and took them to France, referring to it as “iboga” because of one of its vernacular names in the region. *Tabernanthe* as a genus was later described by Henri Baillon, as early as 1889, and applied to one species, *Tabernanthe iboga*, although he indicated that the plant might end up reclassified as the genus *Tabernaemontana*.



Fruit from different varieties of iboga cultivated in Ebyeng, Ogooué-Ivindo province, by the A2E Association with support of Blessings Of The Forest. ©Ricard Faura

IBOGA VARIETIES. The initial classification of *Tabernanthe* included two species, both confined to Central Africa: *Tabernanthe iboga* and *Tabernanthe elliptica*.²⁰ In 1895, Otto Stapf consolidated the genus by describing seven other varieties of *Tabernanthe*, including *Tabernanthe manii*. Regardless, 125 years after that first taxonomy, its accuracy is questioned by various people, who advocate for the need to perform this taxonomic task again, this time recording the relative quality and quantity of alkaloids in each variety.

Hybridization has been observed between the different so-called species, giving rise to fruit plants whose carpels are more or less fused.²¹

The varieties of *T. iboga* found in Gabon can be distinguished by the naked eye according to different physical qualities, such as the shape of the tree, the color and shape of the fruit, or the flowers. However, in the absence of conclusive taxonomic studies, it has been questioned as to whether all these varieties belong to the genus *Tabernanthe iboga* as it is currently defined. In fact, when the Nganga do their training they are taught which varieties are used for which pathologies and for which intended outcome.

Differences in efficacy, namely the concentration of alkaloids, are often attributed to the environmental conditions within which the plant has grown, rather than to the variety itself.

The efficacy does not change when this variety or the other is taken. If you take this “bois sacré” here, and compare it with the one downstream, you will see that it is very different there. Here we are by the ocean, and there the soil is really pure and differently constituted. We see that it has the same taste... but the virtues are no longer the same. There it is more effective [more alkaloids] and it is a question of the type of soil. [E14-M.Vincent_02:07:56]

We do not know how long an *T. iboga* can live. According to some Ngangas, the lifespan of an iboga plant is 80 to 100 years, whereas according to others the lifespan could also be up to 500 years, although some also claim that each iboga plant is eternal. Some varieties grow to about 6 metres tall, and when they reach this height their roots and branches begin to grow wider.

There is a variety of “bois” for teachers, one for initiations, one for mental pathologies, for the elderly, for very agitated people, for very relaxed people, etc. And they give them names, which are transmitted only among the Ngangas. [E12b-Y.Guignon_02:17]

In terms of cultivation, there are some varieties that are more widely planted than others. However, it seems that no one has yet mastered cultivating multiple varieties simultaneously, and they do not even have a known common name. The cultivation of iboga is an activity that is new for to local communities as well as for farmers, botanists, and entrepreneurs, who are operating in a context of lack of previous studies and the benefit of accumulated experience.

WHO CAN GROW IBOGA? Anyone is free to grow iboga, whether initiated or not, and each new plant is seen as a cause for celebration. However, the uninitiated should be aware that, within the Bwiti tradition, iboga is a sacred tree and tradition states that it should only be handled by individuals who are healthy or “clean of spirit.” Like with many sacred plants, intention and reverence are of utmost importance in the cultivation process.

CULTIVATION METHODS. Although *T. iboga* cultivation has never been developed on a large scale, some processes are known and followed in the villages that may favor the cultivation and multiplication of this plant. Within Bwiti communities there are four categories that describe how iboga is propagated.²²

- » **Wild propagation.** The plant has been propagated on its own with great success. The spread of *T. iboga* is often assisted by various animals that eat its fruit and then spread its seeds throughout the forested territory of the Congo Basin. These animals include forest elephants, baboons, gorillas, porcupines or parrots, with whom the iboga plant has established symbiotic relationships, the details of which remain a mystery.
- » **Propagation using the roots** of an existing plant. Most people who grow iboga just greedily uproot the entire tree, killing it in the process without replanting it. A good practice for the plant regeneration is to always leave a part of the root *in situ* to allow the tree to restore itself and continue to grow strongly.
- » **Cloning from cuttings.** Just like a starfish, a new iboga bush will grow from any part of the stalk. When a broken or cut branch of an iboga bush is planted back into the ground, roots grow from its base and a new tree grows. After three to five years, there are sufficient alkaloids in the bark of the new root and the plant can be harvested again.
- » **Seeds.** The fruit of the iboga plant produces seeds for planting. The fruit are left to rot and the seeds begin to germinate. Once germinated, they are planted in seedbeds, and after they reach around 10cm in height, they are transplanted.

During our visits to plantations, we observed that most growers, in the interest of achieving efficient long-term plantations, were strongly committed to the seed method of cultivation. Growers explained that this method is preferred to that of using cuttings because the resulting plants grow larger root structures. Furthermore, this approach allows for eventual traceability of each plant, ensuring that the resulting plantations are consistently produced and controlled according to national and international quality standards, and with the aspiration of being able to legally sell these plants on the international market.



A2E Association member showing a child how to grow iboga at the Ebyeng community plantation, in the Ogooué-Ivindo province. ©Ricard Faura

PREPARING TO HARVEST. As a sacred plant, iboga is always harvested and handled mindfully. The Nganga must be spiritually healthy and clean at the time of harvest, and therefore undertakes preparatory steps. These practices are more or less strict according

to tradition and rite and may consist of various elements, such as abstaining from all sexual contact, not consuming alcohol or any substance of any kind, and assuming special diets for at least three days beforehand. Likewise, the tools used to cut the iboga are only used for this purpose. Finally, at harvest time, Ngangas ask permission from the plant, speaking to its spirit and connecting to the spirit world to explain their intentions, always with great humility and deep respect.

If we buy the plant, or send someone else to cut it for us, we must make sure we know the procedures of the person who has chosen this work, and you must know that he will talk to the plant before asking it to sacrifice itself and before collecting it. Then, this person should cut the dark part and replant the visible part. [E5-Tatayo_01:26:33]

HARVESTING PRACTICES. Informants shared that when harvesting iboga roots, the plant needs to be at least five years old, although ideally 10 years old, no matter how tall it is. When it is uprooted, as noted above, a portion of the root should be left in the ground, and several cuttings should always be replanted ensuring that it can re-establish. In other words, a plant should not be harvested without making sure that at least one plant will grow in its place. It was emphasized that several cuttings are better than one. Or, if the plant is very large, the harvester can choose to only take part of it, leaving the rest to re-grow, a process that takes about three years.

Position on non-traditional uses

TRANSMISSION OF BWITI TO FOREIGNERS. It is important to know that historically many Bwiti practitioners in Gabon have often been opposed to non-African people – and especially white people – coming to get initiated into Bwiti. This fear and mistrust run deep and is based in historical experiences. It was believed that if white people or other power-hungry foreigners got a hold of this powerful knowledge, they could in the future use it for their own benefit and use it against the various peoples of Gabon, as they have always done in the past with local resources. Therefore, it is understandable that today many still do not wish to reveal many of the secrets of Bwiti to curious visitors.

Bwiti is considered by some as the last hidden stronghold in Central Africa that has not yet been taken by colonial and post-colonial powers, among which, in addition to Europeans and Americans, now also include the presence of Chinese, Indonesian, Arab, and Israeli companies. And their fears are not unfounded. In fact, one of the greatest threats to which iboga—and, with it, Bwiti—is currently subjected comes from the Western and international pharmaceutical corporate world. Big Pharma sees the medicalization of ibogaine as an opportunity to generate profits and shows little interest in establishing mechanisms of solidarity and reciprocity with the peoples and forests of Gabon.

Yet those we spoke with were careful to also state that these issues are not black and white; there are many grey areas in how people in Gabon perceive international interest in iboga. It's time to discern how iboga can be best protected and respected. Currently, a complex challenge for Bwiti practices appears to be from the inside, specifically from thriving, evangelical churches that are thriving. In this new context, foreigners who come to Gabon who are genuinely interested in and respectful of local spiritual traditions, are seen as a new and unexpected allies to help protect ancestral traditions.

Therefore, in general, the Bwiti communities we met in Gabon expressed an appreciation of the growing interest that this plant and its special characteristics have generated internationally. These conversations also painted a picture of iboga in Gabon wherein it is part of a broader framework of knowledge, values, and spiritual practices through different rites, which are known globally as Bwiti. Some spiritual leaders stressed that iboga is for all of humanity, not just for Gabonese people or Bwiti practitioners. However, they add the nuance

that although iboga is for “everyone,” if not worked with carefully in ways guided by ancestral knowledge, it can generate spiritual distress and can even carry great risks to one’s health and life. Therefore, it is recognized that it is within Bwiti that these protocols for how to work with iboga are collected, and which translate a cosmic order that encompasses wholeness.

NON-RITUAL USES IN THE GLOBAL NORTH. In Gabon, iboga is conceived of as a universal medicine that has come into the world to save all of humanity. This is why anyone in the world who is ill can take it without having to be initiated into Bwiti. However, the guardians of the plant claim that in order to use it as a spiritual tool, initiation into Bwiti is recommended. Any unwell person that uses iboga opens a spiritual path, whether they know it or not and this spiritual opening can present as a new and strange experience. Therefore, even when it comes to healing ailments, knowledge holders advise initiation, as it can help in giving meaning to the experience.

According to Bwiti practitioners, the use of iboga in profane ways can generate fears and anxiety when the individual experiences the spiritual dimension. The set and setting provided through initiation provide a safe container within which fears are addressed and dissolved. Traditional ritual use incorporates all the experiences within a spiritual epistemology that brings security and tranquility to the complexity of the experience, which can lead to a greater integration of the experience.

When one has to cure a disease, it is not necessary to come and be initiated into the Bwiti, because iboga is a spirit that came to help all of humanity, and to bring health to disease. [...] But there are certain senses that are going to be awakened after consuming iboga. You will have another way... a new way of seeing things in life. Iboga can lead you to perceive someone who is not healthy internally without you knowing it. That’s why we should explain to you what is happening, because you are going to take iboga, a spiritual medicine, and we need to be able to explain it to you well. [E10-Rekako_38:45]

TREATMENT FOR ADDICTION AND PROBLEMATIC SUBSTANCE USE. In the 1990s, Professor Jean-Noel Gassita, the first Gabonese person to extract ibogaine from *Tabernanthe iboga*, received a visit from Howard Lotsof, the American who discovered the anti-addictive effects of ibogaine. The two forged a great friendship that lasted until Lotsof’s death in 2010. Today, the opiate crisis in the West, and especially in North America, generally is far removed from the Bwiti practitioners in Gabon. However, stakeholders in Gabon are becoming more aware of the growing international interest in ibogaine for treating addiction.

As mentioned above, the Nimas insist that iboga is there to help all of humanity, not just the peoples of Gabon. This implies that iboga is also here to assist people all over the world to overcome problems such as drug addiction. If foreigners in their own countries use iboga and Bwiti knowledge for the good of humanity, they will always be respected and welcomed in Gabon by the Bwiti communities.

That said, there appears to be some controversy and difference of opinion among Bwiti communities about how iboga can be used in non-initiatory and secular contexts. While some believe that any secular use is exempt from the requirements of Bwiti, other more orthodox believers claim that any use of iboga for healing must be done in accordance with Bwiti protocols, whether in Gabon or elsewhere and whether facilitated by a Gabonese or a foreigner.

RITUALS AND PROTOCOLS. Individuals interested in learning how to work with iboga are required to work through several phases of learning, from Bandzi (initiate), to Nganga (spiritual practitioner), to Kambo (guardian of the temple), to Nima (master initiator). This type of learning takes time (10 to 15 years to become a Nima, if not more) and Bwiti communities are concerned about impostors (i.e. individuals who have not undergone adequate training),

as their actions can hurt the reputation of the tradition and practitioners. Spiritual leaders are calling for the formal regulation of the training to become Nganga and Nima. This is also why some Nimas are unwilling to permit the knowledge of Bwiti, and thus teachings around iboga, to be shared if existing protocols are not respected.

We know very well that the only purpose of the [Bwiti] tradition is to awaken the consciousness of human beings. It is a tradition that must be addressed to all of humanity. What I find a little regrettable is that there are Bwiti masters who think our knowledge should not be passed on. Of course it should not be opened so wide, we just have to respect the codes of transmission. [...] But that transmission, of course, is based on codes. These are the codes that we ask everyone to respect. [...] For me, it is forbidden to refuse to transmit, but what is also forbidden is to transmit in disorder. Codes must be respected. [E3-SP.Ovono_01:47]

According to interviewees, anyone (including lay people) can take iboga, but anyone who wants to facilitate rituals or ceremonies with iboga must learn the Bwiti protocols and procedures, otherwise physical and spiritual accidents may occur. Therefore, learning and following what is sometimes called “the procedure” [E14-M.Vincent] is critical. If the procedure is not followed, inappropriate use of iboga by the facilitator can sometimes lead to serious accidents or even the death of the person who is being treated.

ADDRESSING THE SPIRITUAL DIMENSION. Protocols and procedures enable the spiritual master to make key decisions for the person’s mental and physical health, which includes determining whether the person is fit to take iboga, whether they should wait, or if they should abstain forever. The spiritual master (Nima) must be able to find out if, for example, there are “vampires,” spirits that suck our vital energy, and if so, eliminate them prior to the initiation. When doing the spiritual consultation before the initiation, the Nima may consider that it is necessary to do much more work with the Bandzi before continuing, deepening, for example, the internal cleansing process to heal organs, such as the liver or kidneys. During the spiritual consultation that happens in that early moment, the spiritual master will also receive guidance with regard to what medicines need to be given to the Bandzi if signs appear that something is going wrong. There are plants that increase or decrease the effect of iboga, or that can be given to counteract the previous plants.

Despite these perspectives, it is accepted that a secular therapeutic procedure can also be developed in order to avoid accidents, but interviewees warned that a secular procedure would not connect with the mystical, spiritual dimension, which according to them is the most powerful dimension.

AVOIDING BAD PRACTICES AND EXPLOITATION. According to the Spiritual Masters, non-ceremonial uses of iboga can lead to bad practices and exploitation. More specifically, profane commercialization and therapeutic applications of iboga are currently considered to have three negative effects on the Bwiti rites in Gabon and elsewhere:

Incidents in secular contexts. A significant number of negative incidents have occurred in secular contexts that are attributed to the ingestion of iboga, yet we were told that these types of incidents do not usually occur during initiations. In this sense, it is sometimes believed that in order to avoid severe negative incidents, iboga use in the West needs to be treated as a spiritual instrument within the context of a rite of passage, even if not a Bwiti rite.

The profane use the sacred medicine without knowing the consequences of what they are doing... When a profane person gives iboga to a young person [...] they rather take this person without knowing why, and in the case of an accident they do not understand what is happening. What did not work? How can they understand? [E14-M.Vincent_01:43:04]

Commercial exploitation and exportation. Iboga is increasingly being exploited by commercial interests for exportation to international markets. This growing trend is having an impact on the availability, supply, and cost of iboga nationally, putting traditional practices at risk.

Today we applaud the fact that we have a law that says that the exploitation and export of iboga to the outside world must be stopped. You can see that we are happy because we want the state to secure this product for our communities by all possible means before sending it abroad.

[E14-M.Vincent_01:43:04]

Absence of reciprocity in commercial exchanges. Gabonese people are not benefiting from growing international interest and markets. Increasing use of iboga internationally is leading to the extraction of this cultural treasure from Gabon through methods that are often not legitimate and where local people are not benefiting. While international companies seek patents, the communities who have traditionally stewarded iboga are not considered as beneficiaries or even acknowledged.

What do we think about the use of iboga in [international] clinics? We have two positions. The use of iboga in clinics is where the problem is because we realize that iboga is no longer simply used in the ritual setting, but has been transformed within the modern medical setting. We move between two positions [acceptance and rejection] because that is where the problem really is. The first position implies that we benefit from the exploitation of iboga and its use by the lay people. However, this is a problem, because today they have put [iboga] on the commercial circuit, but it has never really had any impact on the Gabonese economic circuit for its preservation in our country.



Two bandzis (initiates) on their journey to the spirit world. ©Ricard Faura

Deaths from iboga?

THE STEP TO THE OTHER WORLD. When we talk about death with Bwiti practitioners, we have to keep in mind that in their tradition, death is considered simply as a change of frequency, a movement of the soul from the physical to the spiritual world. Therefore, when we talk about death, we would rather speak of physical death, since the person's spirit moves to the other world but does not necessarily die with the body. Death is thus a door to the next life, the beginning of another stage, the passage to another state of life.

Death is... how should I put it? Actually death is a door, because after death there is another life. So for us death is not an end in itself. It's a journey to another stage. [E7-S.Mousounda_01:01:57]

We should also keep in mind that the journey we make when we take iboga is also conceived as one that takes us from the physical world to the spiritual world. That is why we can also refer to this journey as a “near-death experience.”²³ The key in all this is to heal ourselves and learn as much as we can from our time in the spirit world, but also to make sure that we return safely to our usual physical reality.

DEATH FROM A SPIRITUAL CAUSE. A perspective that came as a surprise during our field visit was the almost complete consensus among interviewees that it is not possible for someone to die from iboga. According to them, if someone dies after taking iboga, the death can be attributed to other causes of illness that were already present. In other words, if a death occurs, there was a health condition not taken into account and iboga made the problem manifest itself and it was the underlying health condition that caused the death.

Actually, iboga doesn't kill. It doesn't kill. You can take a lot of it; it doesn't kill. The person who dies was already sick, and like people, when they go to the hospital, they can lose their life. But only traditional medicine is blamed for it, saying he was killed by iboga. Iboga does not kill. Iboga is a pure remedy and iboga restores the human body and spirit. And, sometimes we have recorded deaths. But these deaths are not due to iboga. [E7-S.Mousounda_01:01:08]

More specifically, the Spiritual Masters interviewed shared that physical deaths following the ingestion of iboga are linked to the spiritual, and they can occur either when a spiritual condition is hidden from the Nganga or when the people who facilitate the iboga do not have knowledge needed to respond and prevent the death. This spiritual approach to death with iboga may explain how traditional practitioners view the deaths that occur in international drug treatment clinics. Patients who have not fully disclosed recent consumption of substances or previously existing health conditions, or who have harmed others can experience difficulties or risks because of this. Traditional practitioners' perspectives would also suggest that deaths may be attributed to the inability of doctors or iboga/ine facilitators to intervene in matters of the spirit.

But that never happened in our house, because in our house, before taking the commitment to treat someone in our house we do the consultation with the spirits. It is a whole process, and often the candidate is rejected because it is not safe to proceed with initiation [...] If you want to do the opposite of what they [the spirits] say, that is how it comes [death]. But it's not like that with us. Here we respect the recommendations of our spirits after consultation with them. [E1-A.Nlo_44:56]

Several interviewees described two types of spiritual or mystical deaths related to iboga:

- » **Spiritual murder.** When a person visits the spirit world, where the spirits of people who have already died in the physical world dwell, they may encounter people whom they have deeply hurt or even killed in the past. If proper procedure has not been followed, for example, sharing these past events with the Spiritual Masters during the prior consultations, the spirit may kill the person in revenge so that their spirit can no longer return to the physical world.
- » **Spiritual suicide.** Interviewees also shared that, in some cases, there are some people who, when visiting the spirit world and all the entities present there, realize that this is actually the world in which they want to continue living. In these particular cases, they may simply decide to stay there voluntarily, and not return to their physical life.

Preparing to participate in an initiation is an important component of this work. Before the initiate takes the iboga, Ngangas ask the individual whether they have ever committed an evil act against another person, as it is important for them to be aware, especially if the latter is dead. As noted above, this is an important step that interviewees suggested could lead to a negative outcome if missed. The abilities of a Nganga must be good enough to be able to assess who is a good candidate for this work, and when and how it should be done.

DEATH FROM A PHYSICAL CAUSE. There are Gabonese who seek Bwiti treatments only when they are very ill and no longer find solutions in modern medicine or if they do not have money to be treated in private hospitals. It is at this point that they turn to traditional medicine, to Ngangas, and to iboga, as the last glimmer of hope. Some of these people are already in very poor health when they visit the Nganga.

According to interviewees, the problem is that sometimes the Ngangas are not aware of the diseases experienced by patients. Ngangas trust that the spiritual consultation will reveal everything to them but, according to some interviewees, there are patients who simply lie with the hope that the treatment will bring a miracle that modern medicine has denied them. Therefore, there are desperate individuals who come to a Bwiti ceremony to receive treatment and then who die, having not shared the truth about their health conditions. Others are of the opinion that these individuals die because of malpractice by traditional therapists who are poorly trained or do not follow the procedures correctly, since they should have detected the deception during the spiritual consultation prior to the treatment.

Regardless of what viewpoint is correct, it is clear that spiritual consultations do not work in all cases, and that therefore it is always more than advisable to seek all the necessary medical tests (such as an EKG) before taking large doses of iboga, as well as being truthful with the Nganga prior to ceremony.

IBOGA'S FALSE SIBLINGS. With regard to safety, an important issue is the possible misidentification of iboga with other similar plants. Since 1944 “false” iboga has been referenced in the literature, specifically in relation to other species of the same Apocynaceae family, such as *Rauvolfia monbasiana* and *Pterotaberna inconspicua*, both described by Stapf.²⁴ There is another Apocynaceae, known as *Rauvolfia vomitoria*, which also closely resembles the iboga root bark, and which is widely used in TCAM to treat diarrhea, jaundice, venereal diseases, rheumatism, and snake bites, as well as to reduce colic and fever, to calm anxiety or epilepsy attacks, and to lower blood pressure.²⁵

There is at least one certified case of accidental death due to the consumption of fake iboga in a ceremonial context. Professor Jean-Noel Gassita, who is recognized in Gabon for his contributions to botanical science and in particular to the study of *T. iboga*, lost one of his nieces during a Bwiti initiation in Port Gentil. Professor Gassita, with whom we had the privilege of speaking, commissioned an autopsy that determined that the cause of death had been the ingestion of *Rauvolfia mombasiana*, which had been accidentally consumed in place of *T. iboga*. After this unfortunate accident, Professor Gassita requested that the government perform autopsies in all cases of death in ceremonial settings, but the government refused.

Apparently, there are other plants that have similar appearances to the iboga tree when it is not in fruit. Therefore, it is risky for lay people to collect iboga in an unknown place when there is no visible fruit on the plant.

In Libreville there is a large popular market [...] where you can buy and find everything. Iboga is sold there in large quantities, and there are many people who do not understand the product, and indeed intoxication occurs. [E15-C.Mathelin_00:15]

When people with limited knowledge get involved in harvesting or selling iboga, they may inadvertently harvest these false siblings, which can lead to accidents, including death. According to those interviewed, the adulteration of what is being sold as iboga with other, similar plants (even if unknowingly) is not a recent phenomenon. Yet, it may be a more common experience now in urban Gabon because of the aforementioned sourcing challenges.

Markets, regulations, and science

Market and reciprocity

T. IBOGA AS THE PRIMARY PLANT SOURCE FOR IBOGAINE. As discussed, *Tabernanthe iboga* is a sacred plant for dozens of ethnically different peoples who practice Bwiti in Central Africa. Pharmacologically, its psychoactive effects are mostly attributed to one of its main alkaloids, ibogaine. And yet *T. iboga* is not the only plant that produces ibogaine. This alkaloid can be extracted from various plant sources in the Apocynaceae family. Within this family there are at least three genera – *Tabernanthe*, *Voacanga*, and *Tabernaemontana* – that produce ibogaine, as well as other alkaloids closely related to the structure of ibogaine. These other alkaloids can be semi-synthesized and converted to ibogaine relatively easily. Therefore, these species emerge as logical alternatives, psychopharmacologically speaking, to the iboga plant itself.

Nevertheless, *T. iboga* is, by far, the most common product both in root bark form (60%–62% of treatment providers use it), and in the form of ibogaine extracted from it (49%–53%). *Voacanga africana* is far behind *T. iboga* as the primary source, however up to 20% of providers say they have used ibogaine derived from this species on at least one occasion, which is notable. Other varieties, such as *Tabernaemontana* or *Tabernanthe Manii*, also appear as outliers, showing insignificant use.²⁶

TRACEABILITY. Traceability refers to the process that makes it possible to transparently follow a product that comes onto the market, from its origin until it reaches the hands of the consumer. With the growing international demand for iboga root bark and ibogaine, individuals and groups have sought to benefit financially from this demand with Gabonese-grown *T. iboga*. Currently, iboga exported from Gabon is being used by clinics offering iboga or ibogaine treatments and for ceremonial use by psycho-spiritual communities. As noted above, the demand for both ibogaine and iboga is expected to grow in the coming years. Ibogaine production is also likely to shift away from *Tabernanthe iboga* as the main source of extraction, as interested parties seek to optimize other sources that are currently more expensive, such as the *Voacanga africana*, or to develop it using synthetic or semi-synthetic sources.

In the meantime, the reality is that most of the iboga and ibogaine that reaches international markets is made from plants clandestinely harvested from Gabon's forests, and is not traceable.²⁷ This means that it is not possible to know where iboga and ibogaine are being sourced from; current products being sold are of unknown origin. This means that they do not come from legal plantations with licences that are committed to sharing the benefits derived from the use of genetic resources in a fair and equitable manner, as stated in the Nagoya Protocol. Stakeholders have indicated that the creation of plantations producing traceable iboga is an essential first step toward the creation of a sustainable and equitable process.

This plant grows wild in the forests of Gabon. Recently, a few plantations that are cultivating traceable *T. iboga* have appeared in the country, although at the time of writing this report they were still in the process of being recognized as such by the Gabonese government, the first step in seeking authorization for legally export of iboga. Therefore, there are currently no legal and traceable iboga plantations in Gabon or anywhere else in the world that can legally and sustainably meet the demands of the current international market, let alone a growing market.

It is of great importance to ensure that the product is what it says it is, and has been produced where it has been said. Up until 2020, no iboga sourced from Gabon can provide proof of origin, and the reality seems to be that the vast majority of iboga leaving the country is harvested in clandestine ways from the forest, with no guarantee that it will be replanted in the process. This is the main reason why all the iboga that reaches the international market is currently exported illegally from this country.

POACHING AND THE ILLICIT MARKET. The amount of root bark produced by a *T. iboga* plant, as well as the ibogaine concentrated within it, will vary depending on such variables as its age, variety, the place where it was grown, and the weather conditions it has endured, among others. It is estimated that on average a 5-year-old iboga plant can produce about 250 grams of root bark. As the plant ages, this amount increases. It can produce a greater amount of root bark. Therefore, a 20 to 30-year-old plant can produce 1 kg or even 2kg of root bark. In Gabon, iboga root bark is often sold in glass bottles. Each bottle contains about 350 grams of root bark, and in 2020 the average price for a bottle was about 50,000 CFA (75 EUR, or 90 USD). This works out to around 0.22 euros or 0.25 US dollars per gram.

Prices are different within the foreign market. Although there are different suppliers that engage in wild iboga harvesting, with different practices, the role of illegal trafficking networks in Cameroon stand out. These traffickers pay 5,000 CFA francs (7.5 euros or 9 dollars) per plant. They offer the money to local people, often youths, to look for plants in the forests of Gabon, often in the country's natural parks where iboga grows well. These harvesters are not known for replanting the tree once they have uprooted it. The bark of the root is extracted and once it is brought to Cameroon it is packaged and sold to an international reseller for 0.50 euros/g, or 0.60 dollars/g. On the international market the final customer buys it online for an average price of 4.25 euros/g, or 5 dollars/g, although prices vary. Using these figures as a reference (and taking into account that sometimes there can be different intermediaries before reaching the final price on the international market), we see that the benefits of this illegal market for resellers can be extremely large, with margins close to 850%.

These prices illustrate that there is a profit to be made within this black market for iboga, particularly since the demand is growing. There seems to be a disconnect between the headlines in Western media about this new "wonder" substance that can help with addictions and the central question of who will supply this product and who will benefit. Therefore, there is an increasing urgency for this market to be regulated through mechanisms that also ensure that Gabonese people benefit.

Conservation Justice, a wildlife protection organization based in Libreville, has identified several cases where poachers selling protected animals were also found to be illegally exporting iboga. Therefore, the word "poaching" is sometimes also extended to this illegal harvesting of wild iboga, which is often also linked to trafficking of illegal animal products.

... We have detected hundreds of illegal traffickers in wildlife, and illegal loggers, and we see some links to other types of trafficking that are now growing, including iboga. [E16-L.Mathot_01:27]

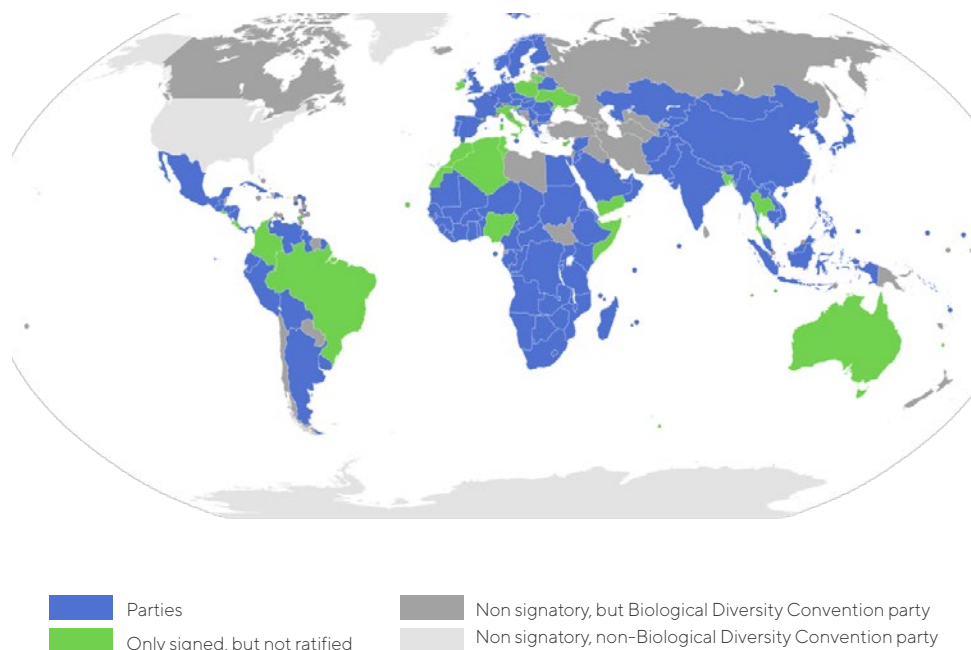
Furthermore, Conservation Justice and Blessings of the Forest (BOTF) have noted several cases of Cameroonian traffickers selling iboga illegally on the internet, along with other illegal products

such as animal skins, minerals, protected trees, etc. These organizations explain that when measuring the risk of trafficking in various illicit items, selling ivory carries a risk level of 10, whereas iboga is 1. Although the profits for selling iboga are smaller, the low risk makes it worthwhile.

THE NAGOYA PROTOCOL. In 2000, the Gabonese government declared iboga to be a national treasure, establishing a foundation for policies that respect traditional medicines and spiritual practices. Its use is therefore registered under customary law in Gabon, and therefore protected by the constitution. A decade later, in 2011, the Government of Gabon took a further step in protecting iboga and its biocultural legacy by ratifying the Nagoya Protocol, which has also been signed and/or ratified by most countries in the world, with the notable exception of the United States, Canada, Russia, Chile, Israel, and a few other Middle Eastern countries. The Nagoya Protocol is an international mechanism that aims to implement the sharing of benefits arising from the use of genetic resources in a fair and equitable way.²⁸

The Nagoya Protocol could help achieve several objectives, including conserving genetic diversity; reducing the technological gap between the global North and the global South; and compensating indigenous and local communities for the use of their traditional knowledge in relation to the use of biological diversity.²⁹

Nagoya Protocol Signatories 2014



Gabon has offered the world a great secret that is the use of iboga. And, we can observe its use today all over the planet, which is good for human beings, and the therapeutic perspectives are bigger and bigger. Iboga appears as a solution to many ills, both psychological and physiological. This gift from Gabon to the rest of the world imposes a minimum of ethics. [E2-N.Aristide_14:15]

The protocol is a basis for international action, however details for its implementation have to be written into the legal frameworks of each country. Despite the fact that it is not being put into practice, the Nagoya Protocol is considered by the Gabonese government as a victory for developing countries.

Benefit sharing was never a priority for the West. And it took us many years to draw up this protocol. So, this protocol, if you like, is a victory for Latin American countries, African countries and Asian countries, which is why this protocol is important to us. [E17-E.Bayani_38:59]

However, the mechanism around which access and benefit-sharing (ABS) revolves poses great difficulties for national implementation. Some of these mechanisms respond to the content or process of development of ABS regimes, such as the scarce human and institutional capacity to design and apply them, or the lack of inclusion of relevant stakeholders in the decision-making processes.³⁰

Others, however, originate from the very text of the Nagoya Protocol, which is at times complex, ambiguous, and controversial.³¹

REGULATION OF THE EXPORT OF IBOGA. To ensure the sustainability of iboga, on February 4, 2019, the Gabonese government issued an order temporarily suspending the exportation of iboga, raw or derived, as a precautionary measure. This action illustrates a policy-level acknowledgement of the impact that the international demand is having on iboga's sustainability and on Gabon's culture and economy. The Gabonese government had been receiving information for several years from civil society warning of the risks of not regulating the illegal trade in iboga. In particular, the alarm was raised by BOTF, which subsequently helped the government in drafting the export suspension order that was finally approved.

The long-term implications of this legal order are not yet clear, but one of the first measures is that the Ministry of Water and Forests (MINEF) will only issue iboga export permits to plantations that adhere to the requirements of the Nagoya Protocol. These include: the plantation will need to prove traceability of their plants; sales can only be made to customers legally authorized in their own country; and that reciprocity mechanisms are put in place with local communities. A year and a half after the order for the temporary suspension of iboga exports appeared (in September 2020), the government signed the first of agreements with an NGO (Blessings Of The Forest). This step has paved the way for the start of legal exports of traceable, sustainable and respectful iboga with its biocultural legacy as of 2021.

Community plantations

COMMUNITY-BASED FOREST MANAGEMENT. All forests in Gabon belong to the state, which historically has ceded its use for private exploitation. Since 2013, Gabon has been implementing a policy of delegating the authority for sustainable forest management to rural communities. The objective is the management of natural resources by the community, while improving living conditions and ensuring the development of villages. During our fieldwork, we visited one such community, where BOTF has promoted the implementation and development of a pilot project for community planting of iboga. In order to provide greater insight into some of the key issues, the following provides an overview of this project and the opportunities it illustrates for the development of other community-based projects that are integrated into nature.

Located in the Ogooué-Ivindo province, the villages of Ebyeng and Edzuameniène are the site of one of the first community forests in Gabon, covering an area of 1,256 hectares and with around 256 people living almost exclusively from the forest. These resources are mainly related to agriculture, collection of non-wood forest products (NWFP), artisanal fishing, hunting, logging, and reforestation.³² When visitors set foot in Ebyeng, one of the first things that often strike them is how exceptionally clean the town is; no plastic or other waste litters the ground or the adjacent forests. But Ebyeng is much more than that. It is a Bwiti-practicing Fang community, very well organized through their own community association.

“A2E” ASSOCIATION. The community land concession is managed by the A2E Association, a legal entity established in October 2002. All members are village residents.³³ All women, men, girls and boys of the community are actively integrated into the association. They are proud that the association’s economic management is open and transparent. Its leaders cannot touch the community’s money, which remains in the hands of the treasurer (always a woman, they pointed out), while the board cannot make decisions without consulting the assembly.³⁴

Our association is really organized. All the decisions of the association are taken by us all together. We have our weekly meetings every Sunday. We have a meeting and try to see what we did during the week, what worked and what didn’t work. We can decide to do something in the next week that can work well, rectifying last week’s mistakes. And the kids and the men and the women... we’re all in our association together, each with his own task and her own way of doing things. [E1-A.Nlo_04:14]



Papa Elie, president of the A2E Association, explaining how iboga plots are placed within the agroforestry project. ©Ricard Faura

IBOGA COMMUNITY PLANTATION. Supported by the community forest management framework in place in Gabon, Conservation Justice and BOTF chose Ebyeng and Adoué and the A2E partnership to develop an iboga plantation pilot project. The initiative is following the guidelines set out through the Nagoya Protocol. These two NGOs have been working together using a framework of intercultural mediation to turn the cultivation of iboga and other traditional plants into an alternative to the poaching industry. To this end, they have developed a community-based iboga plantation that seeks to offer sustainable alternatives to the population, thinking of the future, while also inspiring them to defend their communities against both legal extraction and illegal poaching.

They are a community forest, they are a traditional community, they have already been financed by donors like FAO, they have a model of permaculture and agroforestry. Everything is recorded, everything is tracked. It’s an excellent model for the development of Nagoya. [E12-Y. Guignon_39:53]

At the time of writing, A2E had planted 4,300 plants (3,300 in Ebyeng plus another 1,000 in Adoué). Furthermore, this organization has recently incorporated an existing plantation in a nearby village, Minkoala, which has another 2,000 plants between 20 and 30 years old (those in Ebyeng and Adoué are only about two or three years old). The Minkouala plants are the basis of a conservation project to provide seeds to the rest of the project, to future plantations in other areas and to third parties that may be interested. A2E, as part of their collaboration with BOTF, has medium- and long-term plans to sell their traceable plants within the fair-trade international iboga market. The exportation of iboga is not the ultimate objective, however is a means of raising funds for investing in sustainable community development and ensuring local access to iboga (their own as well as in other regions).

CUTTING THROUGH THE RED TAPE. When we visited Ebyeng, almost everything was in place to supply iboga to the international market. However, the last big obstacle was finding a way through two bureaucratic layers of red tape. Firstly, the association expected the government to verify the traceability of the plants, so that they could be legally exported to international markets that require transparency in this process. Secondly, the association required an export permit from the Ministry of Waters and Forests (or whatever ministry ends up regulating these processes). The community awaited a response from the government about both issues.



Women from the A2E Association working at the iboga community plantation in Ebyeng, in the province of Adoué-Ivindo. ©Ricard Faura

The state has to say that our plantation is traceable. The state has to come and see on the ground that the A2E association has X mature plants, so in X years it will have X plants ready to sell, and that's it. [E11-H.B.Elle_39:53]

In order to obtain an export license, and in accordance with the Nagoya Protocol, the government of Gabon requires all plantation management organizations to implement certain measures, both at the origin and at the destination of the supply chain. Regarding the origin of the plant, questions are asked concerning traceability, the quality of the plant, specific details on the genetic variety, transparency in financing and resource management, the use of pesticides in accordance with regulations, the reinvestment of part of the profits in neighbouring communities, etc.

As for the destination, the producer is required to have a final client prior to export, and to demonstrate that this client will make legal and fair use of the product, which includes recognizing the traditional culture that is at the origin of this plant's use. This final requirement has presented two challenges. On the one hand, most international clients who wish to buy iboga are operating illegally or are not properly regulated in their own countries (e.g. unregulated detoxification clinics, or psycho-spiritual retreat centers in places where iboga is illegal or unregulated). On the other hand, because of the grey areas that they are operating in, many clinics or centers that use iboga or ibogaine do not necessarily want to publicly document their financial statements, and may not have any interest in establishing reciprocal relationships with traditional origins of iboga.

In September 2020, the Ministry of Water and Forests and the NGO BOTF Gabon signed an agreement on the implementation of the Nagoya Protocol on non-timber forest products in general and iboga in particular, for a period of five years. *De facto*, the A2E community association becomes an official pilot project for the development of the iboga sector. At the time of publication of this report, the certificate of origin and the export license are being obtained for the benefit of these NGOs, and only two steps remain to be taken:

- » A visit to the plantations by the government team in charge to verify that they comply with all the production and traceability requirements determined by the Nagoya Protocol.
- » A2E and BOTF-Gabon associations show proof that their international clients comply with all legal requirements for export to their respective countries.

Once these steps are completed, the international sale of legal, regeneratively grown, fair-trade iboga will begin, hopefully in 2021.

The above agreement includes government permission to establish fair and sustainable community plantations, specifically for the international marketing of iboga, but also for other non-timber forest resources. Four villages in the south of the country have received financial support that will enable them start a long-term collaboration with BOTF Gabon, and with the support of the Ministry of Water and Forests. The process opens the door to the establishment of a new type of relationship between local African markets and international markets; a relationship that places the principle of reciprocity at its core.

Large private plantations



*Baby iboga seedlings growing out of the soil substrate.
Bibasse, Woleu Ntem province. ©Ricard Faura*



Iboga nursery with young seedlings waiting to be transplanted. Bibasse, Woleu Ntem province. ©Ricard Faura

PRIVATE PLANTATION. In addition to the community plantations, there are also privately owned and operated plantations that claim to comply with the Nagoya Protocol. The following provides an overview of this second type of approach to iboga cultivation.

We were able to visit one of these plantations located in a village called Bibasse, in the province of Woleu-Ntem, located at the extreme north of the country, near the border with Cameroon.³⁵ According to those responsible for the plantation, it belongs to a joint venture with Gabonese and Israeli capital. Specifically, the company has three investors: the country's presidency, the manager in charge of the land concession, and a large Israeli security company that has won contracts to install and manage an integrated governmental surveillance and security system in Gabon.

This iboga plantation could be the largest in the country, with almost 20,000 plants, a number that will soon rise to 34,000. The plans are to cultivate a large iboga plantation of almost six hectares, which will soon be doubled. The domestication of iboga is very recent and, according to the plantation's manager, understanding how to cultivate at large scale has required years of research.

DOMESTICATION PROCESS. The first step, and one of the most important for its domestication, is to germinate the seeds in a nursery. This process requires finding an ideal soil substrate for this particular plant. Once germinated, several seedlings grow from each fruit and then are moved to a covered hangar where each one will be grown separately in small soil bags. After three months, the seedlings are transplanted carefully outdoors.

In fact, it all started with the observation of an elephant's belly. It was the elephant's belly that allowed us to understand the process because we saw what was going on. I had found Pygmies who told me that some poachers had killed an elephant. The poachers were caught in the forest and the authorities allowed the people to move the elephant. Then they opened the elephant's belly. And what did I see inside? I put my hand in, it was very hot in there, and after studying it we understood why some plants can only germinate if they pass through the elephant's stomach. That's how it happened and it's that biotope there that we wanted to reproduce. [E18b-H. Onva_15:08:58]

ACCESSIBLE AND TRACEABLE. According to its manager, a plantation like this one has multiple goals. Firstly, they believe that cultivating iboga legally on a large scale will ensure

accessibility of iboga in urban areas in Gabon, thus ensuring the conservation of traditional ceremonial and initiatory practices. Secondly, once export permits are obtainable, these kinds of plantations can supply the international market, thereby reducing pressure on wild plants.

The most interesting thing is that the material to be marketed we are talking about has traceability. The investor buys iboga from private plantations, and not from public land, and thus also contributes to the safeguarding of the iboga that is generally extracted from the forests and is not traceable. [E18a-H.Onva_01:23:26]

TECHNOLOGY TRANSFER. The managers of this initiative are working in coordination with the government on a comprehensive approach to develop the implementation of the Nagoya Protocol. They are working to generate a model that favors production of specialized products within Gabon, including the extraction of ibogaine. The goal is to build capacity within Gabon to apply these technologies and then export these products internationally.

The question of the organization of the legal framework for the use of iboga is on the table. It is a priority, but there is another aspect that is also important. Why export the plant? Why not develop everything here? In this village, for example, instead of taking it away and transforming it outside... Why shouldn't the West bring the technology here so that we can transform the plant here? [E18a-H.Onva_01:12:09]

BENEFIT SHARING. In accordance with the Nagoya Protocol, the whole process would need to include mechanisms through which to share the benefits of this global business with Gabon's grassroots communities.

Tomorrow, if we have partners who want to buy root bark, it must be possible to sell this powder, provided that the profits from the proceeds, or part of them, are used for the development of schools, health care, and people in the affected areas. [E18a-H.Onva_01:23:26]

The reciprocal elements of this model look promising. A potential problem arises from its scale. In the wild, iboga typically grows under tall, dense trees, and in coexistence with a large number of other plants and living creatures that inhabit the same ecosystems. This is understandable considering that almost 90% of Gabon's surface is covered by tropical forest. There are also some varieties that have traditionally grown very well on the coast, without having a forest cover on or around them. This is seen on the coastal strip from Mayoumba to Gamba.

Iboga can therefore certainly prosper as an extensive plantation, and this is where the problem lies. Some say that if Gabon were to produce all the iboga the world needs, this would result in deforestation, a result that is simply not worth the cost for communities that depend on forests or for global climate change. Plantation models that can work with existing forests are therefore important to develop.

AGROFORESTRY RESEARCH. The private initiative described here works in close collaboration with IDRC Africa, a Canadian NGO with an office in Gabon staffed by locals.³⁶ IDRC Africa is investing effort in the study and protection of iboga and traditional plants and is developing a pilot project with the Institute of Pharmacopoeia and Traditional Medicine (IPHAMETRA) to study the domestication of iboga within a forest environment.

We are currently introducing iboga into the Ciban Arboretum, a forest that was established in 1886's by the French colonial forest service and became a natural forest. So, in partnership with IPHAMETRA, IDRC Africa is going to reintroduce the plant into this forest to monitor how it behaves when grown under a canopy. [E18a-H.Onva_08:56]

We found that the agroforestry research offers very promising scenarios for the combined action of all the parts involved, including investors, consumers, practitioners, farmers, communities, iboga, and forests.

African science



Laboratory at the Institute of Pharmacopeia and Traditional Medicine (IPHAMETRA), in Libreville. ©Ricard Faura

MODERN GABONESE SCIENCE. Preserving the immense biodiversity of Gabon's tropical forests is vital. The forests of Gabon are considered to be a green gold mine, with a large number of plants that warrant further study. Local scientists are convinced that a large number of these plants contain various unknown alkaloids and potential remedies. There are scientists in Gabon who firmly believe in the immense potential of studying plants and their uses in this country, both for traditional medicine and for pharmacological or commercial use, all of which could be shared with the world. In fact, Gabon has diverse research teams.

The National Centre for Scientific Research (CENAREST) is the technical body that coordinates and implements Gabon's national research policy. Gabon's research centers have full access to the raw material, *Tabernanthe iboga*, among the many other medicinal plants within the local, natural pharmacopeia, as well as the professionals and knowledge required to extract ibogaine. What is lacking is the financial investment in technological instruments and equipment, such as that needed to extract ibogaine in large quantities.

Gabon has the necessary structures and personnel to carry out scientific studies. The problem is that they do not have a budget. [...] But the studies should be carried out in Gabon, which is very important, especially if there are publications. It's important that the Gabonese are involved in this. [...] In any case, there is a willingness to carry out high-level research in the country. Even if it's in partnership with international institutions, the willingness to do it here is important. [E12c-Y. Guignon_07:17]

TRADITIONAL KNOWLEDGE ALIGNS WITH SCIENCE. Scientific research undertaken in Gabon has played a role in the government recognizing the immense value of traditional medical and pharmaceutical knowledge. Professor George Gassita was the first

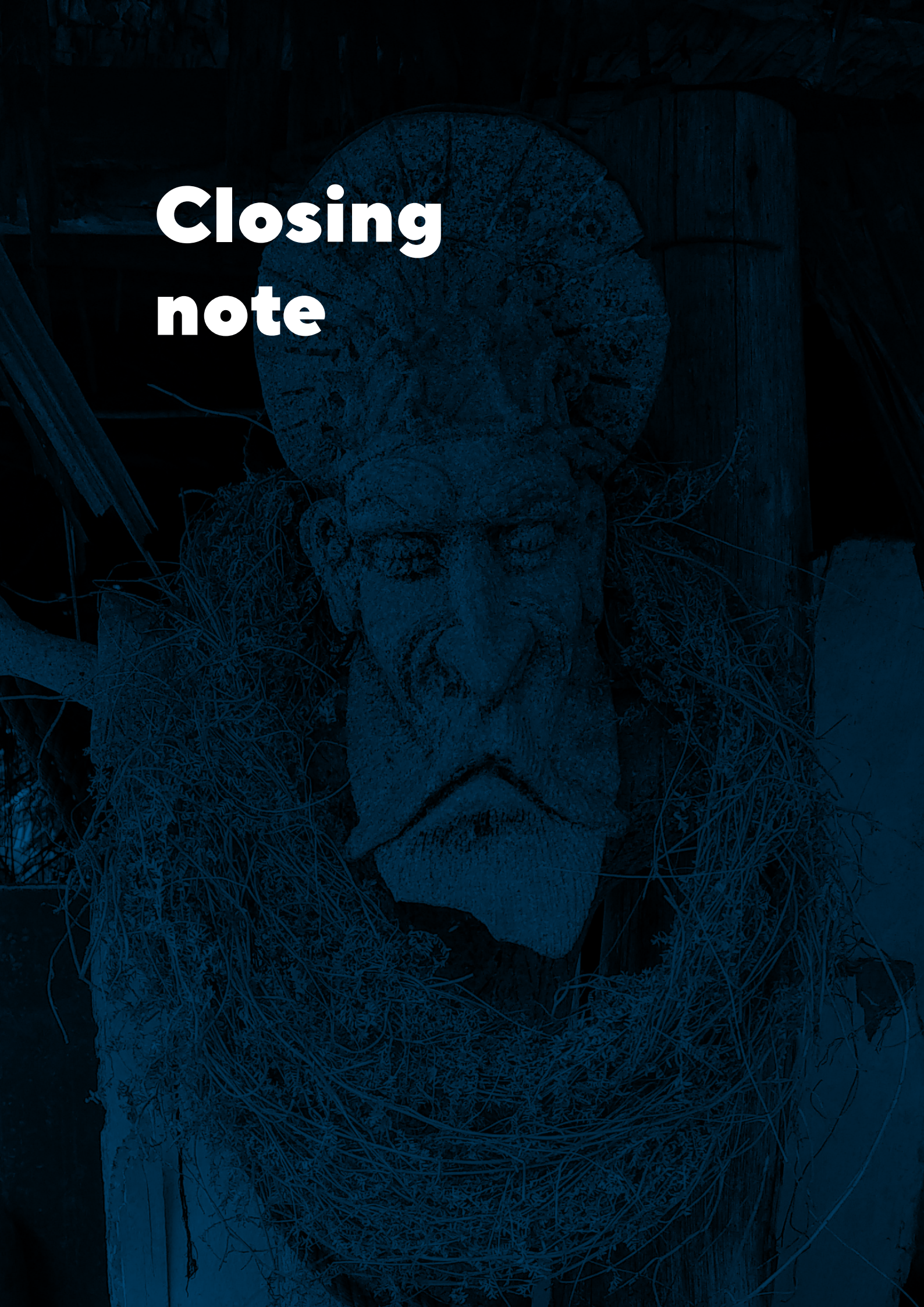
Gabonese scholar to study Ibogaine (in the 1950s) and the first African to be decorated by the Sorbonne School of Medicine in Paris. He proposed the idea of “useful gardens” where Gabonese would be trained to cultivate plants for traditional, complementary, and alternative medicine (TCAM) from the forests and gardens for personal health management. Later on, CENAREST created the Institute of Pharmacopoeia and Traditional Medicine (IPHAMETRA), a significant step forward in the recognition of TCAM as a body of knowledge to be studied, preserved, and valued. Traditional science is proactive, produces medicines, and is recognized and respected by the people who use it. Its practitioners and students are currently seeking to align themselves with modern science and develop deeper understandings of plants, traditions, and potential remedies.

In some of Gabon’s scientific sector, science is considered to have inherited the methods and institutions dedicated to modern theory and the development of laboratory techniques. But in the same way, it is also thought that modern science must integrate in its conception and practice the complex system of traditional knowledge, procedures, and techniques. These have been developed after long processes of study and experimentation, later being transmitted from generation to generation. According to these scientists, the innovative path forward for science and medicine is for studies that take into account traditional epistemological and methodological models. Actually, the gap between the biomedical and traditional models in the study of iboga is basically methodological, even more so epistemological, and therefore ontological.

Deep down, if we continue to work from Western perspectives, we will never get a Nobel Prize for medicine in Africa. We will start to make our scientists look for it [Nobel Prize] only if we address new issues, new perspectives. [E19-H.P.Bourobou_01:18:52]

While biomedical models are based on the premise that research on iboga should seek to understand its physiological and chemical mechanisms, traditional models are based on the premise that the mechanism by which the plant creates effects in the material world is based on an intervention by the Spirit.

Closing note



Closing note

One of the strongest messages to emerge from this project was that iboga speaks to whom-ever wants to connect with and is able to hear it. Another key message was that word of its gifts is travelling—and that those who have stewarded it for generations have knowledge that they would like to share with the world. The Pygmy and Bantu peoples who stewarded this plant and its spirit for so many generations assure us that they are here to share their sacred legacy with the world, and as they say, “Help save humanity.” This message comes with a solid request—that if we accept this help, we must do so with great respect and truly act reciprocally with those who have graciously shared their relationships with this sacred plant so that we can also learn.

While it may not always be obvious, iboga and its main alkaloid, ibogaine, build connections between diverse individuals, groups, and subcultures, bringing us together into a global network of which you are also a part. If an individual, or the whole world, wants to benefit from iboga, they must play their part to ensure that the plants and the cultures that sustain them are protected and regenerated and sacred reciprocity must guide their actions. This report points to some of the ways that this can be done and there will surely be an evolution in what these cross-cultural relationships look like. We have long known that the well-being of individuals is intimately interconnected.

In closing, let us stress the importance of taking care of those who care for us—the plants, ecosystems, cultures, and knowledge holders. May this report contribute worldwide to the greater appreciation of and dialogue about iboga’s extraordinary benefits and how best to protect and honour the plants.

As those initiated in Bwiti say,
“Basse.”



Bibliography & Footnotes

Bibliography

- » Afribone. (2009). "Omar Bongo, le symbol de la Françafrique." *Le Point*, June 8, 2009. [Retrieved on April 7, 2020] <<https://www.afribone.com/?Omar-Bongo-le-symbole-de-la>>
- » Blessings Of The Forest. (2020). [Retrieved on April 7, 2020] <<https://www.blessing-softtheforest.org>>
- » Bodeker, G. & Burford, G. (Eds.) (2007). *Traditional, complementary and alternative medicine: policy and public health perspectives*. Imperial College Press, Londres, p. 472.
- » *Bulletin of the World Health Organization*. (2008). Volume 86, Number 1, January 2008, 1-80. [Retrieved on April 14, 2020] < <https://www.who.int/bulletin/volumes/86/1/07-046458/en>>
- » Carayol, R. (2012). "Armée française en Afrique : renégociation des accords de défense, rompre avec la 'Françafrique'". *Jeune Afrique*, May 16, 2012. [Retrieved on April 7, 2020] <<https://www.jeuneafrique.com/141652/politique/arm-e-fran-aise-en-afrique-ren-gociation-des-accords-de-d-fense-rompre-avec-la-fran-afrique>>
- » Conservation Justice NGO. (2020). [Retrieved on April 7, 2020] <<http://www.conservation-justice.org/CJ/?lang=en>>
- » Delourme-Houdé, M. J. (1944). Contribution à l'étude de l'iboga. *Annales Pharmaceutiques Françaises*. Vol. 430, 1946. [Retrieved on April 7, 2020] <https://www.samorini.it/doc1/alt_aut/ad/delourme-houde-contribution-etude-iboga.pdf>
- » Direction Générale de la Statistique (DGS) du Gabon et ICF International. 2012. Enquête Démographique et de Santé du Gabon 2012: Rapport de synthèse. Calverton, Maryland, USA: DGS et ICF International. [Retrieved on April 7, 2020] <<https://microdata.worldbank.org/index.php/catalog/1560>>
- » E-Geopolis (2018). Fiche Pays Gabon. [Retrieved on April 7, 2020] <http://archive.wikiwix.com/cache/?url=http%3A%2F%2Fwww.e-geopolis.eu%2Fafricapolis%2FRubrique70_Metadata%2FFICHE_PAYS_GABON.pdf>
- » • Faura, Ricard; Langlois, Andrea. (2019). Iboga Community Engagement Initiative. Phase 1 Report. ICEERS. [Retrieved on October 30, 2020] <<https://www.iceers.org/iboga-ine-community-engagement-initiative-phase-1-report>>
- » Fernandez, J. W. (2019). *Bwiti: an ethnography of the religious imagination in Africa*. Princeton, New Jersey: Princeton University Press, 1982, 731 p.
- » Food and Agriculture Organization (2020a). Global Forest Resources Assessment 2015 website. Archived from the original on December 10, 2018. [Retrieved on April 7, 2020] <<http://www.fao.org/3/a-i4808e.pdf>>
- » Food and Agriculture Organization –FAO–. (2020b). Le développement de la foresterie communautaire au Gabon : Cas des Villages Ebyeng – Edzuameniène. [Retrieved on April 7, 2020] <<http://www.fao.org/africa/news/detail-news/en/c/1037345>>
- » Goutarel, R., Gollnhofer, O., & Sillans, R. (1993). Pharmacodynamics and therapeutic applications of iboga and ibogaine. *Psychedelic Monographs and Essays*, 6, 71-111.
- » Hofnung, T. (June 7, 2009). Avec Omar Bongo, c'est un bout de la Françafrique qui disparaît. *Libération*. [Retrieved March 23, 2020]. <https://www.liberation.fr/planete/2009/06/07/avec-omar-bongo-c-est-un-bout-de-la-francafrique-qui-disparait_562718>
- » Kasilo, O. M.; Trapsida, J. M.; Mwikisa Ngenda, C.; Lusamba-Dikassa, P. S. et al. (2010). An overview of the traditional medicine situation in the African region. *African Health Monitor*, 7-15.
- » Kohek, M.; Ohren, M.; Hornby, P.; AlcázarCórcoles, M. Á. y Bouso, J. C. (2020). The Ibogaine Experience: A Qualitative Study on the Acute Subjective Effects of Ibogaine. *Anthropology of Consciousness*, 31(1), 91-119.

- » Leeuwenberg, A. J. (1989). *Series of revisions of Apocynaceae XXIX, XXX; and Tabernanthe*. Agricultural University, 89-4, The Netherlands.
- » Lewis-Lettington, R. J.; Muller, M. R.; Young, T. R.; Nnadozie, K. A.; Halewood, M. y Medaglia, J. C. (2006). *Methodology for Developing Policies and Laws for Access to Genetic Resources and Benefit Sharing*. International Plant Genetic Resources Institute, Rome, Italy. [Retrieved on April 7, 2020] <https://cisd.org/wp-content/uploads/2018/04/Methodology_for_developing_policies_and_laws_for_access_to_genetic_resources_and_benefit_sharing_1150.pdf>. In Silvestri, 2017.
- » Neffati, M., Najjaa, H., & Máthé, Á. (Eds.). (2017). *Medicinal and Aromatic Plants of the World-Africa Volume 3* (Vol. 3). Springer. pp. 253-256.
- » Mboutsou, Charles. (2011). « Hypofécondité gabonaise en question : problème résolu ou mise en jachère d'une préoccupation majeure pour le développement du Gabon ». *Gabonica*, Université Omar Bongo, CEREP, no 5, novembre 2011.
- » N'Nah, N. M. (2006). *Histoire du Gabon: des origines à l'aube du XXIe siècle*. Editions L'Harmattan.
- » Metegue N'Nah, N. y Pourtier, R. "GABON", *Encyclopædia Universalis* [Retrieved on April 7, 2020] <<http://www.universalis.fr/encyclopedie/gabon>>
- » Ott, J., & Hofmann, A. (1997). *Pharmacothéon: Entheogenic drugs, their plant sources and history*. Natural Products Company.
- » Pope, H. G. (1969). Tabernanthe iboga: an African narcotic plant of social importance. *Economic Botany*, 23(2), 174-184.
- » Ravalec, V. & Paicheler, A. (2017). *Bois Sacré: Initiation à l'iboga*. Au Diable Vauvert, 366 p.
- » Rufin, J. C. (2012). "Sarkozy n'a jamais rompu avec la Françafrique". *Jeune Afrique*, March 6, 2012. [Retrieved on April 7, 2020] <<https://www.jeuneafrique.com/142652/politique/jean-christophe-rufin-sarkozy-n-a-jamais-rompu-avec-la-fran-afrique/>>
- » Samorini, G. (2002). *Animals and Psychedelics: The Natural World and the Instinct to Alter Consciousness*. Simon and Schuster.
- » Secretariat of the Convention on Biological Diversity. (2011). *Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilisation*. [Retrieved on April 7, 2020] <<https://www.cbd.int/abs/doc/protocol/nagoya-protocol-en.pdf>>
- » Silvestri, L. C. (2017). Nagoya Protocol: Challenges Arising from a Complex, Ambiguous and Controversial Text. *Anuario Mexicano de Derecho Internacional*, 17, 697-716. <<https://absch.cbd.int/database/VLR/ABSCH-VLR-SCBD-208976>>
- » Stapf, O. (1895). *Iboga Root*. Kew Bull.
- » Strubelt, S., & Maas, U. (2008). The Near-Death Experience: A Cerebellar Method To Protect Body And Soul-Lessons From The Iboga Healing Ceremony In Gabon. *Alternative Therapies in Health & Medicine*, 14(1):30-34.
- » Taylor, W. I. (1965). The iboga and voacanga alkaloids. In *The Alkaloids: Chemistry and Physiology* (Vol. 8, pp. 203-235). Academic Press.
- » Timber Trade Portal (2016). Forest Resources Gabon. [Retrieved on August 16, 2020] <<https://www.timbertradeportal.com/countries/gabon>>
- » World Health Organization (2001). *Legal Status of Traditional Medicine and Complementary/Alternative Medicine: A Worldwide Review*. Genève: World Health Organization, 2001. [Retrieved on August 25, 2020] <<http://digicollection.org/hss/en/d/Jh2943e/4.16.html#Jh2943e.4.16>>
- » World Resources Institute (2000). *A First Look at Logging in Gabon: A Global Forest Watch-Gabon Report*. [Retrieved on August 16, 2020] <http://pdf.wri.org/gfw_gabon.pdf>
- » Xue, C. C. (2008). Traditional, complementary and alternative medicine: policy and public health perspectives. *Bulletin of the World Health Organization*, 86, 77-77. [Retrieved on April 7, 2020] <<http://dx.doi.org/10.2471/BLT.07.046458>>

Footnotes

1. FAOa, 2020.
2. Timbertrade portal, 2016.
3. Fernandez, 1982.
4. Stafford, 2013.
5. Goutarel, Gollnhofer and Sillans, 1993.
6. The World Bank, 2012.
7. Métégué N’Nah and Pourtier, 2020; Mboutsou, 2011.
8. E-Geopolis, 2018.
9. Samorini, 2002.
10. The WHO, in Volume 86 of its 2008 Bulletin, and based on a review by Charlie Changlie Xue (2008), adopts the proposal of Bodeker and Burford (2007), who point out the dichotomous situation of particular forms of traditional medicine being practised in their countries of origin and also in countries to which they have been “imported”. They suggest that the term “traditional, complementary and alternative medicine” (TCAM) is a more appropriate term to describe such traditional therapies globally.”
11. Kasilo, O.M.; Trapsida, J.M.; Mwikisa Ngenda, C. et al., 2010.
12. Direction Générale de la Statistique (DGS) du Gabon et ICF International. 2012.
13. Ravalec & Paichener, 2017; Kohek et al., 2020.
14. See: <https://www.blessingsoftheforest.org>
15. See: <http://www.conservation-justice.org/CJ/?lang=en>
16. World Resources Institute, 2000.
17. Taylor, 1965.
18. Fernandez, 1982.
19. Ott, 1993.
20. Goutarel, Gollnhofer and Sillans, 1993.
21. Stapf, 1895; Pope, 1969; Leeuwenberg, 1989.
22. This list was submitted in writing by Maghanou Vincent and Jean-Moïse Nuirou, Nganga spiritual masters of the Ngondet tradition.
23. Following the research in this field by Strubelt and Maas (2008): “the near-death experience seems to be the result of a dominance of phylogenetically and ontogenetically old neurological structures and brain waves, which are allowed to show their (para)psychological abilities in the absence of cortical dominance. If parts of the neocortex are still active and permit observation and memory performance, the experience can be integrated within the personality.”
24. Delourme-Houdé, 1944.
25. Neffati, Najjaa and Máthé, 2017.
26. Data retrieved from the Iboga/ine Community Engagement Initiative, Phase 1 Report (Faura & Langlois, ICEERS, 2019)
27. Data retrieved from the Iboga Community Engagement Initiative, Phase 1 Report (Faura & Langlois, ICEERS, 2019).
28. Secretariat of the Convention on Biological Diversity, 2011.
29. Silvestri, 2017.
30. Lewis-Lettington, et al., 2006, p. 2. In Silvestri, 2017.
31. Silvestri, 2017.

32. FAOb, 2020.

33. *Ibid.*

34. A2E and BOTF have signed a 5-year mutual agreement contract, according to which the latter committed to finance and advise the former until the *T. iboga* plants are adult and assisting them to sell iboga at the best possible price. Both organizations will share the eventual profits in a percentage of 70% for A2E and 30% for BOTF. Both organizations have committed to grow traceable iboga according to the criteria of the Nagoya Protocol and to legally sell the product as designated by Gabonese regulations. The contract between the two organizations also includes other aspects, such as keeping the village and crop fields clean of plastics and other non-biodegradable waste at all times, having mechanisms for economic transparency and accountability, defining the equal roles of spiritual mothers and fathers, not cutting trees from the forest if they are not properly replanted, etc.

35. The plantation is managed by Mr Hervé Onva, who was kind enough to show us the whole plantation and the entire production process.

36. IDRC Africa is coordinated in Gabon by Mr. Hervé Onva.



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