

***“Tambadoras Dancing with the Palo River:” A***  
**Research Creation Exploration of Traditional Gold**  
**Mining in Colombia**

by  
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## Abstract

This thesis explores the traditional gold mining practices of *Tambadoras*, a group of women from Guachené, Colombia. It reflects on the production of the video documentary “*Tambadoras Dancing with the Palo River*” (2022) as part of a curatorial call for experimental videos and the website [www.tambadoras.com](http://www.tambadoras.com), tracing their development as part of an academic inquiry through the framework of research-creation. Unlike conventional academic research, which often starts with predefined hypotheses and research questions, this project evolved organically from the creative process of producing the video documentary and the website. The video captures the interplay between *Tambadoras*’ traditional mining methods and the Palo River, a body of water essential to their livelihood and cultural heritage. The bilingual website, in English and Spanish, acts as a complementary platform to disseminate this research. The website contains the video and provides historical context, serving as an archive, a pedagogical tool and a connector of generations that allows *Tambadoras*’ voices and stories to be heard by wider audiences. Employing a research-creation methodology defined by Sawhuck and Owen as “research-from-creation” (2012), this study examines the socio-economic implications of *Tambadoras*’ mining methods, the challenges they pose to conventional narratives of artisanal mining, and their alignment with the United Nations Sustainable Development Goals concerning gender equality and clean water and sanitation. This thesis contributes to the discourse on sustainable mining practices, the empowerment of women in artisanal mining, and the preservation of Afro-Colombian cultural heritage.

**Keywords:** Afro-Colombian heritage; artisanal mining; women and mining; research-creation

## **Dedication**

This thesis is dedicated to my parents, Ruth Mina and Daniel Castro, whose love and guidance are my constant inspiration. To my siblings, Diana Ximena and Daniel Humberto, and my cherished friend Alejandro Rengifo, whose unwavering support and belief in me have shaped my journey. All the glory and honour be to You.

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## List of Acronyms

ANM	<i>Agencia Nacional de Minería</i> [National Minerals Agency]
ASM	Artisinal and Small-Scale Mining
CNOA	<i>Conferencia Nacional de Organizaciones Afrocolombianas</i> [National Assembly of Afro-Colombian Organizations]
MAPE	Minería Artesanal y de Pequeña Escala [Artisanal and Small-Scale Mining]
UNEP	United Nations Environment Program
UNESCO	United Nations Educations, Scientific and Cultural Organization

## Glossary

Barequeo	A panning technique used in Colombia to obtain gold with manual tools on the riverbed and shores of the Cauca River and its tributaries.
Batea	A wooden pan used to extract gold from the riverbed and shores of the Cauca River and its tributaries
Tambadoras	A group of Afro-Colombian women that practice barequeo in the Palo River.
Tambar	A word colloquially used by Tambadoras to explain their approach to barequeo.
Sancocho	A soup that often features a variety of meats like chicken, beef, or pork prepared in Colombia
Guaro	A Colombian sugarcane liquor.



*Photo of Doña Gladys in The Palo River (Guachené's local historian). Photo by Maira Cristina Castro Mina.*

# Chapter 1.

## Introduction

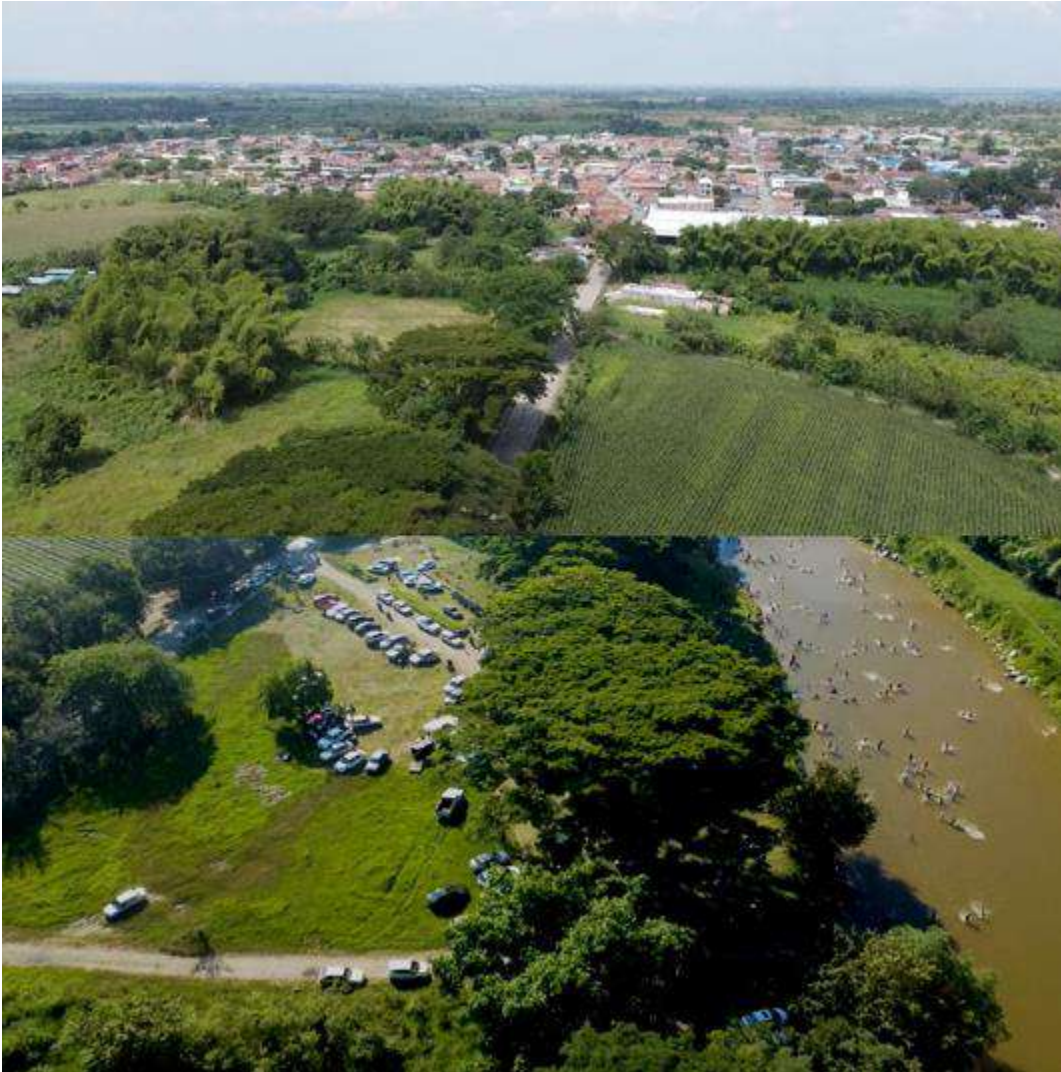


Fig. 1.1 Aerial Photos of Guachené (top- still image from video Tambadoras: Dancing with the Palo River) and the Palo River (below- Photo by Arley Cajado).

Artisanal mining has great historical, cultural, and economic significance in Colombia. It is broadly defined as an activity carried out by an individual or group who extract and collect precious metals, precious and semi-precious stones with manual means and tools without using any mechanized equipment or machinery for their removal. Different forms of artisanal mining have been practiced in the country since

pre-Hispanic times (Ballesteros, 2020). Today, numerous rural communities carry out artisanal or small-scale mining under the umbrella of subsistence mining (Departamento Administrativo de la Función Pública, 2016; Ministerio de Minas y Energías, 2003, 2016). It is estimated that more than 49% of mining in the country comes from artisanal and small-scale mining endeavours (Acevedo, 2024). For many, these activities are the means to secure a basic income (Martínez & Aguilar, 2012). While artisanal mining does not utilize mechanic tools for extraction, small-scale mining involves limited mechanization and exploitation in mines not feasible for large-scale operations (Martínez & Aguilar, 2012). Due to the complexity of regulating small-scale and artisanal mining, at times they can be considered as illegal practices by the state when they do not comply with mining licenses and taxation. Continuing attempts to regulate the mining sector face multiple challenges given that artisanal and small-scale mining are subsistence activities and an important part of communal traditions (Acevedo, 2024; Cremers et al., 2013). These challenges underline the intricate tapestry of artisanal and small-scale mining in Colombia.

In the Pacific Region, where the town of Guachené is located (Fig. 1.1), a group of Afro-Colombian women known practice artisanal mining in the riverbend and shores of the Palo River. *Tambadoras* use a wooden pan (*batea*) to wash the sand from the river and extract gold, a mining practice known also as *Barequeo* as defined by the mining code of 2001 (Congreso de la República de Colombia, 2001). This process not only yields gold but unlike other small-scale mining process that rely on mercury to extract gold, *Tambadoras* do not pollute the environment. *Tambadoras* inherited their mining knowledge from Indigenous communities and their once-enslaved ancestors brought to the region by Europeans in the 16th Century (Landers et al., 2015).

Like other rivers in Colombia, the Palo River holds great historical significance for the people of Guachené. This significance dates back to the colonial era when the Magdalena River, Colombia's main waterway and its tributaries, functioned as the primary mode of inland transportation for enslaved Africans, contraband and gold (Bryant, 2014; Landers et al., 2015; Tubb, 2020). The Palo River and other branches of the Magdalena River were also used by enslaved Africans to escape slavery and establish independent communities in the Pacific Region of the country (Bryant, 2014; Landers et al., 2015; Tubb, 2020). For Doña Gladys, Guachené's local historian, the Palo River not only facilitated the escape from slavery for her ancestors but also served

as a source of sustenance and gold mining (*Doña Gladys*, personal communication, January 2022).

To this date, the Palo River continues to be a lifeline for the community. On a large scale, it is the main source of electrical energy production and supports the sugar cane-agro-industry, the main activity in the region (Alcaldía de Guachené, 2012). At a small scale, it supports the livelihoods of artisanal miners. The Palo River is also an important gathering place where many recreational activities take place. People get together by its riverside to celebrate important anniversaries and traditional festivities (Alcaldía de Guachené, 2020). Despite all the resources that the river brings to the community, residents of Guachené, like other Afro-Colombian communities in Colombia, grapple with poverty, racial inequality, violence and the lack of recognition of their historical contributions to the nation (Arocha, 1992; Arriaga & Villar, 2021; Taussig, 2004). These challenges are even more acute for *Tambadoras*, most of them single mothers who face limited access to education and financial services. For them *Tambar*, as they call their artisanal mining practice, is an important source of income despite that it only amounts for 1 % of the town's economy (Alcaldía de Guachené, 2012). *Tambar* is performed along other economic activities such as agriculture, domestic services, or homemaking.

In the winter of 2021, as I prepared to begin my MA studies in the School of Interactive Arts and Technology (SIAT), I was invited to submit a video to *Boundless*, an experimental short screening program curated by Freya Zinovieff and prOphecy sun. Zinovieff and sun invited SIAT members to submit short videos in response to the site-specific commission *Body as Border: Traces and Flows of Connection* (Zinovieff et al., 2022), a generative video projection which explored the connections between human bodies and bodies of water, such as the Fraser River in B.C. amid the Covid-19 pandemic. Inspired by the significance of the Palo River and *Tambadoras* in my community, I convened a group of friends and family to help me produce the short video documentary *Tambadoras: Dancing with the Palo River* (Castro-Mina, 2022). Through conversations with *Tambadoras* and shots in location, the video captures the interplay between *Tambadoras'* traditional mining methods and the Palo River. It also shows how *Tambadoras* are deeply committed to teaching their traditional mining method to other members of the community, something that I experienced first-hand in the production of the video. I also learned how this practice is not exclusively for women, rather like other



artisanal mining endeavours throughout the country, in Guachené women, men and children practice *Tambar*.

Using research-creation as a framework, this thesis reflects on the creative process involved in the production of *Tambadoras: Dancing with the Palo River*. It describes how the video became an entry point to explore and understand the historical, social and cultural implications of *Tambadoras'* mining practices in my community. Specifically, the challenges they pose to official narratives of artisanal mining in Colombia, and how their practices align with the United Nations Sustainable Development Goals concerning gender equality, clean water and sanitation (United Nations, 2015). Unlike traditional research projects, which often start with a predefined hypotheses and research questions, this project evolved organically from the creative process of producing the video documentary. In other words, it was from the process of developing this documentary that I understood the unique and significant role *Tambadoras* play as traditional keepers and transmitters of knowledge in my community, the challenges they face and the broader implications of their modest mining endeavours to broader discourses on sustainability and gender equity in mining.

For Chapman and Sawchuk research-creation is a mode of inquiry that incorporates creative practice as a critical lens (Chapman & Sawchuk, 2012). While a clear conceptualization of research-creation is still in development and some will argue not desirable, it has increasingly gained recognition within the Canadian and Latin American academies as a valid mode of inquiry (Aceves Sepúlveda, 2023). Research-creation offers value “in generating situated forms of knowledge and new ways of developing and disseminating knowledge” (Chapman & Sawchuk, 2012, p. 69). Many recognize the emergence of research-creation as a disciplinary category as a response to changing economic needs in the university sector and the necessity to support university-based-artists (Chapman & Sawchuk, 2012; MacDonald, 2007). Based on the concept of ‘family resemblances’ Chapman and Sawchuk, delineate four different yet overlapping modes to understand research-creation: research-for-creation, research-from-creation, creative presentations of research and creation as research (Chapman & Sawchuk, 2012). I frame this research using Chapman and Sawchuk’s “research-from-creation” understood by the authors as projects where the research data, research questions and future initiatives are generated from the creative practice (Chapman & Sawchuk, 2012, p. 17).

As a creative output, the video circulates as a short documentary. In the context of my master research the video is the catalyst of the following research questions that serve as guide for this study:

- 1) What are the socio-economic implications of *Tambadoras'* mining methods compared to other artisanal gold mining practices?
- 2) How do *Tambadoras* challenge conventional narratives of artisanal mining?
- 3) How do *Tambadoras'* artisanal gold mining practices align with UN Sustainable Development Goals pertaining to gender equality and clean water and sanitation?
- 4) And how do *Tambadoras* participate in the preservation of Afro-Colombian heritage?

The website functions a multimodal platform that addresses these questions by showcasing *Tambadoras'* mining technique, their relation to the Palo River and their tools highlighting how they transmit embodied knowledge to their community through video, photography, and sound.

These questions emerged organically through the conversations I had with a group of *Tambadoras* while they showed me how to mine the Palo River. Another important part of this project that was generated from the video was the development of a website as a complementary platform to disseminate this research.

This project seeks to contribute to current efforts by Afro-Colombian organizations working since 2002 to foster access and use of analog and digital tools to preserve the ancestral wisdom of Afro descendant peoples. As Yancy Castillo and Dora Inés Vivanco, coordinators of the technical team at *Conferencia Nacional de Organizaciones Afrocolombianas*, CNOA (National Assembly of Afro-Colombian Organizations) declared in a recent interview:

Using digital tools and applications allows us to foster processes of memory or to create memory when there is none, so that we can record and disseminate these

memories to the current and future generations who create meaning in both digital and analog worlds (Arriaga & Villar, 2021, p. 122).

Over the past few decades institutions, organizations and initiatives like CNOA have been established to promote and preserve Afro-Colombian heritage. However, despite these efforts academic studies on Afro-Colombians are still incipient even though Colombia is the country with the third highest percentage of Afro-diasporic population in Latin America and the Caribbean (Díaz, 2006, p. 104). This lack of attention has deep roots in Colombia's colonial and national history. It speaks to how knowledge produced in universities tends to perpetuate official national narratives that obscure the presence of Afro-descendant populations in the region and to an overall disregard of African heritage across academic intuitions in Latin America. It was only in 1991 when Afro-Colombians were recognized and granted full rights as an ethnic group in Colombia (Arocha, 1992).

In terms of academic studies focusing on Afro-Colombian women, Lamus (2009) argues that they are scarce and focused mainly in making visible cultural elements such as their dances, rituals and gastronomy in manner that disregards how these women have been resisting policies that dehumanize them and their families through practicing these traditions. For Betty Ruth Lozano Lerma, member of the Afro-descendent feminist collective *Otras Negras...y !feministas!*, oral traditions and other ways of keeping their communities together are practices of insurgency. She states:

Women of the black diaspora have been builders of worlds through diverse cultural practices (orality and poetry) and social practices (family, friendship, midwifery) with pedagogical and spiritual meanings that today constitute alternatives to predatory hegemonic development and contributions to good living. (Lozano Lerma, 2019, p. 15).

Building from this understanding, I conceptualize the artisanal mining practices of *Tambadoras* as a form of insurgency against extractivist mining practices, a means to acquire economic independence and a significant tradition that keeps our community together. Through the video documentary, the accompanying website, and a response to the guiding research questions this study contributes to the discourse on sustainable

mining practices, the role of women in artisanal mining, and the preservation of Afro-Colombian cultural heritage through a research-creation framework.

## 1.1. Overview of the Chapters

The first chapter introduced my research on the artisanal mining practices of *Tambadoras* and contextualizes its relevance within current research-creation methodologies and efforts to preserve Afro-Colombian heritage. This chapter explains how the research-from-creation modality as defined by Chapman and Sawchuk (2012), serves to generate the research questions that guide this study and how they emerged organically from the creative process of producing a video documentary initially planned for an artistic event.

Chapter two, *Historical Background: Situating Tambadoras within artisanal gold mining*, situates *Tambadoras* within the complex landscape of artisanal gold mining in Colombia. Delving into the histories of mining in the region this chapter also explores the social and economic implications of artisanal gold mining in Afro-Colombian communities. It concludes by connecting *Tambadoras'* practices to the UN's Sustainable Development Goals envisioning how their practices serve as a blueprint for sustainable and gender-inclusive mining practices. In chapter three *Research- Creation and the preservation of heritage* I discuss research-creation and related projects that utilize this framework of inquiry in relation to the preservation of heritage.

In chapter four, *Exploring the practices of Tambadoras through Research- From-Creation* I describe in detail the process of creation of the video documentary and offer a methodological reflection on how this process generated research questions through the frame of research-from-creation. It also describes the design of the website ([www.tambadoras.com](http://www.tambadoras.com)) and how both complement each other to contribute to the preservation of Afro-Colombian heritage. This chapter also includes an analysis of the data collected and the implications and contributions of the study. In the conclusion I consider the overall contributions of this study and I reflect on this research journey, acknowledging its limitations and ethical concerns.

## Chapter 2.

### Historical Background: Situating *Tambadoras* within artisanal gold mining

#### 2.1. Tambadoras



Fig. 2.1 Photo of Tambadoras in the Palo River. Still image from video *Tambadoras: Dancing with the Palo River*.

*Tambadoras*, are a group of Afro-Colombian women who practice artisanal mining in Guachané, a town located in the Cauca department in the Pacific Region of Colombia. They mine gold from *El Palo River* using bateas (wooden pans). They inherited this practice from Indigenous communities and from their once-slaved ancestors who populated this region more than 300 years ago (Arocha, 1992; Poveda, 2017). This region, composed of four departments, Nariño, Chocó, Valle del Cauca, and Cauca, is known for its biodiversity and its mostly Afro-Colombian population who settled it as they fled from slavery, or what is known as “marronage” (Arocha, 1992, p. 30). The waterways that traverse this region provide important economic resources and hold important historical significance. The Palo River is a tributary of the Cauca River, one of the main waterways used by once slaved Africans to escape and established

independent communities, or *quilombos* (Arocha, 1992, p. 30). The Palo River is mined for gold but also is an important gathering place where community traditions are celebrated.

For example, the tradition of gathering by its riverside for a shared meal, particularly during holidays, is a deeply rooted practice within the Guachené community (Alcaldía de Guachené, 2020). This communal experience, highlighted by Sanchez and Sanchez (2012, p. 312), involves the collaborative preparation of *sancocho*, a soup that often features a variety of meats like chicken, beef, or pork. It is served with green plantains, cassava, a zesty spicy sauce, rice, avocados, and grilled ripe plantains. These gatherings are also a time for enjoying beverages like beer and *guaro*, a traditional sugarcane liquor. This culinary tradition, as described by Patiño (2016) carries historical significance dating back to the era of slavery. Upon their arrival to the Colombian Pacific's mines, enslaved Black women were educated by Indigenous people to the native flora, learning which plants and fruits were edible or safe for consumption. Over generations, this knowledge has evolved into a unique culinary heritage, a fusion of Indigenous food traditions and the adaptations made by Black women (Patiño, 2016).



*Fig. 2.2 People preparing sancocho in the Palo River. Photo by Carlos Adrian Lucumi Caicedo.*



*Fig. 2.3 People gathering in the Palo River to amuse themselves. Photo by Arley Cajado.*

The *sancocho de olla* [pot soup] is not only prepared in the Río Palo. This soup is a typical dish that is made in homes as a regular meal. It is also possible to buy it in local restaurants and at the market square. For example, Doña Neira, one of the *Tambadoras* featured in the video, does not only mine gold out of the Palo River, but also sells *sancocho* and *tamales* on Mondays, the local market day in Guachené. Selling food in the market is one of the many ways *Tambadoras* make a living.



Fig. 2.4 Doña Neira selling *sancocho* and *tamales* at the market square. Photo by Daniel Castro.



## 2.2. Artisanal Mining in Colombia

As Ballesteros (2020) notes gold has been exploited since pre-Hispanic times. The Indigenous communities living in regions such as the lowlands of the Cauca and Magdalena Rivers, employed simple and rudimentary gold extraction techniques. The gold was then traded or transformed into intricate pieces reflecting their cultural and artistic significance, often reminiscent of the sun. However, with the arrival of Iberian colonization vast segments of the Indigenous population vanished due to various factors, including illnesses and the harsh labor of mining. This brought about the introduction of enslaved labor from Africa, utilized to expand and establish the colonial dominion in the Americas (Ballesteros, 2020; Cremers et al., 2013). Enslaved individuals from certain African nations possessed knowledge and techniques related to gold exploitation, which they intertwined with the ancestral wisdom of Indigenous populations, and European techniques, shaping unique methods of mineral extraction that evolved over three centuries of colonial rule in America (Ballesteros, 2020; Castro, 2011; J. Cifuentes, 2002). Although several historians have emphasized the significance of studying the amalgamation of techniques, the invention of tools and economic exploitation methods, as well as the continuity and change concerning Indigenous, African, and European labor practices, these narratives remain an understudied facet of the rich tapestry of gold's historical significance in Colombia (Ballesteros, 2020; Espitia, 2019).

According to Cremers et al., (2013) in Colombia, the shift from small-scale to large-scale mining commenced in the late 1800s when the first industrial mining ventures were established. By 1910, approximately 35 mining enterprises were active, primarily concentrated in regions such as Antioquia, Chocó, Cauca, and Nariño (Cremers et al., 2013, p. 47). Nevertheless, small-scale mining persisted as a significant contributor, responsible for around 80 percent of the country's gold production (Veiga & Marshall, 2019). This significance was further amplified when national production reached international price levels, rendering the sector increasingly attractive to artisanal and small-scale miners (Cremers et al., 2013, p. 48). Artisanal practices, especially when involving pollutants such as mercury or cyanide, and criminal exploitation for money laundering, present serious challenges for small mining communities (Cremers et al., 2013; Veiga & Marshall, 2019). For instance, Veiga and Marshall (2019) highlight the inefficiencies of gold recovery through amalgamation, noting that artisanal miners

typically recover only 20 to 30% of the gold present in ore (p. 225). Furthermore, Parra et al., (2015) detail the environmental consequences of the gold rush in the regions of Segovia and Remedios, which now hold one of the highest levels of mercury pollution globally (p. 119). Thus, the social fabric in these areas also suffers, as the lure of gold has attracted violent illegal armed groups, escalating threats and conflicts within these communities (p. 103).

### **2.2.1. Implications of Artisanal Gold Mining in Colombia**

The regulation of mining activities in Colombia has been an ongoing process dating back to the 1800s when it was declared that all mineral deposits are the property of the state (Cremers et al., 2013). The Colombian mining code, outlined in Law 685 of 2001, serves as the prevailing legal framework. However, despite the comprehensive nature of this code, it fails to explicitly define artisanal, small, medium, or large-scale mining operations. The same occurs with the Glossary (an additional document) contemplated in Article 68 of the same law. Veiga and Marshall (2019) highlight that this absence of clear definitions gives rise to a range of legal complexities. Consequently, the process of obtaining mining licenses becomes intricate, leading to a blurring of the lines between artisanal and illegal mining activities. This ambiguity inadvertently leads to the criminalization and stigmatization of artisanal miners (Güiza, 2010, 2013). In this context, I draw from Veiga (1997), who defines artisanal mining as a rudimentary process of extracting gold from ore bodies. Based on this definition, artisanal mining is considered under the umbrella of subsistence mining, which is described as small alluvion mining, also known as *barequeo* (Ministerio de Minas y Energías, 2003). Article 155 of the Colombian mining code of (2001) defines *barequeo* as a manual process of washing sand to extract valuable metals like gold. This definition gains particular significance as it is exactly what *Tambadoras* do.

### **2.2.2. Socio Economic implications of artisanal gold mining in Colombia.**

The economic implications of the artisanal gold mining sector in Colombia are profound and multifaceted. The Colombian National Mining Agency, ANM (2022) reports that in 2021 Colombia ranked fourth in gold production across Latin America,

contributing 7.6% to the nation's total exports and 32.2% to its mining exports. The significance of gold is reflected in its position as Colombia's third-largest export, generating approximately \$87 million in royalties; concentrated primarily in the departments of Antioquia, Santander, Tolima, Huila, Caldas, Nariño, Cauca, and Chocó. The last three departments form the Pacific Region of Colombia, situated in the southwestern part of the country. In the Pacific Region, the largest gold producer is Chocó, contributing with 13.85% of the national gold production. Following is Nariño accounting for 2.62%, while Cauca contribute with 2.34% to the nation's total gold production. Also, it is important to note that Antioquia, located in the Andean Region of the country, is the national largest gold producer with 55.91% (Herrera et al., 2021), gold mining paradoxically coexists with conditions of extreme poverty within artisanal mining communities (Esdaile & Chalker, 2018) and Colombia is not the exception.

This paradox underscores the challenge of inequality that persists despite the apparent wealth of natural resources. Leal (2018) and Vélez-Torres (2016) highlight the alarming levels of inequality in these very departments, indicating that such disparity is even more pronounced in areas characterized by lower educational attainment, limited vaccination coverage, and inadequate public services such as aqueducts and electricity. This phenomenon particularly resonates in Colombian municipalities historically linked to the legacy of slavery (Acemoglu et al., 2012). The necessity of regulating artisanal mining arises not only to counteract social and environmental abuses but also to ensure fair pricing for miners' produce (Martínez & Aguilar, 2012) as well as to make feasible artisanal miners sell their productions at fair prices (Veiga & Fadina, 2020).

Regulation alone, however, can only be effective when complemented by educational initiatives that foster compliance and awareness of sustainable practices. Encouraging miners to adhere to regulations while educating them about cleaner methods of gold extraction is pivotal for building trust relationships with regulated processors and accessing equitable prices (Thomas et al., 2019; Veiga & Fadina, 2020). Such integrated approaches are essential to bridge the socio-economic gaps in mining communities and transform the industry's dynamics.

While the *Tambadoras'* practices are endorsed by the Colombian Mining Code recognized as *barequeo* (Ministerio de Minas y Energías, 2001), their social and economic conditions are significantly more precarious than those of miners employing

chemical methods. My conversations with *Tambadoras* revealed a challenging reality, as they often must sell their gold below market to intermediaries. This puts them at a disadvantage (*Doña Neira*, personal communication, January 2022). During our conversation in the Palo River, they shared how their status as single mothers with limited educational opportunities and lack access to financial resources rendered them socio-economically vulnerable as highlighted by Martínez and Aguilar (2012), who argue that the financial capacity of artisanal mining is zero.



*Fig. 2.5 Doña Neira and I posing with the wooden pan and continuing our conversation about gold mining at her home. Photo by Clemencia Mina.*

### **2.2.3. United Nations and Sustainable Development Goals**

The United Nations Sustainable Development Goals (SDGs) were created upon the achievements of the UN Millennium Development Goals (MDGs), which from 2000 to 2015 reduced poverty, improved health outcomes, and increased access to education (Bergman et al., 2018, p. 2). The culmination of this plan is the 2030 Agenda for Sustainable Development, adopted at the 70th Session of the UN General Assembly on September 25, 2015 (p. 2). This shift marked a universal commitment, gathering unprecedented support from international entities and civil society organizations (p.2). The SDGs constitute a global framework, articulating 17 specific objectives ranging from

eradicating poverty and hunger to achieving gender equality and ensuring access to clean water and sanitation (Bebbington & Unerman, 2018; Bergman et al., 2018). SDG number 5 which refers to Gender Equality and SDG number 6 pointing to Clean Water and Sanitation have been specifically highlighted in this thesis. SDG 5 focuses on empowering marginalized groups, including women and rural populations, emphasizing the political and economic empowerment necessary for sustainable development (United Nations, 2015, p. 22). SDG 6 underscores the need for responsible management of our natural resources, particularly water, and integrating this environmental focus with the development of sustainable communities (United Nations, 2015, p. 23).

I emphasize these two goals in my study as they intersect with the artisanal gold mining practices of *Tambadoras*. These goals help me contextualize the relevance of their practices within broader discourses on gender equity in mining as well as sustainable mining practices. Using the framework of SDG no.5, I discuss the role of women in the artisanal mining sector, including some of their challenges, such as social marginalization while highlighting the significant role they play in intergenerational transmission of knowledge for cultural heritage preservation. Considering that artisanal mining has profound implications for the healthy maintenance of water resources, SDG no. 6 serves to demonstrate how *Tambadoras'* practices are sustainable by highlighting their commitment to keeping the water free of pollutants when they mine gold from the Palo River.

### **2.2.3.1. The role of women in the artisanal mining**

Women play a pivotal role in the artisanal mining industry, an often-overlooked facet of Global South gold mining landscape (Macintyre, 2016; Romano & Papastefanaki, 2020). Their involvement extends beyond mere participation; it is foundational to the industry's functioning and survival as they are tasked with introducing this practice to younger generations. Cremers et al., (2013) offer a comprehensive insight into the roles of artisanal women miners across various Latin American countries, including Brazil, Bolivia, Peru, and Colombia. In the Brazilian Amazonia, women actively participate in small-scale mining. However, their involvement dwindles as mining operations expand, with men taking over, resulting in a notable decline in women's

presence in mining activities (p. 10). In Bolivia, women face considerable limitations, often relegated to roles such as cooks, as certain areas are effectively off-limits to them (p. 25). Conversely, Cremers et al. underscore that, traditionally, in Colombia, women, men, and children have participated interchangeably in the artisanal mining sector (p. 55). However, the number of women is notably lower in more advanced small-scale mining operations employing hydraulic excavators and spoon dredges, echoing the situation in the Brazilian Amazonia (p. 57). Nonetheless, the Cauca and Chocó Departments, women and children artisanal miners coexist with these advanced mining technologies despite their dominance by men (p. 57). Additionally, Cremers et al. highlight the scenario in Peru, where women often bring their children to mining sites due to a lack of alternative childcare options, resulting in their gradual or natural involvement in mining work (p.73). This is another example of intergenerational knowledge transmission.

Furthermore, Hinton et al., (2003) argue that women within artisanal mining communities exhibit diversity, dynamism, and uniqueness. Nonetheless, their roles tend to be universally similar, typically encompassing activities like panning, processing, or cooking. Notably, women's presence is significantly more pronounced in artisanal mining than in the large-scale mining sector. Several factors contribute to this disparity, including discriminatory labor legislation designed to protect women from strenuous tasks, as well as adherence to the breadwinner model, which traditionally casts women as homemakers responsible for domestic duties (Romano & Papastefanaki, 2020), or patriarchal ideologies also play a role in shaping these dynamics (Lahiri-Dutt, 2022).

In terms of challenges, while women artisanal miners in countries like Ghana and the Republic of Congo contend with issues such as strong subordination and gender discrimination (Côté, 2014; Geenen et al., 2022; Koomson-Yalley & Kyei, 2022), without saying it is over, Colombia's experience with discrimination against women in mining has deep historical roots dating back to the early 1900s when the industrial mining era began. During this period, male workers were hired for mineral extraction, while women were only allowed to practice *barequeo* in the mine's disposal waters or to make a living through prostitution (Urrego, 2019, p. 95). Presently, the artisanal mining sector in Colombia faces a host of challenges, including extreme poverty, limited access to financial resources and education (Cremers et al., 2013; Veiga, 1997; Veiga & Marshall,

2019). Additionally, there are instances of communities being displaced by large mining corporations, facilitated by what some perceive as discriminatory state policies like the Mining Code of 2001 or by illegal armed groups (Veiga & Marshall, 2019). For instance, a notable case unfolded in 2019 in Segovia and Remedios, two towns in the Antioquia Department, where the Canadian company Gran Colombian Gold sought military intervention from the national government against artisanal miners. In response, artisanal miners argued that Gran Colombian Gold, as foreigners, disregarded their traditional and ancestral rights to the land (Perdomo & Furlong, 2022). Another significant example occurred in La Toma in 2001, an Afro-descendant community in the Cauca Department. Here, the community faced threats from both the Mining Code of 2001, which declared their traditional mining practices illegal but granted mining licenses to corporations, and paramilitary forces that sought to displace them and assume control over mining activities (Vélez-Torres, 2016). In both cases, in the Cauca and Antioquia Departments, the number of women artisanal miners is significant, and the challenges faced by the artisanal mining sector affects directly the women involved in this practice.

Given this context, I argue that one of the main significances of the role of women in the artisanal mining sector relies on knowledge transmission to younger generations. For example, in Colombia, Black women have played this role since colonization, working in the mines under slavery conditions with their families (Romano & Papastefanaki, 2020). From then to the contemporary period, especially in the Pacific region, the presence of women exceeds that of men (Veiga, 1997).

Drawing on the insights of Lozano Lerma (2019), Black women, especially from the Colombian Pacific, have historically been active agents of change. Despite facing marginalization and violence, they have continued transmitting knowledge to younger generations through poetry and storytelling (p. 193). They also keep vital social practices such as extended family roles, including *comadrazgos* [grandmothering] (p. 194), and health services like midwifery and traditional medicine (p. 210). The familial structure of Black people expands to a wider community framework marked by shared labor and reciprocal support, nurturing age-old customs of unity that are essential for the intergenerational continuity of knowledge (Rodríguez & Rodríguez, 2012, p. 20).

In terms of artisanal mining, Lozano Lerma (2019) highlights that in the Pacific, specialized labor is uncommon, with individuals often engaging in a variety of productive activities responsive to environmental changes. Women participate in all tasks, including *mazamorreo* or *barequeo* – the process of panning for gold in the river – a task shared by both sexes. However, mostly women undertake the dive, a practice where they affix a stone to their waist to sink to the riverbed and gather sand with the pan, they sometimes are restricted due to local beliefs that gold conceals itself during menstruation (p. 206). In the case of *Tambadoras*, their practice differs from the ones Lozano Lerma describes as they do not dive into the water. *Tambadoras'* technique is characterized by a bending motion to gather river sand in their wooden pans.

As shown in the video *Tambadoras: dancing with the Palo River*, another significant role of *Tambadoras*, relates to their strong connection with the land and water. This includes not using chemicals or mercury and thereby minimizing environmental negative impacts. This thoughtfulness resonates throughout the Black communities in the Pacific region, symbolizing collective effort and resilience, traits that have catalyzed significant achievements. For example, in an interview, Francia Márquez, the winner of 2018 Goldman Environmental Prize and current Vice-President of Colombia, provides an overview of her leadership role in guiding a group of community members in a 350-mile march from La Toma to Bogotá to protest illegal mining that was polluting their waters and land with mercury. She also mentions that this action has inspired other communities to denounce illegal mining in their areas (Goldman Environmental Prize, 2018).

### **2.3.3.2. The Artisanal Mining and the Sustainable Development Goal #6**

Artisanal gold mining often involves the use of mercury, a hazardous substance that poses threats to both the environment and human health (Artisanal Gold Council, 2020; Gyamfi et al., 2020). Notably, a report by the UNEP (2012) revealed that artisanal and small-scale gold mining accounted for the largest global demand for mercury in 2011. This demand raises concerns due to mercury's role as a harmful neurotoxin that not only endangers mining communities but also has far-reaching effects on ecosystems, wildlife, and food chains (Human Rights Watch, 2012; UNEP, 2012).



In the context of Colombia, the situation is pressing. As García et al. point out, five municipalities in the department of Antioquia are considered “the world's larger mercury polluter from artisanal gold mining in 2010” (2015, p. 246). This study aimed not only to quantify mercury exposure among artisanal miners but also to foster mercury reduction initiatives through education in the region. Estimates between 2010 and 2013 suggest that interventions have prevented the release of 46 to 70 tonnes of mercury annually into the environment within the targeted towns (p. 251). However, as Esdaile and Chalker (2018) emphasize, achieving a complete cessation of mercury release into the environment requires ongoing efforts, including the development of cost-effective remediation technologies and mercury-free mining techniques.

Nevertheless, both studies were put in doubt by Veiga and Fadina (2020), who argue that these solutions are not necessarily sustainable due to the operating cost of implementing technologies, constant technical assistance to miners, and limitations of authorities to eradicate main polluters (p.1138). Instead, Veiga and Fadina (2020) suggest an alternative model where artisanal miners coexist with responsible mining companies that possess the rights to process gold ore. It is recognized that for such a system to work, these companies must establish and maintain the trust of the artisanal mining communities (p. 1141).

In contrast to these challenges, *Tambadoras* presents an alternative path. Their practices reflect a sustainable approach that abstains from harmful chemicals like mercury. *Tambadoras* employ rudimentary yet effective methods, extracting gold by scooping gravel from rivers and carefully washing it in water. This process not only minimizes harm to the environment but also maintains the natural balance of river ecosystems. Drawing from these practices, we can posit that *Tambadoras'* techniques exhibit a significantly lower environmental impact compared to conventional methods that involve toxic substances.

In this way, *Tambadoras'* mining practices resonate with the objectives of Sustainable Development Goal no. 6, which advocates for universal access to clean water and sanitation (United Nations, 2015). Through their commitment to cause the minimum

impact, the *Tambadoras* actively contribute to the preservation of clean water resources—as it is illustrated in the following images.



*Fig. 2.6 Photography collage illustrating Doña Neira artisanal mining practice without pollutants to the water or environment. Still image from video Tambadoras: Dancing with the Palo River.*

## Chapter 3.

### Research- Creation and the preservation of heritage.

This chapter discusses research-creation and related projects that utilize this framework of inquiry in relation to the preservation of heritage.

#### 3.1. Research-Creation

Research creation is an approach that combines research methods such as empirical, reflexive, philosophical, and analytical as well as creative practices leading to both scholarly and artistic productions (Stévanice & Lacasse, 2018). This definition highlights how research creation bridges the gap between academic research and creative practice by supporting collaborations between artists and scholars on a common project and generate artistic work or generate research from creative outputs. For Chapman and Sawchuk research-creation is a mode of inquiry that incorporates creative practice as a critical lens and is valuable “in generating situated forms of knowledge and new ways of developing and disseminating knowledge” (Chapman & Sawchuk, 2012, p. 69). Using the term “family resemblances” they discuss four overlapping modalities of research creation. The first is *research-for-creation*, which involves activities such as the gathering of material, ideas, concepts, collaborators, technologies, archival research, interviews, literature review, etc., to begin and produce creative work (Chapman & Sawchuk, 2012, p. 15). In contrast, *research-from-creation* generates theory and methodology from the creative process itself (p. 16). In this modality research is not only part of developing stand-alone art projects but they can also be the catalysts for data generation used to understand different dynamics (p. 16). They also highlight *creative presentation of research* to encompass alternative forms of research dissemination ( p. 18). And lastly, *creation-as-research* combines elements from the aforementioned modalities, which “involves the elaboration of projects where creation is required in order for research to emerge.” (Chapman & Sawchuk, 2012, p. 19). Chapman and Sawchuk’s categories are relevant to this thesis project because they help to situate this study initially under the frame of research-from-creation given that this project emerged from the production of a video documentary leading to writing of a thesis and not originally intended as research as it would be the case of creation-as-

research. It was through the process of creation and more specifically from the conversations with *Tambadoras* from where my research questions generated leading to an understanding of other dynamics. Although, as Chapman and Sawchuk argue neither of these modalities has definite boundaries and they all build one another, and in this context the reflection on the process of creating this study enriches the intersections and understandings of these modalities. For example, given that the website was created to complement the video and further its dissemination one could argue that this project also falls into the category of *creative presentation of research*.

As stated earlier, the video was produced as response to the invitation of Freya Zinovieff and prOphecy sun, curators of the short screening program *Boundless*. This screening of short videos accompanied the projection of *Body as Border: Traces and Flows of Connection* at the Urban Screen of the Surrey Art Gallery. Zinovieff and sun sent out a call for short videos that examined the relations between bodies (human and non-human) and bodies of water in the context of the COVID-19 pandemic. At the time I was visiting my family in Guachané before starting my MA studies in SIAT. I immediately thought of the intimate connection between *Tambadoras* and the *Palo River*. An image of them collecting sand from their river, as if they were dancing with the water came to mind. With the help of friends and family, I began to work on the video *Tambadoras: Dancing with the Palo River*, which was screened as part of *Boundless*. As I began to learn about research-creation as a mode of inquiry and similar projects that use digital platforms to preserve cultural heritage, I understood its value and potential beyond the video screening. The video became the point of entry to investigate the cultural, social, and historical relevance of *Tambadoras*.

### **3.2. Digital Platforms and Cultural Preservation and Heritage**

According to UNESCO (2023b), cultural heritage encompasses more than just monuments and object collections. It also includes oral traditions, rituals, social practices, and knowledge related to nature and the universe. UNESCO recognizes that cultural heritage becomes heritage when it is acknowledged as such by the community's members who uphold and pass it on to younger generations. This process instills a sense of identity and continuity, connecting the past, present, and future. Cultural

heritage is shaped by factors like migration, adaptation, and environmental changes, and it transforms as our societies progress UNESCO (2023a).

Preserving cultural heritage offers several advantages, such as promoting environmental sustainability, regional development (Gunlu et al., 2009; Vu Hoang, 2021), and maintaining cultural diversity (Vondolia et al., 2022). For Nikonova and Biryukova (2017) cultural heritage preservation can be achieved through digital technologies. This involves creating digital copies of traditional cultural objects, like exhibitions and databases, or developing electronic forms of new cultural objects, such as 3D artworks or reconstructions.

The *Wrapped in the Cloud* project conceived by Haida/Kwakwaka'wakw artist Meghann O'Brien, scholars Kate Hennessy, Hannah Turner and Reese Muntean, and digital artist Conrad Sly, epitomizes the use digital technology in safeguarding cultural artifacts (Turner et al., 2018). The project centres around the digital reproduction of Sky Blanket, a textile work by O'Brien, exploring how such replicas can foster audiences to uncover new meanings at the crossroads of material culture and digital innovation and across the realms of tangibility, digital existence, temporality, environmental stewardship, and the cultural significance of artifacts. They employed photogrammetry, a method involving extensive high-resolution photography combined algorithmically to create three-dimensional digital renditions (Turner et al., 2018, p. 1). This innovative approach allowed the Sky Blanket to remain with the community for traditional observances. At the same time, its digital counterpart journeyed through galleries and exhibitions in 2022 (Oogjes et al., 2023, p. 2).

Within the Latin American context, Arriaga and Villar (2021) explore a range of cases across the region that bridge cultural traditions and digital innovation. They stress that digital connections cover a wide range of interactions, linking tangible and intangible elements, and have become essential tools for these communities to assert their presence and narratives. One example is the interview with Yancy Castillo and Dora Inés Vivanco of the *Conferencia Nacional de Organizaciones Afrocolombianas* (CNOA) (Arriaga & Villar, 2021). This discussion highlights how the adoption of digital strategies complements longstanding activism, allowing for a broader inclusion of traditionally

marginalized groups, such as women and children, in the ongoing conversation about Afro-Colombian rights and heritage. Castillo and Vivanco explain how their digital initiatives are created in close contact with the communities they serve representing their wishes to communicate and for self-representation (p.120). For instance, CNOA's most recent e-book, *Leilani* featuring stories told by Afro-Colombian children is used by members of the Afro descendant communities that created it, as well as by affiliates of CNOA, teachers in school and other government organizations that work with ethnic populations on issues of self-recognition (p.120).<sup>1</sup> Efforts like this ensure that the rich tapestry of Afro-Colombian culture continues to thrive, engaging a new generation in its preservation and celebration.

I situate this study in conversation with these initiatives to preserve Afro-Columbian heritage by harnessing digital storytelling through photography, video, and web platforms. Digital formats offer advantages for the preservation and distribution of content. They are not as susceptible to the physical wear that analog materials endure, nor are they prone to the loss of information that can occur when analog content is converted to digital (Dimoulas et al., 2014; Soleymani & Russ, 2023). Moreover, in our global connected world digital formats offer easier access. In my community, while not every household has Wi-Fi access, the municipal government offers free Wi-Fi access in the town's main square. Nonetheless, challenges persist in ensuring the long-term integrity and accessibility of digital data, necessitating regular updates and transfers to the latest data preservation systems to circumvent technological obsolescence (Schüller, 2008).

Despite these drawbacks digital tools can be leveraged to capture and immortalize communal memories, especially in instances where traditional transmission has been disrupted as noted by Turner et al. (2018) and Arriaga and Villar (2021).

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<sup>1</sup> <https://convergenziacnoa.org/leilani-historias-contadas-por-la-infancia-afrocolombiana/>



Fig. 3.1 Free digital Wi-Fi port at Guachené's town square. Photo by Lina Lucumi.

### 3.3. Related Work

In creating the website for this project, I studied several web-based projects initiatives that use digital storytelling to preserve cultural heritage.

In *Smillakemeen Crossroads*, Tyler Hagen creates a new web platform based on his 2013 interactive documentary that narrates the history and engagement of an Indigenous community with the St. Ann's Catholic Church.<sup>2</sup> The website allows users to interact with a combination of photographs, muted videos, and narrative audio. In this case the website provides more up to date content to Hagen's documentary.

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<sup>2</sup> [https://www.nfb.ca/interactive/similkameen\\_crossroads\\_en](https://www.nfb.ca/interactive/similkameen_crossroads_en)

Similarly, the website *Morning Star* produced by the Canadian Museum of History serves to provide a wider context on the creation of *Morning Star* (1993), a mural by Indigenous artist Alex Janvier located in the dome of the Haida Gwaii Salon in the Museum. After the creation of the mural, the museum produced an interactive web portal to recount the history of the mural's creation.<sup>3</sup> Visitors to the portal can engage with multimedia elements to dive deeper into the artist's inspirations and the mural's significance as an illustration of the history of the land from a Dene Suline perspective. The portal offers accessibility considerations including close captions and subtitles in videos.

In the *Book of Distance* artist Randall Okita integrates virtual reality and personal narrative to recount the tribulations of a Japanese family during the 1930s in Canada.<sup>4</sup> The experience merges mechanical sculpture, cinema, and theatre, enhanced by family archives, to transport the viewer across time and space.

All these projects were developed by professional artists and with the financial support of cultural and government funding bodies. Some involved the community in the creation of content but not in the production of the portals.

My project takes inspiration from these initiatives, specially by exploring digital storytelling through different formats (photography, video, and sound). However, my project is more modest in its interactive aims and as I will explain involved the community in the making of the video. By weaving digital storytelling with photos and videos, the website that accompanies this project represents the artisanal gold mining practiced by the women of Guachené, Colombia, honouring their stories and heritage.

In this context, the award-winning project *La Batea* photo book by Elizabeth and Stephen Ferry (2017) deserves mention as it represents a significant effort to document artisanal gold mining communities in Colombia.<sup>5</sup> In this project, the authors combine their anthropological insight and photographic skills to narrate the

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<sup>3</sup> <https://www.historymuseum.ca/morningstar/>

<sup>4</sup> [https://store.steampowered.com/app/1245640/The\\_Book\\_of\\_Distance/](https://store.steampowered.com/app/1245640/The_Book_of_Distance/)

<sup>5</sup> <https://elizabeth-ferry.com/gold-2/la-batea-project/>



communities' struggles against external threats and their relationship with the environment. Their multidimensional approach to storytelling invites the reader to interact with both textual and visual narratives. Yet, despite its value, *La Batea* is not a digital project, its audience is not the community that it represents, mostly based in Yalombó, Marmato and Indigenous reserves in Cauca, who need to purchase the volume and many of them grapple with economic constraints and limited educational resources (Bonilla Mejía, 2020; Güiza Suárez & Aristizabal, 2013; Perdomo & Furlong, 2022).

In contrast, my study takes a different approach by hosting a video documentary and other multimedia elements on a freely accessible website, making it available to those it represents, even in areas where internet access is not widespread. Efforts to enhance digital access in Guachené, such as the installation of municipal Wi-Fi ports, further amplify the project's impact, which helps bridge the digital divide. Furthermore, *Tambadoras* is a story told from within the community—offering a unique perspective by those who are intrinsically part of the cultural tapestry of Guachené.

## Chapter 4.

### Exploring the practices of Tambadoras through Research-From-Creation

This chapter describes the process of creation of the video documentary and offers a reflection on how this process generated research questions through the frame of research-from-creation. It also describes the design of the website and how both complement each other to contribute to the preservation of Afro-Colombian heritage. This chapter also includes an analysis of the data collected and the implications and contributions of the study. It critically reflects on the research journey, acknowledging limitations and ethical concerns.

#### 4.1. Tambadoras Dancing with the Palo River

*Tambadoras: Dancing with the Palo River*, is a video documentary that explores the gold mining practices of *Tambadoras'* as an example of an intricate relation between human bodies and bodies of water. It also highlights the importance of their practices as part of Afro-Colombian traditions while also recognizing the importance as a form of sustenance. The initial intent was to capture the interactions of the *Tambadoras* with the Palo River during their gold mining activities. This project began as an artistic exploration, emphasizing the interplay between the miners' physical movements and the river's water flow, through the metaphor of dance. As the project unfolded, the richness of the data collected became apparent. The wealth of information collected on themes that include the history of Guachené, sustainable mining, and *Tambadoras'* cultural traditions and beliefs were the catalyst for transforming the project into an academic research inquiry.

The video was developed using an iterative participatory methodology that consisted of inviting family and friends to collaborate in its production, mainly as photographers and sound recorders. The main source of data for the video was gathered through a series of conversations with two full-time *Tambadoras* (Doña Neira and Doña Nelser) and one local historian and seasonal *Tambadora* (Doña Gladys). These conversations were audio and video recorded and took place in their homes and also in the river, as they

demonstrated and taught me and my family how to mine gold. As the project matured and I had the opportunity to reflect and analyze on the wealth of data collected, I was prompted to explore many of the themes that emerged through the production of the video. These themes gave rise to the research questions that guide this study:

- 1) What are the socio-economic implications of *Tambadoras'* mining methods compared to other artisanal gold mining practices?
- 2) How do *Tambadoras* challenge conventional narratives of artisanal mining?
- 3) How do *Tambadoras'* artisanal gold mining practices align with the UN Sustainable Development Goals pertaining to gender equality and clean water and sanitation?
- 4) How do *Tambadoras* participate in the preservation of Afro-Colombian heritage?

To explore the socio-economic repercussions of the *Tambadoras'* eco-friendly mining techniques, this study was informed by qualitative methodologies, which entailed an analysis of the conversations with *Tambadoras*, active participation in observing their mining activities, and the documentation of these practices through video recording. These activities also informed a response to the second research question concerning the *Tambadoras'* challenges to traditional narratives and their advocacy for the preservation of eco-friendly mining practices.

I am from Guachené, and this intrinsic connection to the community facilitated dialogues, the acquisition of crucial insights, and the ability to closely observe and record the *Tambadoras'* practices. Their practices are steeped in the transmission of knowledge and a spirit of community cooperation. Collecting oral histories through conversations and observing the participation of community members were instrumental in this analytical stage.

To investigate how the *Tambadoras'* practices correlate with the United Nations Sustainable Development Goals, specifically Goal #5 concerning gender equality and Goal #6 focusing on clean water and sanitation, I conducted a review of existing

literature (discussed in chapter 2). This step is complemented by a comparison of our empirical findings with the eco-friendly mining techniques practiced by the Tambadoras.

## 4.2. Video Production



*Fig. 4.1 Cristian Ararat and Daniel Castro testing the drone before starting recording Doña Gladys' demonstrations in the Palo River. Photo by Maira Cristina Castro Mina.*

Guachené is a town located in the northern part of the Cauca Department and consist of 25 adjacent villages (Alcaldía de Guachené, 2020). I was born in the area and grew up in La Cabaña, one of the adjacent villages. My upbringing in La Cabaña was instrumental in building a bridge of trust and familiarity that enabled open engagement with the Tambadoras and other community members (family and friends) who contributed to this project (Fig. 4.1).

The production of the video began as response to the call for entries to "Boundless: Body as Border." This call prompted me to ideate an artistic reflection of our community's connection with the local waterways in the context of the COVID-19

pandemic. The concept of Tambadoras working in the Palo River presented an opportunity to portray the symbiotic relationship between their daily labor and the river. My family's enthusiastic response, particularly from my mother who advised me to talk to Doña Gladys, my cousin Mery, a newly graduated nurse, and my aunt Libia, a fervent preserver of local customs, provided me with the impetus to proceed. As the idea matured in my mind, I wrote a script in Spanish, my first language, and then translated it into English. This script introduces Guachené, the Palo River, and the Tambadoras (Fig. 4.2). I wrote this script while visiting my sister and her newborn child at her place in Santander de Quilichao, a town near Guachené.

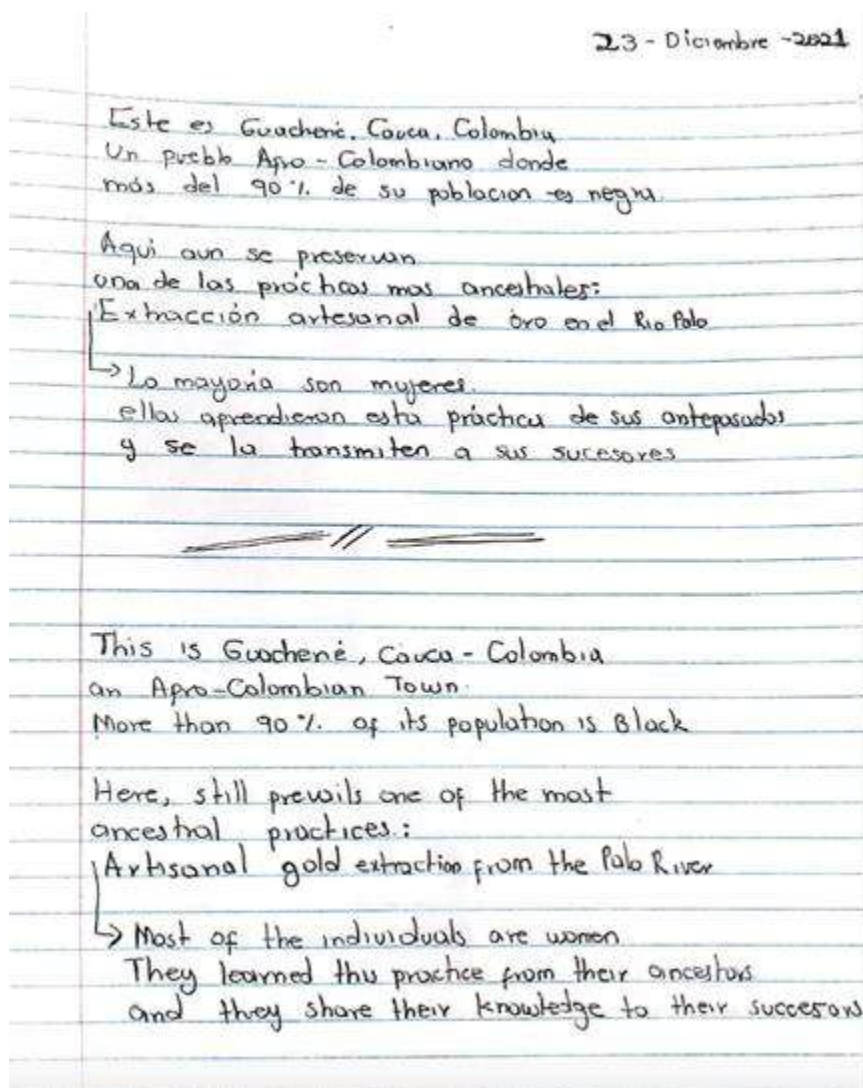


Fig. 4.2 The script in Spanish and English I wrote on December 21, 2021, imagining how to start the video. Sketch by Maira Cristina Castro Mina.

The documentary developed collaboratively with nine community members. Doña Gladys, a well-known local historian, and part-time *Tambadora* narrated Guachené's history and the artisanal mining traditions that have long sustained its people. Doña Nelser and Doña Neira, experienced Tambadoras, demonstrated their skilled practices, embodying an eco-friendly approach to gold mining passed down through generations. Finally, my friends Cristian, Arley, Quevin, and my brother Daniel offered technical assistance and expertise with video recording and editing.

They all participated in the production voluntarily. Their eagerness to participate and refusal to accept payment reflected the communal spirit prevalent in Guachené, where collective goals often transcend individual gain. As a native of this area, I can testify that Guachené is a place where fraternity is not an abstract concept but a way of life, evident in the seamless cooperation that characterized the making of this documentary. Every participant's role was pivotal, and they are credited at the end of the documentary, underscoring the community's collective effort.

The video was produced over two weeks in January 2022. During the first week we conducted interviews and filmed in location and the second week we edited the video. The production phase began with a conversation with Doña Gladys narrating the historical significance of the Tambadoras' artisanal mining and their sustainable practices. This initial conversation was filmed at her home with the assistance of Cristian, a community member actively involved with Afro-Colombian organizations. His role extended beyond camerawork to fostering engaging conversations, asking probing questions, and managing the ambient sound to ensure the clarity of recordings. This initial conversation with Doña Gladys took us to the Palo River. She wanted to demonstrate the traditional process of *Tambar*. In the river, my brother Daniel joined us with his drone to elevate our visual storytelling with aerial perspectives of Doña Gladys's interaction with the Palo River (Fig. 4.1).

A couple of days later, my aunt Libia my cousin Mery and I visited the river to capture other Tambadoras' experiences and stories. That is how we met Doña Neira and Doña Nelser. They not only agreed to record and share their stories with us but also invited us into the mining process, allowing us to capture their practice and experience firsthand how they transmit their knowledge to others.



*Fig. 4.3 Aerial photo capturing me filming the Tambadoras with my cellphone. Still image from video Tambadoras: Dancing with the Palo River.*

On this occasion, Arley operated my brother's drone, documenting the interplay between community, nature, and tradition. In the scenes captured by Arley I am visible filming the Tambadoras, practicing mining and talking to them, all which show moments of direct participation in the mining process signifying a deeper level of engagement between me and the Tambadoras (Fig. 4.3 and 4.4). This direct engagement provided a rich tapestry of data, capturing not only the eco-friendly mining techniques but also the community's profound cultural and spiritual connection to the Palo River.



*Fig. 4.4 Photo capturing me participating in artisanal mining with Tambadoras. Still image from video Tambadoras: Dancing with the Palo River.*

To highlight the locations named in this section and the activities carried out in them as an integral part of the narrative and iterative participatory methodology of our documentary, I want to note that conversations with the Tambadoras were held at: 1) Doña Gladys' residence, where we engaged in a meaningful cultural and local history dialogue, 2) The Palo River served as both a backdrop and a participant, revealing the intimate bond between the community and its natural resources. There, amid the water currents and the Tambadoras' guidance, I learned the traditional methods of Tambar, experiencing firsthand the transmission of intergenerational knowledge (Fig. 4.4) and 3) at Doña Neira's home, where we continued with our conversations about artisanal gold mining (Fig. 2.2).

In capturing these moments, the documentary does more than merely document artisanal gold mining practices. It celebrates the fraternal lifestyle intrinsic to Guachené. It honors the generosity of spirit that flourishes within our community, where knowledge, skills, and resources are shared selflessly—a reflection of a culture that champions unity and collaboration.



Filming on location captured the essence of *Tambar*– the traditional gold mining practice. It was a venture into learning and documenting a skill deeply embedded in the community. This rich experience brought to light the intrinsic values of respecting nature, intergenerational transmission of knowledge, communal harmony, and the spiritual connection between the Tambadoras and the gold they seek (Fig. 4.3 and 4.4)

*A mi Tambar me enseñó mi mamá. Aconsejo a las personas que trabajan en la minería artesanal no echarle químicos al río. A nosotros no nos favorece en nada Tambar con químicos. Se nos pierde nuestro trabajo porque el químico se lo lleva todo (destruye todo). (Doña Neira, personal communication, January 2022)*

*[My mom taught me how to Tambar. I advise those who work in artisanal mining not to put chemicals in the river. It doesn't benefit us at all to Tambar with chemicals. We lose our work because the chemicals take it all away- destroy everything]. (Doña Neira, personal communication, January 2022)*

The final stages of production moved to Quevin's home, where the editing process was carried out collaboratively. I selected images, shots and sounds while Quevin, used Adobe Premier Pro and Photoshop to edit the video. Additionally, we incorporated my voice reading the script I wrote into the beginning of the video (Fig. 4.2). The whole editing process took us around three hours.

### **4.3. Website**

This project extended into the digital space with the development of a website to showcase the Tambadoras' practices and the broader context of their work. Acknowledging my initial unfamiliarity with web development, I embarked on a self-directed learning journey by enrolling in an online course titled 'No-Code Website with Elementor and WordPress'. This comprehensive tutorial, spanning 3 hours and 28 minutes, equipped me with the tools and inspiration needed to conceptualize and design a site map that aligns with our project's essence.

The course provided a wealth of knowledge, from foundational overviews of WordPress and Elementor to hands-on guidance in building a website based on a chosen design proposal. A crucial takeaway from this course was the significance of maintaining an open mind. This adaptability proved invaluable when facing the challenges of realizing a web design that needed to be both visually engaging and functional. The initial design I selected, which featured an unconventional navigation style, proved impractical. It led to a serendipitous pivot towards a more fitting design, one I had initially overlooked. Utilizing pre-designed themes offered a pragmatic and aesthetically pleasing solution, ultimately enhancing the website's user experience.

The final product is a bilingual website with scrolling navigation, rich in audio-visual content. It is structured into sections that delve into the stories of the Tambadoras, the significance of the Palo River, the use of the wooden pan in gold extraction, the video documentary “Tambadoras: Dancing with the Palo River,” the overarching context of this project, and a brief history of artisanal gold mining in Colombia (Fig. 4.14) To foster greater accessibility, particularly for the Tambadoras and local community members, Spanish audio narratives complement the visual content in the Context and History sections (Fig. 4.19).

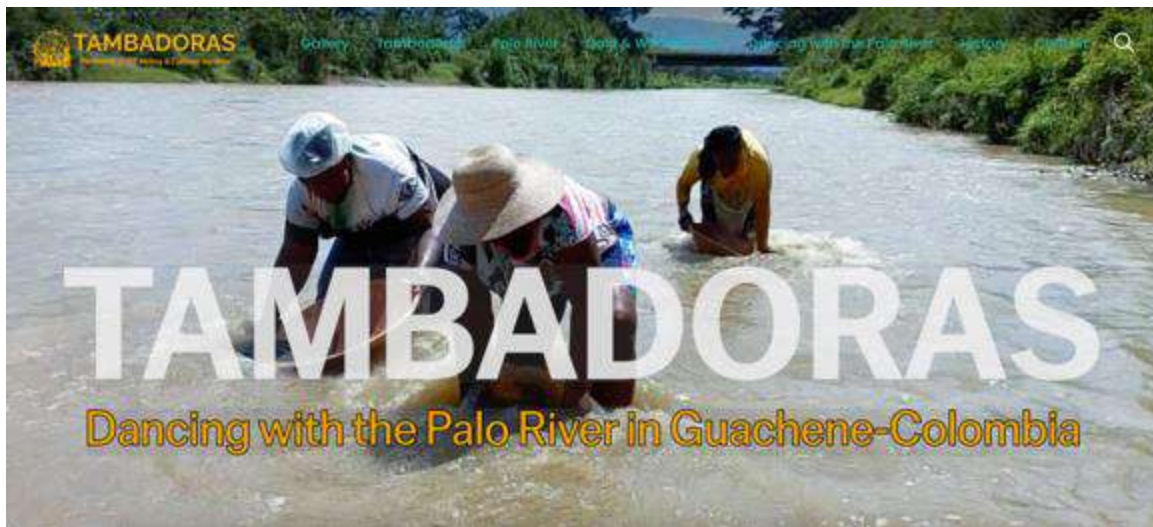


Fig. 4.5 Screen shot of homepage. The website is found on [www.tambadoras.com](http://www.tambadoras.com) Design by Maira Cristina Castro Mina.

### 4.3.1. Ideation

The initial phase of the website's design process involved the creation of various sketches, each representing a unique vision for the digital platform. These early designs were crucial in visualizing potential navigational flows and layout arrangements. The initial sketches ranged from ambitious, intricate layouts to more simplistic, user-friendly interfaces (Fig. 6-12).

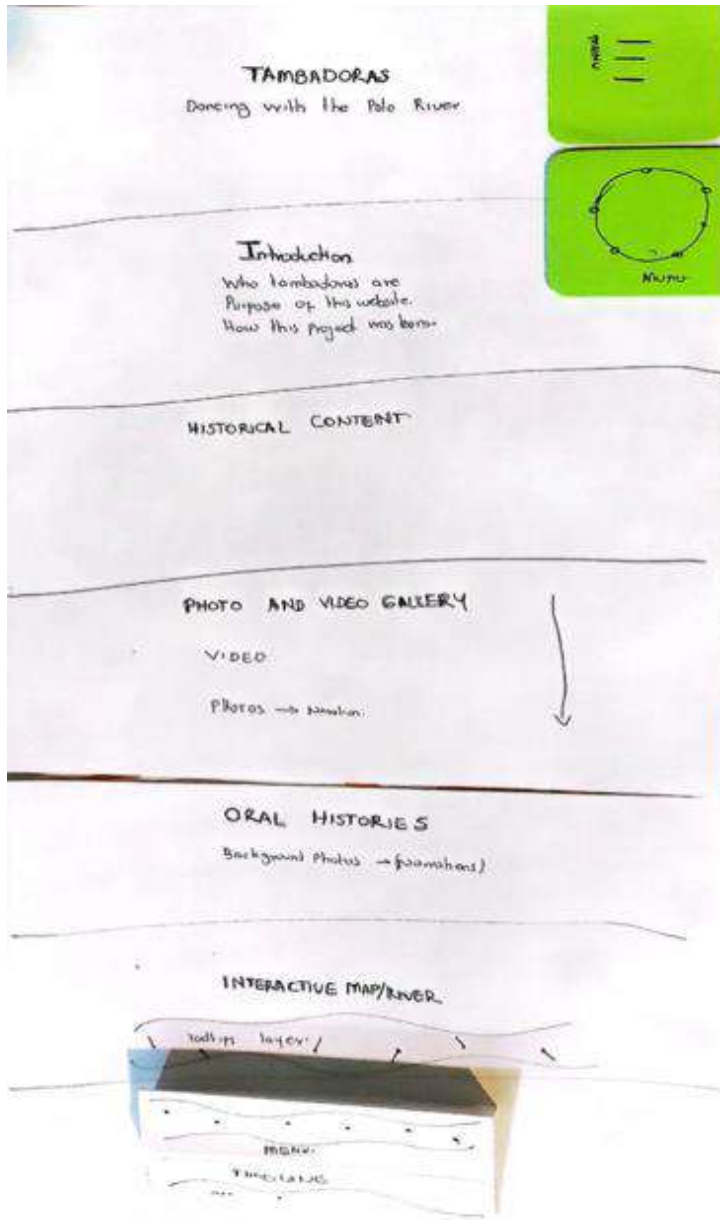


Fig. 4.6 First design proposal for Tambadoras' website. Sketch by Maira Cristina Castro Mina.

## Design Proposal 2

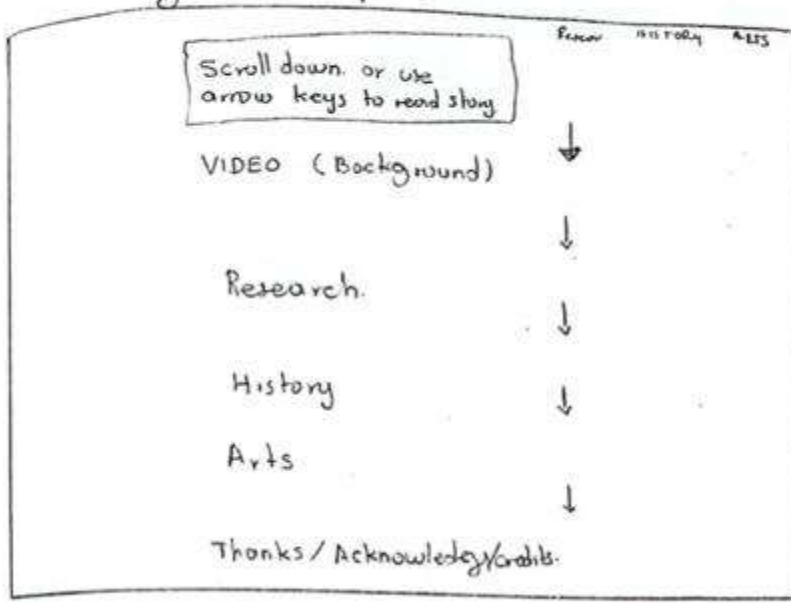


Fig. 4.7 Second design proposal Tambadoras' website. Sketch by Maira Cristina Castro Mina.

## Design Proposal 3

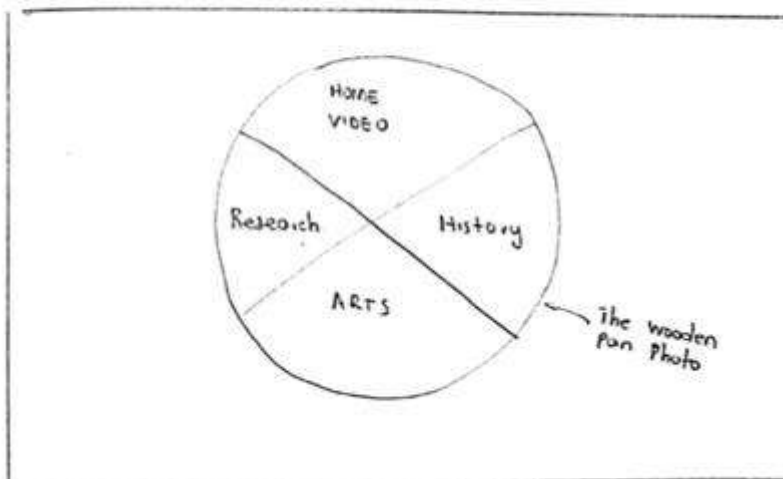


Fig. 4.8 Third design proposal Tambadoras' website. Sketch by Maira Cristina Castro Mina.

# Design Proposal 4.

Possible fonts:  
Darken Grotesque  
David Libre  
Futura One  
Roleway  
open sans (condensed)

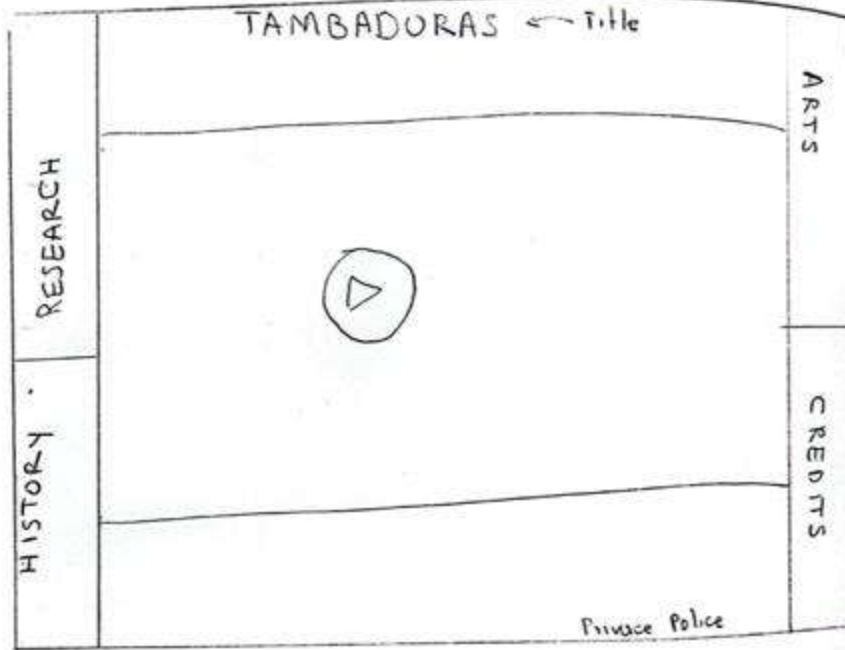
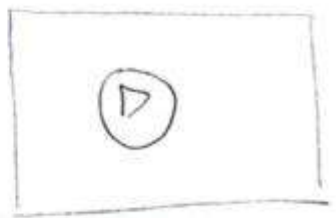
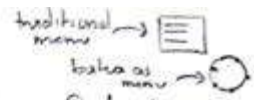


Fig. 4.9 Fourth design proposal Tambadoras' website. Sketch by Maira Cristina Castro Mina.

TAMBADORAS  
 Dancing with the Palo River in Guachené Colombia



Description & background information of the video

Introduction

- Who tambadoras are {matrilineal knowledge}
- Purpose of this website (Cultural heritage Preservation)
- How this project was born?

Historical Context

- Artisanal Gold mining
  - Community discrimination & state policies
  - How tambadoras are affected
- Tambadoras
  - River
  - Wooden pan.
  - Gold

Media

- video & audio clips
- How the river palo sounds
- Photos
- Oral histories (Background photos & narration)

Interactive map/River

with layers

menu or timeline or

Fig. 4.10 First iteration design proposal 1. Sketch by Maira Cristina Castro Mina.

Feb 26 2024.

# Website Iteration

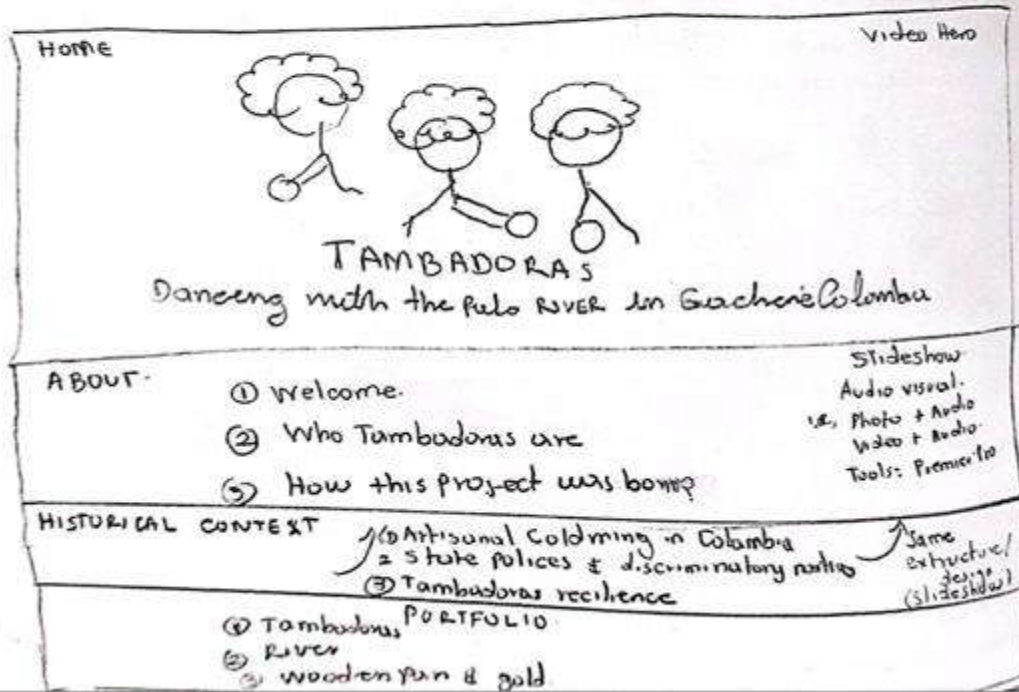
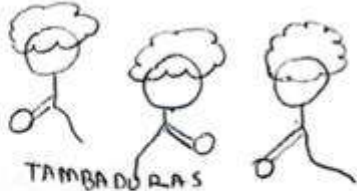


Fig. 4.11 Second iteration design proposal 1. Sketch by Maira Cristina Castro Mina.

HOME

VIDEO HERE



TAMBADORAS

Dancing with the Palo River in Guacheme Colombia

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Welcome:

Gallery / Portfolio

- ① TAMBADORAS' Project; VOICES, STORIES
- ② RIVER
- ③ Wooden Pan & Gold

---

ABOUT

- ① Who TAMBADORAS are?
- ② How This project was born?

---

HISTORICAL  
CONTEXT

- ① Artisanal Gold mining in Colombia
- ② State Policies & Discriminatory Narratives
- ③ TAMBADORAS Resiliency

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Acknowledgments

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Fig. 4.12 Third iteration design proposal 1. Sketch by Maira Cristina Castro Mina.



### 4.3.2. Final Prototype

Creating an effective site map was a critical step to ensure the website's structure was logical, coherent, and conducive to storytelling. The site map needed to facilitate visitors' journey through the rich content and interactive elements of the site.

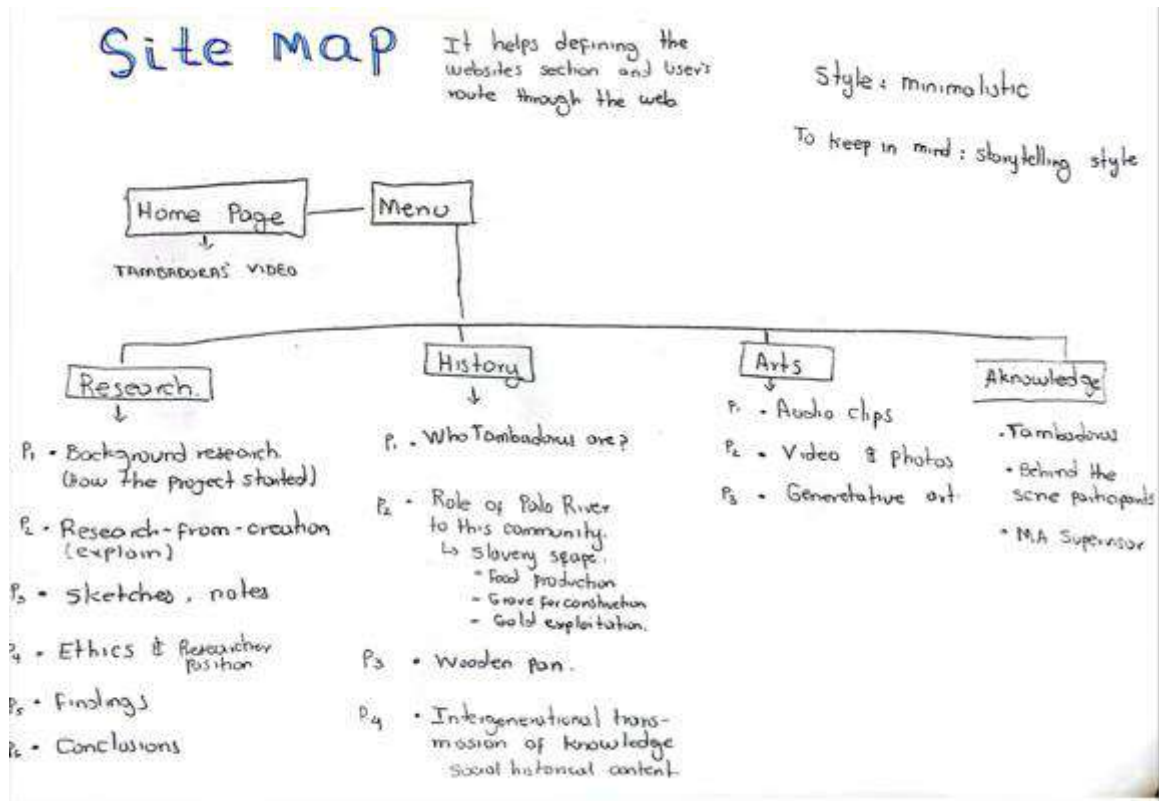


Fig. 4.13 Frist Tambadoras' Website map. Sketch by Maira Cristina Castro Mina.

The first site map I designed (Fig. 4.13) while taking the web design tutorial featured a central home page anchored by the documentary video. Surrounding the video, the navigation was envisioned as four vertical buttons or tabs, splitting two on each side of the screen. These links—Research, History, Arts, and Acknowledgement—were designed to guide users to distinct pages, each filled with thematic content. The 'Research' section was to detail the project's inception, research-from-creation methodology, ethical considerations, findings, and conclusions. 'History' would delve into the Tambadoras' narratives, the Palo River's significance, traditional mining tools, and the transmission of knowledge across generations. 'Arts' was allocated to showcase related audiovisual materials, while 'Acknowledgements' were reserved for expressions of gratitude.

# Site map - iteration

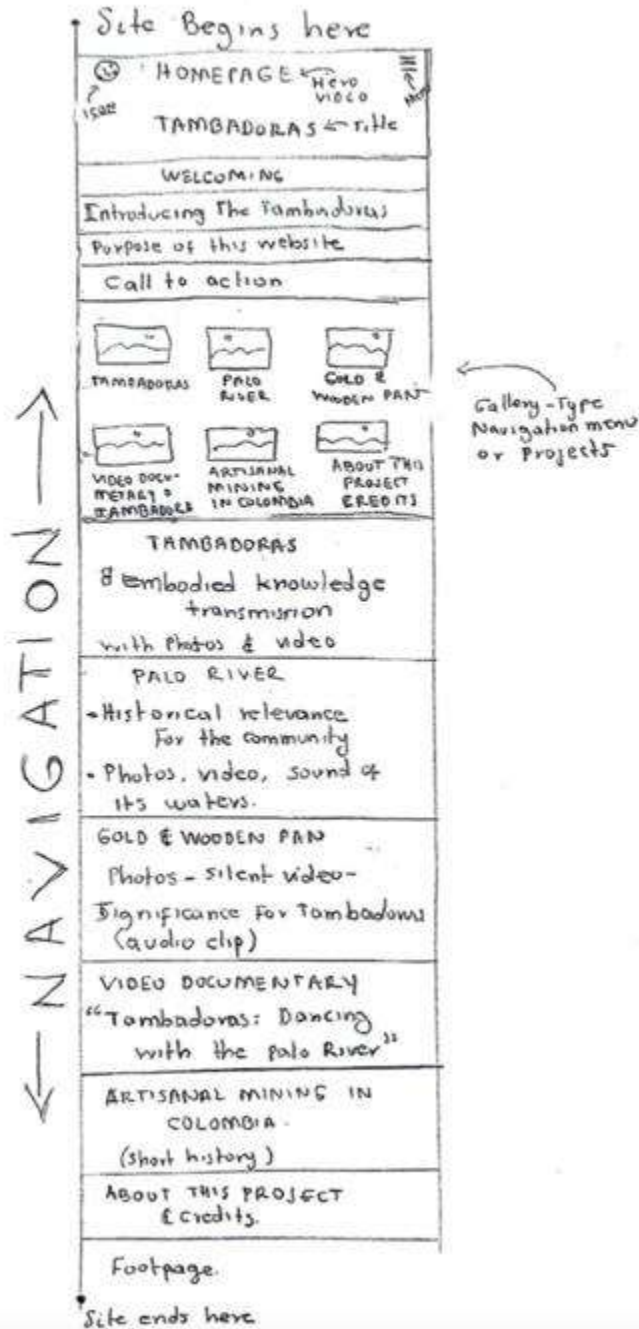


Fig. 4.14 Scrolling format site map. Sketch by Maira Cristina Castro Mina.

The second iteration of the website map (Fig. 4.14) steered away from mirroring the thesis and instead center on showcasing Tambadoras' lives and their contributions to Afro-Colombian heritage. This approach was based on the affordances of website. The website audio and visual capacities provided access to my research to different audiences, particularly to members of my community. While not all members of my community have Wi-Fi, the central plaza in Guachené has free Wi-Fi access (Fig. 3.1). Members of my community could have access to my website through their phones.

The site map was refined to prioritize the Tambadoras, resulting in a user-friendly scrolling format that replaced the multi-page structure (Fig.4.14).

The revised map includes six menu items that constitute the sections of the website. 'Tambadoras' is the homepage. It uses a hero video layout, which is a full-screen video at the top of the website, that serves to introduce Tambadoras and the purpose of the website. It also contains a call to action to learn more about this community (Fig. 4.15).



Fig. 4.15 Tambadoras' homepage, welcoming, and call to action. - <https://tambadoras.com>. Design by Maira Cristina Castro Mina.

'The Palo River' section contains a slideshow of photos with an overlay of text detailing the importance of the river from colonial to current times (Fig. 4.16).



Fig. 4.16 The Palo River history, resources, and traditions - slideshow section - <https://tambadoras.com>  
Design by Maira Cristina Castro Mina.

The section 'Gold and Wooden Pan' highlights mining tools and their connection to cultural beliefs through photos, silent videos, and audio clips (Fig. 4.17).

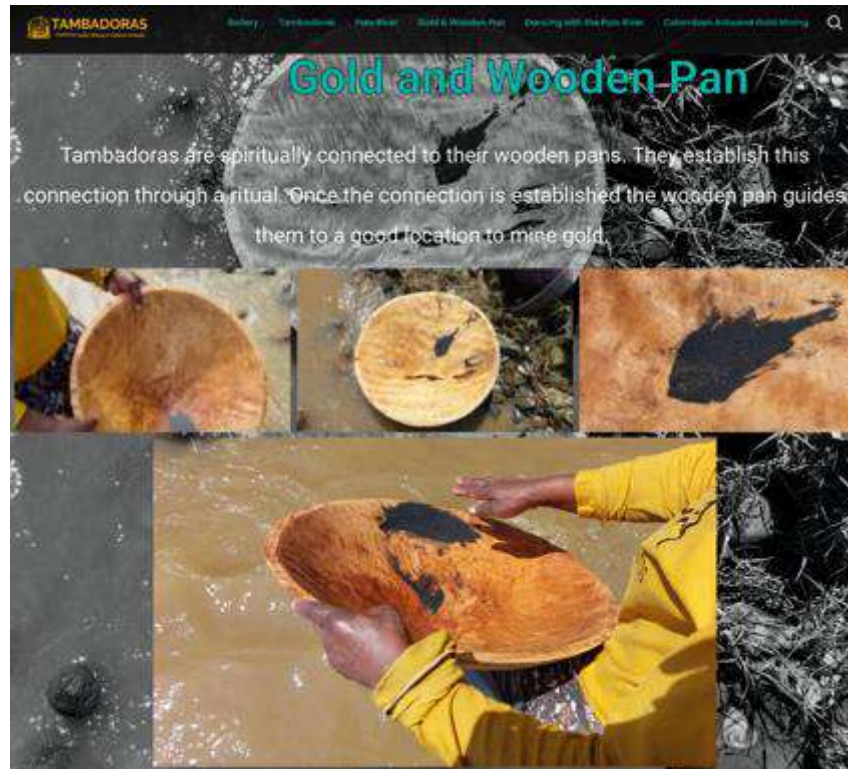


Fig. 4.17 Short gallery of Gold and Wooden Pan - <https://tambadoras.com>  
Design by Maira Cristina Castro Mina.

'Dancing with the Palo River' showcases the documentary (Fig. 4.18).



Fig. 4.18 Dancing with the Palo River - documentary on <https://tambadoras.com>. Design by Maira Cristina Castro Mina.

'Artisanal Mining in Colombia' offers historical insights, and 'About This Project' section provides the context for this project, including a link to the thesis research and credits (Fig. 4.19).

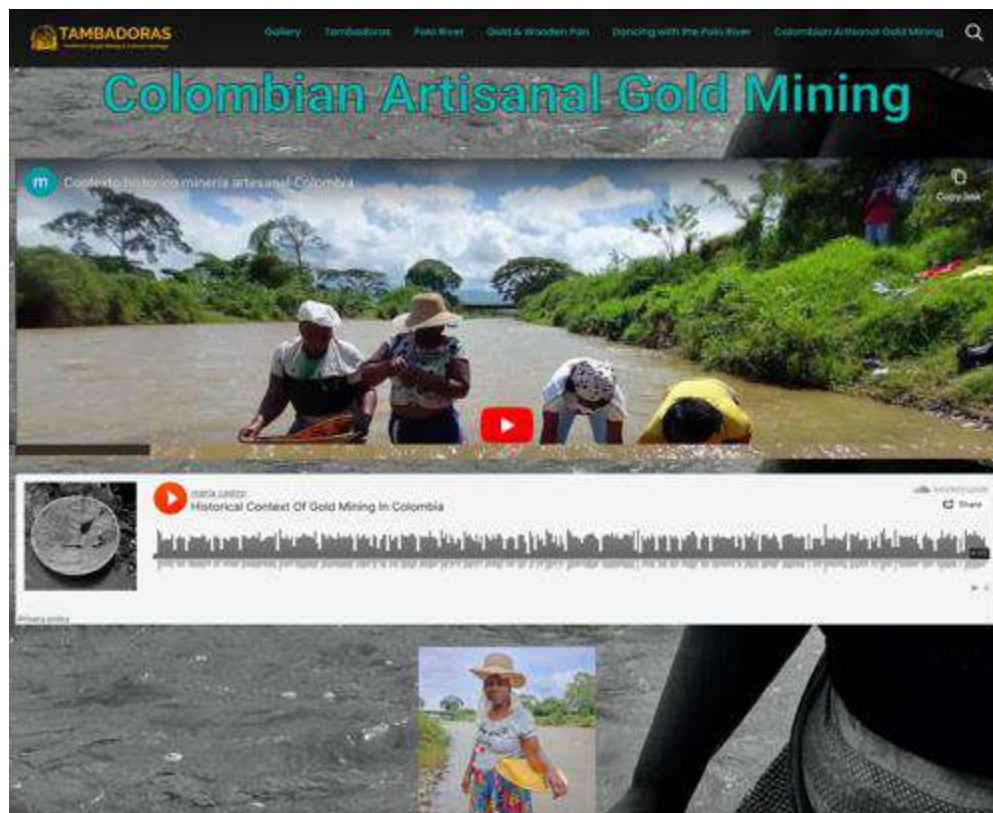


Fig. 4.19 Historical context of artisanal gold mining in Colombia - <https://tambadoras.com>. Design by Maira Cristina Castro Mina.

The iterations seek to provide an accessible user experience, especially for the Tambadoras and the broader community, emphasizing audiovisual richness with Spanish audio and English captions to enhance inclusivity.

## **4.4. Conversation with Tambadoras, Analysis, and Interpretation**

### **4.4.1. Non-structured Interviews**

The data collection process for this research, while unconventional in its origins, yielded a rich tapestry of insights from the Tambadoras. The primary source of data for this project was the video documentary titled *Tambadoras: Dancing with the Palo River*. This creative endeavor was initially conceived as a visual exploration of the interplay between the bodies of Tambadoras and the Palo River rather than a traditional research initiative.

During the video creation process, I conducted a series of non-structured interviews with three Tambadoras. These interviews, although not rigorously structured, naturally unfolded as the Tambadoras shared their experiences, perspectives, stories, and cultural beliefs. They shared historical and cultural aspects of Guachené. For instance, Doña Gladys recounted the history of Guachené as an Afro-community, emphasizing its historical significance as a sanctuary for ancestors who escaped slavery during colonial times. She also underscored the vital role of the Palo River in sustaining their community through its fertile lands.

*El río Palo es muy rico en materiales para la construcción de vivienda y carretera y oro. Estas tierras anteriormente cuando aquí no existía nada esto era pura selva y eran de un cacique que llamaba el Cacique de Guachetá ... Cuando llegaron los esclavos que se alzaron [revelaron/escaparon] de las haciendas El Paso de la Bolsa y Japio, entonces ellos tomaron la decisión de también volverse Barequeros. Ellos sacaban oro y lo iban a vender a Santander de Quilichao. De ahí para acá se quedó la costumbre de que algunas personas se vivieran del río, del Barequeo. Entonces esto ha venido por generaciones. Ahoritica no están las Barequeras porque ellas no trabajan los lunes. Como el*

*lunes es el día de mercado en Guachené, entonces ellas no vienen los lunes a Tambar. Vienen de martes a sábado. Yo que soy nativa de aquí del municipio vengo a hacer el mostreo de como se hace el Barequeo, o sea el arte de Tambar- de sacar el oro naturalmente del río. (Doña Gladys, personal communication, January 2022).*

*[The Palo River is very rich in materials for housing and road construction and gold. Previously, these lands, when nothing existed here, were pure jungle and belonged to a chief called the Cacique of Guachetá...When the slaves who rose up [revealed themselves/escaped] from the haciendas El Paso de la Bolsa and Japio arrived, they made the decision to become gold panners (Barequeros) as well. They would extract gold and sell it in Santander de Quilichao. From there on, the custom for some people to live from the river, from gold panning (Barequeo), remained. So, this has been carried on for generations. Right now, the female gold panners (the Barequeras) are not here [in the river] because they do not work on Mondays. Since Monday is market day in Guachené, they don't come to Tambar on Mondays. They come from Tuesday to Saturday. I, who am a native of this municipality, come to demonstrate how gold panning is done, that is, the art of Tambar—extracting gold naturally from the river.] (Doña Gladys, personal communication, January 2022).*

Doña Gladys also shared the profound cultural connection between *Tambadoras*, gold, and environmental stewardship. She shared insights, such as the importance of approaching the river with respect, good intentions, and in small groups, as these factors were believed to affect the quality of gold. Doña Gladys' perspective resonates with existing literature regarding Colombian artisanal miners, where a profound reverence for the environment is not only traditional but integral to the socio-cultural dynamics of their regions. Such practices of environmental deep respect and cultural milieu have been documented and discussed by Castro (2011), Ruíz et al., (2018), and Cifuentes (2022a, 2022b).

*El arte de Tambar naturalmente es sin químicos, aquí no se usa cianuro ni azogue, sino que se saca la arena, se lava, en el río, y se coje lo que uno ve que es el oro. Bueno, aquí en el río no se ven grupos numerosos numerosos para Tambar. Se ven grupos de 4 hasta 5 personas, porque algunas tienen malas*



*energías, entonces el oro se esfuma cuando hay personas que tienen malas energías. El oro cobra vida con el agua. El oro y el agua son de la misma... son del mismo grupo.] (Doña Gladys, personal communication, January 2022).*

*[The art of Tambar, naturally, is without chemicals; we don't use cyanide or mercury here. Instead, you take out the sand, wash it in the river, and pick out what you see as gold. Well, here in the river, you don't see large numerous groups for Tambar. You see groups of 4 to 5 people because some carry bad energies, and then the gold vanishes when there are people with bad vibes around. Gold comes to life with water. Gold and water are from the same... they are from the same group.] (Doña Gladys, personal communication, January 2022).*

Conversely, the interviews with other Tambadoras took a more pragmatic approach. They shed light on their personal journeys into artisanal mining, primarily influenced by matrilineal knowledge transmission from mothers and grandmothers. Their motivations were rooted in the harsh socioeconomic realities of their community, characterized by limited employment opportunities and persistent poverty. The satisfaction they derived from supporting their families and breaking the cycle of financial hardship through artisanal mining was palpable.

*El río es una fuente de empleo, es una forma de sobrevivir. A mí me enseñaron las viejas de antes a Tambar. Yo aprendí desde pequeña, yo tenía como doce años porque yo me venía a bañar al río y me encontraba con las vecinas pues, entonces uno cogía las bateas de ellas para ir aprendiendo. Yo ya tenía tres hijos y se me dificultaba alimentarlos. Entonces ahí me acordé de mi empleo y empecé a explotarlo bien. Entonces yo dije ay Dios mío, pero cómo si yo se Tambar, porque acá le decimos es Tambar, en otras partes es Barequiar. Cuando el río está crecido es mejor porque la tierra está más blandita. Y si está lloviendo mucho uno hace cambuche y se mete hasta que escampe, y si no, pues uno se va. (Doña Nelser, personal communication, January 2022).*

*[The river is a source of employment, a way to survive. The old women from before taught me to Tambar. I learned from a very young age; I was about twelve years old because I used to come to bathe in the river and I would meet the*

*neighbors, so then one would take their pans to start learning. I already had three children and it was hard to feed them. So, then I remembered my job and started to exploit it properly. So, I said, oh my God, but how if I know how to Tambar, because here we call it Tambar, in other places it's Barequiar [Barequeo]. When the level of the river water is high, it's better because the ground is softer. And if it's raining a lot, one makes a cambuche [makeshift shelter] and stays in until the rain passes, and if not, well, one leaves.] (Doña Nelser, personal communication, January 2022).*

Additionally, these Tambadoras candidly discussed the challenges they face as artisanal miners. Their experiences mirrored the vulnerability, misrepresentation, and economic disparities highlighted in existing literature on this subject including those done by Veiga (1997); Martínez and Aguilar (2012); Ruíz et al. (2018); and Veiga and Marshall (2019). They grappled with limited formal education, financial instability, and the harsh stereotypes that often equate artisanal miners with illegal miners.

*Al contratista (intermediario es al que mejor le va porque eso (el comercio de oro) es al porcentaje, pero antes de darme el porcentaje, ellos capan (hacen trampa) primero. O sea que a uno le va tocando como la tercera parte. El intermediario es el que consigue la plata.*

*En lo financiero, nunca he recibido ninguna ayuda del gobierno. No he participado en ningún programa gubernamental. Este es un sector olvidado por el gobierno, y si el gobierno decidiera apoyarnos, agradecería nos dieran materiales para trabajar-herramientas de trabajo, porque estas bateas son costosas. (Doña Neira, personal communication, January 2022).*

*[The contractor (the middleman is the one who fares the best because the trade of gold is done on a percentage basis. But before giving me my share, they skim off the top (cheat) first. Meaning, what ends up coming to you is like a third. The middleman is the one who makes the money.*

*Financially, I have never received any help from the government. I have not participated in any government programs. This is a sector forgotten by the government, and if the government decided to support us, I would appreciate it if they gave us materials to work with—work tools, because these pans are expensive]. (Doña Neira, personal communication, January 2022).*

#### **4.4.2. Analysis and Interpretation:**

Given the unconventional nature of our data collection, which was initially designed for creative exploration rather than structured research, the analysis process was iterative and adaptive. We revisited the video documentary and interviews to identify key themes and patterns that emerged organically from the Tambadoras' narratives. The themes that crystallized from their accounts were multidimensional. They encompassed the concept of 'environmentally friendly mining,' a common thread running through the discussions. All Tambadoras consistently emphasized their commitment to eco-friendly practices, refraining from the use of chemicals or mercury and demonstrating profound respect for the water and land.

Furthermore, the interviews illuminated the matrilineal transmission of mining knowledge, highlighting the integral role of mothers and grandmothers in teaching the practice to younger generations. This aspect resonates with the preservation of cultural heritage and the enduring significance of women in artisanal mining, as outlined in the existing literature.

The insights shared by the Tambadoras underscored the socioeconomic realities they navigate. Their stories echoed the findings of previous studies, painting a vivid picture of the challenges, resilience, and triumphs of this often-marginalized group.

While our data collection process may have deviated from traditional research methods, it provided an authentic and multifaceted portrayal of Tambadoras' practices, values, and experiences. The themes that emerged from this unique approach offer valuable contributions to the ongoing discourse surrounding environmentally sustainable mining, gender equality, and the preservation of Afro-Colombian cultural heritage.

Tambadoras, occupy a unique and significant role in the mining industry. Their practices exemplify sustainability within an otherwise extractive field, as they extract what is only necessary to support themselves and their families. What sets them apart is their unwavering commitment to preserving the environment by avoiding the use of mercury and other pollutants.

The matrilineal transmission of knowledge among Tambadoras is a testament to the vital role of women in this Afro-Colombian community. In contrast to communities where women engaged in artisanal mining face discrimination, low or no remuneration (Hinton et al., 2003; Koomson-Yalley & Kyei, 2022; Macintyre, 2016) and even bans from accessing mining sites (Romano & Papastefanaki, 2020), Tambadoras hold power. They are the primary bearers of mining knowledge, passed down through generations, a heritage they inherited from their ancestors.

Despite grappling with socioeconomic constraints and structural barriers, such as poverty, limited scholarly levels, and historical discrimination (Immigration and Refugee Board of Canada, 2020; United Nations, 2015), creating the video documentary *Tambadoras: Dancing with the Palo River* allows us to shed light on the pivotal role Tambadoras play not only in the mining industry but also in preserving cultural heritage through the transmission of embodied knowledge.

In conclusion, the social implications of this documentary and website are profound. They can raise awareness about abandoning harmful practices like using mercury and other pollutants, advocating for sustainable and eco-friendly mining in Colombia and beyond. Additionally, it has the potential to inform local authorities in Guachené, encouraging them to develop financial strategies that support artisanal miners in overcoming structural barriers when selling their products and preserving their cultural heritage.

## Chapter 5.

### Conclusions

This study offers an exploration of the artisanal mining practices of *Tambadoras*, a group of Afro-Colombian miners through the framework of research-creation. As noted, this project began with the production of a video documentary *Tambadoras: Dancing with the Palo River* in which I employed an iterative participatory method of production involving members of my community and family. The main source of data for the video was gathered through a series of conversations with two full-time *Tambadoras* from Guachané (Doña Neira and Doña Nelser) and one local historian and seasonal *Tambadora* (Doña Gladys). These conversations were audio and video recorded and took place in their homes and in the Palo River, as they demonstrated and taught me and my family how to mine gold. Both the conversations with *Tambadoras* and the positive response of my community prompted a more in-depth exploration of the themes that emerged through the production of the video and the research questions that guide this study. The themes included: the socio-economic implications of *Tambadoras'* mining methods; how do their methods align with UN Sustainable Developmental goals in terms of gender equity and clean water, and most significantly how do *Tambadoras* participate in the preservation of Afro-Colombian heritage.

Given that this project emerged from the production of a video documentary the framework of research-creation as defined by Chapman and Sawchuk (2012) helped to situate this study under the modality of research-from-creation. As discussed, it was through the process of creation and more specifically from the conversations with *Tambadoras* from where my research questions generated. Exploring these questions help me to understand the legacies of *Tamabadoras* within my community and globally. In reflecting on the process of research-from-creation employed in this study, I hope to contribute to current discourses on research-creation both in Canada and Latin America (Aceves Sepúlveda, 2023; Chapman & Sawchuk, 2012).

## 5.1. Contributions

The initial chapters of this thesis provided contextual information for understanding the historical arc of artisanal mining in Colombia. This historical vantage provides an understanding of the continuity of these tradition amidst change, highlighting how *Tambadoras* preserve the past while they adapt it to current environmental and socio-economic challenges. I argued that *Tambadoras* challenge therefore, dominant narratives against artisanal gold miners that tend to focus on a legislative framework that disregards the cultural, economic, environmental and historical significance of their practices.

In chapter three, I discussed how the framework of research-from-creation and contemporary digital modalities for cultural heritage preservation provided a space to understand the contributions of this study and its methodology. In this chapter, I explored the potential of digital storytelling in bridging the gap between traditional outputs offering opportunities to reach broader audiences.

Chapter four narrates the evolution from conceptualization to implementation of this project. I chronicled the journey from the initial conception of the *Tambadoras: Dancing with the Palo River* documentary to the realization of a website. This process exemplifies the iterative nature of research-from-creation showcasing how a project, inspired by *Tambadoras'* practices in the Palo River, transcended initial artistic boundaries to become an academic endeavor. The video documentary which began as a response to the '*Body as Border*' artistic call, became an immersive narrative that intertwined the participatory experiences of learning and teaching within my community. It is within this narrative that the academic potential of the documentary was discovered, highlighting the socio-economic implications of eco-friendly mining and the cultural richness of Guachené. The subsequent development of a website not only aimed to share these findings but also to honor the community that inspired them. Through sketches and prototypes, the website was crafted with attention to accessibility and engagement, ensuring that the legacy and knowledge of the *Tambadoras* were presented in a format that resonates with both local and global audiences. This chapter illustrated the iterative and reflective process of blending artistic expression with participatory research, culminating in a digital platform that encapsulates the heart of the *Tambadoras'* story.

The website can be used as an archive, a teaching tool, and a bridge between generations—a place where the voices of Guachené's artisans can continue to echo and inspire. In doing so it joins recent local efforts by the Afro-Colombian community in using digital tools and applications to foster processes of memory and even memory creation to record and disseminate them to the current and future generations in both digital and analog worlds (Arriaga & Villar, 2021, 122).

## **5.2. Limitations**

This section outlines the constraints I encountered during my research, including my positionality in the study and issues related to internet accessibility among Guachené's community members.

### ***5.2.1. Researcher's Position and internet accessibility:***

I want to acknowledge my unique position as a researcher in this study. Hailing from Guachené, I have an inherent insider's perspective, allowing me to share a deep cultural and historical connection with the community. This insider status facilitated my access to participants and the rich tradition of knowledge transmission among the Tambadoras. However, it's essential to note that while I have a profound understanding of Guachené's cultural context, I approached this project as an outsider to the specific practice of 'Tambar.' Before this research, I had never engaged in artisanal mining. Instead, I embarked on a journey of learning artisanal mining practices directly from the Tambadoras, emphasizing the role of embodied knowledge transmission.

In terms of digital access within the community, I could not find updated statistics for Guachené. However, a bulletin by Presidencia de la República (2021) indicates that in the Department of Cauca, where Guachené is located, approximately 30.2% of homes have internet access, and youth internet access is segmented by age, with 24.6% of those aged 12-17 and 45.1% of those aged 18-28 having internet connectivity in 2019. Specific and updated statistics for Guachené's digital access are not readily available, which limits a precise understanding of the community's digital landscape. Therefore, it restricts a comprehensive assessment of the study's reach and influence within the local context despite Wi-Fi being publicly available in the town square of Guachené.

### **5.3. Ethical Concerns**

In keeping with ethical research standards and ensuring transparency, I sought and received the informed consent of the Tambadoras before commencing the video documentary. In January 2022, I outlined my vision to them: to film and capture the dynamic interplay between their labor and the Palo River waters, illuminating their artisanal gold mining practices. Initially conceived for inclusion in a screening exhibition in Canada, the documentary's purpose expanded when it became evident that it could serve as a valuable academic resource. Accordingly, the participants consented to using the documentary as a data source for this thesis through a formal consent process. They expressed their desire for recognition and citation, perceiving their involvement as a meaningful avenue to contribute to preserving and celebrating Afro-cultural heritage in Guachené.

The video is uploaded to YouTube and the website is hosted on WordPress. Both platforms use servers located in the United States, which is not entirely optimal since the data is not housed locally within the community. Nonetheless, I have obtained the participants' consent for this arrangement. Looking ahead, I will explore alternative solutions for more reliable data storage that are in closer alignment with the community's proximity and interests. Additionally, I am considering strategies for the sustained preservation of the website.

Throughout this research, ethical considerations such as transparency and power relationships were paramount. I maintained clear communication with the community members, explaining the purpose of creating the video documentary, its goals, and potential outcomes. Their informed consent ensured that they were aware of the project's scope and how their participation would be represented.



## 5.4. Future Contributions

The insights gained through video creation and website development will serve as cornerstones for further academic exploration and discussion. For example, a further exploration might be through a more structured study with a broader sample size. Given that the data for this study originated from an artistic project rather than a formal research endeavor, a more comprehensive examination could yield a more nuanced understanding of *Tambadoras'* realities and a more in-depth analysis of the significance of their practices within the framework of the UN Sustainable Development Goals. The alignment with goal no. 5 and no. 6 discussed in the study, while perhaps *incidental*, underscores the natural congruence between their traditional practices and contemporary global sustainability and gender equity efforts.

Moreover, escalating our current website to create other digital spaces such as 3D projects, using both new and existing information, offers an exciting opportunity for more dynamic community engagement and research. This approach could serve as a co-creative space, actively involving Guachené youth to interact with and preserve their cultural values and traditions through cutting-edge technology. By involving the younger generation in preserving their cultural values and traditions in such technologically enriched environments, I can envision a future where the legacy of *Tambadoras* and the unique traditions of Guachené are not only cherished and sustained but also made more accessible and engaging, contributing to both the local community and the broader discourse on sustainable and inclusive mining practices. Such advancements in digital storytelling and heritage presentation could provide a scalable model for other communities, underscoring the broader significance and impact of integrating modern technology with cultural preservation. These future iterations could bring issues of privacy to the fore and I will have to think about making protocols that allow certain members of the community access while restricting it to wider publics.

The conclusion of this study is not the end but a beginning. It's a call to action for greater awareness and advocacy for sustainable mining practices. It's an invitation for local authorities to support *Tambadoras* in preserving their cultural and environmental legacy. Moreover, it contributes to mining studies in the region to further investigate the rich tapestry of Guachené's artisanal mining heritage.

Through this work, I envisage a future where the rich traditions and the vibrant present of the *Tambadoras* are accessible to all, creating a bridge across generations and digital divides. It is a future where the past is not a distant memory but a lived experience, continuously refreshed and retold through the lens of technology and innovation.

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## Appendix A.

### Excerpt Transcriptions of my Conversations with Tambadoras

The appendix presents selected transcripts from conversations with Tambadoras Doña Nelser, Doña Neira, and Doña Gladys. These excerpts provide invaluable insights into the lived experiences and practices of artisanal mining within the community of Guachené and offer a direct window into the rich cultural narratives that have shaped this study.

1. Personal Conversation with Doña Gladys on January 3<sup>rd</sup> - Video Recorded by phone.

*El río Palo es muy rico en materiales para la construcción de vivienda y carretera y oro. Estas tierras anteriormente cuando aquí no existía nada esto era pura selva y eran de un cacique que llamaba el Cacique de Guachetá ...Cuando llegaron los esclavos que se alzaron [revelaron/escaparon] de las haciendas El Paso de la Bolsa y Japio, entonces ellos tomaron la decisión de también volverse Barequeros. Ellos sacaban oro y lo iban a vender a Santander de Quilichao. De ahí para acá se quedó la costumbre de que algunas personas se vivieran del río, del Barequeo. Entonces esto ha venido por generaciones. Ahorítica no están las Barequeras porque ellas no trabajan los lunes. Como el lunes es el día de mercado en Guachené, entonces ellas no vienen los lunes a Tambar. Vienen de martes a sábado. Yo que soy nativa de aquí del municipio vengo a hacer el mostreo de como se hace el Barequeo, o sea el arte de Tambar- de sacar el oro naturalmente del río. (Doña Gladys, personal communication, January 2022).*

*[The Palo River is very rich in materials for housing and road construction and gold. Previously, these lands, when nothing existed here, were pure jungle and belonged to a chief called the Cacique of Guachetá ...When the slaves who rose up [revealed themselves/escaped] from the haciendas El Paso de la Bolsa and Japio arrived, they made the decision to become gold*

*panners (Barequeros) as well. They would extract gold and sell it in Santander de Quilichao. From there on, the custom for some people to live from the river, from gold panning (Barequeo), remained. So, this has been carried on for generations. Right now, the female gold panners (the Barequeras) are not here [in the river] because they do not work on Mondays. Since Monday is market day in Guachené, they don't come to Tambar on Mondays. They come from Tuesday to Saturday. I, who am a native of this municipality, come to demonstrate how gold panning is done, that is, the art of Tambar—extracting gold naturally from the river.] (Doña Gladys, personal communication, January 2022).*

2. Personal Conversation with Doña Neira on January 5<sup>th</sup> - Video Recorded by phone.

*A mi Tambar me enseñó mi mamá. Aconsejo a las personas que trabajan en la minería artesanal no echarle químicos al río. A nosotros no nos favorece en nada Tambar con químicos. Se nos pierde nuestro trabajo porque el químico se lo lleva todo (destruye todo). (Doña Neira, personal communication, January 2022).*

*[My mom taught me how to Tambar. I advise those who work in artisanal mining not to put chemicals in the river. It doesn't benefit us at all to Tambar with chemicals. We lose our work because the chemicals take it all away- destroy everything]. (Doña Neira, personal communication, January 2022).*

3. Personal Conversation with Doña Nelser on January 5<sup>th</sup> - Video Recorded by phone.

*El río es una fuente de empleo, es una forma de sobrevivir. A mí me enseñaron las viejas de antes a Tambar. Yo aprendí desde pequeña, yo tenía como doce años porque yo me venía a bañar al río y me encontraba con las vecinas pues, entonces uno cogía las bateas de ellas para ir aprendiendo. Yo ya tenía tres hijos y se me dificultaba alimentarlos. Entonces ahí me acordé de mi empleo y empecé a explotarlo bien. Entonces yo dije ay Dios mío, pero cómo si yo se Tambar, porque acá le decimos es Tambar, en otras partes es Barequiar.*



*Cuando el río está crecido es mejor porque la tierra está más blandita. Y si está lloviendo mucho uno hace cambuche y se mete hasta que escampe, y si no, pues uno se va. (Doña Nelser, personal communication, January 2022).*

*[The river is a source of employment, a way to survive. The old women from before taught me to Tambar. I learned from a very young age; I was about twelve years old because I used to come to bathe in the river and I would meet the neighbors, so then one would take their pans to start learning. I already had three children and it was hard to feed them. So, then I remembered my job and started to exploit it properly. So, I said, oh my God, but how if I know how to Tambar, because here we call it Tambar, in other places it's Barequiar [Barequeo]. When the level of the river water is high, it's better because the ground is softer. And if it's raining a lot, one makes a cambuche [makeshift shelter] and stays in until the rain passes, and if not, well, one leaves.] (Doña Nelser, personal communication, January 2022).*

4. Personal Conversation with Doña Neira on January 5<sup>th</sup> - Video Recorded by phone.

*Al contratista (intermediario es al que mejor le va porque eso (el comercio de oro) es al porcentaje, pero antes de darme el porcentaje, ellos capan (hacen trampa) primero. O sea que a uno le va tocando como la tercera parte. El intermediario es el que consigue la plata.*

*En lo financiero, nunca he recibido ninguna ayuda del gobierno. No he participado en ningún programa gubernamental. Este es un sector olvidado por el gobierno, y si el gobierno decidiera apoyarnos, agradecería nos dieran materiales para trabajar-herramientas de trabajo, porque estas bateas son costosas. (Doña Neira, personal communication, January 2022).*

*[The contractor (the middleman is the one who fares the best because the trade of gold is done on a percentage basis. But before giving me my share, they skim off the top (cheat) first. Meaning, what ends up coming to you is like a third. The middleman is the one who makes the money.*

*Financially, I have never received any help from the government. I have not participated in any government programs. This is a sector forgotten by the*

*government, and if the government decided to support us, I would appreciate it if they gave us materials to work with—work tools, because these pans are expensive]. (Doña Neira, personal communication, January 2022).*