

# Present with a taste of the past: chicha chiquitana, its recipes and its materiality

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**ABSTRACT:** *There are products that nourish the body and soul, are present daily and resist most structural transformations over time. One is maize beer or chicha in the South American continent. This paper provides a diachronic perspective on the elaboration and consumption of chicha in the lowlands of Bolivia, specifically among the Chiquitanos. This analysis highlights both alterations and constancy in the ingredients, processing and materialities involved in production of this beverage. Although a diversity of preparation techniques is used according to the culinary practices and recipes of each ethnic group, there is one important constant, namely the drink's gustatory, symbolic and ritual importance. In this way, chicha's domestic production and consumption are intimately related to cultural values and practices, which are decisive for strengthening the community's identity and well-being.*

**KEYWORDS:** *Beer, chicha, Chiquitano, recipes, maize, materiality*

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## Introduction

Archaeological, historical and ethnographic research in South America has documented the consumption of fermented beverages made from different plants. Many of these beverages are referred to as *chicha*, a word borrowed from the Arawak language and used indiscriminately by the Spanish during colonial times to designate any fermented beverage of indigenous peoples (Moore 2014, 143). *Chicha* or maize beer is a beverage that has been produced, consumed and valued in social, political, ritual, festive and productive relations in many South American cultures since time immemorial. Although *chicha* is widely known around the world as the drink of the Inkas, it is important to emphasize that *chicha* is also part of culinary traditions of the inhabitants of the lowlands of South America, where it plays a central role among different peoples. Erikson's (2004) compendium of traditional beers in the Amazon includes examples of various fermented beverages made from maize, *tembé* (*Bactris gasipaes*) and especially manioc.

The following case study on *chicha* chiquitana, in the Bolivian Lowlands of the Department of Santa Cruz, allows us to analyze recipes chronologically. We identify on the one hand the elements that have prevailed over time and, on the other hand, the reasons why those elements were altered in traditional recipes and the consequences of these changes.

An important contribution is the analysis of materiality in the production of this beer and the presentation of some objects from the Chiquitano culture that are found in the collections of the BASA Museum (Bonn Collection of the Americas) of the University of Bonn. They were collected mainly by Jürgen Riestler and Hermann Trimborn in the 1960s and are intimately associated with the elaboration of *chicha* chiquitana. The paper culminates in a regional dialogue and comparison with available data on the beers of different ethnic groups of the Bolivian lowlands that correspond to distinct linguistic families, such as the Guarayo from the Tupi Guarani family (Melgar 2004), the Mojeños from the Arawak family (Lehm 2004), the Chimane (Daillant 2004) and the Yuracaré from isolated linguistic families (Lara 2004).

### Chiquitanos, Chiquitos

According to early ethnohistorical accounts, the denomination »chiquitanos« derives from what Guarani speakers called the indigenous population of this region in South-East Bolivia, namely *Tapuy-mirí*, meaning »slaves of small houses;« a simplification and translation into Spanish of this name would then have yielded the ethnonym »chiquitos« (Matienzo et al 2010: 440). Combès (2010, 24) notes that they called themselves *tobasicoci*, but this is only one among various names known in the region. At the same time, Combès warns against directly concluding that a different name necessarily refers to a distinct nation. Martínez points out (2015: 237 – 238) that from the sixteenth century to the present, the name *Chiquitos* has encompassed a series of ethnic, topographical, linguistic and identity concepts that are still undergoing continuous transformation.

In this paper, we understand the Chiquitano language as the lingua franca chosen by Jesuit missionaries between the seventeenth and eighteenth centuries to homogenize a great diversity of ethnicities and languages and to indoctrinate many peoples<sup>1</sup> that inhabited an extensive plain in the current Department of Santa Cruz (Krekeler 1993, 26). We refer to the Chiquitanos as the largest indigenous group in the lowlands of Bolivia and one that continues to struggle for rights to their territory (Díez Astete 2011; Freyer 2000).

The area where the Chiquitanos live and where the Jesuit reductions were founded is currently located in the provinces of Velasco, Ñuflo de Chávez, Chiquitos and Ángel Sandóval in the Department of Santa Cruz. Known as the Chiquitos plains or Chiquitania, it is an extensive plain with a tropical climate located in the transitional zone between the Gran Chaco and the Amazon. The economy of the Chiquitano people is predominantly based on agriculture, hunting and fishing. Since pre-Hispanic times and through the colonial period into the present day, maize and manioc have been very important components of Chiquitanos' diet. In addition, *chicha*, mainly maize *chicha*, plays a central role in ceremonial dances and religious festivities (Arrien & Viana 2007, 36 – 37; Rozo 2011), cooperative work called *minga*<sup>2</sup> or *bobikixhi* and shamanic activities (Riestler 1976), reciprocity principles (Bärbel Freyer 2000, Rozo 2011) and *compadrazgo* relationships (Silva 2017), among other important contexts.<sup>3</sup>

In addition, sweet maize *chicha* that is unfermented is so important in daily life even now that studies have shown that a Chiquitano family of five consumes 70 liters of the brew every three days. Because of the limited natural resources available to some communities, water supply regulations are very strict and preparation of *chicha* is prohibited in times of drought (APCOB-CICOL 2000, 59 – 60).

## Chicha chiquitana in the *longue durée*

The archaeology of the Chiquitania is still incipient. However, the tropical savannas of the Chiquitania are part of the great Amazon basin and closely connected to the cultural dynamics occurring in the southwestern Amazon. Therefore, we will mention some important archaeological evidence directly or indirectly related to the elaboration and consumption of maize *chicha* in pre-Hispanic times.

The southwestern Amazon is considered a center of plant domestication (Clement 2010). In the Moxos Plains of Bolivia, there is archaeological evidence of manioc (*Manihot* sp.) cultivation from 10,350 years ago (cal. yr BP) and of maize from 6,850 years ago (cal. yr BP) (Lombardo et al. 2020, 1). It is conceivable that one trigger for maize domestication could have been its use for ethyl rather than for food purposes (Smalley & Bralke, 2003). The continued presence of these crops in the archaeological record has also been verified in the residential mounds of the southeastern Moxos Plains (Bruno 2010, Dickau et al. 2012), which have been dated between AD 500 – 1400 (Prümers and Jaimes Betancourt 2014, 19). The paleobotanical evidence was associated with materials used in the *chicha* brewing process such as graters and colanders (Jaimes Betancourt 2012). The latter were described as being still in use during colonial times (Castillo, 1906 [1670]: 328 – 329). In other words, both maize and manioc *chicha* have millennia of historical depth in the Bolivian lowlands.

Accounts from the colonial period, especially from the Jesuit missionaries who were located in what today constitute the lowlands of Bolivia and more specifically in the Chiquitania and Moxos, suggest the strong cultural and social roots of maize *chicha* in several indigenous groups. However, it is also worth mentioning that manioc *chicha* played and plays an essential ceremonial role among the Guarayos (Melgar 2004) and the Mojeños (Lehm 1999, 2004), both ethnic groups of the Bolivian lowlands.

The *Cartas Anuas<sup>4</sup> de la Compañía de Jesús en Chiquitos* (1691 – 1767) describe the founding of the Jesuit mission of San Javier. Although their author and exact date (possibly 1701 – 1702) are unknown, the reports reveal that the Chiquitos were very fond of banquets held in large buildings in which they kept large vessels full of maize *chicha*. Even this relatively early description already referenced the fact that these banquets could last for more many hours with dancing and singing. The gatherings were prepared by families who took turns offering food and drink and lasted until the *chicha* ran out (in Matienzo et al. 2010, 26). These gatherings could be interpreted as what we currently call *minga*, a way of compensating communal work with *chicha* and food.

In accounts from colonial times, it is clear that *chicha* played an important role at the economic and social level. For example, Father J. Knogler mentioned in 1780 that any work or favor was rewarded with *chicha*<sup>5</sup> since there was no currency for cash remuneration (quoted in Rozo 2011, 62). Consumption of maize *chicha* (fermented and unfermented) was normalized among indigenous peoples and considered part of daily life at festivities, at work and in domestic life (Fernandez 1895, 69).<sup>6</sup> The »drink in small quantities did not produce drunkenness; moreover, it had nutritive properties and was healthier than water, which caused stomach pains to the natives« (Tomichá Charupá 2002, 305).

However, consumption of fermented *chicha* did represent a problem for the colonizers who considered it a vice;<sup>7</sup> for the same reason, the Jesuit missionaries did not hesitate to prohibit it in missions, where fermented *chicha* with high alcohol content was consumed (Fernandez 1895, 69).<sup>8</sup> Drunkenness was considered a vice that hindered the evangelization project. Thus, the missionaries fought it by applying different methods, some violent, which, in turn, provoked negative reactions from the indigenous people against the mis-

sionaries (Tomichá Charupá 2002, 416), as recorded in the accounts of Father Juan Patricio Fernández<sup>9</sup> and Julián Knogler.<sup>10</sup>

Apparently there was a great effort in the Jesuit reductions to limit consumption of maize *chicha* (especially the fermented variety), but the prohibition was not total, and in some cases, permission to consume *chicha* was a sort of precondition of the indigenous peoples to stay at the missions (Fernández 1895, 192).<sup>11</sup> For their part, the Jesuits had to »adapt to the way of life and eating habits of the Chiquitanos« (Tomichá Charupá 2002, 452), which implied that consumption of fermented *chicha*, also known as *chicha fuerte* or *tabaix*, was not completely prohibited, much less consumption of non-fermented *chicha*, also known as *chicha dulce* or *naxixh* (Arrién/Viana Chuvé 2007, 137).<sup>12</sup>

### Recipes for maize chicha of the Chiquitanos over time

Lowland peoples have a wide variety of traditional brews made from different products, including plantain, *ñamé* (*Dioscorea spp*), palm fruits (cultivated or uncultivated) such as *tembé*, pineapples, grapefruit and many others. In most cases, however, the most common drinks are made from manioc or maize. Both crops also play an important role in the daily diet (Erikson 2004, 2). Next, we will focus on maize *chicha*. Traditionally and into the present day, there are two ways of stimulating starch to ferment by decomposing into simple sugars. The best-known method is the germination process, and the other is use of salivary diastase (Pardo/ Pizarro 2016 in Vargas Faulbaum 2019).

*Chicha de jora* is the variety made from germinated maize. It is one of the best-known forms of *chicha* and is produced in the whole Andean zone and valleys; there have been numerous investigations about its production and consumption (Noack 2006; Moore 2014; Jennings/ Bowser 2015; Parker/ McCool 2008). On the other hand, studies of the elaboration and consumption of maize *chicha* in the Bolivian lowlands, specifically in the Chiquitania area, are still almost nonexistent, despite both fermented and unfermented *chicha* being widely consumed there.

The flavor of *chicha* depends on the proportion, order and mixture of ingredients, as well as the length of time for which they are cooked. The amount of water also influences not only the flavor, but also the consistency. Finally, the duration of fermentation decides the *chicha's* alcohol content, which increases day by day. In order to identify the changes that have occurred over time in the process of making maize *chicha* in the Chiquitania area and in Santa Cruz de la Sierra (a neighboring city where it is also consumed), we analyzed six maize *chicha* recipes that were previously collected and described by different sources and authors. It is important to note that the recipes presented in this paper only describe the process of preparing *chicha* chiquitana made of maize, whether non-fermented or sweet and fermented or strong, which is made using the traditional process, that is, by adding chewed maize. None of the records or recipes for *chicha* chiquitana refer to preparation based on germinated maize (*chicha de jora*).

The recipes will be presented chronologically, respecting the vocabulary and sequence of preparation, as well as the original author's personal impressions. The recipes include local words that are still used today, both in rural areas and in cities in the Bolivian lowlands. Words that are used to refer to certain products, preparations and cooking utensils are explained in footnotes the first time that they appear. In order to organize and standardize the information in this section, the ingredients are presented first, then the necessary utensils

and, finally, the preparation steps. The first five recipes originate from the Chiquitania area and the sixth from the neighboring city of Santa Cruz de la Sierra.

The first recipe corresponds to Father Juan Patricio Fernández,<sup>13</sup> who was sent to Chiquitos in 1696 and remained there until shortly after 1709 (Real Academia de la Historia). The ingredients that he mentions are maize and water; the necessary utensils are large cauldrons or clay *paylas*.<sup>14</sup> He describes preparation as occurring in three steps: 1) grind the maize well, 2) toast until the ground maize becomes charcoal and 3) put the toasted maize to cook in large cauldrons or clay *paylas*. As in most writings of the time, Father Fernández's description included pejorative comments, describing *chicha* as »that black and dirty water« (Fernández 1895, 193).

The second recipe is from Father Julian Knogler of the Society of Jesus, who was a missionary in Chiquitos from 1748 to 1767 (Riester 1970, 348). In his recipe, he mentions maize grains, boiled water and saliva as necessary ingredients. The utensils required are a large pot half-buried in the ground, a lid for the pot and the mouth and teeth for grinding. The mode of preparation is summarized in four steps: 1) grind a quantity of maize kernels with the teeth, whereby he mentions that »women usually do it while performing their household chores« (Rozo 2011, 61), 2) place the mash in a large pot half-buried in the ground, 3) add boiled water and 4) leave the mixture covered in the pot for a few days until it begins to ferment.

The third recipe was documented by the anthropologist Jürgen Riester, who spent many years among the Chiquitanos. According to Riester (1970, 315), Father Knogler's recipe did not describe *chicha* production correctly. The ingredients are maize, water and saliva, and the utensils are a *batán*<sup>15</sup>, earthenware jars called *bauzĩ*,<sup>16</sup> stone or wooden lids and the mouth and teeth for grinding. Riester describes the procedure in six steps: 1) grind the maize in the *batán* and reserve a small part, 2) cook most of the ground maize in earthenware jars for six hours, 3) pour the cooked substance into large jars buried in the ground up to the neck, 4) chew the part of the ground maize that was set aside for fermentation, a process in which the women help each other, as described by Father Knogler, 5) pour the fermented flour into a jar and cover it with a stone or a board and 6) leave the mixture to ferment for three to four days so that the *chicha* has a low alcohol content.

The fourth recipe is from four decades later and was recorded in an interview with María Cuasace Jiménez among the Monkox Chiquitano people in the indigenous territory of Lomerío (Arrién/ Viana Chuvé 2007, 137 – 138). The ingredients for 20 liters of *chicha* are 30 kilos of maize, 30 liters of water, two bags of crushed or ground manioc (optional, so that the *chicha* does not get too thick) and one jar of *patá*<sup>17</sup> for each pot. For the *patá*, maize and saliva are required. The necessary utensils are eight *jaces*<sup>18</sup> of firewood (big sticks, preferably *curupáú*, which burns hotter and is used to stoke the fire), a *batán* or mill, three special clay pots to cook *chicha*, two very clean pitchers in which to leave the *chicha* to ferment and which are the same size as the clay pots, *jometoto*,<sup>19</sup> ceramic sherds<sup>20</sup> to cover the clay pots and to keep out flames, one pitcher for the *patá*, a plastic bowl, a spoon, a sifter and one's mouth and teeth. The mode of preparation is described in detail as follows: 1) toast the maize, 2) grind the maize in a *batán* or mill (the latter is faster), 3) carry the water and pour 10 liters into each of the three clay pots, 4) bring the water to a boil, 5) when the water is very hot, add the maize flour and stir the mixture constantly with the *jometoto* until the *chicha* thickens. Optionally, one can also add manioc (crushed or ground) so that the *chicha* does not get too thick. In order to prevent the flames of the fire from causing the *chicha* to overflow, the neck of the clay pot is covered with potsherds. Once the *chicha* has boiled, the fire should be dimmed and the *chicha* allowed to boil for approximately four hours, 6) while

the *chicha* is still boiling, grind the maize for the *patá*, then toast the flour and chew it with a little water. »The *patá* is to reduce the thickness of the *chicha*«, 7) when the *chicha* is ready, let it cool in a tub, 8) once the *chicha* is well-cooled, add a jar of *patá* to each pot and stir the mixture well with a spoon. The *patá* should not be added when the *chicha* is hot, because then it will not help to dilute it. 9) The next day, strain the *chicha* to remove the *jachi*<sup>21</sup> 10) Boil the *chicha* in the same pot for a long time, »until 6 o'clock in the evening.« Do not get tired of stirring, because this is essential. 11) Once it boils, keep it in special pots (two pitchers), which have to be cleaned well, until the following day. 12) Let it ferment for three days if it is mixed with manioc and for one week if it is only maize, because then it takes longer to ferment. To serve it, it is necessary to take it out carefully because the thick *chicha* (*taitú*) is deposited at the bottom.

The fifth recipe is from Doña Rosa of San José de Chiquitos and was presented in the television program *Cocineros bolivianos* in 2018. The ingredients are Cuban maize, water, sugar and ice. The utensils are a plastic container (bowl), a *tacú*<sup>22</sup> (with adaptation of sheet metal walls), a metal pot, a wood or brick stove with metal structure, large and small *tutuma*,<sup>23</sup> a plastic bucket, a metal pitcher, a wooden spoon or spatula and an ice bag. The preparation has six steps: 1) transfer the maize kernels from their bowl or plastic container to a pot with water and boil the contents. Let it boil for approximately three hours, 2) remove the pot from the fire, take out the maize with a *tutuma*, add a little bit of water to the mixture and pour it into the *tacú*, 3) grind the mixture until it forms a liquid paste, 4) take out some of the paste with a small *tutuma* and pour it into a plastic bucket. With a pitcher, add water that has been cooled with ice and sweetened with sugar to the bucket, 5) stir the mixture with a spoon or stick spatula, 6) serve the *chicha* in a *tutuma* and consume it.

The sixth and last recipe is from 2019 and was provided by Don Pedro from the *Cabaña Las Maras* at the Piráí River,<sup>24</sup> Santa Cruz de la Sierra, where several restaurants serve traditional Santa Cruz food and drinks. The ingredients are ground cinnamon, cloves (both industrialized products packaged in plastic), maize flour and water. The utensils are a plastic container, a glass pitcher, a metal spoon, a metal pot, a metal ladle, a small plastic container, a brick-walled stove with metal structure to hold the pot, and glass cups. The method of preparation is described as follows: 1) put the maize flour in a container and add water with a pitcher, 2) dilute the flour in the water by mixing it with a spoon, 3) pour the mixture into a pot with boiling water and stir it with a metal ladle while it boils, 4) in a small plastic container, dilute the cloves and cinnamon with a little water, 5) add this second mixture to the pot in which the *chicha* is boiling, 6) pour the *chicha* in a pitcher and serve it in glasses. Although the recipe does not specify, it is very possible that it also includes sugar. In recent decades, sweet *chicha* has become known in Santa Cruz as *chicha cambia*<sup>25</sup> to differentiate it from the *chicha* of the Andean region.

### Alterations and persistence in the preparation of *chicha* chiquitana

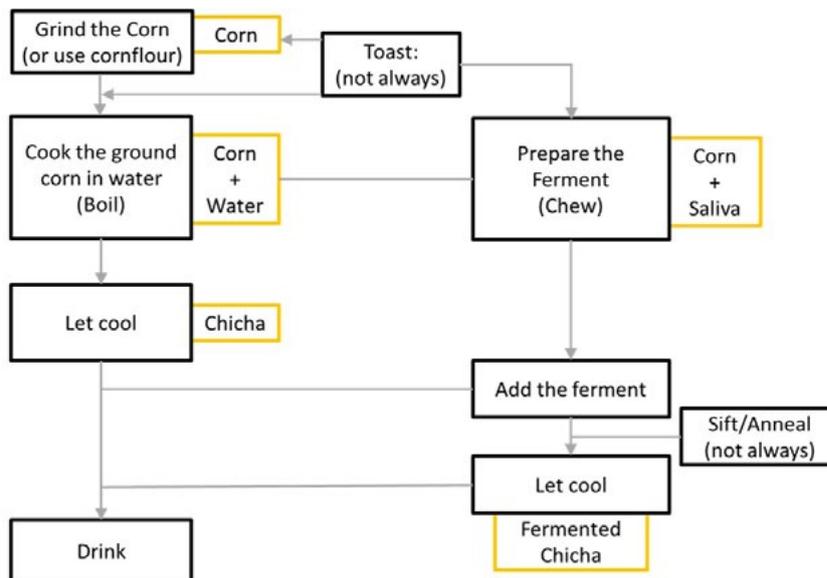
The six recipes presented cover a period of approximately 320 years. It can be observed that the basic preparation of *chicha* has persisted, despite structural changes experienced through colonialism and missionary culture. In recipes from recent decades, innovations are apparent in the addition of some non-local ingredients and the use of non-traditional utensils, but the production process continues to be artisanal, even when *chicha* is being made for commercial purposes.

Analysis of the recipes shows that only the fourth recipe, from María Cuasace Jiménez, provides information on the quantities, proportions, times and manpower («don't get tired»), elements that determine the quality and flavor of the *chicha*. This proves a gender bias in the ethnographic accounts, especially concerning activities that are carried out only by women, such as the processing of *chicha* chiquitana. Another interesting point in her recipe is the reference to how the consistency of the *chicha* can be changed by pouring the pitcher of *patá* into the *chicha* while it is still hot. This example shows us how culinary preferences are intimately related to the cultural practices of each ethnic group. For example, the Tupi-Guaraní instead seek a thicker consistency, for which reason their *chicha* is not strained or filtered and is cooked after mastication. According to Sztutman (2004, 25–42), this method is used to give more »body« to the drink, which accompanies the slaughter and ceremonial consumption of prisoners of war and thus underlines the parallelism in ritual symbolism between the meat of the enemy and the fermenting drink.

Figure 1 shows differences in processing between sweet *chicha* and strong *chicha* (with alcohol). In the latter, fermentation must be initiated, which in the case of some recipes is done with *patá*, also known as *muku*.<sup>26</sup> The *chicha* with added *patá* or *muku* is left to rest, later strained to remove sediments, boiled again and, finally, left covered in special ceramic pots to ferment for at least three days. The alcohol content increases with longer fermentation time, and the flavor of the *chicha* gradually changes. The *chicha* chiquitana is sweet, even the day after preparation. Gradually, *chicha* becomes stronger over three or four days, after which it reaches its optimum threshold.

Small home tricks are evidence of domestic production of this beverage. For example, while some *chichas* use only ground maize kernels or flour, some recipes mention that the

Figure 1



maize must be roasted or specify that only the portion of the maize that will be used for *patá* must be roasted. The ground maize must be mixed with water and left to boil while stirring constantly. After the *chicha* has boiled and subsequently cooled (and fermented, if applicable), it is ready for consumption.

It is possible to perceive differences in the ingredients used to elaborate maize *chicha* in the fifth and sixth recipes, which were recorded in 2018 and 2019, respectively. One incorporates two spices that are not native to the Bolivian lowlands, namely cloves and cinnamon, and the other uses ice (in a bag) to cool the drink and sugar to sweeten it.

Table 1 shows that, over time, the basic ingredients used to make *chicha* chiquitana have been water and maize. In the case of strong *chicha*, the third ingredient is saliva, which is incorporated into the process of chewing the maize grains or flour to make *patá*, which is added after the *chicha* has boiled and cooled.

Table 1. Ingredients used in the preparation of chicha chiquitana.

Ingredients		1696~1703	1748–1767	1970	2007	2018	2019
Maize	Whole Grain					X	
	Flour (Milled Grain)	X	X	X	X		
	Industrialized Flour						X
Water		X	X	X	X	X	X
Manioc (optional)					X		
Saliva			X	X	X		
Ground cinnamon							X
Cloves							X
Sugar						X	
Ice						X	

The most significant change over time can be seen in the materiality of the utensils used to prepare and consume *chicha* (see Figure 2 and Table 2). In rural and more traditional contexts, *tutuma*, clay pots, *tacú* and wooden spoons (*jometoto*) are still used. However, these artifacts have been rapidly supplanted in recent decades by glass vessels, metal spoons, metal pots and plastic containers. Perhaps the most severe change in materiality that has influenced the taste of *chicha* is the replacement of clay jars with metal pots for cooking and storing *chicha*. The abandonment of pottery is a global phenomenon that represents a loss of knowledge and of one humanity's oldest activities.

Figure 2

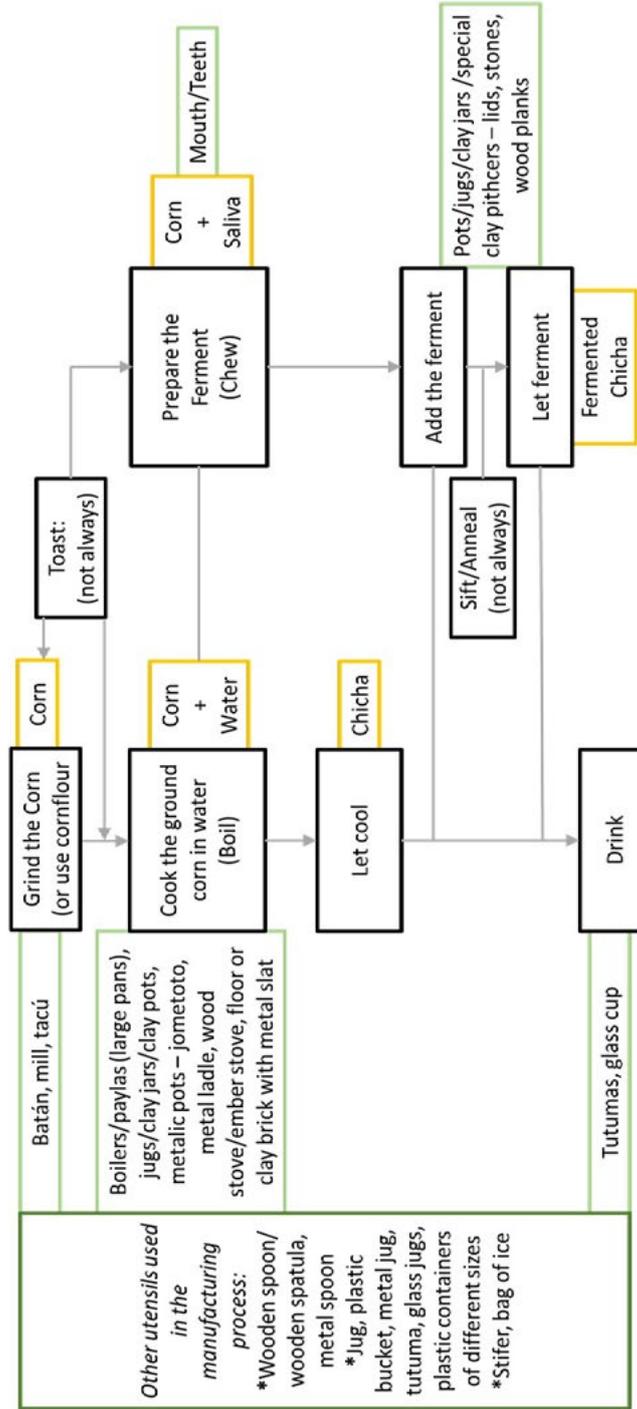


Table 2. Chronology of materiality in the preparation of *chicha* chiquitana.

Recipes	1696~1703	1748–1767	1970	2007	2018	2019
Actions/Process						
To grind the maize grains	grind (does not specify utensil)	Teeth	Batán	Batán or mill	Tacú (sheet metal adaptation)	The flour is already milled
To process the ground maize (to elaborate the ferment)		Teeth	Mastication (mouth/teeth/saliva)	Mastication (mouth/teeth/saliva)		
To cook the chicha *To add hot water	large cauldrons or clay paylas	*Large semi-buried pot	Pottery pots	Pottery pots	Metallic pot	Metallic pot
To whisk while boiling				Jometoto		Metal ladle
To let the chicha ferment		Large pot semi-buried in the ground	Large pot buried in the ground up to the neck: bauziř	Pitchers (for fermented chicha), special pots		
To cover the container and let it ferment		Does not specify type	Stone or board			
To mix				Spoon (no material specified)	Wooden spoon/spatula	Metal spoon
To contain ingredients, to serve and to pour (maize, flour, liquid)				- Jug (no material specified) - Plastic bowl (to cool the chicha)	- Plastic bucket - Metal jug - Tutuma	- Glass pitcher - Plastic containers
To consume chicha					Tutuma	Glass cup
To cook		Pot (leave in the pot)	Pot (leave in the pot)	Wood in the fireplace	Fireplace or stove made of bricks and metal structure	Fireplace or stove made of bricks and metal structure
To strain the chicha				Colander		
To cool the chicha		Pot (Leave in the pot)	Pot (Leave in the pot)	Plastic bowl Re-cooking: in the same pot	Ice	

\*  Does not present this step or does not specify the action/object.

\*\* The description of the objects highlighted with colors is shown in Figure 3.

## Chicha chiquitana among the objects of the BASA Museum

Between mid – 1963 and the end of 1965, the German anthropologist Jürgen Riester conducted field research in the Bolivian lowlands. On his return to Germany, Riester brought with him a collection of objects from the Chiquitano culture that have been in the BASA Museum of the University of Bonn since 1966. Some objects in the collection are related to production and consumption of maize *chicha*.

An analysis of the material artifacts found in the BASA Museum from a *longue durée* perspective reaffirms the function of museums as keepers of memory. Today more than ever, ethnographic collections of museums must be brought to light as a tool in the struggle for preservation and care of cultural traditions, which, due to the capitalist system that dominates the globe, threaten the traditions and knowledge of the indigenous peoples of the Amazon.

Figure 3 provides images of and information about the traditional utensils used to make *chicha* chiquitana. Except for the mortar or *tacú*, which was brought by Trimborn, all objects were in use when Riester (1971) described the processing of *chicha* chiquitana in his ethnography.

Figure 3



**Mortero – Tacú /Kikiš/Atíbaraš** (Riester, 1971)  
**BASA Inv. N°2067, 2068 – Collection:** Trimborn.  
**Locality:** Santa Cruz de la Sierra. Acquired in July 1960.  
Mortar: Height: approx. 40cm, Diameter: 22cm.  
Hand: Length: approx. 75cm, Maximum diameter: approx. 6,5cm.  
Used to grind cereals. Hand carved, made of wood.



**Batán – Taúš/Takuúř** (Riester, 1971)  
**BASA Inv. N°1967 – Collection:** Riester.  
**Locality:** Prov. Chiquitos. Acquired in 1966.  
Length: 180cm, Width: 22cm, Height: 20cm, Depth: 8-18cm.  
Stone: Length: 40cm, Width: 24cm, Thickness: 2-3cm.  
Long trunk of hard wood (Cuchi, Tajibo and Chonta), with straight ends and rounded edges. It is the most important utensil of the Chiquitano women, to grind maize, manioc, pepper, papaya, meat, etc. It is used by taking the stone by the ends and moving it from one side to the other. The center of the *batán* is deeply carved and worn from years of use (Riester, 1971).



**Olla para chicha – Paropés / Paropéz.**  
**BASA Inv. N°2018 – Collection:** Riester.  
**Locality:** Prov. Chiquitos. Acquired in 1966.  
Height: 38cm, thickness: 1cm, minimum diameter of the neck 22cm, maximum circumference of the pot body: 76cm.  
Flat base and spherical body. Ceramic pot with short neck with incised decoration. It was used to store chicha.



***Cuchara – Mekotós/Homeotóto.***

**BASA Inv. N°2017 – Collection:** Riester.

**Locality:** Prov. Chiquitos. Acquired in 1966.

Height: 93cm, maximum thickness: 6.2 cm.

Cedar spoon, polished, whose lower part is black due to constant use during the cooking of chicha.

According to Riester (1971), the mixing spoons – Mekotós – vary between 22cm– 110cm in height and 2.2cm–7.5cm in thickness. They are made of hardwoods (chonta, tajibo, cuchi) and softwoods (toco, cedar) and even bamboo.



***Taropés/Tutuma/Mate.***

**BASA Inv. N°1985 – Collection:** Riester.

**Locality:** Dpto. Santa Cruz. Acquired in 1966.

Height: 8.3cm, width: 16.2cm, circumference 53cm, wall thickness: 0.03cm.

Tree calabash (*Crescentia cujete*), which are grown in the vicinity of houses (Riester, 1971) and are used as containers for consuming beverages and food.

## Currency, power, resistance and flavor

In the previous sections, persistence and temporal changes in both the ingredients and the material culture involved in production of *chicha* chiquitana were presented in detail. Therefore, the discussion will now focus on four thematic axes directly associated with the beverage: 1) the socioeconomic value of *chicha* in collaborative work or *minga*, 2) the transcendence of *chicha* in the social role of women, 3) fermented or strong *chicha* as a phenomenon of resistance of the Chiquitano people, and 4) interethnic similarities and differences in the production of *chicha* in the Bolivian lowlands.

Even before colonial times, *chicha* played a role articulating economy, ritual and society within Chiquitano communities, as it still does today. Festivities involving *chicha* strengthened family and social reciprocity ties, thus fulfilling a cohesive function within the ethnic group. According to Riester (1976, 149), festivities also promoted solidarity among the various chiefs, allowed a release of community tensions, gave social prestige to the host within the group and promoted internal solidarity.

Festivities are still widespread, important social practices that combine ritual and economic aspects. For example, the procession music *piexta prasa*, which has a strong martial character and is part of the religious musical repertoire, is played as a prelude to uncorking the *chicha* pitchers (Rozo 2011, 153).

### Fermented or strong chicha is the currency with which minga is paid

The Chiquitanos use various forms of cooperation in agricultural work. One is *minga* or *bobikixhi*, in which a family rewards a group of twenty or more people who helped them by slashing, felling or harvesting rice with a plentiful lunch and a feast, during which the beneficiary of the collective work offers the traditional fermented *chicha* (APCOB-CICOL 2000, 34). In the words of Rozo:

»there is no other mechanism like the minga, which is formally capable of mobilizing and organizing so many workers, men and women of different ages, to produce reciprocally for a specific family.« (Rozo 2000, 152)

In return for the work, the beneficiary offers a feast with an abundant lunch that includes two large pitchers of the traditional, strong *chicha* or *tabaixi*. The female head of the family, assisted by her daughters and relatives, is in charge of preparing the meal and making the *chicha* (Tomichá Charupá 2002, 303 – 304).

Rozo (2011, 156 – 157) describes the celebrations after the *minga* work as a fundamental, ludic episode that expresses cultural aspects of Chiquitano society. His description outlines the conventional steps that precede the celebration: 1) the beneficiary of the *minga* thanks those present and expresses his family's satisfaction with the results of the work, 2) the beneficiary and his family publicly hands over the *tutuma* to the people chosen as the »uncorkers«, 3) the person chosen to uncork the first pot of *chicha* gives a speech, which may or may not be loaded with political or religious topics but is never informal. The person expresses gratitude for the honor of the invitation to uncork the *chicha*, which, far from being an individual gift, makes this person a servant of the community. All persons who receive a *tutuma* are chosen to break the barrier of work and social obligation and enter into the world of celebration and drunkenness, where the fundamental rule is to serve all the guests and not leave until all the contents of the pitcher have been finished, 4) The person chosen for the uncorking accompanies the sponsoring family and a select group to the place where the pots are covered with plastic bags, circular sheets of wood and blankets, 5) Once the pot is uncorked, this person must collect, using an absorbent piece of cotton, the bitter foam that lies on the surface of the liquid after it cools, 6) a little *chicha* is poured into a bucket and, using the long wooden spoon or *mekotós* provided by the *minga* sponsor, is stirred forcefully within the deep part of the container but without breaking the pot. The effervescence of the foam is celebrated by the witnesses, 7) The separated liquid is returned to the bucket and stirred again for the last time, 8) The *chicha*, now ready to be consumed, is poured back into the bucket and, in the presence of this select group of people and the *minga* beneficiaries, the ritual celebration of gratitude is performed after procession music played by the musicians, who are also present, 9) at this point, some of the poured *chicha* is sprinkled on the ground before taking the first sip, giving »thanks to the earth« for the products of the work and for the *chicha*, 10) once the first celebration is over, all the containers are filled to return to the room with the guests so that others can be served. From this moment on, music is played, and the women quickly form a circle around the musicians and begin to dance.

The quality and quantity of fermented or strong *chicha* that is offered, in addition to the music and dance, are the payment offered by the *minga* beneficiaries to all the people who participated in the work. The *chicha* is tasted or subjected to two tests, first by the select group and later by the rest of the attendees, who express their acceptance or rejection of the payment; the latter response may be caused by poorly cooked *chicha* or a *chicha* with a low alcoholic level that does not cause any effect (Rozo 2011: 157).

Without women, there is no chicha; without chicha, there is no power

The above descriptions are a clear example of the social and economic role of fermented *chicha* in the Chiquitano society, but they also demonstrate the great responsibility that women have in the economic mechanism of the *minga*, since they are the ones who elaborate the *chicha*. On the one hand, Amazonian beers spoil quickly, which explains why or-

ganizing a party requires rigorous planning in which nothing can be left to luck (Erikson 2004, 7). On the other hand, the level of alcohol must be optimal. Although the low level of alcohol in Amazonian beverages explains why ceremonial festivities last several days and nights, it can also generate discontent among guests.

The brewing of beer is entirely in women's hands and is a demanding responsibility, but one that increases the prestige of the family. In the specific case of the Chiquitano people, women are essential to the *minga* as a system of cooperation, both in the brewing of *chicha* and in the extension of family solidarity networks. Let us recall that it is indeed women, and only women, who chew maize grains to prepare *patá* for fermenting *chicha*. In other words, brewing beer is a generalized activity of women not only when they are adults, but in all stages of their lives.

Even among caciques of the indigenous Chiquitanos, polygamy<sup>27</sup> was permitted for the purpose of producing maize *chicha* (and other types of *chicha*) to fulfill social commitments and to »guarantee the social stability of the indigenous community« (Tomichá Charupá 2002, 315).

Lehm (2004, 62) relates that, among the Mojeños in Beni, Bolivia, now as in the past, the prestige of the *corregidores*, the main magistrates of the *Cabildo Indígena*,<sup>28</sup> derives directly from their ability to distribute *chicha* among all members of the community and to guests who come to participate in the patronal feast. The members of the *Cabildo Indígena* are elected every year, and one of the eligibility requirements is that the candidate be married precisely because it is guarantees that his family will have enough *chicha* to distribute when needed.

### Fermented or strong chicha as a phenomenon of cultural resistance

There are many other important ceremonies among the Chiquitanos during which fermented *chicha* is required, for example *compadrazgo*. *Compadrazgo* is a complex relationship mode defined as a system of ritual relationships with multiple variations, one that challenges ethnologists to understand the relationships' role in the passage from nature to culture and in processes of humanization of the person (Silva 2017, 609 – 610) and the construction of personhood. The main rule of *compadrazgo* is mutual respect in the fabrication of otherness, the production of kinship and the prohibition of certain practices among the Chiquitanos. In the end, *compadrazgo* creates a collective called the »brotherhood of respect« that lasts even beyond death (Silva 2017, 611). For the *compadrazgo* ceremony, the host, the owner of the house, the father of the child or the fiancé invites his compadre to the table and serves *chicha* and food. On this day, the *compadres* drink a lot of *chicha* and are the first to eat.

Another is the *curussé* dance performed by Chiquitanos during the carnival period of the Christian calendar in the town of Santa Ana (Bolivia) and in Vila Nova Barbecho (Brazil), an event which synthesizes territory and ethnic identity. This festival is accompanied by several rituals, some of which seem to be inconsistent with the struggle for the demarcation of traditional territory. As Pacini (2017, 139 – 141) reports, during the carnival, alliances with non-indigenous farmers are observed. Thus, all families dance and offer *chicha*, passing from house to house in a circular movement from right to left that begins in the chapel and concludes there with the ritual of reconciliation on the night of Carnival Tuesday.

The Chiquitano people, like any other ethnic group, go through dynamic processes, however, they are determined to continue with their indigenous identity and to continue recreating important works of art endowed with remarkable historical and cultural specificity, one of which is production of the pots used to prepare *chicha* in the Brazilian Chiquitano tradition (Pacina 2017, 146).

The role of *chicha* as food and medicine can also be analyzed. In the Chiquitanos' conception, illnesses are caused by evils placed inside their bodies, and the shaman must perform another, similar action to eliminate the evil. Using *chicha*, food and the Eucharist ritual, shamans appropriate the evil for their benefit. However, there are also accounts of shamans putting poison into *chicha* on both the Bolivian (APCOB-CICOL 2000, 44) and Brazilian (Pacina 2017, 153) sides.

The fermented *chicha* is not the variety that transcends rural borders in the department of Santa Cruz; as apparent in the last recipes introduced here, only sweet *chicha* is elaborated for sale both in and near the city. The way of making strong *chicha*, that is, with mastication, is not part of the life of the »white« cruceño, whose tolerance of the cultural practices of indigenous peoples is not different from Jesuit postures during the seventeenth century. This stance undoubtedly influenced indigenous peoples to take some adaptive decisions, such as reducing production and consumption of *chicha fuerte* and substituting it with the consumption of liquor or and sweet *chicha*. Similar cases have already been documented among the Guarayo people in Santa Cruz, Bolivia (Melgar 2004). This phenomenon could lead to a weakening of women's power and a decrease in cooperative labor (*minga*).

As long as they maintain their festivities, *minga*, religious beliefs, ritual practices and political reaffirmation as an indigenous people, Chiquitano women will continue making fermented *chicha*, and its consumption is part of their resistance.

### The flavor of chicha depends on ethnic identity

The way in which *chicha* is prepared is perceived as a unique characteristic of different ethnic groups and may or may not confer certain prestige. In this sense, Lehm et al. (2002) explain that one of the reasons why Mojeño Trinitario men avoid marrying Yuracaré or Chimane women is precisely because of this difference in how *chicha* is prepared. According to Lara (2004, 67), Yuracaré men consider *chicha* to be the most important product in the sphere of reciprocity and social relations. Nordenskiöld (1923, 40) already noted that *chicha* played an important role among all the groups he visited in eastern Bolivia, since long excursions were made with the aim of visiting neighbors to drink *chicha* and chat. How recipes and ways of preparing maize *chicha* have survived over time, in the hands of women and in the context of interethnic marriages, is an interesting topic for further research, since one can conclude that *chicha* is made according to different recipes and is definitely a household matter.

Through brief comparison with the maize *chicha* of neighboring ethnic groups, we observe that the Guarayo people also consume fermented *chicha* on important occasions and consume sweet *chicha* in everyday life. The process of making fermented *chicha* Guaraya is somewhat different from that for *chicha* chiquitana. The grain is ground in a large wooden *batán* and heated until it reaches the boiling point, which makes it suitable for mastication. Then, small balls are formed and boiled in water again for a long time. Once the mixture has cooled, it is left to stand for a day and boiled again for a long time, after which it is poured into special containers to ferment for three or four days until it reaches the required alcohol level (Hermosa Virreira 1950, 40 quoted in Melgar 2004, 57).

For the Chimane, the complete beer is a mix of manioc and maize beer, with each prepared separately and then filtered together. However, and despite manioc *chicha* having priority over maize *chicha*, each can be consumed independently. To prepare maize *chicha* that is consumed alone, called *co'ractyi'*, the Chimane people use ripe bananas in their recipe. The dried maize is threshed and then crushed on a grinding board with the edge of a large, flat stone that is more or less oval. Once the maize is crushed, the very ripe, raw bananas are incorporated into a mixture that is moistened to obtain a compact dough. Some pieces are taken off and given the shape of flat bread rolls that will be boiled separately and constitute the *jäsdye*<sup>29</sup> of this beer, and thus will be chewed to stimulate fermentation. The rest of the dough is diluted in water. There are two ways to proceed from this point: either the liquid is boiled as-is, or it is pre-filtered. When the now-thickened liquid is cooked, cold water is used to dilute and cool it, whereafter the *jäsdye'*, often already chewed, is poured in and dissolved so that it can start fermentation of the maize beer. (Dailant 2004, 75).

Through flavors we recall past times, experiences lived and knowledge accumulated, and we articulate them with social relations, cultural practices and management of natural resources. Every time we drink a fermented *chicha*, let us enjoy a journey into the past and think about how its consumption in the present supports the power of women and contributes to the cultural resistance of indigenous peoples of Latin America.

## Endnotes

- 1 Belonging to different linguistic families, namely »Chiquito, Arawak, Chapakura, Zamuco, Otuqui, y Tupí-Guaraní« (Tomichá 2002)
- 2 «The minga is an activity in which people collaborate. The owner of the minga prepares strong chicha and invites all the neighbors to come, for example to collaborate with his chaco [i.e. field]. The chicha is a form of 'payment', in addition to a lunch served at noon. When the chicha is good, they want to dance and this is where the musician is so important. If there were no musicians, there would not be these festivities and activities« (Dolores Charupá, elderly housewife, in Rozo 2011, 155).
- 3 All citations were translated into English by the authors.
- 4 Reports on apostolic activities were to be sent annually from each province and were written by the provincials themselves, secretaries or chroniclers (Matienzo u.a. 2010: 8–9).
- 5 «... Everything is treated, arranged and paid for with this drink, since there is no other money. If a person does another one a favor and helps at home or in the field, after rendering the service (s)he is rewarded with chicha, in view of the fact that it is not possible to remunerate him in cash because of the lack of currency that I have never seen in this country« (Padre J. Knogler [1780] cited in Rozo 2011, 62).
- 6 «They do not usually go hunting in the forests, nor to collect honey and only move away from their homes that bit of a distance that can last them a flask of that their wine, which is their only supply and provision on the way« (Fernández 1895, 69).
- 7 «They are all naked people, as they are born, as it is said, and very bestial, without order or reason, or law, and the most vicious drunkards of maize wine of all the nations I have seen« (Governor D. Lorenzo de Figueroa [1586] in Charupá 2002, 346–347).
- 8 «Father Lucas did not have much difficulty in allowing them the use of that drink, because it did not cause drunkenness in them, which was the only motivation to banish it from the other reductions« (Fernández 1895, 193).
- 9 «That is why our missionaries made every effort from the beginning to exterminate and uproot this vice, and at the same time those feasts and banquets. They used many means, both gentle and severe, to break the pitchers, reprimand them, spill the chicha, and undo their brutal meetings, which provoked anger and revenge in those barbarians, and they became so enraged and exasperated that many times they furiously used their clubs and arrows to kill them« (Fernández 1895, 43).
- 10 «This miserable drink has always troubled us and has caused us serious displeasure, since it drives people mad, if left to ferment for eight or more days. In this way violent quarrels break out, since our Indians like chicha just when it has become as sour as vinegar... Now they are allowed only to

make it ferment three days, in this case they do not lose their minds, but feel only joyful« (Father J. Knogler cited in Rozo 2011, 62).

- 11 «Attracted by the hope of the reward, and fearful of the punishments, if they did not obey the will of God, they promised Him, unanimous and in agreement, to obey His will soon, provided that He would only allow them their chicha, their ordinary drink, because water caused them acute pains in the stomach« (Fernández 1895, 192).
- 12 «The strong chicha or tabaix is the traditional monkox drink that continues to maintain its validity for all social and festive events. Tabaix is made for patronal feasts and festivities, mingas, affection to compadres and family festivities on the occasion of birthdays, marriages, graduation, etc. The elaboration of chicha is a feminine task. The woman continuously elaborates sweet chicha or naxixh since this should not be missing in the home, and in special festive occasions, she elaborates the tabaix.« (Arrién/Viana Chuvé 2007, 137)
- 13 «They roast the maize until it becomes charcoal, and after it is well crushed or ground, they put it to boil in large pots or pots of pottery, and that black and dirty water that they get, is the whole composition of the chicha, which they like so much that they spend a good part of the day in toasts, working in the fields only from morning until noon; but although they promised to leave their old diabolical superstitions, they did not forget them so easily« (Juan Patricio Fernández 1895, 193).
- 14 Payla: »Paila: Large metal vessel, round and shallow« (Real Academia Española 2021).
- 15 The Chiquitano batán is a long, hardwood log that has been hollowed out on one side. Riester (1970, 314) believes that this tool was created under Andean influence.
- 16 Bauziñ: »Large jug buried up to the neck in the ground that can reach 160 cm in height« (Riester 1970, 315).
- 17 Patá: in Chiquitano múkko is the chewed flour. A mass obtained from soaking roasted maize flour in saliva to achieve chicha effervescent (Landivar Justiniano 2019, 25).
- 18 Jace is a bundle, of firewood (Landivar Justiniano 2019, 19).
- 19 Jometoto/ homeotóto is the wooden paddle large enough to stir chicha in deep cántaros (Landivar Justiniano 2019, 19). In Chiquitano it is called mekotóš (Riester 1971, 174).
- 20 Usually fragments of a ceramic object are reused as vessel lids.
- 21 Jachi is the thick sediment of a liquid that remains in the vessels that keep chicha (Landivar Justiniano 2019, 7).
- 22 Tacú is the Chiquitano/Bolivian mortar. In the Chiquitano language tacuarsch means »to crush, to grind« (Landivar Justiniano 2019, 33).
- 23 Tutuma is a tree calabash (*Crescentia cujete*) used as a container for drinking chicha.
- 24 The Cabañas del Río Piraí is an area on the banks of the Piraí River in Santa Cruz de la Sierra that hosts restaurants visited by locals and tourists.
- 25 Camba refers to a person or way of life typical of eastern Bolivia.
- 26 Muku is the traditional preparation of chicha that consists of chewing maize so that the ptyalin in the saliva initiates the degradation of the starches. This paste makes it possible to obtain a drink with special fermentation properties and a characteristic taste (Centro de Documentación de Bienes Patrimoniales).
- 27 »The Caziques have two or three because as such they have to give a lot of chicha to the others, a drink they make from maize, manioc, or other fruits, and one woman is not enough to make so much drink«. (Burgés 1703: f. 3 in: Tomichá Charupá 2002, 215).
- 28 It is a special public entity, whose members are members of an indigenous community, elected and recognized by it, with a traditional socio-political organization, whose function is to legally represent the community, exercise authority and carry out the activities attributed to it by the laws, its uses, customs and the internal regulations of each community.
- 29 »What is [or has been] chewed« (Daillant 2004, 75)

## References

- APCOB/CICOL (2000): Dueños del bosque: Manejo de recursos naturales por indígenas chiquitanos de Bolivia. Santa Cruz de la Sierra.
- Arrién, Mario (2008): Sistemas de Subsistencia y Cosmovisión de los Chiquitanos. CLWR. Santa Cruz de la Sierra.
- Arrién, Mario/Antonio Viana Chuvé (2007): Saberes y Conocimientos del Pueblo Monkox. Santa Cruz de la Sierra, Bolivia.
- Bruno, María (2010): Carbonized Plant Remains from Loma Salvatierra, Department of Beni, Bolivia. In: Zeitschrift für Archäologie Außereuropäischer Kulturen 3, 151 – 206.

- Parker, Bradley J./Weston McCool (2015): Indices of household Maize beer production in the Andes. An Ethnoarchaeological Investigation. In: *Journal of Anthropological Research* 71/3, 359 – 400.
- Castillo, Joseph [José] del (1906 [1676]): Relación de la provincia de Mojos. Descripción de la provincia, ríos y sitio de los pueblos. In: Manuel Vicente Ballivián (ed.): *Documentos para la historia geográfica de la República de Bolivia*. La Paz, Bolivia. [Serie Primera: Época Colonial, Tomo 1: Las provincias de Mojos y Chiquitos].
- Centro de Documentación de Bienes Patrimoniales: Tesoro Regional Patrimonial. Ministerio de las Culturas, las Artes y el Patrimonio. Gobierno de Chile. URL: <https://www.tesoro regional.cl/terminos/1174>, aufgerufen am 07.10.2020.
- Clement, Charles u.a. (2010): Origin and Domestication of Native Amazonian Crops. In: *Diversity* 2/1, 72 – 106.
- Combès, Isabelle (2010): *Diccionario étnico. Santa Cruz la Vieja y su entorno en el siglo XVI. Cochabamba*.
- Daillant, Isabelle (2004): La bière complète des Chimane. In: Philippe Erikson (ed.): *La pirogue ivre. Bières traditionnelles en Amazonie*. Saint-Nicolas de Port, 71 – 80.
- Dickau, Ruth u.a. (2012): Diversity of cultivars and other plant resources used at habitation sites in the Llanos de Mojos, Beni, Bolivia: evidence from macrobotanical remains, starch grains, and phytoliths. In: *Journal of Archaeological Science* 39/2, 357 – 370.
- Diez Astete, Alvaro (2011): *Compendio de etnias indígenas y ecoregiones. Amazonía, Oriente y Chaco*. La Paz, Bolivia.
- Erikson, Philippe (Ed.) (2004): *La pirogue ivre. Bières traditionnelles en Amazonie*. Saint-Nicolas de Port.
- Fernández, Juan Patricio (1895): *Relación historial de las misiones de indios chiquitos que en el Paraguay tienen los padres de la Compañía de Jesús*.
- Fernández-Carrión, Miguel Héctor: Juan Patricio Fernández. URL: <http://dbe.rah.es/biografias/22402/juan-patricio-fernandez>, aufgerufen am 11.10.2020.
- Freyer, Bärbel (2000): *Los Chiquitanos. Descripción de un pueblo de las tierras bajas orientales de Bolivia según fuentes jesuíticas del siglo XVII*. APCOB. Santa Cruz de la Sierra, Bolivia. [15, *Pueblos indígenas de las tierras bajas de Bolivia*].
- Jaimes Betancourt, Carla (2012): *La cerámica de la Loma Salvatierra*. La Paz, Bolivia.
- Jennings, Justin/Brenda J. Bowser (Ed.) (2008): *Drink, Power and Society in the Andes*. Gainesville, Florida.
- Krekeler, Birgit (1993): *Historia de los Chiquitanos*. APCOB. La Paz, Bolivia. [*Pueblos indígenas de las tierras bajas de Bolivia*, Bd. 2].
- Landivar Justiniano, Raúl (2019): *Ecós de mi Tierra. Diccionario de habla popular chiquitana*. Ms.
- Lara Delgado, Kantuta (2004): *La consommation de chicha chez les Yuracaré de San Pablo, Río Isiboro*. In: Philippe Erikson (Ed.): *La pirogue ivre. Bières traditionnelles en Amazonie*. Saint-Nicolas de Port, 65 – 70.
- Lehm Ardaya, Zulema (1999): *Milenarismo y Movimientos Sociales en la Amazonia Boliviana: La Búsqueda de la Loma Santa y la Marcha Indígena por el Territorio y la Dignidad*. Santa Cruz.
- Dies. (2004): *Quelques aperçus sur la bière des Mojeños*. In: Philippe Erikson (Ed.): *La pirogue ivre. Bières traditionnelles en Amazonie*. Saint-Nicolas de Port, 59 – 64.
- Lehm Ardaya, Zulema u.a. (2002): *Matrimonios Interétnicos en los Llanos de Mojos*, La Paz.
- Lombardo, Umberto u.a. (2020): Early Holocene crop cultivation and landscape modification in Amazonia. In: *Nature* 581/7807, 190 – 193.
- Martínez, Cecilia (2015): *Tapuy miri, chiquitos, chiquitanos. Historia de un nombre en perspectiva interétnica*. In: *Bulletin de l'Institut français d'études andines* 44/2, 237 – 258.
- Matienco, Javier u.a. (Ed.) (2011): *Chiquitos, en las anuas de la compañía de Jesús (1691 – 1767)*. Cochabamba.
- Melgar, Tania (2004): *Chicha et résistance culturelle chez les Guarayo*. In: Philippe Erikson (Ed.): *La pirogue ivre. Bières traditionnelles en Amazonie*. Saint-Nicolas de Port, 55 – 58.
- Moore, Jerry D. (2019): *A Prehistory of South America. Ancient Cultural Diversity on the Least Known Continent*. Colorado.
- Noack, Karoline (2006): *Im Rausch der Zeiten. Chicha und soziale Beziehungen in den Anden*. In: *Das Altertum*, 176 – 192. [Bd. 51].
- Nordenskiöld, Erland (1923): *Indianer und Weisse in Nordostbolivien*. Stuttgart.
- Oxford University Press (2020): *Definición de Yuca*. URL: <https://www.lexico.com/es/definicion/yuca>, aufgerufen am 30.10.2020.
- Pacini, Aloir (2012): *Um perspectivismo ameríndio e a cosmologia animica chiquitana*. In: *Espaço Ameríndio* 6/2, 137 – 177.
- Prümers, Heiko/Carla Jaimes Betancourt (2014): *100 años de investigación arqueológica en los Llanos de Mojos*. In: *Arqueoantropológicas* 4/4, 11 – 53.

- Real Academia Española (2021): Diccionario de la lengua española. 23. Aufl., [Onlineversion 23.4]. URL: <https://dle.rae.es>, aufgerufen am 18.02.2021.
- Riester, Jürgen (1970): Julian Knogler S.J. und die Reduktionen der Chiquitano in Ostbolivien. Roma. Via dei Penitenzieri 20. [Archivum historicum Societatis Iesu, Bd. 39].
- Ders. (1971): Die Materielle Kultur der Chiquitano-Indianer (Ostbolivien). Wien. [Archiv für Völkerkunde, Bd. 25].
- Ders. (1976) En busca de la loma santa, Cochabamba-La Paz.
- Rozo López, Bernardo (2000a). Impacto diferencial de la economía de mercado en formas tradicionales de cooperación laboral. Estudio de las comunidades chiquitanas de San Lorenzo y El Cerrito de la zona de Lomerío. Departamento de Santa Cruz. La Paz. Tesis de Grado para Licenciado en Antropología. UMSA.
- Rozo López, Bernardo u.a. (2011b): Curaciones de Luna Nueva. Saberes, prácticas y productos musicales en Lomerío. La Paz, Bolivia.
- Silva, Giovanni José da (2015): «Todo se Cambia, Incluso el Paisaje». Memórias Indígenas e Migração Camba-Chiquitano. In: Revista Eletrônica História em Reflexão 9/17.
- Silva, Verone Cristina da (2017): Fazendo compadre: relações de compadrio entre o povo indígena chiquitano. In: Etnografica 21/3, 599 – 612.
- Smalley, John/Michael Blake (2003): Sweet beginnings. Stalk Sugar and the Domestication of Maize. In: Current Anthropology 44/5, 675 – 703.
- Sztutman, Renato (2004): «Kawewi pepicke». Les caouinages anthropophages des anciens Tupi-Guarani. In: Philippe Erikson (Ed.): La pirogue ivre. Bières traditionnelles en Amazonie. Saint-Nicolas de Port, 25 – 46.
- Tomichá Charupá, Roberto (2002): La primera evangelización en las reducciones de Chiquitos, Bolivia (1961 – 1767). Protagonistas y metodología misional. Verbo Divino, Bolivia.
- Vargas Faulbaum, Felipe (2019): Chicha de jora. Cauim de milho germinado nos Andes peruanos. Dossiê Saberes e Sabores. In: Equatorial – Revista do Programa de Pós-Graduação em Antropologia Social 6/11, 1 – 25.

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Figure 3: Material artifacts involved in the processing and consumption of *chicha* chiquitana in the BASA Museum