Journal of Agriculture and Environment for International Development - JAEID 2020, 114 (2): 63–84
DOI: 10.12895/jaeid.20202.1376

Discovering Neverland: São Tomé and Príncipe and the development of the agricultural heritage of a multi-ethnic population

ALESSANDRA NARCISO*1, STEFANIA APHEL BARZINI², ANNALISA DI NUZZO³

Submitted on: 2020, September 15; accepted on: 2020, November 19. Section: research papers.

Abstract: The history of São Tomé and Príncipe (STP) shows that the development of the roças, plantations established in colonial times, form a heritage linked to the human development of STP. Various agricultural products have characterized the historical periods of migration, slavery, creolization, and gender emancipation up to the present day; agricultural products and the history of creolization make STP unique, while the relationship between culture and nature provides a useful tool for a better understanding of its historical roots. The essay argues that STP's sustainable development could be fostered by valorizing its historical agricultural heritage. Agrifood geographical indications (GIs), which directly link territories, peoples, and traditions could also serve this purpose. GIs could lead to raising the export price of STP's cocoa, coffee, and pepper, at the same time increasing cultivation of a number of other crops, especially indigenous fruits, which are usually planted in combination. These systems have proven to lead to better prices for products and increase the specialist labour market; they could also foster a multi-faceted approach to territorial development, including eco-tourism. However, challenges remain, as the country is still lacking in proper infrastructures, skilled labour, management, and institutional support. The question will be whether STP's fragile agri-food setting is able to support these new mechanisms, which require strong value chains, respect for territorial biodiversity, and a fresh look at the role played by small farmers running AgriSMEs.

Keywords: Agri-food heritage/São Tomé and Príncipe, geographical indications, sustainable development.

Introduction: Identity and Agriculture: an Inseparable Combination in the History of São Tomé and Príncipe

Few people have visited São Tomé and Príncipe (STP), a small independent African State barely visible on the map, situated some 300 km off the Gulf of Guinea, and one of the smallest economies in Africa. Situated on the equator, it is one of the most bio-diverse places on the planet, with a historical and cultural heritage of enormous interest. STP has

¹ ISEM-CNR, Rome, Italy

² Food Historian and Food Writer

³ S. Orsola Benincasa University of Naples, Italy

^{*}Correspondence details: alessandra.narciso@isem.cnr.it

a total area of 1,001 km² and around 44% of agricultural land of which 40% are permanent crops and 4% is arable land (FAO, 2018). Forest makes up about 30% of its territory, and the island of Príncipe is a UNESCO Biosphere reserve (UNESCO, 2019), while STP has not yet inscribed any sites on a UNESCO World Heritage tentative list.

This article situates the effects of the colonization of São Tomé and Príncipe and its creolization in the 16th century in a historical-anthropological synthesis that can provide some understanding of the country's current socio-economic and development potential. The specific goal is to identify characteristics with which the population of STP can easily identify. This aim is not an end in itself, as STP needs a long-term strategy to defeat poverty and fears regarding the food supply, also in the light of population growth. It is believed, in fact, that appreciating and making good use of resources, including cultural heritage agri-food development, can represent a driving force for positive change.

To this end, the methodology used in this work could be considered multidisciplinary, as it draws on the analysis of historical, legal, and anthropological sources that describe changes in the population of São Tomé and Príncipe over the centuries, starting from an aspect that is fundamental to the life of the country: its agricultural development.

Knowledge of life in the $roças^1$, the now mostly inactive plantations dating from the pre-independence period (until 1975) (Pape et al., 2013) is a useful lens through which to regain possession of a history that has helped shape life on STP today. Established to satisfy agricultural-colonial needs, the roças constituted small states within the State, developing a social and management system of great interest; the segregation models were overlaid on top of the typical segregation culture of the Portuguese colonial system. The wealth of the country's biodiversity, and traditional agricultural products such as cocoa and coffee, introduced by the Portuguese colonizers and historically worked in the roças, bring the discourse of identity into the present-day context.

The article focuses on the importance of these products, which become a defining hallmark of STP as an example of a very special territorial and human union, arguing that steps must be taken to prioritize the country's agri-food culture, allowing prospects for sustainable development.

Geographical indications, a special intellectual property right combining territory, traditions, and human labour, could be a particularly interesting springboard for the rebirth of the TPS's agri-food economy, and they could contribute to a sense of identity. To make this route feasible, it is necessary to focus on improving the agrarian structure to take full advantage of a variety of local agricultural features, using environment-friendly methods to avoid damaging the country's rich biodiversity.

Diversifying local production is one of the ways to break loose from a very low-yield economy currently highly dependent on foreign aid and often not in line with STP's needs.

Rebuilding São Tomé and Príncipe's historical memory means primarily reinforcing the identity of a population formed by several ethnic groups, cementing a national pride that is not a form of nationalism but a renewed and enhanced relationship with the agrifood world and its traditions, which could certainly represent a bridge towards a sustainable economy.

¹ Many former roças, which are not privately run, are currently abandoned, and they must be revitalized if this historical patrimony and possible agro-tourist attraction is not to be lost. The problem of the loss of this cultural heritage is well illustrated in the book by Rodrigo Rebelo de Andrade and Duarte Pape 'As Roças de São Tomé and Príncipe' (Edições Tinta da China, 2013).

A Very Special 'Colonization'

The history of this country is both unique and curious. São Tomé and Príncipe were discovered around 1471 by two Portuguese sailors, João de Santarém and Pero Escobar, before which time the islands appear to have been uninhabited (Miranda et al., 2012).

It can therefore be said that what we know of the history of Tomé and Príncipe begins with its 'colonization' by the Portuguese, but it is a very curious and almost atypical context both in Africa and beyond. It seems to be beyond doubt that the beginning of human history on STP can only be traced back to the period of Portuguese maritime expansion in Africa, as there are no historical signs of human life before 1493, when settlement effectively began. Unlike the majority of the African territories, which already had indigenous peoples living there, São Tomé and Príncipe does not therefore have a pre-colonial past (Seibert, 2015).

In the early days, people were deported from Portugal and forced to take up residence on the islands, so the first inhabitants consisted mainly of numerous exiled Portuguese convicts and Jewish children forcibly separated from their families in 1493 (Nogueiro et al., 2015), along with slaves from Benin and the Rio Niger delta. Those from the Kingdom of Congo were brought in only later.

In order to combat very high tropical sickness rates due to the low resistance of Westerners to the tropical climate, the Portuguese encouraged mixed marriages between Europeans and African slaves. Such unions were less frequent in the second colonization period from the mid-19th century onwards. 'A new Creole population was thus formed in the 16th century, with a distinct culture and language' (Seibert, 2015)

The waves of Portuguese settlers essentially date back to two phases that can also be recognized through their different agricultural produce: the sugar cane period, during the 16th century, and the coffee and cocoa period during the 19th and 20th centuries. These migrations differ over the centuries due to an "opportunistic" and ambiguous colonization policy: in the first period, marriage between Portuguese and Africans, mostly slaves or freed slaves, was widespread, while such unions were less frequent in the second.

After the decline of sugar cultivation in the archipelago in the 17th century, STP became almost exclusively a transit point for the slave trade. During the second colonization period, the Angolares, descendents of a community of runaway slaves known as *forros*, refused to do manual work on the Portuguese-owned plantations, since they considered it unworthy of their status as free Africans.

The second Portuguese colonization was based on the cultivation of coffee and cocoa, both originating from Brazil. A former slave-trader, Joāo Maria de Sousa e Almeida, who became a wealthy land-owner, born in Príncipe to a Brazilian *mestiço* family from Bahia (Florentino et al., 2017) was a prominent pioneer of cocoa cultivation in STP. He later introduced the *fruta pão* plant, the breadfruit tree today ubiquitous on the islands, as a food crop for his plantation workers (Clarence-Smith, 1987).

During the second colonization, in the 19th and 20th centuries, São Tomé became one of the world's leading producers of top-quality cocoa and coffee. The Portuguese forced Angolan and Mozambican contract workers working in the *roças* to accept contract labour on the islands. In the case of Cabo Verde, droughts and famine led people to accept labour migration to STP (Soares, 2010). Despite the abolition of slavery in the Portuguese colonies, in reality it continued under another name on STP, where export crops consisted largely of coffee and cocoa. (Seibert, 2015).

From the mid-to-late 19th century, the concentration of lands shifted gradually from Forro owners to the hands of Portuguese plantation owners, who mainly produced cocoa, which became a monoculture. This development forced the rest of the population to practise subsistence agriculture in the few remaining territories available; this was the golden age of the colonial *roças* in terms of large-scale cash crop cultivation.

Anyone organizing a trip to the islands of São Tomé and Príncipe today cannot fail to include a visit to the *roças*, or at least what remains of these once splendid estates, which, if not urgently valorized, may soon disappear, depriving São Tomé and Príncipe of a precious historical memory (Soares, 2010).

The *roças*, which still form an architectural heritage handed down from the days of Portuguese colonization, not only contain magnificent colonial buildings but also a complex system for exploiting the territory, in both the negative and positive connotations of the word (Figure 1 and 2). In any case, they are an integral part of the history of this small island State marked by a history of plantation economy and monocultures.

Nationalized after independence in 1975 and put under State management, which proved unable to maintain their economic potential, they are now a tourist attraction and unique legacy to be preserved as historical heritage.

These structures mainly consisted of constructions designed and built to shore up a specific type of agricultural economy. They are large buildings surrounded by intensively cultivated plantations, *loci* of a specific and rationalized agriculture that at the same time formed genuinely autonomous settlements where the work was distributed and organized in a systematic manner (Sanguin, 2014; Åkesson, 2016)².

The *roças* existed in various sizes, each usually with a principal plantation connected to its smaller units by means of a private railway system; "the major ones formed independent centres including warehouses, drying houses, ancillary buildings, hospitals, churches and schools, oil and soap factories, carpenters' workshops, lumber yards, mechanics' workshops, kitchens, communal toilets, lime kilns, water and fuel tanks, aqueducts, arenas, watchtowers, and dovecotes" (Sanguin, 2014; da Fonseca, 2010).

There was also accommodation for the managers in addition to the *senzalas* or workers' lodgings, all extremely simple in their functions, materials, and construction. The rules in the colonial *roças* were very strict, imposing exhausting work shifts, total obedience to the *patrão* (the boss), and heavy restrictions on personal freedom: for example, workers could not leave work or return to their countries of origin on their own initiative. Initially, slaves could dedicate one working day, usually Saturday, to their own livelihood.

When slavery was abolished on STP in 1875 (Clarence-Smith, 1993), forced labourers continued to exist, as did the *roças*, and the former were called *contratados* (Soares, 2010) – labourers with a renewable five-year contract, frequently extended without the consent of the workers – but in substance nothing changed, and thousands of Africans, mainly from Angola, Mozambique and Cabo Verde, were forced to work for the large landowners.

² The principal Roças are those of Agua Izé, Boa Entrada, Vista Alegre, São Nicolau, Boa Entrada, Agostino Neto, and Diogo Vaz.



Fig 1 and 2: Roça Monte Café – Pictures by one of the authors

Creolism in São Tomé and the unique relationship between nature and culture

The complex *roças* phenomenon is of particular relevance and interest for cultural anthropology due to the hybridizations and crossbreeds that have sprung from it; these are symptoms and manifestations of the current globalized cultural forms in which STP is inserted in a rather original way. The history of this small country is highly suited to reflexive anthropological observation, namely a scrutiny attentive to the reciprocity of the gaze of each stakeholder present and participating in shared cultural constructions. Anthropological analysis, however, becomes historical investigation (Augé, 1979) by means of documents and travel reports pertaining to the early years of colonization, examined as significant and original ethnographies.

Portuguese atemporal colonialism (Corossacz, 2016) blends with the logic of living in a place, almost succeeding in making a concrete reality of the political utopia that has characterized European philosophical reflection since the early 16th century. This is how one of the sailors in the second half of the 15th and early 16th century describes the islands, highlighting their rich biodiversity:

When it was discovered, this island of São Tomé was a dense forest with straight, green trees reaching the sky; they were of different sorts but sterile, with branches different from the ones we see here, with some broadening out laterally and others straight, but these all point straight upwards. There the trees sprout and grow as big in a few days as they do over several months here. (Milanesi, 1978)

The report reveals a singular relationship between nature and culture: it was a widespread belief, from what we read, that this unbridled nature was sterile and unable to reproduce, in the certainty that unspoiled nature had no capacity to procreate and perpetuate life because it lacked the presence of God-fearing man and the fruit of human labour. In the account of the Portuguese traveller-mariner, nature also takes on the characteristic of a place of well-being and the myth of eternal youth, as in the case of a description of the particular properties of the waters: "they give this water to the sick to drink, as it is very light to bear" (Milanesi, 1978).

A continuous process of disintegration and reintegration from the points of view of culture and identity unfolds from the earliest days of colonization. A sort of cultural 'syncretism' comes into being; it is not a mechanical mixture of cultures but a sort of spontaneous re-fertilization of the African matrix coming into contact with foreign culture. They all come from other places and become creolized in some way. Western culture meets African cultures and gives life to a new Creole community without, however, abandoning the slave model (Pereira, 2005). Slavery in São Tomé and Príncipe produces a paradoxical linguistic and religious circularity of mixed sexual unions and

family histories with ambivalent roles and powers, and of dialectic between nature and culture.

The role of women is of particular interest; they were often leading figures at the time of the 16th-century sugar plantations. Indeed, some of those women, such as Dona Simoa, came to inherit sugar plantations (Silva, 2002). Specifically, the biography of Dona Simoa takes us back to the foundation myths and the construction of hybridized family genealogies. Her biography is a valuable source that allows us to sketch the roles of certain women who served as mediators in the world of agriculture, addressing the matter of working hours and favourable conditions for women and children, as well as hygiene, medical care, and various other measures providing a useful contribution to the modernization of the rigid hierarchies affecting life in the plantations – this information is gleaned indirectly from Dona Simoa's will (Ambròsio, 1987).

Post-Independence and the Agricultural Question

The situation in the *roças* has changed dramatically since 1975 when the country peacefully gained independence, but not all the changes have had positive consequences (Seibert, 2015).

As already mentioned, in 1975 the government of São Tomé nationalized the *roças* and reorganized them into 15 large plantations. With the departure of the former Portuguese landowners, production gradually decreased, leading to serious economic problems in the mid-1980s. The *roças* finally ceased to exist in around 2000 when the distribution of former plantation lands among former workers and medium-sized enterprises, begun in 1993, came to an end. A few are still inhabited, but the inhabitants do not work there, and the consequence has been decay and neglect. The nationalization process was perhaps a little hasty, and the effects on the economic, traditional, and cultural heritage had not been given due thought (Seibert, 2015).

The purpose of nationalization was to transfer land ownership to the State, to cut ties of dependence with those who were considered former colonizers, and to increase agricultural production by increasing productivity, as well as to ensure increasing exports and develop cultivation in order to guarantee the population a livelihood. Meeting these objectives, however, required a rational and competent agricultural administration and an entrepreneurial capacity that were lacking due to a clear loss of know-how and management.

The *roças* have only recently begun to be seen as heritage of historical and cultural value to be salvaged, not merely a memory but also a precious resource for the development of STP as a centre for tourism. Traditional products could be showcased, especially those with quality products, as could the many culinary variations of each ingredient. Initiatives such as these could favour a new kind of development capable of relaunching the national economy and identity.

STP actually has fertile volcanic soil and a vigorous and lush plant and wildlife that needs to be protected and monitored, a true Eldorado of biodiversity (Lopes, 2013). This uniqueness lies in some of its most famous plants, namely cocoa, one of the islands' sources of wealth, and *coffea canephora*, better known as *robusta*, but also *arabica* and *liberica* of exceptional quality (Meschini, 2019).

Another is cocoa, for two centuries a source of sweat and labour for the plantation workers collecting, toasting, and transforming what is now a globally sought-after niche product – its special flavour due to cultivation in a natural environment that enhances its qualities. Although colonial Portuguese sources report that cocoa was introduced in 1822, it was in fact brought to Príncipe from Brazil in around 1820 by João Baptista da Silva Lagos. (Seibert, 2008)

Cocoa is certainly a source of pride for the country. It is particularly suitable for organic farming because it grows beneath the trees of other species and guarantees greater biodiversity than the monocultures of other plants (Graça and Teixeira, 2013). For centuries, this fruit has represented a tangible capital for STP, and for some time, the country was the world's largest producer, although today's output is much less (35,000 tons per year in the heyday of cocoa production in the early 20th century). Nevertheless, despite a current annual production of only 3,000 tons, cocoa still represents 90% of the total value of STP's exports (Henriques, 2015). There are many other varieties of edible but unknown plants proper to these islands, including the Izaquiente (Treculia africana), an enormous fruit endemic to the forest, which is worth a mention. The islanders practically leave it to rot, letting it fall apart, then they dry it out before crushing it with stones to produce a flour rich in calories. They eat it in any number of ways: sweet or savoury. In its savoury form, it becomes a dish based on smoked fish, mosquito grass (another local herb), peppercorns and palm oil, cooked in yuca (Manihot esculenta) flour. This too is São Tomé, with its extraordinary cuisine, rich in flavours and bold combinations of sweet and savoury.

Challenges and potentials of STP's agri-food sector

In order to provide the country with a sustainable future, the agricultural sector in STP should also support and encourage 'forest and insular' agriculture. Priority should be given to the production of some valuable inland crops to satisfy the internal demand for food items; a sustainable production of high-quality products for exports, such as cocoa, coffee, and peppers but also vanilla and other spices should be promoted as most of these products, if proper agricultural practices are respected, could contribute to preserving the biodiversity of STP (World Bank, 2019).

Although some farm cooperatives and agriSMEs are present in the country, particularly in the cocoa, coffee and pepper value chain, and funding has been provided for some of them (Garbero et al., 2019), there are very limited infrastructures and a lack of incentives to effectively support agri-food value chains from production to sale. Export markets for cacao, chocolate, peppers, and coffee, but also dried fruits – growing and driving forces in these sectors – are represented by diverse AgriSmes mostly run by cooperatives with foreign investments. Local food markets are also increasing productivity as shown by the annually increasing FAO Food Production Index. Most fruit and vegetables, but also some livestock and fish products, have the potential to burgeon despite many shortcomings, including limited job skills, weak irrigation systems, and the need for more greenhouses to overcome the damage caused by the long rainy season (World Bank, 2019).

The recent Covid-19 pandemic has aggravated the longstanding problem of trade barriers (taxes, port charges, and poor port management) (Kyle, 1999).

The export of quality food such as cocoa, coffee, vanilla, and pepper has been blocked by the main air companies present in STP since March 2020 to the detriment of local farmers and farmworkers, consequently impoverishing their families. It is also particularly harmful to the country's reputation as it disincentives private investment. STP's small airport is used by very few airlines companies, and many international standards are unmet.

This impediment to market access due to poor logistic infrastructures and lack of government support for private investment could undermine the long-established work of some AgriSMEs. Some of them (see, for example, the case of Claudio Corallo reported in World Bank, 2019) have provided many farmers with employment and know-how, improving the selection of already excellent native species of cocoa and coffee (Veiga, 2020).

Rural population

With a total population of 215,056 (World Bank, 2020), most of the people live in the flat areas on the two main islands, almost all of them concentrated in the city of São Tomé and surrounding areas.

Outside the city, the rural population lives in settlements called *lucháns* which are usually constituted of wooden houses on stilts. Nevertheless, urban poverty is higher than rural poverty because of the lack of employment opportunities in the capital city (IFAD, 2019).

STP has a very young population – a quarter being under 30 years old – with a life expectancy above the average for many African countries (65 years old). Only 1/3 of the entire population is involved in agriculture, but investing in agriculture (for internal and export commodities) could be a way of overcoming poverty and mass emigration (Macrotrends, 2020).

Despite poor knowledge of data on institutional effectiveness and accountability, (World Bank, 2020), according to the Report in CPLP Member States on Family farming (FAO, 2018), 63.3% of STP's active population work in agriculture, 20% of which are women farmers and 40% male. The role of women in agriculture is particularly crucial for family food security as many women are small household farmers, exclusively providing for their family income.

The widespread extended family setting helps overcome most food crises, as in most parts of Africa. Thus, government and UN food-agricultural strategies are working to strengthen the family farming system, which is among the most sustainable in terms of production but also for the environment and land utilization (FAO, 2018). However, country-dwellers are not in charge of their own development due to the limited resources available to them as the farming sector is not so well represented, and there are only a few farming associations, often organized thanks to the support of foreign groups (as in the case of organic certification organized by foreign companies linked to important distribution retail groups).

GIs and organic investment, coupled with rural strategies – if properly organized and not run as State-owned/controlled systems – could thus contribute to a new era for agriculture in STP, overcoming the impediment of limited infrastructures and a disaggregated approach to agriculture, not to mention providing social benefits for many farmers and agro-workers.

Hope of becoming a future oil producer is driving the economy of STP in a new direction that could possibly be harmful for the agri-food development of the country and its overall future development.

The country has been granting oil exploration licences (ANP-STP, 2020) since 1997, so far without discovering any commercially exploitable oil and could move away from traditional farming practices, decreasing exports of its traditional agricultural products, which are particularly sought after on the market, such as cocoa, coffee and pepper. This could drag the country into additional poverty and dependence on other countries for food security, not to mention abandoning its niche agriculture, which could guarantee the country a possible future even in terms of diversification in the field of tourism.

This would have a two-fold effect: attracting people to foreign agri-food products and thus creating dependency on that product; on the other hand, it would deprive people of their original agri-food products, which would no longer be produced, having being replaced by the new ones (*Knoema*, 2017).

Huge investments in the agri-food sectors have been supporting pro-poor value chains, including organic and fair-trade value chains and public-private partnerships to give small farmers the possibility of a more stable income. As reported (IFAD, 2019), investment in

rural development has amounted to 31.7 million US dollars over the last 30 years, showing the country's clear dependence on foreign aid.

Despite the large forest (30,000 ha), of which 1/3 is protected, products like cocoa, coffee, and palm oil are the main agricultural products. A distinction should be made between cocoa, coffee, and palm oil because of the differences regarding plantations and production.

In general, palm oil plantations have been deemed detrimental as they impoverish the soil, produce a large quantity of waste from production, and use a large number of herbicides, fertilizers, and pesticides (Carrere, 2013).

Furthermore, the production of palm oil should be limited as it is incompatible with agro-forestry conservation. Many international environmental organisations are recalling the danger of spreading this kind of cultivation, especially in countries like STP. Cases have been reported of the Government giving thousands of hectares to foreign companies for palm oil cultivation (Lopes, 2012). Another consequence of this kind of cultivation is that farmers are abandoning more sustainable traditional practices and being forced off their land (Veiga, 2014; Veiga, 2013). However, in 2010, STP signed a contract for palmoil production with a Belgian company and set up the Agripalma joint venture that opened a new palm-oil factory in 2019 (EJAtlas, 2018).

The local cocoa had good organoleptic potential, but disorganization in the sector damaged its reputation and led to a shift towards cocoa butter production (Roche and Dulcire, 2007), although niche markets were left for very high-quality production (Corallo's Terreiro Velho is a cocoa plantation run on private investment that developed a selection of beans able to satisfy the highest market standards).

In the 1990s, the Government started the privatization process, setting up a system of small, medium and large-size farms mostly cultivating cocoa plants in the open air in direct sunlight to increase profitability using pesticides and fertilizers, rather than in the shade of forest trees as they were traditionally grown (Aguilar, 1997).

According to WB indicators, arable land was said to amount to 0.0428 ha per person in 2016, but due to the scattered and insufficient data available on proprietary rights, this information does not indicate the average percentage of hectares owned per farmer.

A new change of direction, also driven by the high demand for organically raised products, is currently being pushed by the Government even though critical issues remain concerning how the standards for the new organic certifications are set and managed, as mentioned above. In order to avoid massive deforestation, as in the case of palm oil plantations, and to address the growing demand of organic cocoa and coffee, STP will enforce more sustainable ways of cultivating their crops (Breuillac, 2003).

Claudio Corallo's plantation is one example of a producer of high-quality cocoa (Figures 3 and 4) that respects the biodiversity of the territory. The cocoa plants are shaded by other forest plants and this creates a perfect environment for one of the most famous chocolates in the world.

Another important crop is that of organic pepper (*Piper Nigrum L.*); its production method is organic even though it is not all certified and there is increasing market demand (World Bank, 2019). This multi-crop can easily grow with other plants, fruit, and vegetables, and is able to respect the specific biodiversity of the islands (Bonfim et al., 2020).



Fig. 3: Coffee plantation in Nova Moca. Some of the best varieties of coffee are grown on terraces protected by stone walls.

Fig 4: Hand selection of cocoa beans. (Photos: courtesy of claudiocorallo.com)

Food products yesterday and today

Food was a very important factor in the life of the *roças*, not only as nourishment but also as a symbol of identity and a form of communication (Åkesson, 2016).

The story of Fernando, a Cape Verdean brought to STP to work on the plantations, is testimony to a relationship of power and division between races and nationalities that produced different ways of eating: "The people of Angola and Mozambique ate *fuba* (boiled cornmeal polenta), dried fish, and palm oil". The Cape Verdeans were later subjected to an 'African' type meal, lowering the Cape Verdean level of cuisine to obtain homogeneous treatment among the workers.

"At breakfast we would eat rice, boiled with dry fish; at lunch we had *fuba* and palm oil, and at dinner we would eat rice with dry fish, and the fish would not even be cooked – we would eat it as it was, just as it came out of the bag". But in Fernando's case, food also had the power to emancipate him. The Portuguese offered him the chance to work in the kitchen, initially as a kitchen boy. Fernando was able to progress to the role of cook through hard work, and his life changed from that moment on. "My work not only gave me access to better food but also improved my social status. I worked for the Portuguese and had the right to the same food they ate. I ate potatoes, rice, salt cod, meat, beans, garlic, onions, olive oil, and sugar" (cf. Åkesson, 2016). The sources presented highlight how such a small reality contained various levels of cuisine associated with different ethnic groups, corresponding to different social levels.

Interesting combinations and intersections of flavours can still be found today: the generous natural resources of the island offer inspiration for a diversified cuisine that lends itself to versatile menus at family and gourmet tables. The *safù* (*Dacryodes edulis*), for example, is a very curious fruit, halfway between a giant olive and an aubergine, and then there is the *caja-manga* (*Spondias dulcis*), a sort of mango that tastes like a pear and has the texture of a walnut peach. *Calulu*, for example, is a thick soup made with grilled smoked fish and local herbs, very similar to the Angolan dish were it not for the use of herbs that make it a typical and unique product that the people of São Tomé proudly claim to be the dish that best represents them.

Herbs, most of which are unknown to Europeans, are one of the greatest riches of these islands, which have one of the most complex biospheres in the world. Markets are still a tradition in parts of the world where women work tirelessly to arrange fruit and vegetables.

STP is now facing several challenges, problems related to its fragile economy, with one of the largest government debts in the world due to a policy of undiversified productivity that depends, almost exclusively on cocoa (still its most principle crop and export of goods) at the expense of other products, such as marine and land resources. Fishing serves, in fact, only for sustenance, while intensive exploitation of the sea and coasts is licensed to foreign countries, such as the EU, Japan and China, (Veiga, 2019) which, in exchange for fishing licences, export large quantities of rice to the islands, rice that can never become a staple as it is not grown locally. There is a risk that many animal and plant species will disappear as a result of deforestation and monocultures. A solution to protect these species and at the same time stimulate STP's economy would be to focus on eco-sustainable and high-level agro-tourism, as we shall see below. It is a difficult mission for the Government, engaged as it is in the difficult task of keeping inflation under control, but it is also the direction in which the country seems to want to go.

Discussion: Geographical Indications as a Driving Force for Development and the Question of Cultural Identity in Relation to Agri-food Products

Geographical indications for a new development model

The historical-anthropological contribution described above shows that São Tomé and Príncipe has a significant traditional heritage and agricultural products introduced in the colonial period and/or forming part of STP's biodiversity. However, São Tomé remains poor and poorly narrated, almost like the Neverland of Barrie's imaginary fairy-tale island (Barrie, 1911). But while the imaginary island of Neverland was only a metaphor for the ideal life, São Tomé and Príncipe is a totally real entity. Although the country is still very dependent on external aid, its GDP continues to grow (Worldbank, 2018), and the State finds itself in a sensitive phase that will impact on important future choices. Building on its history is one of these choices, at the same time engaging in actions to protect a unique bio-diverse heritage comprising plant and animal varieties that today bring scholars from all over the world to study the country's rich natural biodiversity.

STP's unique food products are the result of these contaminations, and they may be able to open up new development perspectives: the country has taken several steps to stimulate the economy by safeguarding its rich flora and fauna and eco-environmental diversity (Ministério das Infra-Estruturas, 2018). One of these efforts was to begin a process for the legal recognition of geographical indications in the broader sense – appellations of origin and geographical indications – of certain agri-food products, but at present, this venture has not yet produced concrete results. This new addition to the realm of safeguards for intellectual property aims to support some specific agri-food products, linking them to the country's complex historical development: here it is possible to find references to an incredible traditional agricultural heritage and recover what is historically attractive, at the same time activating a virtuous development model not only for the improvement of no-global or 'placeless' production models (Réviron and Chappuis, 2011), (Belletti and Marescotti, 2011) but also for farmers' living and working conditions (Cei et al., 2018).

Despite the various definitions at national and supranational level, geographical indications include different elements, some of which even outside the legal sphere and with different levels of protection, such as appellation of origin and geographical indications stricto sensu. The link between some specific agri-food products and the territory is what distinguishes them from any other product and embraces the human and natural environment, traditions, and production methods as characteristics marking the

originality and quality of a product: they constitute additional elements to a geographical indication in the sphere of agriculture (Van der Ploeg et al., 2000).

Firstly, a close relationship with the territory gives rise to a special geographical indication, known as appellation of origin, in which the raw material and the processing of the product should be *exclusively* or *essentially* sourced in the place of origin. It is the territory that shapes the product and its intrinsic qualities *exclusively* or *essentially* to become appellation of origin (Article 2(1) of the Lisbon Agreement 1958).

The challenge for STP currently lies in its capacity to update the current IP system to effectively protect geographical indications in a complex context with multiple stakeholders and numerous products possibly eligible for protection.

Geographical indications and international protection

It is indispensable to mention the distinction made on the international level between appellations of origin and geographical indications.

In their broadest sense, geographical indications include appellation of origin and geographical indications in the strict sense as emerges from the TRIPS agreement annexed to the WTO Treaty. The difference between these two IP rights lies in the stronger protection granted to appellation of origin due to the close link with the territory as seen above, and the link with the territory does not vanish and remains for the other processes in the supply chain: human labour and know-how assume particular importance in this context (Arfini et al., 2010).

However, Article 22 of TRIPs does not examine in sufficient depth the difference between them in terms of scope of protection, making limited reference to the difference between the protection offered to all geographical indications (including those outside the scope of agriculture) and the stronger protection reserved solely to wines (Art. 23 TRIPs) that benefit of protection granted *ex officio*.

On the international level, therefore, the distinction between appellation of origin and geographical indication only emerges in Article 23 *et seq* of TRIPs, as geographical indications, in the strict sense, are in effect a weaker and less stringent intellectual property right. According to the Treaty, geographical indications are a distinctive sign by which a product or service is identified as originating in a particular territory and with certain qualities, characteristics and status associated with that origin (Article 22 TRIPs).

The appellation of origin is specifically recognized by the Lisbon Treaty within WIPO (Lisbon Treaty, 1958 amended in 1979) with the additional extension to geographical indications under the Geneva Act 2015 (WIPO, 2015). The Geneva Act has contributed to expanding the scope of international protection by incorporating all geographical indications, embracing those formerly beyond the scope of the original Lisbon Treaty, which was meant only to protect appellations of origin. Long neglected, the Lisbon Treaty was revitalized by the European Union's accession to the Geneva Act that entered into force for all EU countries on February 26, 2020 (European Parliament, 2018); (WIPO, 2019). This scenario certainly also has very exciting consequences for countries like STP, as new perspectives may open up for mutual recognition and consequent protection of all geographical indications (in the stricter and broader meanings of the term) in accordance with the principle of reciprocity embodied in the Treaty.

For STP, one of the scenarios resulting from this event could be a shift of its appellation of origin and geographical indications towards a European perspective, with both positive and negative outcomes as GIs may not always represent the best solution if infrastructures are not there to sustain these features (Dutfield, 2014).

Perhaps one of the most interesting aspects of all this is the possibility of STP receiving more tailor-made assistance from the intergovernmental organization of African

intellectual property, which mostly brings together French-speaking countries (OAPI) and is therefore actually distant from the Lusophone matrix.

Perhaps this new direction will contribute to the creation of further geographical indications in a more suitable context, affording a high level of protection to these special intellectual property rights in coordination with the World Intellectual Property Organization (WIPO).

In the wake of this trend, an increasing number of countries, including some on the African continent, are starting to introduce geographical indications into their legal frameworks. (Allaire et al., 2010) In São Tomé and Príncipe, Decree-law no. 21 of 2015 (STP Gov, 2015) brought appellations of origin and geographical indications within the framework of intellectual property rights, filling the gaps in national legislation.³

Article 2 of the law in question underlines the importance of these rights in the agricultural development of São Tomé and Príncipe, and recognition for its cocoa, pepper, and coffee is currently being assessed from the point of view of the requirements highlighted above. Many other assets could also benefit from this protection, including some products using herbs native to the islands and unique honey produced by an indigenous bee, whose production would require only modest investment.

The rich biodiversity of STP means that some very special honeys are available, made from banana, coconut, mango, tamarind and other flowers and plants on the islands, such as the *rosé das abeilhas*, which could be of interest to a high-quality niche overseas market.

To this end, it would be appropriate to plan the reforestation of part of the forest with suitable plants. Honey production is not entirely alien to the Sao Tomeans as it was already produced in small quantities for personal consumption and healing at the time of the *roças*. This tradition has since been lost (Nascimento, 2015), but new interest in the production of honey has recently emerged: training courses need to be set up because honey harvesting systems on the islands are still somewhat archaic, involving destruction by bee smoking and sometimes even the cutting of parts of trees and plants (Nascimento, 2015). Additional geographical indications could be linked to the protection of some typical local dishes, such as the aforementioned *calulu saotomense*, which involves the use of a large number of native herbs, as already described.

Geographical indications are certainly an area on which to focus to boost sustainable development in STP: they increase the economic value of a territory and a country (Quiñones-Ruiz et al., 2017); they help the agri-food system, especially the more traditional kinds, they represent a county's identity to some extent, and lastly, they preserve traditions and the existing biodiversity, as the experiences of other countries show (Lockie and Carpenter, 2010; Lockie, 2009; Wang, 2018).

Some problems in the implementation of these rights

Often considered as specially-created legal artifices, geographical indications are special intellectual property rights interpreted as products of rich and industrialized societies, the prerogative of an old world (mostly identified with Europe) that, in reaction to development constraints, has invented "protectionist barriers to maintain its world of evolved economy" (Wang, 2018).

³ Art. 2 of Law No. 4/2001 of 31 December defined only the scope of application of indications of origin and designations of origin without mentioning geographical indications. The same problem arises with decree 6/2004 of 31 June (Regulamento Interno da Execução da Lei da Propriedade Industrial), limited to applying the protection offered by trademarks.

However, investing in geographical indications can also produce significant results for low-income economies. In the case of STP, it would be positive not only because of the increase in export flows due to growing demand for niche and quality products, but also because it could lead to promoting native traditional agriculture and food items and consequently a new model of agriculture able to emphasize the value of human labour (Réviron and Chappuis, 2011) and benefit marginalized territories that would turn into attractive tourist itineraries. Another aspect to be studied is eco-tourism based on the search for new and unknown destinations in pursuit of a gourmet experience. Food tourism is a growing phenomenon all over the world, and greater numbers of people are nowadays seeking to experience new and exotic gastronomic adventures.⁴

The purely economic and material aspect must not, however, be the only one to promote geographical indications in the agri-food sector, as the benefits they produce could be very numerous. There is a risk of fostering only the economic approach at the expense of other, far from negligible, aspects linked to the enormous potential resulting from the protection of products from a specific territory, reinforcing the traditions rooted in that territory.

Often subject to widespread criticism regarding their authenticity and their tenuous link to historical facts (Grandi, 2018), geographical indications in the agri-food area are a divisive topic because they embrace a number of characteristics: an ancient soul in the recovery of traditions, in the valorization of human activity and the territory, and at the same time a modern one, i.e., that of a proprietary right granted collectively to a group of people (e.g., a consortium for the protection of products as happens in many countries) by virtue of a product embedding specific and unique characteristics in a restricted territory. In some ways, geographical indications regulate a very special asset that shares the characteristics of a public good (Sylvander et al., 2011) due to the promotion of a natural environment proudly enhanced by human work in a way that cannot be duplicated elsewhere. However, these rights should not be managed as State-owned rights. Producers are in charge of their own products and consequently the rights attached to them. GIs should guarantee these producers extra protection, and State authorities should make sure that their excellent products should be rewarded and protected. Specific rules on how producers should foster GI requirements should work to favour producers who work according to excellent rules of production while respecting biodiversity and socioeconomic criteria.

Given the geographical limitations in São Tomé and Príncipe, the identifying traits of many products take on specific characteristics that belong to an entire nation. It is this duality between old and new, between the weight of tradition and the new and

evolving alternative that enables the world of geographical indications to become a flexible tool able to constitute a huge advantage also in terms of the social right of people to see their work valued and protected and for society as a whole, now able to preserve historical memories linked to agricultural landscapes.

There is undoubtedly an anthropological aspect to geographical indications as it follows the evolution of these rights. Of course, geographical indications have positive

76

⁴ This phenomenon is a new world trend as shown by the rise in tourism in the wine valley in Brazil, Controvérsias Sobre A Noção De Indicações Geográficas Enquanto Instrumento De Desenvolvimento Territorial: A Experiência Do Vale Dos Vinhedos Desenvolvimento Rural, Territorial E Regional, Paulo André Niederle. Cpda / Ufrrj, Rio De Janeiro - Rj - Brasil. Far from being far apart in numbers, food products routes follow shortly after those of wines revitalizing agricultural communities and regions of production. Comté AOC in France and queijo de Azeitão DOP in Portugal are well-discussed cases in support of this thesis.

effects on the link between people and territory, as the preservation of biodiversity often depends on the correct use of traditional production methods (Dominte, 2015).

The rights of an extended, urban, regional community over an agri-food product can become the heritage and pride of the entire country. The same concept of producer *consortia* that would be created thanks to the introduction of geographical indications represents in itself an important contribution to environmental sustainability and human relationships, not only from the point of view of small and medium producers able to join forces in carrying out the production of their traditional products but also from that of production specifications that can be tailored to support production standards (especially in STP) with low environmental impact.

Anthropological Reflections on Development for a shared Socio-Economic Path

Reconciling the reasons of a global logic with what social and economic diversity and inequalities constantly indicate remains a constant challenge for humanity. Analysis, in a global world, becomes a means by which to create a "glocal" dimension where diversities constitute precious elements from different viewpoints in order to resolve the profound contradictions that run through the economy and the relationships between cultures to produce a truly multi-ethnic society open to fruitful mediation (Friedman, 1994). In this perspective, the IFAD has recognized and identified the needs of small island states and countries vulnerable to the limits of food subsistence through the project known as SIDS – Small Island Development States – (IFAD, 2019a). There are enormous difficulties in implementing economic policies and agricultural transformations for which strategies implementing different knowhow and methods of intervention are needed if they are successful.

It is possible to plan and implement forms of sustainable development for PTS that can be shared by the community and thus offer a new perspective. The aim is to create an intervention network between the project phases and the funding provided by major international institutions to create an effective and shared project to transform and enhance forms of agriculture that can combine the goal of autonomous food production with increased exports and the development of experiential cuisine and agri-food heritage tourism. In this way, international operators and returning mediators⁵ establish a continuous relationship between past situations, re-evoking ancient affiliations and working techniques. This serves to upturn perspectives and discover differences and similarities, highlighting contrasts before proceeding to reach possible accords.

Western agri-food knowledge, analysis of the nature of the territory and innovative agricultural techniques need to be innervated with the beliefs, expectations, fears and desires of the fishermen and farmers, who, as the latest IFAD report states, make up the poorest 25% of the population. The culture of poverty and deprived family contexts that characterize this community must be combined with horizons of serenity and well-being: fears must be transformed into resilience and become a driving force for shared change. As Moïsi puts it (Moïsi, 2015), the geopolitics of the emotions have always driven changes in world history.

⁵ Return mediators are defined in the anthropology of tourism and development as the inhabitants of a place who move away and emigrate or experience other, generally more westernized, realities for a period of time before returning to their place of origin, bringing with them the experience and cultural tools of a multiple identity that allow them to usefully channel cultural diversity and development.

Return mediators represent an important added value in this process (islanders are increasingly studying abroad or have closer ties with the Western model). They constitute an important node in this network, paving the way for large institutions to work in synergy to produce a "vernacular cosmopolitanism". There is a link between identity and emotion, on the one hand, and geopolitics on the other; it manifests itself as an environmental impact analysis of the goals achieved, or as a foreshadowing of the future objectives of a community (Moïsi, 2015). The need for food goes hand in hand with agrarian culture, something not static but taking on dynamic dimensions when shared by the São Tomean community, the returning mediators, and mediators in general. Values shared by the local community, such as protecting the climate, the ecosystem, and techniques and knowledge, have not sunk into a process of alienation but become shared and widespread knowledge.

Thus, the new transnational social realities in São Tomé that the policies of international intervention and internal development are called on to implement must consider the stakeholders present and, above all, the population, which needs to be brought to an understanding of the value of cultural and linguistic heritage, encompassing agricultural practices and the importance and uniqueness of some of their products. This is the only way the São Tomeans will come to understand the cultural value inherent in designations of origin and geographical indications. Through their widespread knowledge, the population of São Tomé will be able to contribute to pinpointing outstanding agricultural products beyond the well-known cocoa, coffee, and pepper, encouraging the valorization of their knowledge and their relationship with the territory.

This practice can lead to the identification of new and interesting geographical indications because all innovation and socio-economic transformation takes place through the re-appropriation of historical memory and collective knowledge.

Sustainable tourism and agricultural products: memory and social capital. Gastronomic trails and events and eco-environmental routes: a look into the future

Social memory encompasses collective identity, the spirit of the place created by an uninterrupted construction process. For São Tomé, re-appropriation of the memory of its rural and gastronomic past may be the starting point for some kind of auto-ethnography.

The presence of historical infrastructures such as the *roças*, and the historical memory of the islands' complex rural past and the slave trade, need to be recovered through ecotourism projects incorporating itineraries linked to biodiversity, including agribusiness. Taking care not to create elite niche tourism, ignoring the living conditions of the population, with its widespread poverty and cultural heritage, the model of tourism promoted must focus on attractive itineraries and preparing the local population to welcome outsiders and make tourism a key element in their development. The age-old relationship between nature and culture re-emerges from an increasingly transcultural world thanks to "glocal" opportunities. With the creation of a form of tourism centred on high-quality agricultural production and the recognition of geographical indications and gastronomic trails, the fundamentals would be in place for a modern tourism focusing on both innovation and tradition.

Subsequently, developing the territory could enable the construction of a parish map, (Clifford and King, 1996) in which all the different stakeholders in the community could participate, contributing to an awareness of themselves, their past, and the value of the territory. It will then be possible to build a new system of hospitality for tourists, transforming the islands into a 'dispersed hotel' where a heritage made up of history,

buildings, and traditional knowledge can become an emotion-filled attraction (Camargo et al., 2010).

Policies to preserve the country's biodiversity will take on especial importance, increasingly attracting a more sophisticated tourist industry in search of uncontaminated worlds, historical heritage, and authentic traditions.

The establishment of food fairs alongside tourism schools will help to consolidate this understanding of how to exploit the incredible heritage of biodiversity, history and traditions available to the inhabitants of São Tomé and Príncipe in accordance with ecofriendly principles. It will therefore be possible to encourage choices leading to the creation of nature trails but also historical-cultural and, above all, agri-food itineraries, guiding tourists in the rediscovery of unique products and identities. Reforms enabling the creation of such a climate are therefore both necessary and urgent.

Conclusion

São Tomé and Príncipe constitutes a little-known face of Africa despite being one of the most attractive places in the world from the point of view of its extremely rich biodiversity and its original and captivating cultural and historical heritage, so much so that it can be considered a Utopian place of wellbeing.

The history of this small African Republic and its natural resources are known to many naturalists and historians. This essay aims to contribute to what is still an unexplored reflection on the complex reality of this country and its development from a different and new perspective. Geographical indications (GIs), a very special intellectual property right, have been discussed here with the intent of providing a possible interpretation that may serve to revitalize the economy of STP, also looking beyond the impact that these rights bring in terms of the economic advantage to a specific agri-food product. The multidisciplinary approach adopted in this essay allows an exploration of new possibilities that these rights can offer, focusing on food and agri-food products but also on eco/agro-tourism and moving on to the hitherto unexplored anthropological relationship between people and the territory, which reveals the roots underlying a culture of origin.

São Tomé and Príncipe's historical-anthropological narrative has its own specific character despite sharing affinities with colonial plantation islands in the Indian Ocean and the Caribbean, and its identity map is complex and multi-branching, as this study shows. Undoubtedly, the period of early colonization of the once uninhabited islands that witnessed and experienced the cruelty of slavery and the slave trade has left its mark in the tangible heritage of the *roças*, the colonial plantations, which marked the beginnings of a specialized agriculture but also formed a fascinating microsystem of communal life, struggle, inequality, and opportunity. Rediscovering and making the most of the *roças* experience as part of a memory, with their agricultural structures and the agri-food products in use at that time, can only bring benefits. Among the many possible reflections, one stands out above all the rest: the need to recover a past that, with its positive and negative aspects, needs to be retraced not in some sterile celebratory sense but to encourage future generations to find efficient systems to manage São Tomé's land and sea resources in a way that will allow the country to develop according to the principles of sustainable development.

Focusing on a specialized agriculture based on eco-sustainable and forest-friendly crops could support the geographical indications of STP's world famous cocoa, coffee and pepper. Attaching these rights to these products would represent a niche market guaranteeing better prices for products and consequently the overall improvement of AgriSMEs' investments and the living conditions of small farmers.

GIs have been proven to also attract a certain type of tourism, at the same time promoting a niche type of export. The creation of forms of tourism linked to "gourmet" holidays would contribute to creating the image of an exotic destination to be discovered.

These changes need a coherent approach and much better-developed infrastructures included air cargo facilities and fewer barriers to trade. Furthermore, skilled labour, efficient farm management, and a strong value chain need to be put in place to ensure that setting up GIs would be truly beneficial for the country and the agri-food tourism sector.

Through GIs and the synergy of different disciplinary areas as described above, STP can truly become a 'Neverland', building upon a project to construct a sense of national identity that will focus on the best possible opportunities, taking as its starting point an agri-food renaissance, making it adaptable in terms of heritage, inhabitants, territorial growth, and well-being.

Acknowledgments

The authors would like to thank Adrian Bedford for his assistance with the English-language revision. The authors are also thankful to the editors and anonymous reviewers. The opinions expressed herein are those of the authors.

Authorship/Attribution

Aphel Barzini S. wrote: A Very Special 'Colonization' with A.N.; Food products yesterday and today.

Di Nuzzo A. wrote: Creolism in São Tomé and the unique relationship between nature and culture; Sustainable tourism and agricultural products: memory and social capital. Gastronomic trails and events and eco-environmental routes: a look into the future.

References

- Aguilar P., (1997). La cacaoculture à São Tomé et Principe. 4(3). Available at: https://agritrop.cirad.fr/389182/1/document_389182.pdf (accessed 15 November 2020).
- Åkesson L., 2016. Narrating São Tomé: Cape Verdean memories of contract labour in the Portuguese empire. Etnográfica. Revista do Centro em Rede de Investigação em Antropologia, 20(1), 57–76. DOI: 10.4000/etnografica.4178.
- Allaire G., Vandecandelaere E., 2010. Linking People, Places and Products: A Guide for Promoting Quality Linked to Geographical Origin and Sustainable Geographical Indications. Rome: FAO.
- Ambròsio P.A., 1987. Dona Simoa De Sao Tomé em Lisboa supostamente a sua capela. Lisboa. Revista Municipal, 1987: nº 21, 3-22 e nº 22, 25-40
- Arfini F., Belletti G. and Marescotti A., 2010. Prodotti tipici e denominazioni geografiche: strumenti di tutela e valorizzazione. Tellus.
- Augé M., 1979. Symbole, Fonction, Histoire: Les Interrogations de l'anthropologie. L'Esprit critique. Paris: Hachette.
- Barrie J.M., 1911. Peter and Wendy. 1st Edition. London: Hodder & Stoughton.
- Belletti G. and Marescotti A., 2011 In: Barham E and Sylvander B (eds) Labels of Origin for Food: Local Development, Global Recognition. Wallingford, Oxfordshire; Cambridge, MA: CABI.
- Bonfim F., Castro C., Brito S., et al., 2020. The organic pepper (Piper nigrum L.) value chain in São Tomé e Príncipe under a value chain analysis for development methodology perspective. Journal of Agriculture and Food Science, 8. DOI: 10.26765/DRJAFS40252693.

- Breuillac B., (2003. Du cacao biologique pour le développement durable. Le Monde, 20 May. Available at: https://www.lemonde.fr/archives/article/2003/05/20/du-cacao-biologique-pour-le-developpement-durable_4265958_1819218.html (accessed 15 November 2020).
- Camargo B., Segrado R., Jamal T., et al. (2010. Tourism and cultural sustainability: Towards an eco-cultural justice for place and people. Tourism Recreation Research, 35(3), 269–279. DOI: 10.1080/02508281.2010.11081643.
- Carrere R., 2013. Oil Palm in Africa: Past, Present and Future Scenarios. World Rainforest Movement. Available at: https://wrm.org.uy/wp-content/uploads/2014/08/Oil_Palm_in_Africa_2013.pdf.
- Cei L., Defrancesco E. and Stefani G., 2018. From Geographical Indications to Rural Development: A Review of the Economic Effects of European Union Policy. Sustainability, 10(10), 3745. DOI: 10.3390/su10103745.
- Clarence-Smith G., 1987. The Third Portuguese Empire, 1825–1975: A Study in Economic Imperialism. The Journal of Economic History, 47(4), 1022–1024. DOI: 10.1017/S0022050700050130.
- Clarence-Smith W.G., 1993. Labour conditions in the plantations of São Tomé and Príncipe, 1875–1914. Slavery & Abolition, 14(1), 149–167. DOI: 10.1080/01440399308575088.
- Clifford S. and King A. (eds) 1996. From Place to Place: Maps and Parish Maps. London: Common Ground.
- Corossacz V.R., 2016. Una decolonizzazione mai terminata. Il modello portoghese di colonizzazione in Brasile e la costruzione dell'Altro/a africano/a nell'immaginario razzista. Altre Modernità, 0(16), 134–147. DOI: 10.13130/2035-7680/7845.
- Crapanzano V., 2004. Imaginative Horizons: An Essay in Literary-Philosophical Anthropology. Chicago: University of Chicago Press.
- da Fonseca C., 2010. Plantado no meio do mundo As Roças de São Tomé e Príncipe. FUNAG. Available at: http://funag.gov.br/biblioteca/index.php?route=product/product&product_id=928 (accessed 31 May 2019).
- Dominte N.R., 2015. Can Geographical Indications Bring Value To Environmental Protection? 5 IUCNAEL EJournal, (6), 109. Available at: eographical-indications-bring-value-to-environmental-protection.
- Dutfield G., 2014. Geographical Indications and Agricultural Community Development: Is the European Model Appropriate for Developing Countries? Available at: https://www.researchgate.net/publication/287460318
- EJAtlas (2018) New expansion of oil palm plantations, Sao Tome and Principe. Available at: https://ejatlas.org/conflict/agripalma-plantations-sao-tome-and-principe.
- European Parliament, 2018. Procedure File: 2018/0214(NLE) Available at: https://oeil.secure.europarl.europa.eu/oeil/popups/ficheprocedure.do?reference=201 8/0214 (accessed 27 May 2019).
- FAO, 2018. FAOSTAT S http://www.fao.org/faostat/en/#country/193
- FAO, 2018. The institutional construction of family farming in the CPLP Member States. Lisbon. Available at: http://www.fao.org/3/CA0014M/ca0014m.pdf (accessed 15 November 2020).
- Florentino M., Ribeiro A.V. and da Silva D.D., 2017. Aspectos comparativos do tráfico de africanos para o Brasil (séculos XVIII e XIX). Afro-Ásia, 0(31). DOI: 10.9771/1981-1411aa.v0i31.21072.
- Garbero A., Improta M. and Gonçalves S., 2019. Smallholder Commercial Agriculture Project (PAPAC) and Participatory Smallholder Agriculture and Artisanal Fisheries Development Programme (PAPAFPA). Rome, Italy: IFAD. Available at:

- https://www.ifad.org/documents/38714170/41116204/ST_PAPAFPA+PAPAC_IA+report.pdf.
- Geneva Act of the Lisbon Agreement on Appellations of Origin and Geographical Indications, 2015. Available at: https://www.wipo.int/publications/en/details.jsp?id=3983 (accessed 27 May 2019).
- Graça R. and Teixeira C.V., 2013. Cacau: semente do desenvolvimento de São Tomé. Available at: https://www.dw.com/pt-002/cacau-semente-do-desenvolvimento-de-s%C3%A3o-tom%C3%A9/g-17117130 (accessed 22 May 2019).
- Grandi A., 2018. Denominazione di origine inventata. Milano: Mondadori.
- Henriques J.G., 2015. O cacau ainda mexe em São Tomé? | Reportagem. Available at: https://www.publico.pt/2015/07/12/mundo/reportagem/o-cacau-ainda-mexe-emsao-tome-1701729 (accessed 22 May 2019).
- IFAD, 2019a. IFAD Country Strategy Note 2019-2021. Available at https://www.ifad.org/documents/38711624/40089510/Country+Strategy+Note+So +Tom+and+Principe+-+2019-2021(accessed 4 August 2019).
- IFAD, 2019b. Sao Tome and Principe. Available at: https://www.ifad.org/en/web/operations/country/id/sao_tome_and_principe (accessed 31 May 2019).
- Knoema, 2017. Sao Tome and Principe Rice for food, 1961-2019. Available at: https://knoema.com//atlas/Sao-Tome-and-Principe/topics/Agriculture/Domestic-Supply-Food/Rice-for-food (accessed 15 November 2020).
- Kyle S., 1999. Agriculture in Sao Tome e Principe: Policy and Investment Options. New York, USA: Department of Agricultural, Resource, and Managerial Economics Cornell University. Available at: http://publications.dyson.cornell.edu/research/researchpdf/sp/1999/Cornell_Dyson_sp9904.pdf (accessed 15 November 2020).
- Lisbon Agreement for the Protection of Appellations of Origin and their International Registration, as amended on September 28, 1979. Available at: https://www.wipo.int/lisbon/en/legal_texts/lisbon_agreement.html (accessed 27 May 2019).
- Lockie S., 2009. Agriculture, Biodiversity and Markets: Livelihoods and Agroecology in Comparative Perspective. 1st ed. Routledge. DOI: 10.4324/9781849774376.
- Lockie S. and Carpenter D., 2010. Agriculture, Biodiversity and Markets: Livelihoods and Agroecology in Comparative Perspective. London; Washington: Earthscan.
- Lopes M., 2012. São Tomé & Príncipe: Deforestation Threatens Biodiversity. In: Global Voices. Available at: https://globalvoices.org/2012/10/13/sao-tome-principe-deforestation-threatens-biodiversity/ (accessed 15 November 2020).
- Lopes M., 2013. São Tomé e Príncipe: la medicina tradizionale minacciata dall'industria farmaceutica. In: Global Voices in Italiano. Available at: https://it.globalvoices.org/2013/09/sao-tome-e-principe-la-medicina-tradizionale-minacciata-dallindustria-farmaceutica/ (accessed 23 May 2019).
- Macrotrends, 2020. Sao Tome and Principe Immigration Statistics 1960-2020. Available at: https://www.macrotrends.net/countries/STP/sao-tome-and-principe/immigration-statistics (accessed 15 November 2020).
- Meschini E., 2019. Caffè robusta di São Tomé e Príncipe. Available at: https://www.fondazioneslowfood.com/it/presidi-slow-food/caffe-robusta-di-saotome-e-principe/ (accessed 27 May 2019).
- Milanesi M (1978) Navigazione da Lisbona all'Isola di San Tomè, *Navigazioni e Viaggi. M. Milanesi (Curator), Ramusio, Giovanni Battista*. I millenni. Torino: Einaudi.
- Ministério das Infra-Estruturas, Recursos Naturais e Ambiente Instituto Nacional das Estradas, República Democrática de São Tomé e Príncipe (2018) Estudos de

- Impacto Ambiental e Social. Relatório Available at: http://documents.worldbank.org/curated/en/335691546002352089/text/EIAS-Rev05-PT-ANEXOS.txt (accessed 22 May 2019).
- Miranda L.C., Braz Rabelo F.D., Pacheco J.A.A., et al., 2012. Agricultura Sãotomense Sua Perspectiva No Século XXI: Uma Análise Socioambiental Da Ilha Do Príncipe São Tomé E Príncipe, África. Revista Geonorte, 3(4), 463–473. Available at: http://www.periodicos.ufam.edu.br/revista-geonorte/article/view/1960 (accessed 31 May 2019).
- Moïsi D., 2015. La géopolitique de l'émotion comment les cultures de peur, d'humiliation et d'espoir façonnent le monde. Paris: Flammarion.
- Nascimento J.L. do, 2015. A apicultura em São Tomé e Príncipe. Situação atual e perspetivas futuras. Available at: https://bibliotecadigital.ipb.pt/handle/10198/18932 (accessed 28 May 2019).
- Nogueiro I., Neto C., Marques S.L., et al., 2015. Exploring Sephardic lineages in São Tomé e Príncipe. Forensic Science International: Genetics Supplement, 5, e459–e461. DOI: 10.1016/j.fsigss.2015.09.182.
- Pape D., Andrade R.R. de and Nogueira F., 2013. As Roças de São Tomé e Príncipe. 1a. edição. Lisboa: Tinta-Da-China.
- Pereira R.M., 2005. Raça, Sangue e Robustez. Os paradigmas da Antropologia Física colonial portuguesa. Cadernos de Estudos Africanos, (7/8), 209–241. DOI: 10.4000/cea.1363.
- Quiñones-Ruiz X.F., Penker M., Belletti G., et al., 2017. Why early collective action pays off: evidence from setting Protected Geographical Indications. Renewable Agriculture and Food Systems, 32(2), 179–192. DOI: 10.1017/S1742170516000168.
- Réviron S. and Chappuis J.M. 2011. In: Barham E and Sylvander B (eds) Labels of Origin for Food: Local Development, Global Recognition. Wallingford, Oxfordshire; Cambridge, MA: CABI.
- Roche G. and Dulcire M. 2007 Setting up an organic cocoa sector in SAO TOME. In: AIEA2 International Conference "Knowledge, Sustainability and Bio-Resources in the further Development of Agri-food Systems", Brazil, Londrina, 27 July 2007.
- Sanguin A.-L., 2014. São Tomé e Principe, as ilhas do meio do mundo: avaliação crítica sobre sua geografia política. Confins. Revue franco-brésilienne de géographie / Revista franco-brasilera de geografia, 20. DOI: 10.4000/confins.9018.
- Seibert G (2008) Novos Elementos para a História da Introdução do Cacau em África available at https://www.academia.edu/44475959.
- Seibert G., 2015. Colonialismo em São Tomé e Príncipe: hierarquização, classificação e segregação da vida social. Anuário Antropológico, (II), 99–120. DOI: 10.4000/aa.1411.
- Seibert G., 2018. São Tomé's Greatest Slave Revolt of 1595: Background, Consequences and Misperceptions of One of the Greatest Slave Uprisings in Atlantic History. Portuguese Studies Review, 18(2), 29–50.
- Silva da D.B.D., 2002. O Tráfico de São Tomé e Príncipe, 1799 a 1811: Para o Estudo de Rotas Negreiras Subsidiárias ao Comércio Transatlântico de Escravos. Estudos de História: Revista do Programa de Pós-Graduação em História, 9(2), 35–51. Available at: https://www.africabib.org/rec.php?RID=A00002630 (accessed 27 May 2019).
- Soares O., 2010. Cabo-verdianos em S. Tomé e Príncipe: os contratados. Available at: https://noticias.sapo.cv/actualidade/artigos/cabo-verdianos-em-s-tome-e-principe-os-contratados (accessed 22 May 2019).

- STP Gov, 2015. Decreto-lei n.º 21/2015. Available at: http://extwprlegs1.fao.org/docs/pdf/sao152104.pdf.
- Sylvander B., Anne I. and Wallet F. 2011. Under What Conditions Geographical Indications Protection Schemes Can Be Considered as Public Goods for Sustainable Development?. Territorial governance, 185–202. DOI: 10.1007/978-3-7908-2422-3 10.
- UNESCO, 2019. Island of Principe Biosphere Reserve, Sao Tome and Principe. Available at: https://en.unesco.org/biosphere/africa/island-of-principe (accessed 15 November 2020).
- Van der Ploeg J.D., Renting H., Brunori G., et al., 2000. Rural Development: From Practices and Policies towards Theory. Sociologia Ruralis, 40(4), 391–408.
- Veiga A., 2013. Tribunal mostra sinal de STOP à empresa Agripalma. Téla Nón. Available at: https://www.telanon.info/sociedade/2013/08/12/14103/ (accessed 15 November 2020).
- Veiga A., 2014. Conflito de terra na Ribeira Peixe coloca batata quente nas mãos do Ministro da Agricultura. Téla Nón. Available at: https://www.telanon.info/sociedade/2014/09/22/17455/conflito-de-terra-na-ribeira-peixe-coloca-batata-quente-nas-maos-do-ministro-da-agricultura/ (accessed 15 November 2020).
- Veiga A (2019) UE vem pescar em STP *PorTéla*, 25 April. Available at: https://www.telanon.info/economia/2019/04/25/29109/
- Veiga A. 2020. "Bom Jesus" assiste a agonia do melhor chocolate do mundo produzido em STP. Téla Nón. Available at: https://www.telanon.info/economia/2020/10/14/32723/ (accessed 15 November 2020).
- Wang X., 2018. Absolute protection for geographical indications: Protectionism or justified rights? Queen Mary Journal of Intellectual Property, 8, 73–88. DOI: 10.4337/qmjip.2018.02.01.
- WIPO, 2015. Geneva Act of the Lisbon Agreement on Appellations of Origin and Geographical Indications, May 20 https://www.wipo.int/edocs/pubdocs/en/wipo_pub_239.pdf
- WIPO, 2019. European Union Joins Geneva Act of WIPO's Lisbon Agreement, Enabling Entry into Force Geneva, November 26, 2019. Available at https://www.wipo.int/pressroom/en/articles/2019/article_0015.html (accessed 18 November 2020)
- World Bank, 2019. Country Economic Memorandum for São Tomé and Príncipe Background Notes. World Bank. Available at: http://documents1.worldbank.org/curated/en/429701562910836361/pdf/
- World Bank, 2020. WFP Sao Tome and Principe Country Brief. Available at: https://data.worldbank.org/topic/agriculture-and-rural-development?locations=ST (accessed 15 November 2020).
- Worldbank, 2018. GDP, PPP (current international \$) | Data. Available at: https://data.worldbank.org/indicator/ny.gdp.mktp.pp.cd?locations=ST (accessed 31 May 2019).