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The "Sorondrano" rain ritual: perception and driving forces of actors in the face of climatic variability in southern Madagascar

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Abstract. This paper aims to analyze the manifestation of the “Sorondrano” rain ritual and to assess community perceptions of its expected impacts in the face of extremely dry years over the past 38 years. Specifically, it attempts to characterize the relationship of the Ntandroy to their history and their ways of controlling their environment through this ritual practice and to highlight the conditions and requirements, norms and principles applicable to make the success of the ritual activity effective and reassuring in cases of repetitive droughts. The ethnographic field study was conducted with 44 respondents who had not left the localities in the past 10 years and were selected by purposive sampling. Data was further analyzed qualitatively by content analysis given the prevalent use of Likert type scales analyses. The surveys showed that the majority of the participants have witnessed the ritual ceremony in their lives and affirm its notoriety. They perceived its performance in the face of the eight cases of climatic drought recorded from 1981 to 2019, fitting in the harmonization of procedural steps that the sacrifice is performed without any error. The results imply the continued engagement in the Community - Supernatural Being relationship for the sustainable management of climatic drought cases and above all support the Ntandroy social religion as true coping strategies promoting rainfall as a local economic revival.

Keywords. Androy, indigenous methodology, climate change, ritual, bloody sacrifice

Introduction

The interest in putting sustainable development into territory and then the issue of climate change reminds us of the links between the climate problem and the issue of sustainable development. The concept of sacrifice has always been the object of a certain fascination. It is as vast as it is ancient as religions. This theme has been well expanded progressively from sacrificial dramaturgy where various characters are involved (individual/collective) to social relations. Rituals are obviously omnipresent as a phenomenon of human behavior of social groups. As a result of this, Durkheim ([1912] 1995: 424) claims that the “effervescent” state of ritual performance minimizes individual distinctions and emphasizes the unity of groups. From this, the sacrificial rite began to be considered, not only as a social relationship but also having real social function (Girard 1990:18-19) because its socio-cultural impacts cannot be ignored.

In fact, the concept of sacrifice approached through its dramaturgy becomes significant research objects in sociology (whose undisputed leader of the sociological school was Emile Durkheim). Certainly, the effects of sacrifice cannot be disconnected from the belief that a sacrifice changes aspects of the transcendent realm. Social psychology understands the human being as a social being, i.e. as a being marked by the relationships in which his life is inscribed. Here, the functions of collective ritual in the behavior of social groups are associated with social psychology because they enhance the expression and reaffirmation of shared beliefs, norms and values. They are therefore essential for stability and common group harmony (Whitehouse & Lanman, 2014). From this, ritual takes on an empirical focus in the eyes of psychologists all just on its complexity and diversity.

The applicability of traditional ecological knowledge, combined with socio-economic and adaptive responses to environmental change, can make an important contribution to understanding climate change impacts and adaptation strategies. In its Fourth Assessment Report, the Intergovernmental Panel on Climate Change (IPCC) stated that traditional knowledge is “an invaluable basis for developing adaptation and natural resource management strategies in response to environmental and other changes” (Raygorodetsky 2011). Therefore, this knowledge allows for the comparison of historical landscape conditions with current conditions (Parrotta and Agnoletti 2012). Through their practice, the knowledge they create, share and maintain, strengthens their climate resilience and provides a window into how communities conceptualize their own vulnerability (Hiwasaki et al. 2015). With this awareness, based on the cultivation of worldviews, shapes their perception of who or what is causing climate change and how best to respond? Human experience of nature and environmental change is mediated by culture. "Nature is seen by humans through a screen of beliefs, knowledge, and goals, and it is according to their images of nature, rather than the structure of nature, that they act", the ecological anthropologist Roy Rappaport (1979, p. 97) has pointed out. Culture and social organization in effect shape vulnerability to climate change in terms of whom and what is exposed and how they are susceptible. Rainfall rituals can be seen as an endogenous adaptation and strategy of the community to reduce the uncertainties of rainfall variability and control the phenomenon.

Literature Reviews

The exploration of rain rituals abounds in the literatures in historical and contemporary activities in the world at large, particularly Africa, while examining the complex interaction between humans and the environment. For many decades, many African communities have used knowledge as an essential strategic base and survival tool during extreme weather events and other natural disasters. Orlove et al (2010) argue that such knowledge is localized and rooted in local cultures and is generally associated with a community's strong interactions with its natural environments. Scholarly studies have been started by anthropologists and missionaries, and focus on assessing the rationality of various ritual practices. Junod (1962 [1926]), for example, examined Rama Rainmaking in rich ethnographic detail to assess the connections between the importance of the rainfall calendar, specific ritual practices, and desired outcomes. A comparative review contextualizes Swazi rain ritual as a means of organizing traditional knowledge associated with rain and integrating it into the political environment and economic organization Beemer (1935). Ethnographic descriptions of the Balobedu culture in Limpopo, South Africa, emphasize the centrality of rain and rain rituals to everyday village life in a culture where a queen holds the hereditary political and spiritual power of this practice. Further, Huffman (2009) examines archaeological evidence on prehistoric ritual

spaces and behavior in pre-colonial agricultural societies in southern Africa, including those of the Nguni, Sotho-Tswana, Shona and Tsonga, and notes that in times of severe drought, rainmakers climbed special hills to 'make the rain fall'. Babane and Chauke (2015) provide information on the unique ways of dealing with drought among the Vatsonga ethnic group in the Limpopo province of South Africa. These groups of Xitsonga speakers are also found in Mozambique, Zimbabwe and Swaziland where they are interchangeably referred to as Machangana, Shangani or Shangaans. Babane and Chauke (ibid.) explain both the cultural and religious customs involved in rain rituals (nkelekele), and indicate that the rituals have always been practiced when there is a long period of drought. Researchers increasingly report the importance of religious and ritual beliefs at the community level in adapting to climate change (Guthiga, P., and A. Newsham. 2011; Ombati, M. 2021). Ritual is therefore an action expressing human unity with the universe (Beyer, 2010). None of these studies have been carried out in the Androy (Madagascar), which is particularly impacted and represents 'outposts' and 'thermometers' used to measure and publicize the extent and evolution of global warming.

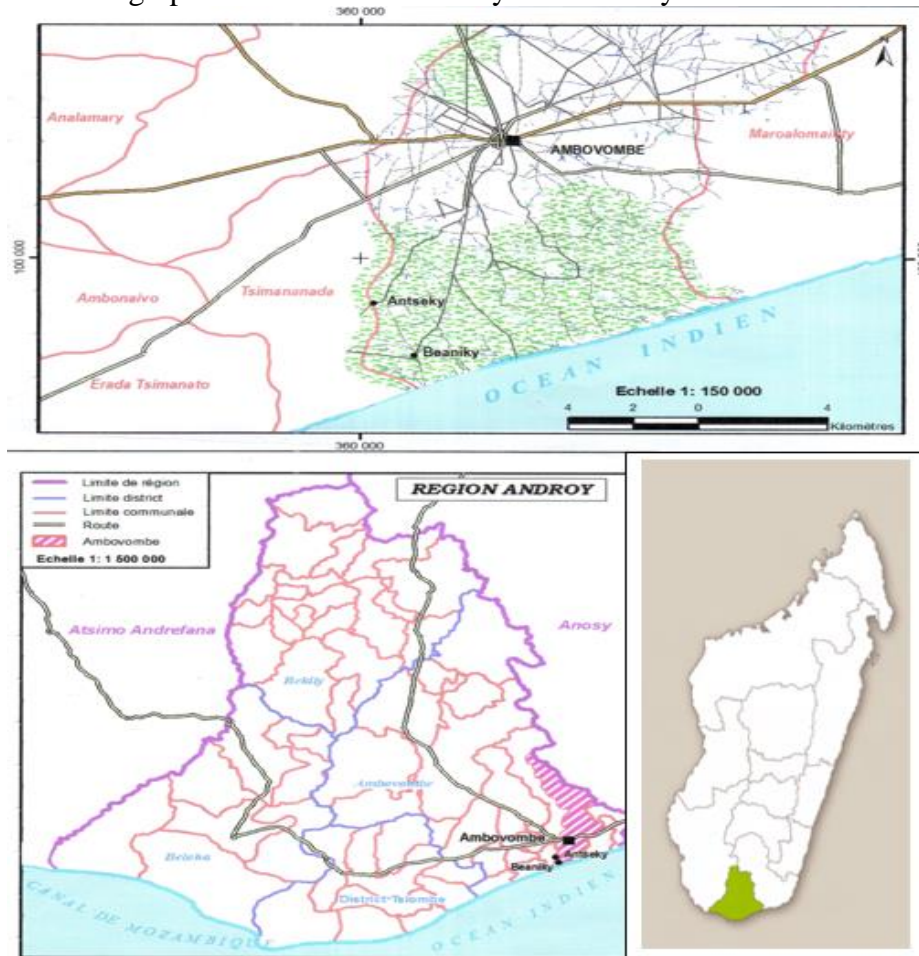
The “Sorondrano” rain ritual in Ntandroy country

From the past to the present, the experience of the Ntandroy, in turn, relates well the dynamics of rain in the community and that the practices of animal sacrifice is a strategy throughout history as a means of approaching the gods in a determined context (acute droughts, pandemic diseases, ...). The “Sorondrano” is a sacrificial rite dedicated to the deities who are responsible for storing the waters that quench the thirst of the earth and all the beings that inhabit it. The order that has existed since the beginning of the creation of our universe at a precise moment in time, "only supernatural beings and men can modify it" (Paul Radin 1962, p.61). The Sorondrano rite is still embedded in the lives of the Ntandroy in the rural sedimentary areas, due to the recurrent problems of unpredictable rainfall and the lack of modern solutions as a socio-cultural adaptation. If rituals are used to solve problems, those who engage in them must consider the causal efficacy of the actions involved (Csordas 2002, Sax 2004; Sax et al. 2010, Turner, 1987; Tambiah, 1979). The development of ritual studies as an independent and interdisciplinary field of scholarly study demonstrates the complexity of ritual as an analytical tool and as a universal human experience in general, for the inhabitants of Beaniky and Antseky in southern Ambovombe - Androy in particular, in the face of the impacts of climate variability. The objective of this study is essentially to analyze the manifestation of the “Sorondrano” rainfall rite and to assess its expected impacts in the context of acute drought in the search for food self-sufficiency over the last 38 years (1981-2019), taking into account agriculture and other subsistence activities. Specifically, it attempts to characterize the relationship of the Ntandroy to their history and their ways of controlling their environment through this ritual practice and to highlight the conditions and requirements, norms and principles applicable to make the success of the ritual activity effective and reassuring in cases of recurrent drought. Thus, assessments of the variables that determine ritual effectiveness characterize the main expected outcome of this study

Presentation of the study area

The villages of Beaniky and Antseky are located in the coastal zone where the most populated part of the Androy region is. To the south, around ten kilometers along the coastal strip where these two neighboring villages are located: Beaniky (25° 16' S - 46° 4' E) and Antseky (25° 13' S - 46° 2' E). The study area is well delimited on the following map:

Map N°1: Geographical location of Beaniky and Antseky in Ambovombe -Androy



The Ntsevohitse clan and its living conditions

The descendants of Princess Say called "*Saivohitse*" or "*Sevohitse*" occupy and hold the town of Ambovombe-Androy District, which is divided into two parts: *Saivohitse-North* is the younger and *Saivohitse-South* is the elder. This is the reason why the *Hazomanga* (ritual pole of alliance with the local deities) were founded, held and worshipped in Antseky because the elders live there. Their center, inhabited in the coastline, formed a federation of lineages with the *Hazomanga* as a symbolic reference point, before which ritual ceremonies were managed by religious notables, the *Mpisoro* (Ancestral Priest). According to information, the *Saivohitse* clan (known as *Ntsevohitse*) had its first *Hazomanga* erected in Antseky under the aegis of *Tsimihetseke*, who was its first guardian around the 18th century. The prestige and moral strength of these religious personalities were in continuity with the foundation of the groups by the ancestors and ensured the cohesion of their whole which is materialized by the presence of ancestral tombs (*kibory*), *vilogne* (zebu ear marks whose cutting out is carried out according to a specific drawing for each clan) and the ritual activity marking a political dimension of the groups.

For a long time, the area has remained outside of the development dynamic, particularly with a schooling rate that is still low today. The *Ntsevohitse* are known for their spirit of independence, as shown by the resistance they put up against French colonization. At the beginning of the 19th century, when the French carried out their conquests, rebellion groups

called "Ntsevohitse" sprang up at the same time under the aegis of Tsimarea (whose village was Antseky). On the other hand, the Christianity brought by Western missionaries was well received from the 1930s-40s onwards in Beaniky, which was not the case for Antseky. Protestantism is permanently present in the village of Beaniky, alongside the traditional religion (animism) which is still very much alive. In contrast, in Antseky, the Christian churches did not come to the village until two decades ago. The coexistence of religions is smooth and not exclusive. The practice of Christianity does not generally mean a rejection of traditional cults (mainly organized by lineage leaders) and it is common for individuals to go through several phases of adherence to different religions in their lifetime.

Motivations for the choice of study sites

The southern region of Madagascar is known for its dry tropical climate. In the "normal" period, the rainy season does not exceed three to four months per year. The 70-80% of annual total is received during this period (Ferry, 1998). On the coast, they even go below 400 mm. On the plateaus, they vary between 500-900 mm but are always marked by aridity and classify the climate of the area in the Sahelo-Sudanese type. It is an arid zone, and is frequently hit by a long period of rainfall deficit, traditionally considered as a drought. It was therefore a meteorological type of drought. With the advancement of technology (satellite data, modeling) and in situ measurements (Directorate General of Meteorology), with the support of warning systems, development and humanitarian actors can detect periods of rainfall deficits as forecasts. Thus, reports indicate a cyclical humanitarian crisis situation that recurs almost every five years. The last three emergencies were in 2001-2003, followed by 2006-2008 and 2009-2011 (BNGRC, 2016). From 2014 to almost today, aggravated by the El Nino phenomenon, humanitarian operations are at their peak due to an "exceptional drought" situation, which is the main determinant of the Ntandroy migration phenomenon. The harsh reality of the current impacts of climate change and the prospect of future impacts underline the importance of strengthening the livelihoods capacities of the Androy: Sorondrano rite as a resilient (emergency) initiative. This region thus meets all the criteria of a laboratory of analysis to help analyze the practices of endogenous recourse strategies initiated by communities to resist and survive in Androy in the face of current and future climatic uncertainty in the quest for territorial development.

Methods

In this study, a qualitative and indigenous methodological framework inspired by the work of Margaret Kovach (2009) and Robina Thomas (2005) was chosen to investigate research questions centered on indigenous knowledge (Kovach, 2009), encompassing a worldview of relational and tribal knowledge. The use of narrative is part of the interpretive nature of this qualitative research and indigenous ontology. Indigenous research methods are "qualitative in nature and allow the indigenous researcher to hear the voices of those silenced, oppressed and marginalized by the dominant social order". According to Denzil and Lincoln (2008), qualitative research is quick to understand the meanings, interpretations and subjective experiences of individuals. According to Brown and Strega (2005), "understanding the reality of an experience, process or phenomenon is contextual and must be grounded in the experience of those who have lived the experience, process or phenomenon. A rich description provides a deeper and more complex understanding" (p.206). The methodological approach used is based largely on the local population having different views on this phenomenon, their experience of

rain-related rituals, and especially their perception of its performance in the face of severe climatic hazards in Androy.

Sampling and sampling technique

To address the issue of rainfall during periods of extreme climatic distress experienced by the inhabitants of Beaniky and Antseky, the sample size was aimed at providing in-depth information to resource participants rather than breadth. The qualitative surveys thus employed restricted samples with a relatively small number of people (N=44). These were studied in the context of their lives in terms of ecological knowledge and beliefs that include ritual practice with its discernible performance in the local cosmology. The sample size was determined by 'purposive sampling strategy' for data collection including how and why ritual practice is practiced in the given context. Resource persons with appreciable knowledge of climatic variability, especially in the case of severe droughts, are needed for the rain ritual as a community-initiated strategy. It was chosen mainly from the traditional leaders (Mpisoro) in office and the descendants of the deceased Mpisoro who took and take part in community decision-making and ritual practices. Similarly, for in-depth interviews on two occasions (November 2019 and November 2020) experienced local farmers (aged 60 and above) were targeted. Both, as elders, are up to the task of priestly knowledge. Finally, we conducted a series of interviews on the one hand with young community members aged between 25 and 45 years to probe their involvement and especially their perception of the ritual practice. On the other hand, we collected information from the Christian participants regarding participation based on the norms of the congregation and personal views in order to analyze their positioning regarding ritual inclusion.

Table 1: Socio-demographical profiles of households

	Characteristic (N=44)	Numbers	% of total
Age	25-50	20	45
	50-65	08	18
	>65	16	36
Gender	Female	17	39
	Male	27	61
Education level	Illiterate	33	75
	Literate (Primary level)	11	25
Subsistence activity	Fishing	3	7
	Agriculture	41	93
Religion	Traditional	12	27
	Christian	32	73
Household size	2-6	35	80
	6-12	9	20

Data analysis and processing

According to Albertse (2007), data in qualitative research speak for themselves to enhance understanding, interpretation and extrapolation. Data analysis is based on the insights (interpretive framework) that the researcher brings to the data and how he or she examines it (Vlaederen, 2003). Since the interpretive framework was adopted in the study, the data was interpreted from the perspective of the participants who provided the data and established their intentions. The analysis of the data was based on an interpretive philosophy that the participants' voices are real in their terms and frames. According to Vlaederen (2003), qualitative data analysis is a process of data reduction, thematization and reintegration of the data into a coherent conceptual interpretation. Keywords and their meanings were considered important in data analysis. The use of thematic analysis in this study aimed to draw out meanings from the data and to subscribe to implicit theoretical commitments (Braun & Clarke, 2006). The data from the video and audio recorder was transcribed verbatim by the researcher based on the theoretical underpinnings of the study's research approach and first-hand knowledge due to the researcher's involvement in the interview process and participation in verbal and non-verbal interactions with the participants. For the processing of the collected data, we used the following software: (i) Access for entering the data collected from the questionnaires administered in order to build a database; (ii) Excel for aggregating certain daily climate data into half-yearly, monthly and decadal data and for calculating statistical parameters (mean, standard deviation) as well as for producing graphs.

Methods of analysis adopted

Historical contours of the Sorondrano ritual practice

The historical examination of the rite from its inception to the present day was collected through oral histories, narratives and testimonies describing the phenomenon from people aged 60 and over. They included male and female heads of households, traditional chiefs (Mpisoro) / and the eldest sons of deceased Mpisoro, particularly as the latter make decisions at the ritual ceremonies. These resource persons reported existing accounts of the effects and impacts of the given ritual in relation to their experience through the focus group discussions and individual questionnaires. The use of the vernacular language for the name of this ritual, Sorondrano, therefore helped to maintain a common understanding of how to commemorate this practice.

Assessment of community awareness and perceptions of the impacts of Sorondrano via the Likert scale (Likert, 1932).

Using the Likert rating scale, key informants were asked about their approval of whether climate change is actually occurring in the localities. Based on their own knowledge and experience in the past, they were asked what they do when climate drought occurs in their country. Then they were asked: Do you know the Sorondrano? For those interviewees who answered yes to the first question, we then asked them to specify whether they had ever participated in the ritual performance of rain and to talk about its impact.

Determination of the elements of the ideal model of the ritual.

The verification of this hypothesis lies in the mechanism of the ceremony. The approach is based on the direct observation of the ritual practice: the dramaturgical scenario of the sacrifice from the entrance, the execution to the exit, as the path of the pattern contains various symbolic practices related to the sacrifices. This verification was carried out through the use of resource persons: the ancestral priest who receives the divine communication with the ritual

norms and requirements, but at the same time he manipulates the execution of the ceremony. The first step is to describe and follow the course of the rites. Participant observation was used to obtain information from photographic and phonographic recordings about the "speech" and "gesture" of the (sacrificing) groups. In doing so, the requirements and conditions that need to be followed and respected in order to guarantee the effectiveness of the rite were examined.

Results

Ntandroy cosmology and the Sorondrano rite

In the past, it was common to kill animals in ritual as an offering to entities and deities in exchange for protection. Animal sacrifice is a ritual of killing animals as part of the religion. The experience of the Ntandroy relates that animal sacrifice practices are a method throughout history as a means of approaching the gods in a given context whose true meaning, operating forces and symbolism of these rights are vast and versatile. The study area has endured a long relationship with drought and unpredictable rain for many decades. According to the narratives available from the elderly, since the dawn of time, the Androy has been confronted with droughts. The testimonies describe the phenomenon that people have had to take shelter from the gracious gods and keep them satisfied by giving them animal sacrifices. In times of extreme drought, the celestial spirit known as "*Boribey/Andrianañahare*" manifest themselves (in visions or dreams) to the ancient diviner-healer or ancestral priest (depending on the circumstances). From then on, these spirits communicate to him that the whole community is cursed, deprived of rain because social prohibitions and precepts are all violated and the laws governing the ecosystem are no longer respected. The earth is tainted by the bad acts of the members of the community. The gods become angry and suspend the rain. On the other hand, these gods demand that every father of a family, every village of the same lineage, kill a sheep as a sacrifice so that he will give them his grace and abort his anger: "make the rain fall! The idea of the performance of sacrifices permeates the entire life of the Ntandroy. From birth to death and even post-mortem, various recurrent sacrificial rites mark the life of the tribe under study. This applies to Ntandroy people in both traditional and urban contexts, as well as to those who have embraced Christianity. The practice of sacrifice is a way of life in the Androy. In fact, the religiosity of the Ntandroy people, in their traditional context, is demonstrated in various

Animal sacrifice is omnipresent among the Ntandroy

Ntandroy customs suggest that throughout the life cycle, the notion of sacrifice is omnipresent Benolo (1998). The severity of the social offence determines the nature of the sacrifice. Social quarrels, for example, which are deemed to be light, do not lead to the slaughter of a domestic animal but only to the cutting of a chicken's crest, or a sheep's, goat's or ox's ear pinna, whose blood drops will be put into water to remove sins, in a way. In addition, in the case of a very severe drought, the Ntandroy sacrifice a domestic animal (preferably a sheep) to put an end to the drought and obviously to make the rain fall. Whether it is worship, healing, rituals of thanksgiving, or a crisis in daily life, the divine beings are crowded with offerings and frequently, the blood of the victims must be spilled on the ground which is soiled by humans living in the community. The spilling of the blood of immolated animals (mainly sheep, zebu, chickens but excluding goats) is a powerful core of sacrifice in Androy. The flow of blood makes the sacrifice powerful, and also transfers energy to the sacrificer during activation ceremonies substituting communities. In terms of sacrifice, the symbolic meaning of blood, deeply embedded in the cosmology and local history of the Androy, is indeed, hyper important. The presence of the *hazomanga* in each clan clearly demarcates the autonomy of the group.

Benolo, Heurtebize and others have written in particular about the Ntandroy *hazomanga*. According to the internal organization of the clan, the *hazomanga* is not only held by the Mpisoro, who should be an irreplaceable person only in case of his death, but is allowed to the heads of internal families who want to have priestly autonomy in the eyes of their descendants, according to the interview at the level of a focus group in the village of Antseky. In this case, Mr. VONDRAOKE specified that the *hazomanga* authorized for them is small (*hazomanga fohe*) because the clan *hazomanga*, which is unique, is in turn large (*hazomanga lava*). Consequently, any ritual action related to the presence of the *hazomanga* is done at the level of each family or each lineage/sublineage according to the needs.

With the penetration of colonialism (around the 1920s), *hazomanga* were rare. Nevertheless, the performance of each sacrificial rite can take place in a good place depending on the case and its determined purpose. (i) The *Soroñe an-davenoke* (sacrifice over the ashes, performed when there is no new Ancestral Priest yet. The sacrifice (*soroñe*) is performed near the house of the previous ancestral priest which is burnt down after the death of its owner for some Ntandroy clans. Then, (ii) the *Soroñe an-donake* (sacrifice at the grave), it is performed at the grave when a sacrifice is needed in the name of a specific ancestor. Again, there is a (iii) *Soroñe am-pototse* (sacrifice before a branch) when there is no *hazomanga*; any status holder in the village can play the role of Mpisoro. He is then called *am-pototse*, because the real chest is absent. The *soroñe* here would concern ordinary sacrifices for the immediate family. Nowadays, all cases often continue in the gate of the zebu parks. A figure in the Appendix summarizes this conception of the Ntandroy religious act.

Awareness of the effectiveness of the “Sorondrano” sacrificial rite

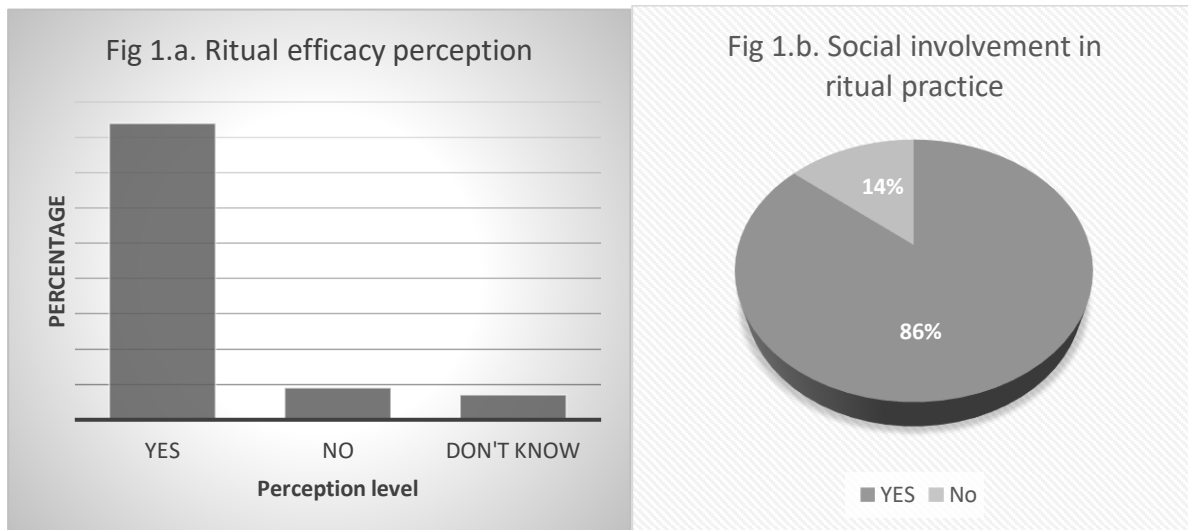
The collective memory of the peasant communities in the two study villages testifies to the ritual effectiveness that is reflected in the vernacular names of the ritual practice: *Sorombala* or *Sorondrano*. Table 2 shows the number (08) of cases of extremely dry periods resulting from the total vulnerability of the social tissues that cause the practice of the rite from 1981 to 2019, during each of them, the participants perceived its effectiveness in major part.

Table 2: Drought periods since 1981-2019 in Ambovombe-Androy

Perceived extremely dry periods	Annual precipitation (in mm)	Vernacular name of the drought
1980	477,98	« Santiravy » (Iron-belt)
1982	478,98	« Malalak'akanjo » (we are thinned out)
1985-1986	312,58 /372,1	« Bekalapake » (Dried cassava)
1988 -1990	222,98/386,32	« Mavovavamiroanake » (starving family)
1991-1992	149,419/ 323,897	« Tsy mitolike » (we eat without dividing)
2006	384,34	« Arikatoke » (all is severe)
2013 et 2016	363,37 / 414,32	« Bohiritse » (All are thinned out)
2018-2019	370,938 /...	« Jarodomiroyaly» et « Agnariambaly» (divorced the wives)

Source: KIOMBA-MADIO, 1987 / DGM, 2020 / Fieldwork (September2020)

Almost all the participants affirmed with "YES" the notoriety of the practice of the "Sorondrano" rite. The majority (86%) of respondents answered that they had attended the ritual rain ceremony in their life *Figure 1*.



The performance characteristics of the Sorondrano sacrificial rite

(1). Divine manifestation and doctrinal requirements.

Divine communication or Fañanto

In Androy, the severe drought was identified as a sign that God had abandoned the people and their land because of their sins. God does not cause any rain to fall in the land by showing his anger towards the sinful attitudes of the whole community (*Tahiñe aman-kakeo*). The morality of people impacts on the universe itself because nature and the supernatural are moral places. Any kind of perceived (or real) separation from the social group, a state of impurity or rift in the clan or a general feeling of lack or disorder causes drought in Ntandroy country according to the report of the clan priest Ntsevohitse. He means by sin of the society forcing the divine anger all the murders caused by the social insecurities yet the judicial tribunals are corrupted. The bloods of many innocent people killed in an arbitrary manner are in vain as they do not win their cases. These resented the divine goodness and thus cursed the community by depriving it of rain. Because of the many crimes and sins in society, the sky is closed and there is and will be no rain. He adds that the pastures of the shepherds are in mourning, the ponds are dried up. The community is plunged into hunger, thirst and famine. As soon as the severe drought persists and weakens community life, communication from the supernatural Being reaches the ancestral religious actors of whom they are the Priest and/or Soothsayer. The process of sacrificial drama is under the guidance of the Divinity. One of the religious actors receives and pays particular attention to the modalities of the ritual killing of an animal in question: the entry, the execution and the exit. The strict observance of these ceremonial modalities will guarantee the ritual performance between the interactants. The ancestral priest then informs the entire community to respond to the celestial call after having received the voice of the divine spirit who describes the process, the rigours and the conduct to be followed before, during and after the cults in order to achieve the objective: the ritual performance (in the form of sufficient rain).

The sheep: sacrifice to the god.

When the voice of the divine spirit is expected by the ancestral priest and is communicated to the people, everyone is called upon to organize the sacrificial rite in each lineage (*famosora*) according to their own decision. The supernatural being communicates his will to all the communities through the ancestral priest, but the will to offer a bloody sacrifice remains with each family head. If the community wishes to benefit from God's goodness by giving them rain, it responds to him through ritual sacrifice as a collective repentance through the *tsiriry* sheep as a type of sacrifice for sins (atonement) and it falls into the category of a scapegoat for the community in each household.

The color of the sacrifice: "Tsiriry"

The sheep and/or ox correspond to the sacrificial animals par excellence, which can be made to honor the ancestors. However, these animals must correspond to specific characteristics depending on the circumstances. The most prized oxen/sheep for sacrifice are those that are reputed to be the rarest, generally oxen/sheep whose head is ideally adorned with a white spot and whose coat is black, its colour is said to be '*tsiriry*'. This colour is reputed to be a requirement of God and the ancestors because it already represents the latter's willingness to show their kindness to the sacrificer. The white spot on the victim's head symbolizes, on the one hand, the openness of the gods to forgive the people, and on the other hand, that the same people should repent of all kinds of defilement "*lio-hakeo*".

Sacrificial blood: uses and representations

Depending on the cultural context, sacrifice is a type of offering to powers (spirits, deities, ancestors). There is no sacrifice without manipulation and destruction of an offering: this is 'immolation' or "*mandenta*". Immolation is a vocabulary of St. Thomas Aquinas that is used by many anthropologists to designate the way in which the oblation material is treated during the sacrifice. The blood spilt gives the sacrifice its full value. According to the account of the ancestral priest Tsiondrane, there is such a quest for life in the blood as soon as it falls to the ground. He added 'the soul of the flesh is in the blood, and God gave it on the altar, that it might serve as atonement for sins (*hakeo*).

(2). Procedural and dramaturgical requirements

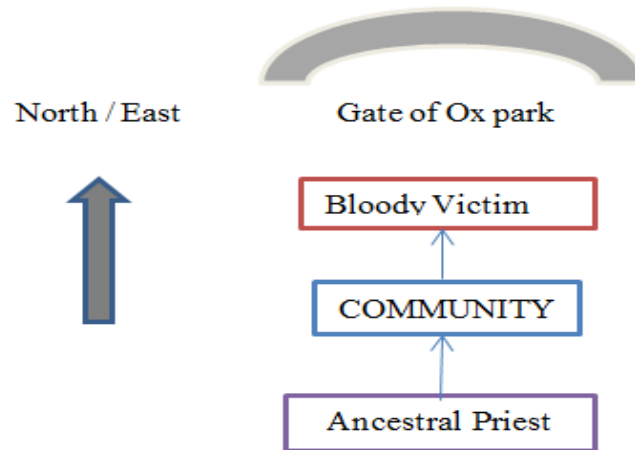
From the beginning, the divine spirit manifested its will to the ancestral priest: to call upon the community to repent and approach the deity through the sacrificial blood offering. At the same time, the supernatural orders its intercessor (the priest) to respect the modalities of the sacrificial scheme. Not all places are suitable. Certain precautions are taken with regard to the rules concerning the place and the instruments of the sacrifice. The killing of the victim is thus carried out in front of the gate of the whole ox park (*valan'añombe*) in case of scarcity of the Hazomanga (sacred post) where the ceremony took place in front of this. This explains the following ritual elements:

The execution

Definitely, the ritual death of an animal does not necessarily imply a sacrifice: The way in which the animal is treated before death, the technique of killing, the use of the body (cutting, sharing, consumption), the position of the sacrificial act within the chain of actions that make up the ritual process, strictly speaking, condition the effectiveness of the ritual itself. Among the Ntandroy, the animal is tied with its legs by a rope (*talivelo*) used to hang the animals to be

sacrificed, its head facing North and/or East before being presented and consecrated to the deity. Now the victim is in the sacred place (in front of the door of the bullpen). The whole community (lineage, group, and family) gathers seated behind the animal and the Sacrificer (priest or male elder leader of the group or family) stands behind the group, i.e. the latter stands between the animal and the priest. *Figure. 2* illustrates the position of the sacrificial act before it is killed.

Fig.2. Position of the sacrificial act



Then, the priest proceeds to an invocation "*mitoka*" of the Infinite to be present in the middle of the cult and dedicates the sacrificial victim to her. It is after having summoned the divine and ancestral spirits through intercessory prayers that the priest substitutes the evils of the community. The sacrificer is sometimes a priest who, by definition, is at the threshold of the sacred and profane worlds, and it is his role to present the repentance of the people to the divinity while asking for the realization of the promises of favorable blessings to the repentant group. This discursive invocation does not last long because it depends on the eloquence or inspiration of the priest. Immediately afterwards, the immolation of the animal takes place (by some young sacrificial boys). The victim's throat is slit with a sacred knife (*vy lava*), which is used for sacrifices, and its blood is actually poured on the ground. It should be noted that during the whole ceremony, the sacrificial rope (*talivelo*) must not be crossed by anyone's foot. In principle, the priest takes some of the spilled blood in a wooden container (*fitovy*) containing the water of blessing. The priest then takes a bunch of green *Fengoke* or *Sañira* plant and dips it in the water mixed with blood which is in the same container, and then sprinkles it on the group concerned. It is in this way that the community is purified of impurity and washed of all defilements. The offering is for the deity but the body of the deity is used by the sacrificing people as a meal to conclude the rite.

The exit from the scheme

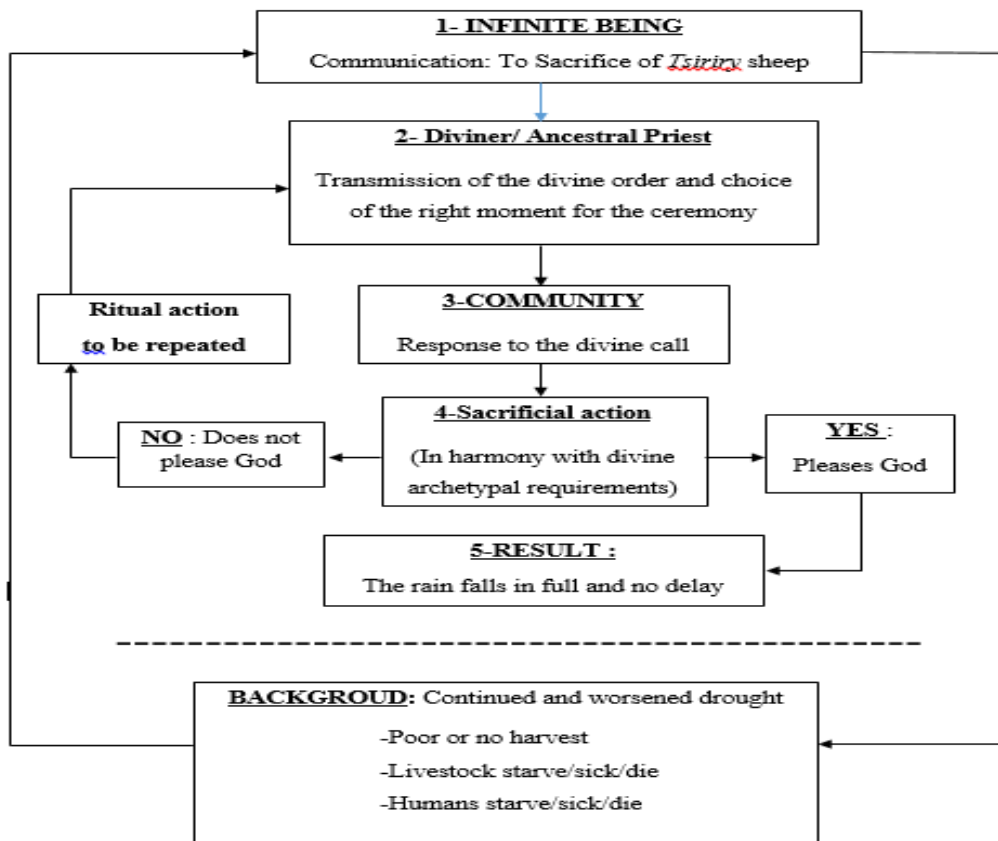
Now the rite is well and truly closed. Since the blood sacrifice eliminates all kinds of communal rivalries and thus protects them from their vulnerability to the process of destruction, the priest "passes on" the rite with its modalities and regulations as he received it from infinity to another recurring village to continue and engage in it. The priest of the next village accepts and grants to receive the celestial recommendations that the previous community has experienced. It is the turn of another village to practice the rite in their home to benefit from divine favours in the context of drought. It should be noted that every village enjoys the

realization of the divine promises by observing and putting into practice all the recommendations that he has prescribed.

(3). Expected impact of “bloody sacrifice” on the ecosystem

The Sorondrano ritual has been successful as soon as the sequential output of the rite is reached and the community will be blessed as a result. Once the victim is put to death, the different parts are cut into pieces (only the liver 'ateke' is reserved for the *Mpisoro*). The celestial guide stipulates that one sheep is needed for each family, one sheep for each house. Meat cannot be boiled and cooked with salt and cannot also be served with rice because it is not a festive meal. The meat cannot be left until the morning (of the next day) and its bones must be buried in an ox yard. The bones cannot be thrown anywhere as they have been consecrated to the divine spirit. Meat is for the household and its members, but it is generously distributed if neighbours or strangers come to eat with it. It is forbidden to spare it or hide it from them. These requirements must be strictly adhered to if they are to be effective. The Infinite responds to its evocation within the non-delayed period. Following the execution of the victim, the liver 'ateke' of which she is the divine part is burnt “*atsotse*”, just in front of the ox park (sacrificial place) or in the *Hazomanga* enclosure. Then it is cut into pieces and the ancestral priest throws them upwards, to the left and to the right. The rest (of the meat and the green plant with which the community was blessed) is hung over the tip of a post, from the north or east corner of the ox yard. The testimony of the participants, as clarified by the ancestral priest, is that the favor of the deity manifested itself immediately on the same day that the ceremony was held. Other informants testify that in 48 hours, the Infinite One will bring rain to “wash away” (*manasa*) from the place where the divine meat 'ateke' was burnt.

Figure. 2. Procedural model of the “Sorondrano” rain ritual



Discussion

Religious views on ecosystem control

(1). Beliefs about rainfall as an adaptation to climate change

The Ntandroy have their own perception of the Infinite, they have the idea of a global life whose source is the same God. The ancestors and the divine powers, made favourable by the rite and by the respect of the prohibitions (*falindraza*) that they had ordered, can indeed influence and modify destiny. It is on these principles that ritual practices are rooted, a symbolic system and representations of religious experience in Androy. Appeasement in the face of all the forces that surround him gives man the condition to reproduce, to act and to work to ensure his permanence in history. The absence of rain can be seen as a drought and a moment that requires ritual intervention (Babane and M. T. Chauke, 2015; Koster 2011). People's entire livelihoods depend mainly on rain which can fall either by invoking the power of the Infinite Being. Most of the time, droughts are a natural phenomenon commonly experienced by the Ntandroy people until today. The practice of the rain ritual among the Ntandroy communities in Beaniky and Antseky Ambovombe-Androy in this study was developed even before colonization. Semenya (2013) argues that the practice of rain ritual is an ancient science that the pagans were already practicing. But the onset of colonization and its ideologies impose with their results in relation to a people's psychological and social lifestyle. Mapara (2011:16) argues that European missionaries mistakenly thought that African religion promoted belief in witchcraft and encouraged people to worship their ancestors rather than God. The most fundamental change occurs in the very conception of existence. Traditional Ntandroy society was based on a perfectly organized system of the world, oriented by a number of spiritual schemes which were transcribed into an identical structure in the different sectors of knowledge and action. The cosmos as a place of speech and manifestation of the deities as well as of the ancestors must be relayed by the diviners (a person playing the role of a bridge) so that this speech can be heard by humans. Such coherence is broken in a techno-mechanist civilization. The same laws no longer govern the activity of the various sectors, which develop independently of each other. It is not surprising, therefore, that the traditional soul finds itself upset, unbalanced, and too often torn apart in the world without coherence that is imposed upon it. It no longer accepts supernatural inspiration (native spirit: *Andrianañahare / boribey*) as a means of interpreting nature. The spirit of the Ntandroy man is not a clean slate. It is the bearer of a civilization that may be considered ill-adapted to modern scientific development born in the post-colonial era, but which has already proved its worth in many fields in general and in the management of climate change in the form of prolonged droughts in particular.

(2). Community participation in the worship of Supernatural Beings

Since the lack of prolonged rainfall is generally associated with the sinfulness of the community and drought is the effect of the immorality of the society, the worship of the Infinite Ones is a community affair. The divine communication was addressed only to the religious actors but the response is the responsibility of the whole community. This implies the participation of all social strata without exception. Thanks to the research methodology adopted, the researchers were able to observe the processes of the Sorondrano rite and no secrets and details were considered confidential. The execution of the sacrificial act actually takes place in each family/household with a lamb, after having understood all the norms and requirements that must accompany the ceremonies. The communal involvement in this sacrificial rite implies the responsibility of every member of the society towards the local cosmology. The bloody offering comes from any devoted, convinced and thirsty family preparing to destroy a victim will seize

the fulfillment of the divine promises: the rains will fall to satiation. It is worth mentioning that the Sorondrano rain rite has its character of 'democratic' involvement. If it is democratic it implies a matter for all rural Ntandroy peoples.

Practical issues of the Sorondrano rite

(1). Doctrinal issues

The sacrificial rite in Ntandroy societies has the meaning of blood. As far as animal sacrifice is concerned, the blood spilt on the ground symbolizes the vital force, life, and what links people in the same family. It is what links the generations together. And this life is passed on by the ancestors. Blood is a sign of communion and at the same time mediates with the transcendent. Without blood passing through the ancestors, the relationship with God becomes impossible. Thus, through the bloody sacrifice, the communities aim at the restoration of a lost order, atonement for sin and acceptance. Access to the symbolism of blood requires an understanding of the Sorondrano rite. The colour red symbolizes the blood of the ancestors, drunk by the earth. It becomes a symbol of unshakeable power and impulsive strength. The physical material blood takes on a mystical form to enable the subjects to make their social life in harmony with the universe. The sprinkling of water mixed with blood (*lio*) collected and accompanied by words or gestures changes its substance. The blood of the sacrifice is no longer biological blood but becomes what society wants it to be: a material of cohesion, reconciliation, welcome, purification and communication. The account of the two resource persons (Ancestral Priests) saying: 'The sacrificial blood *lio*, as soon as it has fallen to the ground, makes atonement and reconciliation of the people towards God (Andrianañahare)' confirms that by virtue of the blood of the victim, the Hakeo sins have not only been covered but also removed, for, "without the shedding of blood there is no remission" (Heb. 9:22). Similarly, blood sacrifice is a component of the identity of the people of Israel. The people are regularly invited by their God to offer bloody sacrifices: slaughtering an animal. Blood was a distinctive sign of the houses of the sons of Israel when the angel of God passed by to exterminate the first-born of the Egyptians. "I will go through the land of Egypt that night. I will strike down every firstborn in the land of Egypt (...). The blood will be a sign for you, on the houses where you are. I will see the blood. I will pass over you, and the destructive plague will not come upon you when I strike the land of Egypt" (Exodus 12, 12-13). God establishes a relationship of recognition between Him and Israel through blood. The *Sorondrano* sacrificial rite does not only convey doctrine or beliefs, nor even meanings of acts and symbols of attitudes towards the matter, but in particular, it calls for the crucial attitude: the commitment to "human-deity" Roy Rappaport (1999) and Nietzsche (1976: 160), which is materialized by the rainfall to satiety in Ntandroy country.

(2). The availability of the victim and doctrinal requirements

The canonical criteria to be respected during the sacrificial rite always count to the ritual efficiency to provide a sacrificial victim is not free. The divine spirit usually imposes criteria for the choice of the victim: the species, the sex (preferably uncastrated male), the age, but also the state of fattening and physical integrity of the animal must be perfect. The context in which the infinite asks the community to perform the Sorondrano sacrificial rite is a crisis situation in which the sheep population available in the country is insufficient and too costly. The most modest families/households, weakened by the crisis, find it difficult to raise the money needed to buy an animal. In addition, the future sacrificial victim cannot be a stolen animal; it must be acquired legally. The discussion lies in the realization of the divine blessings, the conditions of which are under material constraint (the availability of the sacrificial victim). According to our informants, many villages are deprived of rain because they have not been able to buy or have

a sheep (or in the opposite case but they spare them). The human desire to benefit from the rain is thus not realistic because of the lack of sacrifice to destroy. Is the victim a counterpart of the celestial rain towards the Ntandroy community or does it materialize the abnegation of each and every family? Our result confirms the practice of the rain ritual throughout the southern African region, with the black colour of a sacrificial bull in rain rituals symbolizing the rain clouds and the fertility that the rain will bring (Shaffer and Naiene 2011, Shaffer 2009, Willoughby 1969, Junod, 1962). Our respondents specified on obtaining a sheep animal for the sacrifice as black and white, but if so, it is not obligatory (colour or age preferences). Respondents specifically emphasized the need to sacrifice a healthy sheep (per household or group) and, if possible, a male. In any case, the context of drought in Androy creates and reshapes the interaction and especially the bipolar commitment through sacrifice. This interaction thus constitutes a systemic in which the criteria favouring the goodness of the Superior being are inscribed.

(3). Ritualized symbolisms in strict procedures

The Sorondrano, as a sacrificial act, the intervention of a support of symbols, is always accompanied by words and narratives that assign its destination. The pattern of the rite follows the reality of three obvious phases. The process of the sacrificial act must be methodically followed without any error: presentation of the animal to the deity, recipient of the rite, consecration, invocation and the use of the body (consumption). The sacrificer cannot omit any phase; otherwise the sacrificial act will remain banal and vain. It will thus be liable to repetition. Our result confirms Schapera's (1930) report, which proposes variants of the ritual processes of rainmaking in the Bechuanaland of the Bantu Sotho society in Southern Africa as the people, the BaKxatla, struggled to respond to cases of drought in their territory. In addition, the Kilumi rain dance within the Akamba community of Kenya, Korster (2011), Akong'a (1987), and Kenyatta (1938), that rain followed each ceremony, but in case of failure, investigations were made into the details of the clearly defined procedure and the whole ritual was repeated with particular care until the rain came. As with the Sorondrano rite, our key informants specified that in case the rules of the rite were not well observed, the successor village priest returned to his counterpart to (re)enquire carefully about the determining conditions of the ritual efficiency, and so on. Indeed, whatever the element of the rite taken in its social environment, it fulfills a social function and, being integrated into a sacrificial rite, it is veiled with a symbolic meaning that may be beyond mere social use. The direct impact of the Sorondrano rite is not to be groped at, as the experiences of the villages (having performed it) are communicated '*asese*' to the following communities with rigor so that they perform it in a reassuring manner.

Rainfall as a performance of the Sorondrano rite

(1). The role of meat in the animal sacrifice (post-closing)

The ceremony brings the animal, a profane being, into the realm of the sacred, by its killing in front of the sacrificial place. Among the Ntandroy, in particular, the animal is then consumed by all the communities, with a part (the *ateke* liver) reserved for the gods. The consumption of meat from the animal sacrifice allows for collective participation within specific social structures to conclude the rite. The idea of forbidding the hiding or sparing of the sacrificial body served as a meal to anyone (residents or strangers), joins René Girard's assertion that the social function of the sacrifice is 'to eliminate all dissensions, rivalries, jealousies and quarrels between relatives, to appease internal violence and to prevent conflicts from breaking out' (Girard, 2002 [1972]: 27). It restores harmony to society and strengthens social unity (Girard, 1990). Victor Turner (1977) also states that sacrifice serves as a cleansing of a society [...] or a repair of damage [...] to the social fabric [...]. Any person, although not present at the

place of sacrifice but who would eat the meat of the victim, mystically appropriates the mystery of the sacrifice. He himself becomes a participant and beneficiary of the act. In contrast to the practice of ancient Greco-Roman cultures (Soelid Gilhus 2006), if the distribution of types and portions of meat and other substances from animal sacrifice creates a hierarchy between participants and outcasts. The food benefits, animal sacrifice is also linked to all levels of politics in communities (Detienne 1989). The consumption of meat without discrimination or social status, in our ethnographic survey, brings the whole society concerned back into order and up to standard. According to our key informants, as there is no festive meal, the meat from animal sacrifice is not distributed or prepared to honor (fiasia) relatives/elders from the symbolic “*renehena*” portions. Furthermore, examples of meat consumed outside the sanctuary indicate that commercial concerns and practices were at least sometimes involved (Naiden 2013; Parker 2010). Literary evidence shows that meat of a certain description is sold on the market (Isenberg 1967). Contrary to our discovery, the spirit conveying the practice of the Sorondrano rite does not yet have the mercantile drift of greedy and uneducated sponsors seeming to mix tradition, greed and modernity, probably by loss of reference points. The consumption of sacrificial meat is there for community reunification in Ntandroy country and socio-political and consumerist instrumentalization does not reside there.

(2). Expected impacts of the ritual

If rituals are used to solve problems, individuals who engage in them must consider the causal effectiveness of the actions involved (Csordas 2002; Sax 2004; Sax et al. 2010). Our finding accounts for the impacts of the practice of the Sorondrano rain ritual in the context of drought in Ntandroy country. In line with Kenyatta (1938) who details how the Kikuyu community in Kenya approached their ancestors (Mwene-Nyaga) in prayer, ritual and sacrifice begging them to intercede with God (Ngai) during periods of prolonged drought and lack of rainfall in season. Thus, God heard, accepted and answered their prayer and brought them a rain of prosperity.

Haruna (1997) describes and explains the most important aspects, beliefs and practices that are observed during rain prayers among the Guruntun and Bubbure of Nigeria. Rain prayers are led by a spiritual leader (chief priest) who is respected by the community and has a great knowledge of the climatic conditions of the area. After the prayers, the high priest and the people share all the food with each other, leaving some for the ancestors (...). God answers their prayer and 'the rain begins to fall immediately and when there is too much rain, it is the high priest who stops it' (ibid: 232).

Like Akong'a (1987), he agrees with Korster (2011) and both explain that Kilumi dances were also accompanied by the pouring of libations and the offering of sacrifices to appease the spirits. The success of the Kilumi dances ended with celebrations as the community expected a favourable response from the rain of spirits. Akong'a (1987) and Korster (2011) state that it never failed to rain after these festive rituals. Phibion (2013) focuses on the types of spiritual wosana and mayilerain prayerful songs as practiced by the Bakalanga of Botswana and Zimbabwe. These are rain-prayer dances performed each year at the beginning of the rainy season to ask for adequate rainfall, as too much or too little rain can spoil crops and lead to famine. In summary, the rites demonstrate the close relationship between these two types of rain invocation dances, worship and supernatural causes. Thus, the supreme deity, Mwali, when worshipped, responds by giving rain and saves people from hardship.

The rituals may be in the form of invocation of ancestors or God or both. All these ethnographic accounts are confirmed by our findings among the Ntandroy populations living in

the villages of Beaniky and Antseky, Ambovombe District. The testimony of the priest, Mr. Tsiondrane, reports that in the previous climatic emergency he experienced, "the favor of the deity manifested itself immediately at nightfall". In addition, the researchers were eyewitnesses to the Sorondrano sacrificial rite's active force as we were in direct observations of the ritual ceremony on Monday 14 November 2017 (afternoon). The weather was incredibly sunny, accompanied by dry winds. It was mysterious that two days later (Wednesday, November 16, 2017), rain fell. Recently, during the acute drought in Androy in 2020, the Infinite Being *Andrinañahare* was seized (November 11, 2020, at 7:00 am), and he manifested his grace by making it rain heavily on the same day for six (06) hours of time.

Socio-cultural implications of the Sorondrano rain ritual

Ritual activity as a mechanism for coping with environmental stress has been discussed in numerous ethnographic and archaeological studies around the world (e.g. Frazer 1911; Butree 1930), but also specifically in the Androy region. We have provided a context and greater depth of time for the attention given to food production crises in the much later history of the Ntandroy, as recorded over the last 38 years (1981-2019). Community testimonies, adages, songs and weather records from the Ambovombe-Androy station all refer directly to droughts. The community practice of rituals related to rain in the Ntandroy country "Sorondrano" attests to the reality of climate change, of which repetitive droughts are the causes: "there have been droughts, there have been famines". A notable investment in Sorondrano ritual practice is an emergency human response initiated by the Ntandroy peoples to periods of climatic stress. Although this ethnographic study found many differences between accounts of general-purpose rituals around the world related to drought, the study of the Sorondrano rite in Ntandroy country showed greater consistency than those known mainly in East Africa and South Africa (the Kilumi, Rama, for example). The rain sacrifice rite (*Sorondrano*) reveals some very important socio-cultural functions. There are also very specific functions of the rain ritual. The functions identified are as follows:

The performing rite presents an excellent example of strict obedience to the divine instructions and recommendations addressed to the people asphyxiated by the acute drought for the holding of the sacrificial activity. The Sorondrano rite highlights a spiritual intervention and commitment between the bipolar relationships: Human-Divinity.

The drought was the effect of the immorality of the society, a crisis in which the community had to work together. The performing rite restores the harmony of society and strengthens social unity. It eliminates all dissensions, rivalries, jealousies and quarrels between relatives, calms internal violence and prevents conflicts from breaking out.

The successful rain ritual played a role in cleansing a society and repairing the damage in the social fabric. It functions precisely in the passage of the community from a state of affliction (death) to a state of healing (life). Ritual symbolically represents the universal movement of the community from a state of illness to a state of good health and reform. Therefore, rituals can be applied to resolve conflicts in society.

The Sorondrano rain ritual expresses the socio-cultural beliefs of the Ntandroy in Sevohitse and the meanings of the society. Symbolically, it also serves as a pedagogical tool that helps to impose and retain socio-cultural practices. The overall ritual actions, structure and patterns highlight what is culturally valuable to the society.

The rain ritual, which makes it rain at the end, organizes a collective (re)generation of identity of the Ntandroy. In the ritual practice, the participants help to educate the younger

generations about the traditions and role of immanent beings. The very act of ritual practice ensures a degree of continuity and memory in this world of modernism.

Conclusion

Climate change is and will be reflected in disturbances in temperature, rainfall, number of rainy days, incidences of drought during the rainy season, crop pest and disease infestation and frequencies of windy periods. Changing crop varieties, changing sowing dates, crop rotation, crop mixing, use of traditional weather forecasts and food storage are the main strategies for adaptation to climate change. In addition, this article highlights the importance of making statements about the effectiveness of the rain ritual in Ntandroy country: the Sorondrano. Some questions regarding the problem of ritual effectiveness are notable. Is it reasonable to assume that the answer to the question "Why are the rituals performed?" has to do with their effectiveness? All of these questions are related to the observation that many rituals are perceived by analysts as actions that fail to achieve the ends for which their practitioners believe they are performed. The Ntandroy Sorondrano rain rituals, on the other hand, have a direct and not a delayed impact on the weather: the rain falls. The immediate effect expected from the rituals is realized on the same day that the sacrificial act is performed, while granting the rules and requirements applied to it by divine manifestation. It is to say, strictly following the "archetypal" processes of the rite, a single and conclusive condition of its effectiveness. Should we then say that these Sorondrano rituals are effective? Yes, the impact of Sorondrano is predictable as soon as the communication from the Infinite Being reaches its Intercessor (ancestral priest) to perform the sacrificial ceremony. The community party in turn seizes the divine promise by accepting the procedural instructions of the rite in question. Every area, every village and every community enjoy, see the falling rain. The impact of the *Sorondrano* sacrificial rite is not a personal perception, nor an individual psychological sensation like other rituals (of healing, or other...), it is cosmological and communal. It is a common and ocular experience. The intentions of the people performing the rituals do not condition the efficacy of the rite because this practice is not of human initiative. The effectiveness of the rituals is therefore not correlated to the intentions of the people performing the rituals but rather to their involvement (participation). However, the choice of these strategies seems to be influenced by regional factors. Lack of financial resources and information on modern adaptation techniques are the major obstacles to adaptation. A policy of facilitating access to agricultural credit and coaching farmers would facilitate the adaptation of rural populations to climate change.

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SECTION APPENDIX
APPENDIX N°1: Glossary

Faly: Forbidden or taboo (in common Malagasy: "Fady")

Hakeo or (**Tahiñe aman-hakeo**): Hakeo is a state of disgrace in which an individual or group may find themselves. In a word, what is called 'sin'. Benolo distinguishes three causes of hakeo: that produced by a curse (hakeo-fatse) which can be uttered by the ancestors as well as by the living, addressed to an individual or his descendants, that due to a 'natural retribution' (hakeo-sata) caused by bad conduct, and the hakeo inherited from the previous generation (hakeo-lova).

Hazomanga (the blue-sacred wood): This is a ritual post recalling the covenant that the founding ancestors made with the deities of the land on which they settled. It is a religious sign par excellence. The fence around the hazomanga delimits a sacred space, forming a sort of open-air temple, where the community gathers for religious celebrations (at present, all religious rites take place in front of the cattle pens).

Jiny / Renebey: Are the substitute religious actors, often possessed by divine spirits. They are also healers to whom the Supernatural Being communicates his advice other than to the Ancestral Priest (Mpisoro).

Mañanto or **Fañanto** : It is an Ntandroy verb which means "to inspire or manifest" in a dream.

Mpisoro: This is the guardian of the hazomanga, the titular religious actor. Ottino has chosen mpisoro as 'traditional priest'. His status encompasses both religious and political functions, linked to the ability to mediate with the ancestors. It is for this reason that he chooses to translate the term as 'ancestral chief'.

Ntandroy: or **Antandroy** comes from the "roy" thorny plants that grow in the south of Madagascar. People living in areas where these "roy" grow are called Ntandroy, which can be literally translated as "living where there isroy".

Sañira and fengoke: These two trees are used with their branches in Androy to sprinkle the water of blessing, referring to the experience of King David in the Old Testament after committing adultery and willful murder against the family of Uriah the Hittite (Psalm 51:7).

Soroñe (animal sacrifice): means offering, "sacrifice" or sacred invocation. This ritual practice maintains the balance of life as a flow, whose presence is necessary for a being or a group to be alive, by imploring blessings from above.

Sorondrano: This term is composed of two words, namely "soroñe" which means offering, "Sacrifice" or sacred invocation, and 'rano' meaning water. The "sorondrano" is a sacrificial rite of blood dedicated to the celestial deities to implore their kindness to make rain fall. In the past, there were times when these rituals were called "Tsotse" referring to the burnt offerings respectively.

Tsiriry: The black color of the sheep selected for sacrifice is called *tsiriry* in the Ntandroy language. The *tsiriry* is, in fact, a wild duck whose plumage is all black but its head only is clear, i.e. white. This famous sheep preferred by God is thus "a *tsiriry* sheep".

Valan'añombe (or zoloke). Etymologically linked to the zebu park, any ceremony takes place strictly in a sacred place: in front of the door of a park where the bones of the sacrificial meat are buried. The bones cannot be thrown in any place because they have been consecrated to the divine spirit.

APPENDIX N°2 - Ritual utensils of the Mpisoro

Type of utensil	Description and purpose
<i>Vy lava</i>	Sacrificial knife used for sacrifices (two types, one special for oxen, the other for goats and sheep)
<i>Antsiva</i>	Sounding marine conches to summon the communities to any priestly ceremonies
<i>Sadro</i>	a ladle used for the sacrificial meal
<i>Fagnemboha</i>	a perfume burner
<i>Raketse</i>	A sacred basket containing all the sacrificial utensils
<i>Finga</i>	bowls
<i>Fitovy</i>	A wooden vessel containing the water of blessing
<i>Kotrom-pamaky</i>	An old, damaged axe
<i>Kitro</i>	A kind of assegai
<i>Hahake (Satroke)</i>	An ancestral priest's hat
<i>Talivelo</i>	A rope to hang the animals to be sacrificed.

APPENDIX N°3. Word of invocation before the execution of the sacrificial victim

« *Añe rehe Andrianañahare namboatse anay tomboke aman-taña!* » (By tapping the sacrificial victim in the middle of his stomach by the ancestral priest with the knife). « *Ingo ty ambelahy pisatsifa ente' I (name of group leader) isolohoa'e, ente'e mihalaly Ama' TheAndrianagnahare* »;
 « *Motsoty tanefabey Tahinëaman-kakeozahayolombelo; Mihantoñeo' orañe'eo, tsymahatovoambolezemambole, tsymahaterak' añombezemiarake, tsyrioñen' aretetyajaja aman' ampela* ». *Hahaoty Tahinëaman-kakeo Andrianañahare: Añe ty nahavany rae, nahavany rene; añe ty nitera ondaty bey, niranga zoke; Añe ty nitaliafaly; Añe ty namono loza; Añe ty namoreke (nanafotoñe), Añe ty raty sata; Añe ty mañaja agnombe alaendolo; Ingo ty ambelahy pisatsifa, le hoente'io ty sarotse, tsy hisy taly an-karotse ty havelo: Hitombo ty ajaja; hoterake ty añombe; ze mipay vara hahatrea, ty mianatse hilengolengo; tsy holiham-paosa ty tane toy, holatsake o orañeoo.* »

APPENDIX N°4 .The sacrificial practice



Photo 1. Mr. TANEFYO, blessing his family in a sacrificial session in front of the gate of the ox park in Beaniky



Photo 2. Mr MANAGNOHATSE, at sunrise, proceeds with the sacrificial ceremony



Photo 3. The Tsiriry Sheep, God's Favorite Victim



The *Fengoke* tree, it is used as a blessing tool and is a proximity climate indicator



On the right, the ancestral priest Mr TSIONDRANE, presented by FRANCOIS (Chief of the Village)