THE SONGS OF THE VIOLATED *VEREDA* WETLANDS IN THE NOOKS OF BRAZILIAN SAVANNAH BACKLANDS

VEREDAS VIOLADAS: o canto dos cantos do Sertão[1]

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Abstract

This reportseeks to present the outcome of exchanges conducted within the event, *Songs of Violated Vereda Wetlands* (Veredas Violadas), the most recent celebration of the *Sagarana Festival: Becoming Guimarães Rosa for the Backlands* (como Rosa para o Sertão), 2 in November 2012.Topics for discussion included conceptual and cultural aspects, and public policies on the ecosystems of vereda wetlands. Special emphasis wasplaced on the perception of traditional populations living in the Brazilian Savannah hinterlands and their relationship to the *Veredas,* including the expression of traditional life in the work of João Guimarães Rosa3. A typology of the environmental impact on the ecosystems of *veredas* is presented, based on the regional etymology by which the peoples of the hinterlands interpret these impacts.

Keywords: Veredas. Wetlands. Vereda'sinhabitants. Traditional populations. Environment. Guimarães Rosa. Sagarana.

Resumo

O artigo procura apresentar resultados dos diálogos estabelecidos no âmbito do evento *Veredas Violadas*, edição do Festival *Sagarana: Feito Rosa para o Sertão*, em novembro de 2012. São discutidos aspectos conceituais, culturais e de políticas públicas sobre os ecossistemas de veredas. É dada ênfase especial à percepção do povo veredeiros e o seu relacionamento com seu ambiente, incluindo essa expressão na obra de João Guimarães

Rosa. É apresentada uma tipologia de impactos ambientais nos ecossistemas de veredas, com base na etimologia regional com que os sertanejos interpretam esses impactos.

Palavras-chave: Veredas. Veredeiros. Populações Tradicionais. Meio Ambiente. Guimarães Rosa. Sagarana.

Introduction

The *Sagarana Festival – Becoming Guimarães Rosa for the Sertão*, has been held every year since 2008 in the District of Sagarana, within the Municipality of Arinos, in the Northwest of the State of Minas Gerais, in Brazil. The goal of the festival is to serve as a space to engage the peoples of the hinterlands and to gain a deeper understanding of their art, literature, music, dance, politics, social technologies and all other aspects that link the cultures of populations in the Urucuia River Valley and the Savannah Backlands of Brazil. The theme of the 2012 festival, held between November 14 and 18,was *Songs of the Violated Vereda Wetlands*, as expressed in the following mission statement[4]:

The fifth celebration of the festival allows us to show the world the more contemplative side of Urucuia River Valley. This side calls to mind the essential nature of the care given to the land, the soil, the water, and the biome, all of which populates and preserves this region: the Savannah. It represents a symbiosis broken only by force and the unscrupulous actions of men, driven by insensitivity and capitalism's insatiable passion for instant gratification. We are reminded, in a remarkable and singular way, of the need to preserve cultural heritage and ethnic identity – such as the melodious song of the viola, the tales, proverbs, practices and popular wisdom of the region, which sustain human survival itself – harmonious, solidary, shared, and egalitarian – and which lead to the full sustainability of communities, peoples, plants and animal life, soil and water, in a virtuous and life-affirming circle.

From this vantage point, the theme of this year's festival can be easily cast as the focus guiding this event –pulled by the universe of social technologies – and composed of multiple other events, similar to Guimarães Rosa's prophecy, which emerges from the depths of the heart of some of his most remarkable characters (perhaps Riobaldo[5] himself, with his penetrating and uninhibited wisdom?):

SONGS OF THE VIOLATED VEREDAS

Figure 1 – Art of the *Sagarana Festival: Becoming Guimarães Rosa for the Sertão,* 2012 year's theme of *Songs of the Violated Veredas*.

In this context, the festival in 2012 took shape with the support of the Legislative Assembly of Minas Gerais – ALMG –, the Bank of Brazil Foundation, the Government Attorney's Office of Minas Gerais, the State Institute of Forestry (*Instituto Estadual de Florestas* – IEF), the Ministry of Agrarian Development, the Ministry of the Environment and other various institutions and non-governmental social movements associated with the sustainable development of peoples of the hinterlands. Prior to this event, the Legislative Consultancy Board of the Legislative Assembly prepared a study structuring the existing knowledge about the *vereda* wetlands and the population living there, to serve as a basis for activities and discussions to be conducted throughout this event.

The present report draws on the contents of this study and develops along the contributions from the dialogues within the scope of the festival. The *veredas* (wetlands pathways) form the central subject, allowing us to explore conceptual and cultural aspects of this ecosystem and the impact of public policies. This article is structured around these

three respective topics, although questions of environmental interest permeate all three. Special consideration is also given to an analysis of the perceptions of the hinterland populations, as they relate to the veredas and to the expression of this ecosystem in the works of the writer João Guimarães Rosa. Insofar as concerns the topic of public policy, a typology of the environmental impacts on the veredas is proposed, using as a basis the etymology by which peoples of the hinterlands interpret these impacts.

Conceptual Framework

The *veredas* (pathways) consist of wetland environments of flat valleys, containing marshy soil and an elevated concentration of organic matter in states of decomposition, where perennial springs flow throughout the entire water year (BOAVENTURA, 1978 and 1988; FERREIRA, 1988; EITEN, 1993, page 66). In this environment, typical vegetation grows,adapted to the waterlogged soil, in which buriti palm trees (*Mauritiavinifera* M. or *flexuosa*)[6] leap into view, also accompanied by other species of palm, such as Carimá (*Maurítiaarmata,* M.) and Indaia (*Attaleacompta*) (MARTIUS and SPIX, 1981, pages 109-110; RIBEIRO and WALTER, 2008). The buriti palm, an iconic species of the Veredas, signifies simultaneously the *tree of life* and the *tree from which the water flows*, inits original meaning in the Tupi-Guarani language (LORENZI, 1996). An oval-shaped area of gently sloping wet soil surrounds these palm trees, serving as a kind of buffer zone, on which grow species of grasses that are also especially adapted to this environment (MELO, 1992; EITEN, 2001; IBGE, 2004; MELO and ESPÍNDOLA, 2006).

The Veredas mark the sites where springs emerge and may follow watercourses for various kilometers (AGUIAR and CAMARGO, 2004; AUGUSTIN and MELO, 2009, page 103; SANTOS and FERREIRA, 2009). Due to their function as regulators of the water flow, they are called the “Cradle of Waters” (BOAVENTURA, 2007; FERREIRA, 2008, page 6) or the “Mother of Waters” (JOVENS DO BEIRA RIO, 2009). The presence of water and vegetation are sufficient reasons to justify the crucial ecological role that they play in this ecosystem, by maintaining the fauna of the Brazilian savannah and by performing the functions of providing water, food, shelter, an ecological corridor and a suitable environment for reproduction (CASTRO, 1980; VIANA, 1987; BAGGIO, 2002).

Figure 2 – Vereda of Capivara, on which stand out buriti palm groves and the wet fields of the buffer zone. Municipality of Bonito in Minas Gerais.
Source: Boaventura (2007, page 90)

Figure 3 – Branch of the Vereda of Catolé. Municipalityof Bonito de Minas. Source: Neves (2013)

A good description of the veredas can be found in Guimarães Rosa's masterpiece *Grande Sertão: Veredas*:

> *They rise in the same marshes, enormous groves of buriti palms. There the anaconda loops and coils. The thick kind that throw themselves upon a deer and wrap themselves around it, crush it – thirty handspans long! All around is a sticky mud, that holds fast even the hooves of mules, pulls the shoes off one by one. In fear of the mother-snake, you see many animals waiting prudently for the time they can come and drink, keeping hidden behind clumps of palm. The sassafras trees provide shelter around the pool, and give off a good smell. The alligator roars once, twice, three times, a hoarse roar. The alligator lies in wait—bulging eyes, wrinkled with mud, looking evilly at you. Eh, he knows how to fatten himself. On the ponds not a single winged thing alights, because of the hunger of the alligator and the saw-toothed piranha. Then little by little the marshes start turning into rivers. Groves of butiti palms come down with them, and follow on and on.*(ROSA, 1963, p. 24)

The veredas occupy a typical ecological niche in the Savannah biome, occurring most often in flat areas, such as the high plateaus (AUGUSTIN and MELO, 2009, page 103). In addition, they have also been recorded in the Caatinga Biome[7] (Environmental Protection Area – APA – Dunes and Veredas of the Mid and Lower São Francisco – *Dunas e Veredas do Médio e Baixo São Francisco*, in the state of Bahia) and in the high land fields(such as Serra do Cabral, in the state of Minas Gerais, and the Area of Relevant Ecological Interest – ARIE - Buriti, in the state of Paraná) (CARRIJO, 2007). Buriti groves have also been recorded over a large extension of the Amazon, although in an environmental context different from the veredas. The location of the veredas in the state of Minas Gerais was mapped by IEF between 2005 and 2009 (SEMAD, 2006 E 2009). The location of the veredas, as well as their protection in the conservation units, is depicted in the map of Figure 4.

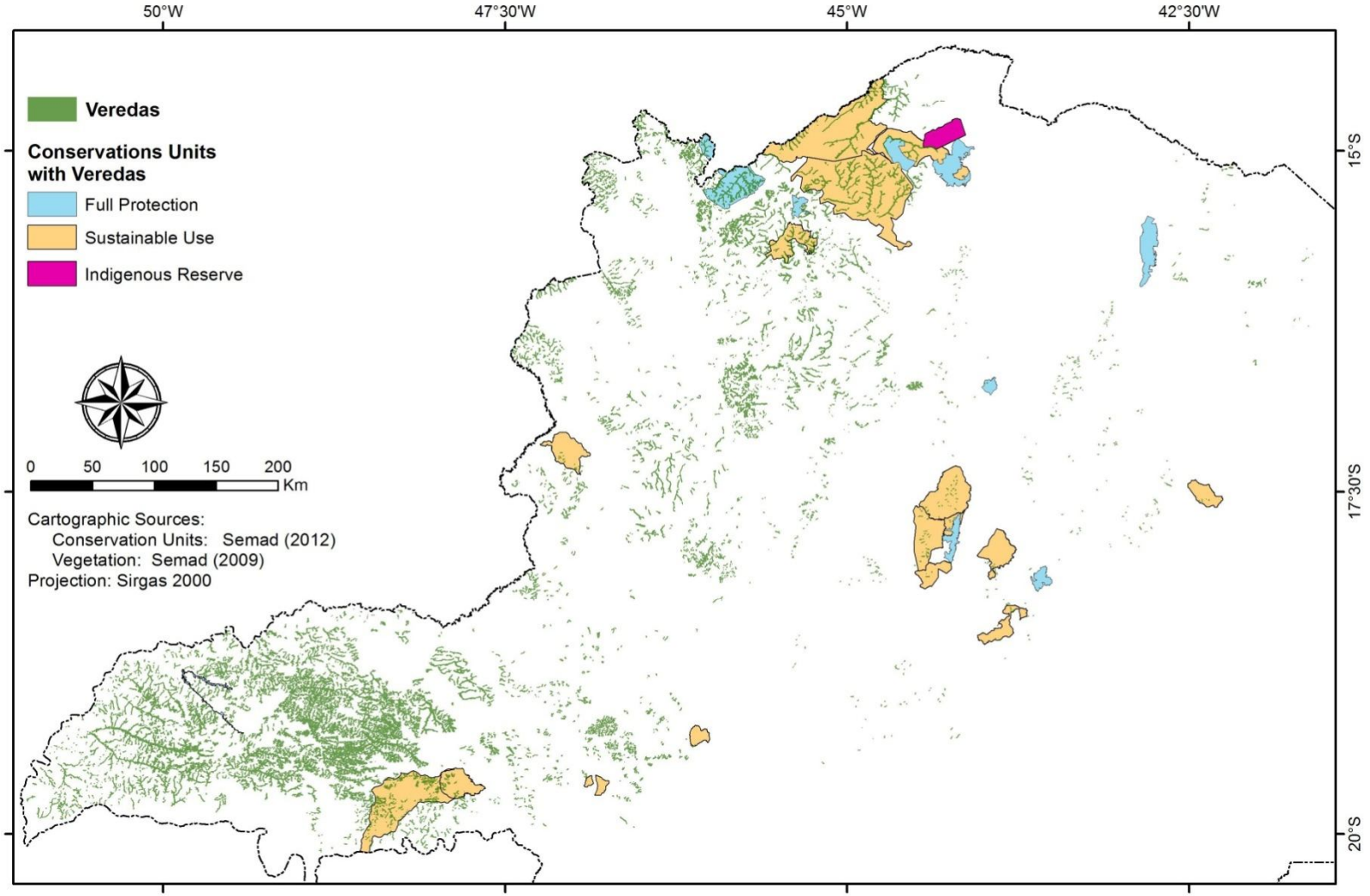

Figure4– Map with the location of veredas in the state of Minas Gerais, as well as the conservation units that protect these ecosystems.

The term *vereda* in Portuguese traces its etymology back to its Celtic roots in the word for horse (*voredos*), which was then appropriated by Latin to mean messenger horses (*veredus)*, coming to acquire the sense of roadway in reference to the trails traversed by messenger horsemen (SILVEIRA BUENO, 1974, page 4227). In Brazil, the environment of the veredas etymologically refers to "water pathways", as well as to the fact that this environment consists of shared passages for muleteers and cattlemen, by virtue of the presence of water and the pleasant microclimate, in contrast to the scalding highland plateaus with scarce watercourses (SOUZA, 1973, p. 297).

Cultural Aspects

The perception of social groups in regard to the veredasand their relationship to such environments is fairly diverse, as we can observe in the following quotations compiled by Ferreira (2003, page 160):

> *It is where streams are born. It is filled with buriti trees. It serves as a watering place for cattle and as a good site to build barriers for irrigating the fields.*(Oral information, farmer, 45 years old)
>
> *It is a marsh filled with buriti trees, where the cattle mire during the dry season. It is also where people go to cut buriti leaves to cover their straw huts, although nowadays we use tiles instead.* (Oral information, cowboy, 36 years old)
>
> *It is a damnedmarsh, filled with saw grass that cuts us even if we just touch it; it also has buriti trees and the straight branches of the pindaíba tree[8]that can be used for making rafters for farms. It serves as a hiding place for the cat tiger[9] stalking chickens in the early morning. All of this iscoming to an end.*(Oral information, river-dweller, 52 years old)
>
> *This is where streams are born and where people dig irrigation ditches to turn the water mill. There weremany fishing holes for catching wide-mouthed piabas[10]at the bottom of the buriti trees. Sometimes people come across anacondas hiding among the grass clumps. In olden days there were even alligators. Today, almost everything has been cut down. Buriti trees are dying in the middle of dams.* (Oral information, small landowner, 65 years old)

These statements reveal how the veredas are perceived as a path to transition, standing in direct contrast to the traditional forms of coexistence with the veredas and how their environmental degradation is, in part, a response to new modes of soil occupation, primarily because of deforestation and containment barriers used for irrigation. Some groups recall the veredas with nostalgia and thoughtful reflection, while others adopt a more utilitarian point of view. These varying perspectives will be discussed in greater depth throughout this document.

Also worthy of mention, within this same context, are the traditional inhabitants of the hinterlands who display a stronger bond with the veredas: the veredeiros (veredas dwellers). These wetlands dwellers have subsisted using a production system of agro-extraction, by rotating their crops in the wet fields bordering on the veredas and by relying on methods of agro-extraction and free-ranging cattle (COSTA, 2005). During the rainy season, they let the cattle roaming freely on the plateaus, while in dry spells, they take full advantage of the buffer areas alongside the veredas that still contain water. The homes of the veredeiros are traditionally located close to the veredas, where residents can take advantage of the fresher and wetter microclimate.

Extraction activities of the buriti palm are especially noteworthy, the straw from their leaves and fronds being used in the construction of homes and for the production of craft goods (GOMES and FREITAS, 2010, pages 337-345). Their fruits are used as feed for work animals on the farms and also to feed families – sweets, *paçoca*[11] candy, flour and oil are all made from this tree – as well as the production of soap (MARTINS and CLEPS JUNIOR, 2011, page 8). Also made from this tree is wine (or liquor), a delicacy little known outside the universe of the veredas: *"This sweet wine, thick in the wine glass, buriti-colored, which speaks of the secrets of Minas Gerais, of gusts of high winds, the hot dryair, the living veredas"*(ROSA, 2001, page 255), in the words of Guimarães Rosa.

Figure5–Hut made from palm straw and earth, at the edge of a vereda. Municipality of Bonito de Minas in Minas Gerais.Source: Boaventura (2007, page 153)

Symbolic and cultural bonds, inherent to this region, emerge between the veredas and their inhabitants. Occupying a prominent place are legends about the mythical figure of "João do Mato" (John from the Woods), a playful spirit and guardian of animals of the veredas, acting as a kind of "cowboy of creatures". Yet the presence of João do Mato also depends on the presence of the veredeiros, disappearing when the latter are expelled from their homes. As a result, the veredeiros recount various stories about how cases of animal deaths are on the rise, even due to hunters, after removal of their fellow inhabitants (COSTA, 2011, pages 164-165). The back story of this legend refers, without doubt, to the insistence with which veredas in habitants seek to maintain these wetlands, because they see them as essential to perpetuating their traditional way of life. This care permeates certain social precautions, as can be seen in the following description: "*we don't stir up in the heart of the vereda and, for this reason, it continues to thrive and the forest regenerates"* (MARTINS and CLEPS JUNIOR, 2011, page 8), within the context of crop

rotation in the wet fields of the buffer area around the veredas, which alternates with fallow periods (MARTINS, 2011, page 115). This narration shows their deep respect for the veredas, which emerges in various stories that people tell about the dangers of anacondas and alligators in the lakes of the veredas, as well as veredeiros who, in a mixture of heroism and foolishness, plunge into lakes in order to save cows that have been dragged to the depths by these predators (JACINTO, 1998, p. 76-77).

Expressing the cultural importance of the veredas, Guimarães Rosa, in his short story "Buriti", focuses on how buriti palms and their marshes are considered to be symbols of the source of the life force (even with an erotic component) for those peoples who live nearby(ALMEIDA, 2008). This sense can also be found in his masterpiece, *Grande Sertão* (SOBRINHO, 2003): *"all buriti groves and woods: branching out and loving in the water"* (ROSA, 1994, page 432).

Another cultural aspect of interest about the veredas is the story of the glowingorbs that ascend at night and circulate along the veredas until they abruptly descend to the ground and disappear. According to veredas in habitants, these lights would be spirits of those who buried gold along the pathways, in ancient times. These legends have led even the most intrepid to be on their guard at night, waiting for the lights, in order to discover the point at which they descend to the ground, thus indicating the location of the alleged treasure. This phenomenon of the glowing orbsis the subject of legends in various places throughout the world, always observed in marshy areas with an accumulation of organic material. The most accepted scientific explanation involves a biochemical luminescence caused by spontaneous combustion of phosphine[12] gases (PH_3), the result of anaerobic combustion of organic materials (MILLS, 1980 and 2000). Guimarães Rosa also touches on stories about biochemical luminescence in the *Grande Sertão: Veredas*, as we can see:

> *For example, there is a marimbú – a killer of a bog – on the Ciz Brook, where practically a whole herd was swallowed up, and rotted there. Afterwards, at night, flickering in the wind, a million blue flames could be seen, will-o'-the-wisps. People who didn't know about it, when they saw it, ran like crazy to get away. Well, this story spread everywhere, traveled more, you may be sure, than you or I. They said it was a bad omen, that the world was coming to an end at that place because, long ago, a priest had been castrated there, about twenty leagues away, for having refused*

> *to marry a son to his own mother. They even made up songs about it: the Blue-Fire-of-the-End-of-the-World.* (ROSA, 1963, p. 60-61)

Veredasand Public Policy

For inhabitants living among the veredas, "*highlandplateaus*[13] *and veredas are gifts from God*", and for this very reason, "*everyone has the right to plant there*" (statements collected by Martins and Cleps Junior (2011, page 7)). Thus, the manner in which they produce and conceive the world cannot be found in any model of private appropriation of property. As they see life: *"the land is free and I, just like any creature in the wild, can graze"*(statement collected by COSTA, 2011, page 186).In some regions, large landowners still claim ownership of the land, although they allow the inhabitants of these hinterlands to continue to live "as a favor" on their properties (MARTINS, 2011, p. 99). This freedom to live on the land was placed in check by the new modes of land appropriation, introduced with the public policy of granting credit for agricultural production. This phenomenon was reinforced since the decade of the 70's, with the implementation of commercial forestry enterprises, as well as agricultural projects of immigrants from the southern part of Brazil.

These new modes of productions have also had a great impact on the environment of the veredas. The "death of the veredas" (NUMAN, 2005, p. 3-4) can be expressed through distinct regional denominations, by virtue of the various forms of degradation that they experienced and which can be expressed, in a general sense, according to the following typology of environmental impacts: drained, buried, dried, and flooded (in the traditional etimology: *esgotadas, aterradas, secas* and *afogadas*).

Drained veredas originate in the central drainage of the veredas, by means of channels that perforate the clay surface that retains water inside the vereda. Drainage of this type allows for cultivation of crops on soil that is perennially wet in the interior of the veredas.However, in addition to the environmental impact resulting from the clearance of vegetation, it also destroys its water regulating function, since the veredas cease to release water in the dry season. Various veredas were drained as a result of government incentives given in the Pro-Meadows (Pró-Várzeas) Program during the decades of the 70's and 80's. At the present time, there is a trend towards draining the veredas for the cultivation of sugar

cane by small landowners in the Northern and Northwest regions of Minas Gerais, which, in turn, has generated conflicts over the use of water with populations located downstream from the veredas (VASCONCELOS *et al.*, 2010).

Buried veredas are the result of aggradation arising from areas of drainage around the veredas, particularly in regions where the soil has a greater sand content. Many veredas were buried after installation of forestry ventures during the decades of the 70's and 80's that operated without proper soil management (GOMES and FREITAS, 2010, page 348). Also significant is the impact of aggradation arising from roads built without adequate infrastructure for handling water runoff (BOAVENTURA, 2007, pages 203-204).

Dried veredas occur when veredas are affected by burns during periods in which peat is not sufficiently wet in order to prevent its combustion (BAHIA *et al.*, 2009, page 8). In those cases, even after the end of a superficial burn, peat mixed with soil continues to experience continuous carbonization in the form of embers (NUMAN, 2005, pages 43-44) deep inside the veredas for weeks on end, giving off smoke through cracks that run meters deep. After this process of carbonization, the carbonized ground/peat is transformed into a hard substance, completely infertile and without the capacity to retain water. There are stories of dried veredas that have taken more than 10 years to regenerate before they are able to support the growth of new vegetation and the circulation of water again (VASCONCELOS and SANTACRUZ JUNIOR, 2007, page 5).

Flooded veredas are the result of water retention in the veredas for agriculture use and animal breeding and for irrigation and watering livestock (FERREIRA, 2003). In an environment with scarce water resources, the veredas appear to be the most practical place for the construction of dams. After construction of a retention wall, a lotic environment (with fresh running water) is thus transformed into a lentic environment (with still water), resulting in higher water levels, with the attendant consequence that a majority of the flora normally associated with the vereda perishes (VASCONCELOS, 2010, p. 114). The trunks of the dead buriti palms serve as testament to the severity of this environmental impact.

Figure 6 – Vereda ofVaca Brava, drained and used for the cultivation of sugar cane. Rio Cochá Basin, Northern region of Minas Gerais.Source: Vasconcelos *et al*. (2010)

Figure 7 – Vereda of Galho do Assapeixe, in which buriti palms are buried, due to aggradation caused by eucalyptus plantations. Spring of the Peixe River tributary, Municipality of São Francisco-Minas Gerais. Source: NUMAN (2005)

Figure 8 – Carbonized soil on a dried vereda, years after a fire. PeruaçúVeredas State Park.
Source: Vasconcelos *et al.* (2010)

Figure9 – Dead buriti palms as the result of retention dams built in a vereda of Entre-Ribeiros, an affluent of the Paracatu River, in the Northwestern region of Minas Gerais.
Source: Martins Junior (2006)

Another significant environmental impact is the damage caused by free-ranging cattle in the buffer zones of the wet fields that drain into the veredas. The compacting of soil and the degradation of vegetation caused by cattle lead to the compromised capacity of the veredas to filter and retain water reserves, thus decreasing the flow of water resources, especially during the dry season (BOAVENTURA, 2007, page 201). Neves (2011), Maffia*et al.*(2009) and Pereira (2010), by monitoring the flow of degraded and non-degraded veredas, have shown that conserved veredas retain a greater capacity to maintain adequate flow during the dry season and eventual droughts. Monitoring projects of

enclosed veredas, carried out for the purpose of separating cattle and stimulating regeneration of vegetation, also report a significant increase in water flow (VIEIRA, 2012).

Recognition of the ecological importance of the veredas and the need to regularize water resources have led to the adoption of measures by public authorities, with the intention of ensuring conservation of these sites. Article 4, paragraph XI, of Federal Law No. 12,651 of 2012, specifies thata buffer zone of 50 meters, starting with a border area of the veredas that is permanently swampy and marshy, be intended for permanent conservation. However, in the case of consolidated use of the veredas until July 22, 2008, that law provides that small rural properties (of areas less than four fiscal modules[14]) are obligated to restore the veredas just up to the first 30 meters of that buffer area (Article 61-A, § 7). Moreover, the law also provides that certain activities of the traditional populations living in the veredas be allowed to continue, by characterizing them as low impact, such as agroforestry activities, the collection of vegetable products for craftwork, and the maintenance of traditional dwellings.

Other legal regulations that are important for conservation of the veredas derive from State Law No. 13,635 of 2000, which declares the buriti palm tree to be protected against logging in Minas Gerais, as well as District Decree No. 14,783, of 1993, which also confers the same protection upon the buriti in the Federal District.

While the protection conferred by environmental legislation on the veredas environment is important, it is also appropriate to recall that these legal instruments make the modes of production pursued by the veredeiros nearly impracticable, such that this legislation becomes a legal-social problem as well.

Governmental water management agencies also confront difficulties when interacting with veredeiros communities. Families living in the wetlands proceed from the premise that water, as a gift from God, should always flow freely, in order to preserve the traditional way of life in the veredas, and that it belongs to no one; while, on the other hand, the culture of water management agencies is governed by the principle of containment (RIBEIRO and GALIZONI, 2003, page 136). A clear example is the practice of letting the water run freely through faucets, hoses, and collection devices next to homes inside the veredas, while environmental campaigns attempt to convince them to change that habit

(RODRIGUES, 2011, page 9). The veredeiros exhibit a deep emotional attachment to the water that flows through the veredas, asin and around their backyards. This dependence on water can be observed in the following passage:

> *One day Clenildawas sleeping here; she slept with a cup of water below her bed. She used to say that it was a sin to go to sleep thirsty. She used to say that if people go to sleep thirsty, their soul leaves their body to go in search of water and that person will die.* (narration collected by Rodrigues, 2011, p. 11).

This bond between water, veredasand the happiness of the people of the hinterlands also can be discerned in Guimarães Rosa's novel, *Grande Sertão: Veredas*:

> *"'the best of all things is water"* (ROSA, 1986, p. 41)
> *"close to a great deal of water, all life is happy"* (ROSA, 1986, p. 21)
> *"some lowlands, which we caught full sight of, utterly delightful in their pleasantness, with a very proper lake and surrounded by one of the tallest buriti groves: the buriti palm – clothed in such a harmonious green, exquisite in itsbeauty"* (ROSA, 1986, p. 35)
> *"The buriti reaches for the whole of the blue sky, but will not leave* the *water beside which it stands – it must have its mirror."*(ROSA, 1963, p. 256)

Another strategy of the public authorities, intended for conservation of the veredas, was to create conservation units for areas of large extension in this environment. In Minas Gerais, the Grande Sertão-Veredas National Park was created in 1989; the Veredas State Park of Peruaçú, in 1994; the State Reserve for Sustainable Development of Veredas of Acari, in 2003; the Environmental Protection Area [APA] in Pandeiros in 1995; and, inside this last reserve, the Pandeiros Wildlife Refuge in 2004. In the case of the two parks, it was still necessary, in order to consolidate them together as fully protected units, to displace the populations who were living there on the veredas. During construction of the Grande Sertão National Park, its in habitants were relocated into agrarian reform settlements. As a result, new ways of life and production were imposed on the veredeiros, accordingly to the programs of occupancy by the Instituto Nacional de Colonização e Reforma Agrária - INCRA – (*National Institute of Colonization and Agrarian Reform*) and to the environmental legislation, with the resulting loss of their culture (MARTINS and CLEPS

JUNIOR, 2011). Also as part of the negotiation process, the government supported the Sustainable Development Plan for Buffer Areas in the Grande Sertão-Veredas National Park (FUNATURA, 2002a), implemented in 2002, in regard to the portion of the park inside the state of Minas Gerais, which became a focal point for agro-extraction activities and rural/ecological tourism in this region. In addition, various projects were proposed,which sought to leverage sustainable development in the region.

By virtue of the various conservation units created in the northern area of Minas Gerais, a Mosaic of Sertão Veredas-Peruaçú Conservation Units was established. One of its objectives was to assist in the management of sustainable lands in the buffer zones and the corridors of native vegetation between these units. Using the template of the Sustainable Development Plan of Buffer Areas in the Grande Sertão-Veredas National Park as a point of reference, in 2008 the council managed the preparation of the Conservation-based Development Plan for the Sertão Veredas/Peruaçú Mosaic (FUNATURA, 2002b).

Still within the scope of the Sertão Veredas/Peruaçú Mosaic and particularly worthy of note was the Development Plan for Implementation of the System of Protected Areas and Connecting Corridors between Conservation Units in the Private Reserves of National Heritage [RPPN] in Porto Cajueiro and the Veredas State Park of Peruaçú(AMDA, 2009), which has been managed by the NGO *Associação Mineira de Defesa do Ambiente*- AMDA (Minas Gerais Association in Defense of the Environment) since 2009, in tandem with IEF, the *Instituto Brasileiro de Meio Ambiente e Recursos Naturais Renováveis – IBAMA –* (Brazilian Institute of the Environment and Renewable Natural Resources) and the Sugar Industry Union in Minas Gerais – Sindaçúcar. The purpose of the project was to plan sustainable development in the region, by means of the orderly allocation of preservation areas inside agricultural and livestock farms, in order to ensure maintenance of the vegetation corridors in the savannah and the veredas between the aforementioned conservation units.

Families living in the veredas, as well as other traditional peoples of the hinterlands, have experienced advancement in their quality of life when they become beneficiaries of income redistribution policies and access to public services, such as the Family Allowance

Program, the Light for All, rural retirement, and school transportation (VASCONCELOS *et al.*, 2010, page 4). In their own words:

> *We are so grateful to this government because they have been so good to people; they send us that assistance every month, which gives us a little bit more with which to buy rice and black beans, so that everyone can eat. Nowadays, no one starves; this is not how it was before for us, when sometimes the cupboard was bare. In the past, if the harvest of the crops planted in the vereda was good, everyone ate; if it was ruined, no one did.*(Narration collected by Gonçalves *et al.* 2010, p. 9).

These resources generated by public policies have allowed the veredeiros to invest in their homes and to engage in activities of production, with the result that their ancient huts of palm straw and small crop rotation, both hidden away inside the veredas, have given rise to open clearings occupied by houses built of masonry, with electrical energy and surrounded by yards, pasture lands and fields planted with crops. Despite the undeniable jump upwards in their quality of life, these public policies also wind up expanding and consolidating the occupation of the veredas and their wet areas in the buffer zones (VASCONCELOS *et al.*, 2010, page 4).

As a result of all these incursions and transformations which this population, formerly referred to as veredeiros, have undergone, their conversations now are filled much more with reminiscences and nostalgia for times past and a life previously lived than a sense of belonging to contemporary environment. In this aspect, the new modes of social behavior and production have led to the gradual abandonment of traditional ways and customs, thereby generating a new appropriation of the veredas environment as a function of its current uses (FERREIRA, 2003, p. 213). In this respect, the words of Riobaldo in *Grande Sertão: Veredas* express this duality:

> *It made me long for a buriti-palm grove at the green, grass-covered headwaters of a stream, where the tableland drops off. Longings that are born of the wind; longings for the Gerais. There you can see the wind lashing the leaves of the buriti palms when a storm is brewing. Can one ever forget it? The wind is green. There are moments when you can seize the silence and clasp it to your breast. I am from where I was born. I am from other places.* (ROSA, 1963, p. 241)

By virtue of the fact that the veredas are essential for maintaining the flow of rivers in the São Francisco basin, it would be expected that they would warrant special attention from the São Francisco River Revitalization Program, by which the Federal Government seeks to maintain flow of the river, so as to offset implementation of the transposition project in the basin. However, the vast majority of resources are directed at measures to achieve social coexistence with droughts in the semiarid environment or at sewage treatment measures concentrated in the Upper São Francisco, where the larger cities are located. The resources intended for restoration of native vegetation and for enclosure of springs have been used throughout the entire region of the São Francisco River basin inside Minas Gerais, in partnership with IEF, but they are focused on the production of riparian forest seedlings, by virtue of the greater technical facility to recover these environments, if compared to the Veredas.

One of the measures focused on veredas conservation is the Living Veredas (*Vereda Viva*) Program, which has been managed by the State Attorney's Office since 2005, in conjunction with various academic institutions and participating public entities of the Inter-Institutional Center for Research and Environmental Action in the North of Minas Gerais – Niea-NM – and the Group to Combat Environmental Crimes in the North of Minas Gerais – GDA-NM (LIMA, 2009, pages 73-75). The program involves conducting technical-scientific studies on degraded veredas, by identifying the environmental damage and the parties liable for such damage (NUMAN, 2005). The State Government Attorney's Office would immediately negotiate behavior adaptation agreements with proprietors, thereby making it feasible to conduct projects to conserve the veredas, as well as to offer environmental education and to carry out sustainable development of populations living in the veredas, all of which would be implemented by the academic institutions themselves. The Roots Program (*Programa Raízes*), administered along the same template as the Living Veredas Program, focuses its endeavors on forestry undertakings and one of its main priorities is the protection of veredas (LIMA, 2009, pages 73-75).

With specific measures aimed at the veredas in the Environmental Protection Areas [APA] in Pandeiros, the IEF has been conducting the Environmental Conservation and Alternative Income Project since 2004. The purpose of the project is the diversification of

production by families who formerly lived off the production of coal of native origin. The project included environmental education activities and income diversification with agro-extraction, claiming as one of its results a significant decrease in fires in the area of the conservation unit.[15]

The non-governmental organization, Green Movement (*Movimento Verde*), in cooperation with the IEF and the company Kinross, has been conducting the Paracatu Springs Project since the year 2006. The project has undertaken the enclosure of land, monitoring and environmental education for purposes of regeneration of more than 90 springs (with many veredas among them)within the Paracatu River Basin, located in the Northwest of Minas Gerais. A portion of the increased flow of the veredas and all other restored springs are used to develop irrigation by the rural landowners who have joined the project, thereby generating greater income for the population according to the principle of sustainability (VIEIRA, 2012).

There have also been independent academic initiatives, such as the Sustainable Vereda Project of the Universidade Nacional de Brasília – UNB –(National University of Brasília), implemented since 2005, which focuses on education and technical assistance for food security, sustainable development, and environmental conservation in rural settlements with the occurrence of veredas. Also worthy of mention is the ethnographic project *Opará – traditions, identities, territoriality, and movement among rural and riverside populations in the Sertão of Guimarães Rosa* – (UNIMONTES, 2010), administered by the Universidade Estadual de Montes Claros – Unimontes – (State University of Montes Claros)from 2007 to 2010, which prepared studies on various ethnographies of traditional populations living in the Sertão, including a specific focus on the veredeiros.

Final Considerations

Degraded, trampled, buried, flooded, drained and dried up, the veredas have experienced a long-suffering history, just like the inhabitants who lived and who now live in these surroundings. Alternately considered as mother, cradle, or course of the waters, the veredas still hold incalculable value for each inhabitant of the hinterlands, whether human,

plant or animal. Recognition of the environmental and social value of the veredas forms an essential component of their conservation.

Instead of concluding, there is nothing better than extending the warm welcome to the Festival, Songs of Violated Veredas[16]:

These veredas, formerly true oases scattered in the enormity of the journey across the hinterland, sources of food and pure water for travelers and creatures living in its milieu, today subsist greatly diminished in servitude to the dominance of the monoculture, which encroaches upon them with its ploughed webs, at the expense of a life harvested from thousands of specimens of rich and rare biodiversity. But the viola is plucked and spills its chords while the songster strums melodies, evoking resistance and the daily struggle for self-redemption of all life that are living creatures and plants, air and minerals, which, together with the poet, lift up their voices in unison with absolute precision:

SONGS OF VIOLATED VEREDAS
SPREADINGDELIGHT
HARMONIOUS CHORDS AWAKENING THE BACKLANDS

Acknowledgments

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End Notes

[1] The Portuguese title is intentionally ambiguous in a poetical style. *Veredas* (Wetlands pathways) are a kind of oasis of vegetation within the *Cerrado* (Brazilian Savannah). The word *Violadas* (touched) refers both to the environmental violation of this vegetation and the songs accompanied by the sound of the *viola*(the traditional twelve-string guitar used in the Brazilian countryside). “Canto dos cantos” refers to the “nook of the nooks” and implicitly to the “The Song of Songs” from the Bible, as well as some interplay between both

these meanings, like "song of the nooks" or "nook of the songs". Savannah Backlands (Sertão) refers to the hinterlands of the Brazilian Savannah.

[2] "Sagarana" designates both a geographical region in the northwestern section of the State of Minas Gerais and the title of a collection of short stories by João Guimarães Rosa in 1946 (for more on this author, see below).

[3] João Guimarães Rosa (1908-1967) was a Brazilian novelist, considered by many to be one of the greatest of the 20th century. His most acclaimed work is the novel *Grande Sertão: Veredas*, the title of which has been translated into English as *The Devil to Pay in the Backlands*, and it is considered by some scholars to be the Brazilian equivalent of *Ulysses*. In the title of the event, the name "Rosa" has two meanings: the surname of the mentioned writer and the flower (Rose).

[4]Available on the events page: http://www.festivalsagarana.com.br/?p=719, accessible as of 7/12/2012.Our translation.

[5]Riobaldo, a former *jagunço* (mercenary or bandit) of the Sertão (Backlands) in Minas Gerais at the dawn of 20th century, is the protagonist in Guimarães Rosa's masterpiece, *Grande Sertão: Veredas.* An old man, Riobaldo narrates the story of his life to an anonymous listener from the city.

[6] The buriti tree, known by its Latin name as *Mauritia flexuosa*, is a palm tree that grows in and around swamps and other wetland areas in South America. An elegant tree, it can reach up to 35 meters in height and has a large rounded crown. Its fruit, which is edible, grows from December to June.

[7] The Caatinga Biome denotes both a type of vegetation, and an ecoregion characterized by this vegetation in the northeast of Brazil. The name "Caatinga" is of Tupi origin, meaning "white forest" or "white vegetation". Caatinga is composed of shrubs and thorn forests, consisting primarily of small, thorny trees, as well as cacti and grasses that make up the ground layer.

[8] The term "pindaíba" refers to a Brazilian fruit tree, native to the Atlantic and found in riparian forests and the savannah.

[9] Known by its Latin name, *Leopardustigrinus*, this cat is similar to an ocelot and is the smallest of the Brazilian wildcats. It is on the worldwide list of endangered species.

[10]Piaba is a general term used to refer to various species of fish found in Brazil.

[11]*Paçoca* refers to a type of traditional candy made from peanuts and sugar, ground together in a mortar and pestle. The word *paçoca* is a word of Tupi origin, meaning "to crumble" or "to shatter".

[12] Phosphine, a compound with the chemical formula of PH_3, is a colorless, flammable toxic gas. It is spontaneously flammable in air, burning with a luminous flame.

[13] The Brazilian term used for plateaus is "*chapada*", the name given to plateaus in the Brazilian highlands. These plateaus have been compared to mountain ranges, because they are capped by horizontal strata of sandstone worn away by the erosive action of rivers, which left behind broad, flat-topped ridges that give the appearance of a continuous chain of mountains.

[14] A fiscal module is a unit of land measurement used in Brazil, established by law. It varies for each county, taking into account a number of factors, among which are the type of farms existing in that particular municipality and the proceeds from operation of those farms. The fiscal module reflects the minimum area required for a rural property to be economically viable.

[15]*Geração alternativa de renda nas veredas mineiras preserva unidade de conservação*. Jornal Estado de Minas. 30/05/2012.

[16] Available at: http://institutohr.org.br/pdg2012/sagarana-feito-rosa-para-o-sertao/, accessible on 7/12/2012.Our translation.

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