“The Only Good Crocodile Is A Dead One”: Contradictions in Conservation Policies and Agricultural Activities in the Gambia, 1938 -1965

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ABSTRACT

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"The Only Good Crocodile Is A Dead One": Contradictions in Conservation Policies and Agricultural Activities in the Gambia, 1938 -1965

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In 1938, the colonial office in Bathurst appointed a forestry management committee to design and implement an aggressive reforestation plan. The committee planted imported tree species and conserved [native] wild bamboo and rhun palm trees. It also created forest and wildlife parks in the colony of Gambia. During this time, the administration's Department of Agriculture initiated several projects: rice and other food grain cultivation for food sufficiency; peanut cultivation to develop a viable cash crop; and exploitation of forest timber products and huntable exotic game. The outcome of this contradiction was stringent conservation policies often with severe consequences for the African residents of the colony. This thesis offers new sources that demonstrate how agricultural activities and resource exploitation undermined conservation, and the colonial conservation policies neglected the local ways of forest and wildlife conservation in the Gambia. It hopes to contribute to the growing environmental scholarship of West Africa most of which neglect conservation. This is a study of forest and wildlife conservation in the Gambia, examining the colonial conservation policies, and how agricultural policies and activities, particularly the introduction of animal drawn-plow, mechanized rice farming, and exportation of wild animal species undermined conservation.

DEDICATION

To my family: Fatoumatta, Dawda and Omar

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INTRODUCTION

During his royal visit to the Gambia in 1957, the Duke of Edinburgh, Prince Philip, embarked on crocodile hunt upstream on the River Gambia and its many creeks. When the prince and his personal secretary each made a kill, the Imperial War Museum film commentator accompanying the royal tour remarked that, "The only good crocodile is a dead one and Prince Philip was too keen a sportsman to miss a chance like this."[1] This event is important because as hunting offered the British imperial rulers an elite outlet for pleasure, demonstrations of imperial masculinity, and above all symbolic domination of the environment, it contradicted the stiff colonial conservation policies in the Gambia[2] that aimed to preserve the colony's dwindling fauna and flora.[3] Significantly, this is an example of numerous colonial activities and policies that contradicted colonial conservation drives in the Gambia.

By the first quarter of the twentieth century, the fauna and flora of the Gambia had significantly diminished, largely because of expanding peanut and rice cultivation. Although the local farmers' slash-and-burn method of farming was mostly blamed for environmental destruction, the British colonial administration's extensive mechanized agriculture, as well as the massive exploitation of forest resources was more destructive to the forest and wildlife.[4] The British colonial government in 1938 appointed a committee that would work to protect and conserve the fauna and flora of the Gambia.[5]

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[1] CSO 84/324 Royal Visit 1957 (Duke of Edinburgh), NRS, Banjul, The Gambia. The Duke of Edinburgh himself coined a term for his hunting trips, "bolong bashing after crocodiles," see and Imperial War Museum film, source Gambia Historical Photography available at https://www.facebook.com/Gambiahistoricalpictures/

[2] This thesis uses "the Gambia" when referring to the British colony, and "The Gambia" when referring to the independent state.

[3] John M. Mackenzie, *The Enpire of Nature: Hunting, Conservation and British Imperialism, (*Manchester and New York : Manchester UP, 1988), 80. & Neumann, Roderick P. "The Postwar Conservation Boom in British Colonial Africa," *Environmental History*, vol. 7, No. 1 (Jan. 2002): 22 – 47.

[4] Richard A. Schroeder, ""Gone to their Second Husbands": Marital Metaphors and Conjugal Contracts in the Gambia's Female Garden Sector," *Canadian Journal of African Studies*, vol. 30, No. 1 (1996): 69-87 & James L. A. Webb Jr, "Ecological and Economic Change along the Middle Reaches of the Gambia River, 1945-1985." *African Affairs, vol 91, No. 365* , (Oct 1992): 543-565.

[5] CSO 2/1655, Forestry Control-Legislation under Protectorate Public Lands and Native Authority Ordinance 1938, NRS, Banjul, The Gambia

The Forestry Committee under the Department of Agriculture passed ambitious policies and programs to conserve the forest and wildlife. It created sixty-nine forest and wildlife parks, and designated hunting areas, along with licenses for hunters and hunting periods to control the indiscriminate killing of the wildlife, except animals considered pest to crops or danger to humans. The committee also initiated permits for cutting trees for commercial use and some forms of domestic use, as well as licenses for tapping of palm trees.[6] By 1950, a major reforestation exercise of planting many tree species began: neem tree (Azadirachta indica), yemane tree (*Gmelina aborea),* rhun palm *(Borassus falbellifer),* santango *(Daniellia oliveri),* African mahogany (*Khaya senegalensis),* she-oak *(Casuarina equisitifolia),* Afara *(Terminalia superba),* and numerous species of pine tree (slash pine, pitch pine, Canary Island pine, Maritime pine, and Mediterranean cypress) within the natural occurring forest. The committee also sought to conserve native wild rhun palm and bamboo trees. [7]

The Forestry Committee's efforts to conserve the environment in the Gambia coincided with the British imperial government's concern over food insecurity in its African colonies. In the Gambia colony, a boom in peanut prices after World War II encouraged farmers to grow more peanuts for export, and high volumes of peanut cultivation and exportation led to greater dependence on imported rice for consumption. The colonial government of the Gambia was tasked to increase food grain production.[8]

The Gambia's administrators consequently initiated projects to expand food crop cultivation. In order to meet nutritional demands of the colony, the first project was aimed at the expansion of swamp rice cultivation. By mobilizing male labor and local resources, the Department of Agriculture built bridges and causeways over shallow waterways and deeper creeks to make rice fields accessible, and swamp rice cultivation

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[6] Ibid.
[7] PUB 1/136 Fourth Annual Report of the Forestry Adviser, Gambia, 1953, National Records Service, Banjul, The Gambia
[8] CSO 2/3221, Letter from Secretary of state for colonies, London to Governors, Gold Coast, Nigeria, and the Gambia, 29th May 1947, NRS, Banjul, The Gambia

was extensively expanded.[9] In 1947, the Colonial Development Corporation (CDC) established large-scale mechanized rice production schemes as part of the second phase of agricultural development. The goal was to produce rice using river water irrigation, but these projects failed.[10] In 1960, the Department of Agriculture turned its attention to the expansion of peanut cultivation by encouraging the animal traction to improve yields and general economic conditions of farmers. By independence in 1965, over twenty-four Mixed Farming Centers were opened to train students who would later teach farmers in their communities how to use animal-drawn implements and apply new farming methods.[11]

The colonial agricultural expansion programs had destroyed a large swathe of forest cover, wildlife and marine life. According to Peter Weil, ox-plowing was the most successful agricultural activity the colonial government had undertaken in the Gambia, as it remarkably increased the cultivable land and general agricultural yield by many folds and reduced the labor-intensive drudgery of local farmers.[12] Because of the agricultural programs, the colonial government encouraged the indiscriminate poisoning and shooting of thousands of baboons, monkeys, pigs, and dozens of wayward hippos in the name of pest control.[13]

Taking account of the colonial administration's contradictory interests in agriculture and conservation, this thesis makes three important propositions for the study of colonial conservation in the Gambia. First, it argues that the indigenous conservation methods based on the relationship between society and environment were undermined by the colonial conservation activities in the Gambia. The environment and society are inseparable for many Gambian communities, as the centrality of environment and nature

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[9] CSO 2/1668, Bridges, Culverts and Crossings in 1938 and subsequent years, NRS, Banjul, The Gambia. See Webb, 553.
[10] CSO 2/3314, Colonial Development Rice Project-Walli Kunda and Kudang, 1949, see also CSO 2/3314, Gambia Rice Farm: Annual Reports 1953, 1954, 1955, NRS, Banjul, The Gambia
[11] CSO 84/392, Mechanization of Agriculture: J.E. Mayne's Report, 10th November 1953, NRS, Banjul, The Gambia
[12] Peter Weil, "The Introduction of the ox plow in Central Gambia," in *African Food Production Systems*, ed. Peter F. M. McLoughlin, (Baltimore: John Hopkins Press, 1970), 244-246.
[13] CSO 2/3208, Destruction of noxious Beasts 1944-1956, NRS, Banjul, The Gambia

were infused in every aspect of religious, cultural, and political lives. Even after the penetration of Islam and colonial rule in the Gambia, vestiges of the indigenous spiritual beliefs and practices shaped people's interaction with the environment. The indigenous spiritual beliefs demarcated sacred forests, pools and groves, and allocated totems, and these sacred sites and animals were protected through religious and cultural beliefs. For instance, the Farankunku sacred grove in Dumbuto, Berewuleng and Santangba sacred groves in Brikama protected the surrounding forests, but when the colonial forestry committee established forest parks in both Dumbuto and Brikama, the sacred groves and the surrounding forests all lost their spiritual aura. These were the sites of worship and sacrifice, thus protected by the spirits, but they were all later encroached upon with the expansion of peanut farming, firewood collection, hunting, and other forest uses. The old sites utilized for forest resource exploitation became the colonial forest parks.[14]

The second argument this thesis makes is that colonial conservation in the Gambia was an extension of colonial control over environment, its resources, territories, and people who inhabited those territories. Like Roderick Neuman shows in his analysis of the British colonial conservation in Tanzania, the colonial forest policies and designated wildlife parks in The Gambia similarly reflected the combined economic and aesthetic values of nature to satisfy the colonial economic interests through ecotourism and emotional desire of 'back-to-nature'. For Neuman, the conservation tradition and territorial boundaries of the Arusha Park are rooted in the colonization of Tanzania. He asserts that, "natural resource laws were essential not only for generating revenue for the state and fueling accumulation of private interests, because they were symbolically important for the assertion of the dominance of the German Kaiser, and later, the British Crown, over all aspects of the territory's economy and wealth."[15] In the same vein, the objectives and approaches of the establishment of the forest and wildlife parks in the Gambia were an extension of Yellowstone national park models that were an expression

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[14] Baba Ceesay et al, *A Guide to the Monuments and Cultural Heritage Sites of The Gambia*,,(Kanifing: Fulladu Publishers, 2012), 43-44.
[15] Roderick P. Neuman, *Struggle of Livelihood and Nature Preservation in Africa*, (Berkeley: University of California Press, 1998), 9.

of national identity and markers of class and racial identities between the white colonialists and the Gambian subjects. While the European residents in the colony of the Gambia were free to hunt and export animal species to European and North American museums, the African population and hunters were restricted by the forest and wildlife policies. The evictions, relocations, and restrictions of Gambian communities from their ancestral lands were a common practice in an attempt to control the economic, social and cultural spaces of Gambians. Most of the conservation activities disrupted human-environment relations by criminalizing customary practices of resource utilizations and detaching people from their cultural and spiritual connectedness to the forest.

The third argument this thesis makes is that the British Colonial Empire in Africa adjusted policies and activities according to its motives of political domination and economic exploitation, and therefore, its policies and activities were not uniform and not intended for any complementarity. The colonial agricultural activities in the Gambia contradicted the conservation policies, as the expansion of mechanized agriculture remarkably increased the cultivable land and was characterized by indiscriminate encroachment into forest cover and the habitats of wild animals.

The introduction of ecological and conservation issues in African history emphasizes the new exploration of environmental consequences of colonization. Often, appropriation of natural resources, forest products, wildlife, and land by colonial governments and concessionary companies are the dominant themes in African environmental history. In West Africa, historians are less drawn to environmental analyses than in Eastern and Southern Africa. Most of the scholarships about Eastern and Southern African environment are in response to dominant colonial narratives that celebrated European conservation ideas and bemoaned African forest and forest products management as environmentally destructive. The revisionist East and Southern African environmental literature portrays the destructive image of environmental degradation, appropriation of natural resources, environmental decay, and compression of African societies into smaller areas of land by the European settlers. The harmful defects of the

colonial environmental policies, mostly neglecting and restricting African initiatives and activities with the environment were blamed for many environmental problems.[16]

The Sahel drought of the 1970s drew attention to West African environmental historiography. When historians began writing about the environment in West Africa in the 1980s and early 1990s their studies focus mainly on African knowledge about the environment, misreading of African landscape. They all reject the views that blamed Africans for environmental destruction. Most of these works fault the earlier methodology used in understanding African environmental problems, particularly desiccation, because they neglect local knowledge over scientific methods. Michael Mortimore blames "the judgements of the 'experts' in the natural sciences and the new technology of remote sensing, whose basis in 'ground truth' does not include enquiries into the operations of indigenous land-use systems."[17] For Mortimore, much of the criticism of African land use is due to ignorance about the indigenous land use practices. He blames too often short "whistle-stop tours" by experts, urban-biased bureaucrats, and the absence of grass-root participation in decision making. Mortimore emphasizes that the experts' analyses of desertification in Mangalands in Northern Nigeria are centered on farming, and the rural sector is bigger than farming. He shows that other rural activities include livestock production, forestry or arboriculture, fishing, collecting, hunting, marketing, and rural manufacturing.[18]

Scholars have also noted the divergent ideas or assumptions found in the local populations and the scientific communities. James Fairhead and Melissa Leach, for instance, notes that the scientists and inhabitants' conception of the causes of desiccation were different because of the different assumptions concerning the relationship between social and ecological processes. Many African societies conceive nature and society, or culture and environment, as inseparable entities. According to Fairhead and Leach, Kissidougou's inhabitants see forest as a "settled" state not a near natural state, a cultural

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[16] Roderick P. Neuman, "The Postwar Conservation Boom in British Colonial Africa," Environmental History, Vol. 7, No. 1, (Jan 2002):22-23.
[17] Michael Mortimore, *Adapting to Drought: Farmers, Famine and Desertification in West Africa*, (Cambridge: Cambridge University Press, 1989), xvi.
[18] Ibid., 2.

realm "associated more with vagrant, mobile and impermanent lifestyles; with the human world perhaps of hunters, the mad, pastoralists and refugees."[19] On the other hand, Western science has conceptualized natural as if uninfluenced by the society, and this has influenced the conservation policies. They argue that scientific interpretation of the African environment devoid of the surrounding socio-cultural environment could become subject of conflicting misreading. Fairhead and Leach's work conclusively establishes that Kissidougou's forest has actually grown substantially, challenging the scientific forestry experts, Africans and non-Africans alike, who have argued that the wasteful methods of agricultural practices by African farmers were destroying the forest. Their research shows forest growth thanks to African farming methods instead of destruction of the forest.[20]

Consistent with the social and environmental resilience thesis, Mortimore's study of Mangalands and Leach and Fairhead's study of Kissidougou show that African landscapes and communities are much more resilient than the degradation narrative allows. Mortimore examines dune activation and vegetation change in Mangalands of Northern Nigeria, and he establishes that the grassland is an area of stabilized sands, but occasional depressions show environmental change not degradation. He also shows that the inhabitants of Mangalands augment their gains from farming through dry season wage labor.[21] Fairhead and Leach in defense of environmental resilience gathered oral accounts and compared aerial photographs and satellite images from the 1950s through 1960s of the Kissidougou region of the Republic of Guinea. From the oral evidence and aerial images, they show that forest cover was expanding around the savanna mosaic instead of shrinking thanks to African farming practices. These works describe the ahistoricism of the environmental degradation narratives and show it as a continuity of colonial era scholarships about African environmental degradation. [22]

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[19] James Fairhead and Melissa Leach, *Misreading the African Landscape: Society and ecology in a forest-savanna mosaic*, (Cambridge: Cambridge University Press, 1996), 5-6.
[20] Ibid., 83-84.
[21] Mortimore, 65.
[22]Ibid., 55-57.

Despite the strong case these books make for African environmental change and resilience of African landscapes and communities, none of them deals with commercial exploitation and agricultural activities as the greatest threats to the conservation of African forests as this thesis attempts to portray of the colonial Gambia. However, the two works show that conservation policies in Africa have been based on faulty science and have served to promote an agenda that continues to shift control over resources from poor rural dwellers to colonial and post-colonial states. These works are a critique of African governments' so-called greening of international aid and degradation narratives to strengthen their control over resources, and they highlight the resilience African communities exhibited in the face of governmental pressures and dislocations. Leach and Fairhead show that 'Savannisation' has been a major policy of both the colonial and post-colonial Guinean governments for the perceived threat it posed to local agriculture, tree crop economy, regional climate, and hydrology. The view of Kissidougou's degraded and degrading landscape has justified repressive policies the Guinean government established for the protection of the landscape and appeals for donor intervention, but to village elders, forests do not disappear under pressure; rather forests "are associated with settlement, and come and go with it."[23]

In the 1990s, the scholarship on the Sahel and its great empire systems got richer and more interesting. Scholars were making connections between the Sahel's the slave trade, nation building through cavalry revolution, iron smithing, and shifting ecological boundaries across the West African landscape. George Brooks' 1993 work describes the role of Sahel ecology in West African human history. Central to Brooks' argument is that environmental factors such as wet and dry spells in Sahel influenced the northward and southward expansion of human activities.[24] The agricultural frontier moved north because of the greater moisture. These periods of less aridity encouraged cereal farmers' expansion towards the trans-Saharan trade routes, and this was another major impediment for cavalry warriors, as the domain of tsetse flies (pests that destroyed horse populations

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[23] Fairhead and Leach, 1-14.
[24] George E. Brooks, *Landlords and Strangers: Ecology, Society, and Trade in Western Africa, 1000-1630,* (Boulders: Westview Press, 1993), 4-5.

in the Savannah) also moved north. According to Brooks, this served as a protective barrier for the defenseless farmers who were preyed on by slave raiders. On the other hand, Brooks argues that the dry spell between 1100 to 1500 pushed Mande smiths, traders, and warriors south where they spread Mali empire's political, economic, and cultural control, as the tsetse frontier pushed as far as 200 kilometers south.[25] In Mali's subsequent expansion towards gold and kola sources between 1250 and 1450 also happened during the dry spell. Brooks emphasizes that the dry spell enabled Mande cavalry warriors to raid towards the edges of the forest and woodlands Mande traders and smiths had influenced earlier.[26] In 1483, severe aridity in the Sahel forced Tuareg pastoralists south to control Timbuctu, and the tsetse zone's expansion towards further south exposed Mali to Mossi, her horse raiding nemeses in the south. However, the brief wet period between sixteenth and the seventeenth centuries led to the fall of Mali and the rise of Songhay. The wet spell enriched Songhay through trade along the caravan routes and similarly exposed her to Moroccan invasion.[27]

Brooks' seminal work effectively shows how environmental factors were directly linked to major historical events such as the rise and fall of the great empires of the Sahel region. His data seems imprecise particularly between 800-1600, and the scarce evidence he uses seems mere generalization of facts. Nonetheless, he succeeded in laying the foundation in the historiography that links environmental factors to specific historical events in the region.[28] Unlike Brooks, James Webb's 1995 study shows relationship between environmental change and the cultural processes that dominated the Sahel at the height of the great empires and after their decline. He attempts to evaluate the historical dynamics that characterized the ecological crisis in pre-colonial Western Sahel which propelled the Atlantic and regional slave trade, and altered the socio-economic and political arrangements of the societies at the edge of Sahara. Webb shows that environmental factors between the fourteenth and the seventeenth centuries brought

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[25] Brooks, 46-47, 98-99.
[26] Ibid., 47.
[27] Ibid., 170-171.
[28] Ibid., 11-14.

different Sahelian peoples - Arabs, Berbers, and Mande - closer, and produced a new ethno-racial identity. [29]

Brooks and Webb each describes how the former rulers of Timbuktu who lost political power and privilege scrambled to dominate the political vacuum and limited resources that existed in the Western Sahel region, but Webb's major contribution to historiography is his integration of ecological changes, slavery, and the Atlantic slave trade. The central argument of Webb's book illustrates that from the 1600s to1850s, the transitional zone around the edge of Sahara experienced severe drought which pushed the desert frontier to 200-300 kilometers.[30] He discusses important economic and political changes, demonstrating the ways in which systems of exploitation and violence adjusted to the changing environment. Ecological changes in Western Sahel, he demonstrates, increased along with violent political contestation over the control of scarce resources in the region. [31] Webb lays much emphasis on the trans-Saharan trade, and this challenged the preeminence of the Atlantic slave trade in the scholarship. Significantly, neither Brooks and Webb focused on the effects of colonial agricultural activities on conservation this thesis examines, but their works are seminal foundations in understanding the relationship between the environment and the socio-economic and political developments in the Sahel region.

In the recent years, the historians of West Africa have attempted to understand how colonial and post-colonial pressures transformed the West African societies' understanding and interaction with the ecology. African religious beliefs and practices have long protected the environment through veneration of sacred groves, forests, trees, water bodies, and some animals. Sandra Greene and Emanuel Akyeampong have shown how multiple pressures from the colonial conquest, Christianity, and Western-style education, and exploitation of resources transformed African belief systems that

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[29] James L.A. Webb, *Desert Frontier: Ecological and Economic Change along the Western Sahel, 1600-1850*, (Madison, Wis.: University of Wisconsin Press, 1995), 3-17.
[30] Ibid. 3-17.
[31] Ibid. 22-26.

conserved the environment and modes of production and maintained the ecological balance.

Sandra Greene's *Sacred Sites and the Colonial Encounter* assesses creative adjustments and adaptations in Anloga, and the Anlo of Ghana's failures in understandings their landscape to survive the imposition of the European belief systems. This book gives a fascinating description of the Anlo and Anloga's encounter with colonial rule which was influenced by unequal power relations, and it produced multitudes of ecological effects and belief systems.[32] Greene is mainly concerned about what values changed, how meanings and memories associated with the numerous water bodies that dot Anloga landscape took different meanings and why, as well as which spiritual concepts were lost. She shows the impact of colonial pressures on the Anlo understandings of the material and the spiritual aspect of their landscapes, and how western technology and urban growth rendered permanent potable water bodies spiritually meaningless to the contemporary Anlos. For instance, Mama Blolui pond, which served as a source of drinking water for the whole of Anloga, lost its aura of spirituality to protect Anloga spiritually and physically because new technology wrought new methods of digging wells to provide drinking water and "most of the trees that once constituted the grove on the edge of the pond were cut down for firewood, and the grasses and bushes were cleared to make way for houses and farms."[33]

Akyeampong's *Between the Sea and lagoon: An Eco-Social History of the Anlo of Southeastern Ghana c. 1850 to Recent Times* charts an environmental change over many years in Alonga in Southeastern Ghana. Unlike Greene, Akyeampong does not attach much importance to change in the belief systems of the people, but he shows that the people resorted to spiritual means defeat ecological pressure when technological measures failed.[34] Akyeampong shows that the Anlo utilized ancestral deities and their knowledge of the environment in an endeavor to understand the sea's unrelenting

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[32] Sandra Greene, *Sacred Sites and the Colonial Encounter: A History of Meaning and Memory in Ghana,* (Bloomington: Indiana University Press, 2002), 10-13.
[33] Ibid. 48-50.
[34] Emmanuel Kwaku Akyeampong, *Between the Sea and lagoon: An Eco-Social History of the Anlo of Southeastern Ghana c. 1850 to Recent Times,* (Athens: Ohio University Press, 2001), 9.

destruction of their surrounding and to repair what they perceived as a breach in their moral ecology. This strengthened their physical and spiritual conception of erosion in Anloga. Erosion in one form is seen as an ecological damage that needs physical solutions, while in another form, it is defined in terms of offending gods and ancestors through urbanism, urbanization, and foreign missionary influence.[35]

While Greene is concerned about meanings and memories associated with water bodies, and how colonial technology led to its lost, Akyeampong shows the economic importance of water bodies to economic and cultural environment of Anloga. Akyeampong shows that the Keta Lagoon's economic importance runs through Anlo history. Lagoon fishing and salt making supplemented other economic occupations, experience, and capital generated in the lagoon could later be used in sea fishing, and it is opened to women and children.[36] Greene on the other hand shows the Keta Lagoon is overfished, crocodiles and hippos had long gone, and that was the catalyst of the dissipation of the spiritual meaning of Kita Lagoon. On the other hand, the Ocean maintained its spiritual meaning because it still provides fish, and the danger remains of the current undertow and shark attack.[37]

Akyeampong doubts whether his book could fit into the environmental history genre because it is not focused on conservation, but his description of "eco-social" history and the contrast of the relationship between the environment and culture, economy and society is a familiar trend in environmental scholarship.[38] The two works are not focused on colonial conservation in Anloga, but they are significant to this thesis because they highlight the relationship between the ecology and society, and how environmental factors shape the belief systems of African communities. Significantly, they highlight how European conceptions of the ecology as only a material realm shaped their attempts to control ecological pressures, but also their determination to suppress the inhabitants' views of their surroundings. These works provide an important parallel to

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[35] Ibid., 9-11.
[36] Ibid., 15-16.
[37] Greene, 54.
[38] Akyeampong, 3.

this thesis as it examines how modern technology in a form of agricultural machinery and new conservation ideas weakened the local knowledge and practices in forestry and wildlife conservation.

Most studies of the Gambia's environment do not focus on conservation or the effects of agricultural activities on the environment. Instead, much of the scholarship highlights the social identities, agrarian relations, gendered struggles, and conflicts over access to, and control of land and agricultural resources. A handful of these studies highlight the British colonial government's economic and agricultural misadventures but fail to highlight the effects of those agricultural activities on the environment. For instance, James Webb and Judith Carney give a fascinating description of ecological change and social transformation among the agrarian communities of the rural Gambia. Webb's 1992 article examines the process of ecological and economic change along the middle reaches of the Gambia River between 1945 -1985. The middle reaches of the Gambia River corresponds with Lower River, Central and parts of Upper River regions of South Bank of the River Gambia, a distance between 110km to 290km from Banjul, the capital.[39] These are regions that Judith Carney refers to in her 1993 article as lowland areas of the Gambia River, where tidal agriculture is more viable than anywhere in the Senegambia region.[40]

Carney's work examines environmental change on the wetlands of The Gambia in rice irrigation schemes and horticultural projects. The government initiated these agricultural schemes to diversify agriculture from the dominant peanut cash crop to improve food coarse grain production, but the horticultural programs aimed to improve the economic standing of women. Carney shows that these projects failed to break the gendered division of labor in rice and vegetables. In effect, male participation in rice production brought about their increased control over surplus production and female land dispossession. The horticultural projects ensured improvement in women's income, but

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[39] James L.A. Webb, Jr., "Ecological and Economic Change along the Middle Reaches of the Gambia River, 1945-1985." *African Affairs, vol. 91, No. 365* , (Oct 1992) : 543-565.
[40] Judith Carney, "Converting the Wetlands, Engendering the Environment: The Intersection of Gender with Agrarian Change in the Gambia," *Economic Geography, Vol. 69, No. 4, (Oct. 1993): 329-348.*

were equally rife with gendered contestation over access to irrigated land, because the irrigated projects gave women access to land as laborers but denied them full claims to the benefits of the agricultural produce.[41]

Webb and Carney emphasize ecological change in agricultural production and eventual social reorientation in labor obligations, choice of crops, and the ecology of crop production, brought by cash crop economy. They show that food production before the mid-nineteenth century involved both men and women, but the imposition of colonial rule with its taxation and fiscal policies compelled men to cultivate peanuts to meet the financial demands of the colonial government. [42] Webb's work highlights the failed attempts by the post-independence Gambia government to implement models transferred from outside by donors such as Taiwan and China in the Gambia's drive to be food self-sufficient. He fails to highlight the environmental effects of these agricultural projects during the colonial and post-colonial irrigation projects.

Carney's work, on the other hand, emphasizes how commodification of land-based resources led to gendered contestation over resources. She shows that colonial government's attempts to diversify agriculture and food security in the Gambia gives rise to new claims made by the male household heads over wetlands and control of female family labor. These irrigation projects induced local household labor regimes to year-round cultivation which reoriented the social understanding of the common property rights and brought about gendered conflicts.[43], Carney only peripherally mentions the environmental destruction caused by the agricultural diversification schemes she discusses, and blames the Gambia's reliance on monocrop peanut export, which destroyed the forest cover. She shows that environmental and related economic crisis caused by the declining peanut revenues compelled farmers to reduce and eliminate traditional fallow periods of land, and to expand peanut cultivation in order to make up for poor peanut revenue.[44]

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[41] Ibid., 330.
[42] Webb, 555. & Carney, 333.
[43] Carney, 329-330.
[44] Ibid., 335.

Richard Schroeder's analysis of forest management in the Gambia shows a striking shift from the colonial era land, water, forest, and wildlife management practices imposed on Africans to an organization of environmental principles at the community levels. His study shows that it was not a populist gesture inviting community participation in resource management from the forestry department, but rather a deliberate financial strategy because of the acute budget shortfall caused by the Structural Adjustment Program in the 1980s.[45] Schroeder emphasizes that the Gambia Forestry Department relied on the communities to meet its conservation objectives because of lack of adequate financial support from the government. He uses the Gambia-German Forestry Project (GGFP) to inspect the community resource management policies and the conditions placed on the community control in post-independence Gambia. His analysis shows the reluctance of forestry managers to devolve their management responsibilities without forfeiting the management control to the communities. Denial of management roles to communities is typical of resource management in many poor countries where the governments and even non-governmental organizations that supported the community resource management initiatives appropriated the control of resources for commercial exploitation.[46]

Schroeder shows that Gambia Forestry Department was generally dependent on the donors such as USAID, EEC, and German government funded Gambia-German Forestry Projects. He emphasizes that the community control was acquired only in stages and on conditions that the community continued performing its obligations faithfully.[47] For Schroeder, the GGFP personnel have successfully converted a community-based resource management project into a tool of Structural Adjustment Policies that saved the government from its obligations but continued to provide revenue to the government through licenses issued for forest products.[48]

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[45] Richard A. Schroeder, "Community and Conditionality in the Gambia," *Journal of the International African Institute, Vol. 69, No. 1 (1999): 1-22.*
[46] Ibid., 2.
[47] Ibid., 5.
[48] Ibid., 18.

Schroeder's article is one of the few studies focused on forest conservation in the Gambia. He explains the resurgence of community management of forest resources because of the fiscal constraints of the Gambia Government. He highlights the destruction of the forest and need for more conservation efforts when he describes the activities of the Gambia-German Forestry Projects as directly managing twelve forest parks as either plantation or protected areas. Schroeder utilizes GGFP's 1980 forestry survey data, through which he blames the poor forest utilization practices of the rural people such as uncontrolled firewood exploitation and constant waves of bush fires His analysis exonerates the conversion of forest into agricultural land or other land uses.[49]

Assan Sarr's 2009 article, "Fighting Over Rice Swamps: Conflict and Community across the Gambia River Basin, Nineteenth and Early Twentieth Centuries," also neglects conservation or the effects of agricultural activities on the environment; rather he shows immense social, economic and political pressure and contestation over long held property ownership particularly land and resources in the communities along the Gambia River basin. The dominant theme in Gambian scholarship (Watt and Carney 1990, Carney 1993, and Schroeder 1999,) highlights gendered conflicts within communities, but Sarr shows the inter-communal conflict over land and resources because of enormous socio-economic and political transformations taking place in the Senegambia region.[50] He evaluates three conflicts that happened at the beginning of the twentieth century, Sankandi-Jattaba, Sarrakunda-Tendaito, and Sarrakunda-Kunbija, and argues that these conflicts over rice swamps were caused by the breakdown of traditional methods of resolving conflicts. He blames it on the end of the slave trade and the subsequent cash crop economy it wrought, the rise of militant Islam, and gradual increase in British control.[51]

In his 2016 book, *Islam, Power and Dependency in the Gambia River Basin: The Politics of Land Control, 1790-1940*, Sarr expanded on how *Soninke-Marabout* wars

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[49] Ibid., 4-5.
[50] Assan Sarr, "Fighting Over Rice Swamps: Conflict and Community across the Gambia River Basin, Nineteenth and Early Twentieth Centuries," *Mande Studies* 11, (2009): 145-164.
[51] Ibid., 149.

weakened the elite aristocratic families' control of land and the emergence of dependence on Muslim clerics by their disciples and followers. Sarr's main argument in the book is that land was central to the economic, political, and social identities in the history of the communities along the Gambia River basin. Unlike many other works that highlight the fertility and changing ecological nature of land cultivation, his book is the first attempt to give detailed historical analysis of land and its socio-political value in the Gambia River basin.[52]

Sarr emphasizes that the nineteenth century militant Jihads weakened the fabrics of Gambian societies, which affected the community elders' ability to negotiate and settle disputes. He shows that *Soninke-Marabout wars* divided communities between the opposing sides and weakened the control of non-Muslim ruling families. In the article, he shows that the chief of Batteling, Mansakoto Sanyang, failed to settle the Sankandi-Jattaba land dispute that claimed the lives of two British commissioners and their entourage because he was a symbol of *Soninke* rule and lost the legitimacy to assert any effective control or means to resolve the conflict peacefully.[53]

In his book, Sarr shows the political dimension of land control, in which the Mandinka ruling aristocracy led by Mansa (chief), village head (alkalo), and family head (kabilo) monopolized the ownership of land and kept other segments of the population as dependents.[54] He shows that oral traditions perpetuated themes of migration, conquest, and settlement in order to legitimize land ownerships of the elite families.[55] However, the nineteenth century Jihads were fought to end this dependency on economic and political assets associated with landownership, as well as exclusion from owning good land and excessive taxation.[56] As in his article, Sarr emphasizes the transformation peanut production brought, the movement and arrival of newcomers, and the dependence on marabouts and mystics who used their spiritual powers to combat and overcome land

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[52] Assan Sarr, *Islam, Power and Dependency in the Gambia River Basin: The Politics of Land Control, 1790-1940*, (NY: University of Rochester Press, 2016), 15.
[53] Sarr, Fighting Over Rice Swamps, 146 -147., 153.
[54] Sarr, *Islam, Power and Dependency in the Gambia River Basin*, 72-74.
[55] Ibid., 36-37.
[56] Ibid., 113-114.

spirits. Along with their disciples and followers, Muslim clerics cleared large tracts of land previously believed to be owned by the spirits.[57] Sarr combines three central themes of the book, chieftaincy, land tenure, and invented traditions in describing the impact of the British rule in land tenure and aristocratic control. He shows that the land legislation passed by the British weakened the chiefs' authority, but family heads became more powerful in controlling land.[58]

While dominant political analysis in the scholarship often describe these conflicts as a form of resistance to colonial rule, Sarr emphasizes the weakened social and political systems caused by nineteenth century religious wars. He further shows that women can own land, which Webb and Carney did not highlight in their discussions. Although this differs from place to place, Webb and Carney's analyses seem to underscore perpetual male ownership and control of land and resources.[59]

Sarr's book, on the other hand, emphasizes the pressure of Islamization and peanut economy on the changing land tenure system in the Gambia, but he neglects the effects of agricultural activities particularly peanut cultivation on the destruction of the forest cover. He shows that the effects of Islamization put much pressure on land tenure leading to major ecological and environmental changes in the Gambia River basins.[60] He asserts that the pre-Islamic local beliefs and reverence of "spirit lands" was an instrument of social control that regulated access to land and served an ecological function, as the spiritual association of the land restricted the exploitation of resources to the privileged few with spiritual powers. He shows that this "wittingly or unwittingly" preserved unoccupied forests.[61]

Tad Brown examines the British colonial government's venture to build a ship, the Jarga, to transport the cattle downriver to the capital Bathurst along the Gambia River in order to circumvent marketing difficulties in the colony. Although British experts were successful in reducing rinderpest outbreak in the colony, their marketing efforts failed

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[57] Ibid., 139-141. Idem, 150.
[58] Sarr, *Islam, Power and Dependency in the Gambia River Basin*, 163-167.
[59] Sarr, Fighting Over Rice Swamps, 153.
[60] Ibid., 14-15.
[61] Ibid., 28.

because they dismissed local farmers' practices, which hindered livestock development.[62] Brown shows that the success of the colonial campaign against rinderpest caused the Gambia's cattle population to grow four times its size. For fear of fodder shortage in dry season, the colonial government became determined to ship cattle to Bathurst and nearby colonies to avert cattle disaster. He shows the local cattle brokerage practices frustrated the colonial administrators' vision of the cattle market.

Brown's article offers an insight into the British imperial mindset that disregarded African knowledge and imposed a fix for almost every problem. Despite the increase in cattle population, urban Gambia continued to rely on exported cattle because the colonial veterinary officers assumed the position of middlemen in the cattle trade. Their refusal to observe local norms of exchange, however, left the government to literally scrap the market-based approach for a loss.[63] Brown's article makes a political and economic analysis of the British colonial administration's obsession with the Gambia's cattle population. However, his article fails to show the cattle population as an important source of revenue through cattle tax and pasturage fees for the colonial government. Brown also fails to show that the increase in the cattle population led to overgrazing, and cattle tracks also destroyed forest cover particularly in the Central and MaCcarthy Island Provinces.

This thesis contributes to this growing literature on the environment. Its main objective is to highlight the contradictions in the colonial conservation policies and agricultural activities in the Gambia between 1938 and 1965, and how colonial conservation undermined the local conservation methods. The main goal of this study it to focus on indigenous conservation practices that could help provide sustainable insights and practical approaches to modern conservation. It aims to give a detailed analysis of forestry and agricultural developments of the Gambia.

The scope of this study covers the last two decades of colonial rule in the Gambia. It focuses on the period stretching from 1938 to 1965 because of the profound historical dynamics that were taking place in the tiny British colony, particularly in the areas of

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[62] Tad Brown, "Await the *Jarga*; Cattle, Disease, and Livestock development in Colonial Gambia," *Agricultural History*, vol. 90, 2, (Spring 2016): 230 -245.
[63] Ibid., 231.

conservation and agricultural development. My methodological approach is inspired by the work of several African historians who since the 1960s have been collecting oral histories and archival documents to piece together the events and periods they study. In that regard, three different categories of evidence are collected for this study.

First, I utilize historical data from Gambia's only Oral History Collection, housed at the Research and Documentation office, which is under the Gambia National Council for Arts and Culture. This archive holds a collection of over 3,000 oral history tapes and transcripts on various topics of Gambian history. Exploiting these materials adds local perspectives to the questions this thesis attempts to answer.

Second, archival research was conducted at the Gambia's National Records Office (the National Archive) where tons of European, colonial documentary sources are held. These documents include Colonial correspondence from the Colonial Secretary's office in Bathurst to the Colonial Office in London. They also include reports from Colonial Commissioners, Special Committees, Letters from Colonial Administrators, ordinances and newspapers. These constitute a rich body of sources that would serve as the most important set of sources for this study on colonial environmental policies and their impact on Gambian society. These records provide first-hand information about colonial forestry and agricultural policies in the Gambia colony.

Third, additional interviews were conducted across The Gambia to fill the gaps where the oral history and national archival materials fail to shed-light on the questions this study seeks to explore. I visited communities across the country and talked to individuals who witnessed some of the key events under discussion. This methodological approach imparts a rich evidentiary base, which allows me to make an important contribution to our understanding of African colonial environmental history.

This thesis is divided into three chapters. Chapter 1, "Gambian Society and Ecology", argues that colonial agricultural activities destroyed the Gambia's vegetation cover. With the help of early European traveler accounts, colonial documents, and oral sources, this chapter discusses the flora and the fauna of the Gambia before and during early colonial rule. Major geographic features such as forest cover, savanna grasslands,

bolongs, estuaries, sandbars and tidal islands characterized the Gambia, as well as diverse plant and animal species.

The geographic features, flora, and fauna had symbolic socio-cultural, religious, and political representation to the communities in the Gambia before colonial rule. As the environment was central to the lives of Gambian communities in a variety of beliefs encompassing transcendent reality, the veneration of ancestors and nature spirits that animate the natural environment, and totemic beliefs based around a sacred identification with animals, plants, sacred forests, and groves protected the environment. This chapter establishes that colonial activities such as the introduction of cash crop economy, mechanized farming, and exportation of animal species destroyed the forest cover.

Chapter 2, "The Colonial Conservation activities in the Gambia," examines the imposition of colonial rule and exploitation of forest and wildlife resources. It argues that the colonial forestry and wildlife conservation represented further efforts by the British colonial administration to extend their political control over the environment and its resources of the Gambia. Generally, the extension of political control over the environment was important in the political control of the colonized Africans.

The first part of this chapter discusses the Gambia's colonial forest and wildlife conservation policies and conservation activities, which include the appointment of the forestry committee and the establishment of forest and wildlife parks. The second part of the chapter discusses the enforcement of the conservation policies by the colonial chiefs. Colonial conservation policies generally undermined the local utilization of forest resources, and by extension, wildlife conservation in the Gambia. The final part of the chapter discusses the local response to the enforcement of forestry policies.

Chapter 3, "The Colonial Agricultural Activities in the Gambia," argues that colonial agricultural activities contradicted colonial forest conservation policies. It shows that agricultural activities led to the unprecedented destruction of Gambian environment. It mainly examines how the intensification of commercial agricultural production promoted by the colonial government between 1938 and 1965 destroyed the forest and wildlife in the Gambia. This chapter looks at the introduction of animal-drawn plows, their effects on agricultural production, and how they contributed to the destruction of the

environment. It also discusses how animal-drawn implements revolutionized agriculture, particularly peanut cultivation, and the eventual transformation of the social structures of the Gambian rural farmers.

This chapter also examines the colonial government's obsession with the Gambia's cattle population, as more heads meant more cattle taxes and pasturage fees. This was the catalyst for the major inoculation drive against rinderpest. When the cattle population grew unabated, however, the colonial agricultural activities, particularly farms in Fulladu, were a subject of continual cattle depredation. The district authorities in Upper and Lower Saloum had constant brushes over cattle grazing sites.

This chapter also examines the rice mechanization schemes in Jenoi, Walli Kunda and Kudang, and numerous mixed-farming centers built countrywide in order to spread new farming techniques and ideas. These projects were the focal point for the introduction of agricultural machinery, herbicides, and insecticides, as well as the catalyst of the colonial land grabbing in the Central and MaCcarthy Island Provinces. Consequently, many residents of Fulladu (particularly those villages surrounding Walli-ba Kunda that lost their rice fields) had to cross the River Gambia to cultivate rice in Niani District, and many others encroached upon the habitat of the wildlife.

This chapter also discusses in detail how the government's annual gun and gun powder supplies to the colonial chiefs intended to protect farms from wildlife, further demonstrate the British colonial government's obsession with profit over environmental protection. It further highlights the so-called "war on pests" and its methods (poison bait, trenches, and tail for shilling) to exterminate baboon, bush pig, and monkey populations, and killing of dozens of hippos. This chapter will also discuss the debates surrounding the "war on pests" generated in Westminster in London.

The conclusion of this thesis ties up the loose ends with a sustained discussion on the contradictions in the policies and activities of these two government institutions, highlighting how agricultural activities and resource exploitation undermined conservation. It explains how the new colonial conservation policies undermined the local ways of forest and wildlife conservation in the Gambia. The conclusion establishes that the policies of the British Colonial Empire in Africa was a mess of contradictions;

policies and activities were adjusted according to motives of political domination and economic exploitation.

CHAPTER 1: GAMBIAN SOCIETY, ECOLOGY AND INDIGENOUS RESOURCE MANAGEMENT

Introduction

The Gambia's fauna and flora had significantly decreased by the early twentieth century. Much of the early scholarship blamed Gambian hunters and farmers for bringing about environmental degradation. Peter Reeve and Bella Southern, for instance, blame Gambian farmers' slash-and-burn farming techniques and over-hunting for the loss of fauna and flora.[64] Recent studies by Judith Carney and Assan Sarr, however, consider the expanding peanut cultivation for the destruction of the Gambia's environment. For Carney, the declining peanut revenues caused the Gambia's environmental crisis. Gambian farmers abandoned the traditional fallow periods of land and crop rotation to expand peanut cultivation in order to make up for poor peanut prices.[65] Sarr equally blames the expanding peanut economy but emphasizes that lands that were preserved as sacred were encroached upon by the Muslim clerics and their disciples in order to expand peanut cultivation. [66] While the peanut economy was one of the causes of the destruction of forest and wildlife in the Gambia, there were other major agricultural activities such as mechanization of rice cultivation and introduction of the animal-drawn plow. The colonial conservation activities which attempted to restore the ecological balance instead led to the encroachment into the locally reserved forest cover.

With the imposition of British colonial rule, the conservation practices adopted by the colonial government undermined local conservation methods. For centuries, the veneration of ancestors and nature spirits that animate the natural environment and totemic beliefs based around a sacred identification with animals, plants, sacred forests and groves conserved the environment. This chapter argues that before colonial rule,

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[64] Peter Fenwick Reeve, *The Gambia: Its History, Ancient, Medieval, and Modern,* (London: Smith, Elder & Co., 1912), 235; Bella Southorn, *The Gambia: The Story of the Groundnut Colony, (London: George Allen and Unwin Ltd., 1952),56.*

[65] Judith Carney, "Converting the Wetlands, Engendering the Environment: The Intersection of Gender with Agrarian Change in the Gambia," *Economic Geography, Vol. 69, No. 4, (Oct. 1993); 409.*

[66] Assan Sarr, *Islam, Power and Dependency in the Gambia River Basin: The Politics of Land Control, 1790-1940,* (NY: University of Rochester Press, 2016), 100-105

indigenous knowledge and practices conserved the Gambia's forest cover and animals. Consequently, this chapter makes four important arguments the indigenous conservation. First, the Gambia's major geographic features represented a cultural and religious symbol to the communities which protected them from human encroachment and exploitation. Second, the ritualization of shrines and sacred forests around the country conserved the surrounding flora and fauna. Third, the environment was central and gave meaning to rituals of rites of passage, and the sites of initiation were conserved. The chapter also proposes that the stratified social structure of the Gambian societies balanced the competing interests in the exploitation of forest resources.

The notion of sacredness and the role it played in conservation generate a fierce academic debate. Sacred groves, forests and pools represented an important pre-colonial resource management in Africa. Whether religion was consciously used to manage resources remains contentious. For instance, Roy Ellen and Holly Harris argue that the epistemic origins for both folk and scientific knowledge are hidden, and this anonymity distinguishes scientific practices from indigenous knowledge. For them, when the origins of the knowledge can be revealed, the notion of indigenous knowledge becomes questionable.[67] For some scholars, intention of the indigenous people should determine the presence or the absence of conservation. Allyn Stearman, Eric Smith and Michael Wishnie all argue that resource management must be a conscious awareness and the intention to conserve must be clear in order to be called conservation.[68] However, for Michael Doe the divide between intention and non-intention in indigenous resource management reflects the divide between modernity and pre-modernity than between conservationists and non-conservationist practices. He argues that concept of indigenous knowledge is faulted in favor of the hybrid products of modernity. Doe agrees with James

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[67] Roy F. Ellen and Holly Harris, "Introduction: Indigenous Environmental Knowledge and its transformation," eds. Roy F Ellen et al, (Amsterdam: Harwood, 2000), 213-215.
[68] Allyn Maclean Stearman, ""Only slaves climb trees": revisiting the myth of the ecologically noble savage in Amazonia." *Hum. Nat.* 5(4): 339-57; Eric Alden Smith and Michael Wishnie, "Conservation and subsistence in small-scale societies." *Annu. Rev Anthropol*. 33(1) (2000); 187-224.

Scott that twentieth century's high modern global development discourse is dismissive of indigenous knowledge including resource management and environment.[69]

On the issues of consciousness or unconsciousness, Fairhead and Leach's view provides an important parallel for this chapter. In their seminal work on conservation in Guinea, West Africa, they argue that while the villagers of Kissidougou precipitate vegetation changes, it has not been intentional. They emphasize that the villagers knew and appreciated these conservation results, but they did not necessarily work for them.[70] The sacred places and veneration of animals and plants signified much broader social and religious goals, and its major functions to the communities in the Gambia were to preserve and protect their environment. It is apparent that there have not been any significant separate categories for pre-colonial conservation in the Gambia; rather conservation has been based on the traditional religious teaching of unity of humanity and nature, and strategies devised for guaranteeing access to resources. Evidently, this access and use have been mitigated by religious practices, customs and totemic values, and this emphasizes that the motivation for conservation was to guarantee human access to nature. Contrary to the indigenous resource management strategies was the colonial conservation models instituted in the Gambia in 1938, which had led to the development of nature conservation areas as zones cleared of all human influence and settlement, with highly restricted access to resources.

Before the Anglo-French boundary demarcation in the 1890s, the Gambia was part of a vast Senegambia region which stretched from the Senegal River in the north, the Kolonte in the South, and the foothills of the Futa Jallon plateau in the east. Senegambia is a home to diverse peoples with profound cultural cohesiveness. The centrality of the Gambia's location as the confluence of northern and southern Senegambia symbolized the diversity and unity of Senegambia's civilization, the reality that connected it to, but also distinguished the region from the Sudan to the east, the Sahara to the north, and the

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[69] Michael R. Doe, "Indigenous People and Environmental Politics," *Annu. Rev. Anthropol*, 35, (2006); 191-208. & James C Scott, *Seeing Like a State: How Certain Schemes to improve the Human Condition Have Failed*, (New Have: Yale UP, 1998), 67.

[70] James Fairhead and Melissa Leach, *Misreading the African Landscape: Society and ecology in a forest-savanna mosaic*, (Cambridge: Cambridge University Press, 1996), 285.

forest zone to the south. Consequently, analyses in this thesis, particularly discussions on the pre-colonial times, will not be confined to the few miles from the Gambia River, but examples and inferences will always consider the greater Senegambia socio-cultural and political nexus.[71]

Geographic Features and Indigenous Resource Management

The geographic features had symbolic socio-cultural and religious representation to the communities in the Gambia. The forests, marshes, savanna grasslands, creeks, estuaries, and tidal islands all connected to the Gambia River are important physical features. The people's interaction with these unique ecological features were infused with spiritual meanings which shaped the socio-economic and political lives of the Gambian communities. Because of the religious meaning attached to these physical geographic features, many of them were saved from human encroachment and exploitation for many years before colonial conservation began in the Gambia.

The key geographic features in the Gambia are islands apart from the Gambia River. These islands are within or along the Gambia River which meanders across the country. In practical terms, most of these islands were uninhabitable because of the water flows every tide a foot above the island, but the neighboring residents saw them in different light. For instance, the Elephant and the Seahorse Islands were held with much awe and respect, as they were believed to be abodes of malevolent spirits. The residents of the neighboring districts of Jarra, Sanjal, Niamina, and Saloum never interfered with the lush forest cover and the animals on these islands for the fear of repercussions for encroaching the realms of dangerous jinns and wilderness spirits. Some of these islands such as Dog Island were uninhabited because they kept shrines and spirits of the neighboring settlements. The European disregard for local customs and values was manifested in the Anglo-Niumi dispute over Dog Island. In 1831, an English Agricultural Society settled pensioners and liberated slaves on the Dog Island where the neighboring Niumi kingdom's royal family in Sitanunku kept its fetishes, shrines and spirits. The

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[71] Boubacar Barry, *Senegambia and the Atlantic slave trade,* (Cambridge: Cambridge UP, 1998), 3- 6; Sarr, *Islam, Power and Dependency in the Gambia River Basin*, 16.

Mansa (king) of Niumi in protest to the British settlement closed all the waterways to the main British settlement, Bathurst, and the *Mansa's* men attacked the pensioners on the island. As the new settlers eventually fled the island, the credit of their expulsion was given to its spirits and fetishes.[72]

The network of waterways and numerous creeks that stretched inland along the Gambia River were sometimes received with much veneration. In pre-colonial African communities, the reverence of creeks, waterways and swamps were a common practice. De-Valera Botchway and Yaw Agyemang points out the values couched by taboos in the usage of major water bodies in Sekyere locality in Ghana. According to Botchway and Agyemang, the rules that inspired taboos in the usage of the twelve rivers in the Sekyere land are an example of religious environmentalism. The connection between water bodies and the taboos that regulate their usage protect and preserve them. For Sekyere, the removal or destruction of vegetation along the banks of the rivers, defecating along the river bank and fishing with chemicals in them are all strictly prohibited, as well as fetching water and farming near them on non-specific days, and fishing between the months of March and October in the smaller rivers.[73]

Like Sekyere regulations of waterbodies, many waterways and swamps in the Gambia were protected with similar veneration and regulations. For instance, while the Dankunku Island was not cultivated, the swamps along it were cultivated with much reverence. According to oral tradition, a *jinn* named Maimuna grew up among humans in Dankunku town. When she reached adulthood, she returned to her kin in the Dankunku Island (locally referred to as Mbulumanoo). The jinn spirit, Maimuna, had protected the town of Dankunku for many years from both visible and invisible enemies. She also vowed that until the end of time, no native of Dankunuku would ever drown in a waterbody. Consequently, Dankunku Island was received with much respect and the swamps along it were cultivated with much reverence in honor of Maimuna. Often, if a

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[72] Sarr, *Islam, Power and Dependency in the Gambia River Basin*,*90-91. and David* P. Gamble, *The North Bank of The Gambia: Places, People, and Population, The Nyoomi, Jookadu, and Badibu Districts*, unpublished Gambian Studies No. 38, (Brisbane: California, 1999), 12-13.
[73] De-Valera Botchway and Yaw Sarkodie Agyemang, "Indigenous Religious Environmentalism in Africa," Religion: A Scholarly Journal: Vol. 6 Environment (2012); 71.

group was to cultivate in the swamps, they must dedicate part of their food to Maimuna and her horde of jinns in the Island.[74] Tilling the swamps on Wednesdays was prohibited as it would cause pest infestation of crops, thus poor harvest. Fishing around the island was also prohibited. As Dankunku Island (or Mbulumanoo) provided visible and invisible protection to Dankunku, the river bank in the adjacent Sanjal was a site of prayers and rituals. My informant, Yusupha Ceesay, recalled that many years ago, an old man returned to the Mbulumanoo to fulfill the pledge he made many years ago when he sought prayers from the *jinns* of the island. According to Ceesay, this old man's wife had been barren for many years; he sought prayers and pledged that if his wishes were accepted, he would return to slaughter animal in honor of Maimuna. Thus, when his wife delivered, he returned to honor this pledge.[75]

As the Gambia River sat at the meeting point of the southern and northern Senegambia, it splits pure savanna from savanna-woodland. As a result, the rolling savanna country north of the Gambia River has progressively fewer trees until one encounters the Sahel, or marginally habitable desert edge near the Senegal River. In the South of the Gambia River, there are progressively more trees until one begins to encounter the galleried vegetation of tropical rainforest. The expanse of tall grasses and scrubs, open woodland, trees and thorns, anthills and stalking animals formed the agricultural land the Wolof called the *Jeeri*. The landscape of the *Jeeri* opposes the mashes, mangrove swamps and estuaries along the banks of the Gambia River.[76]

The major economic activity in the *jeeri* was agriculture. Before the mid-nineteenth century, the main agricultural activity in the Jeeri was grain cultivation, but the imposition of colonial rule with its taxation and fiscal policies compelled men to cultivate peanut to meet the financial demands of the colonial government, and the women concentrated on rice cultivation. Most of the scholarship on the Gambia describe how peanut cultivation led to the destruction of the forest cover in the *Jeeri*. For instance,

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[74] Interview with Jaliba Kuyateh at his Brikama residence, 31st May 2017
[75] Interview with Yusupha Ceesay, Kanni-Kunda Tenda, 16th May 2017
[76] Donald R. Wright, *The World and a Very Small Place in Africa, (London: M.E Sharpe Inc 1997), 41.* & Sarr, *Islam, Power and Dependency in the Gambia River Basin*, 19.

Donald Wright and Assan Sarr's works show how the spiritual veneration protected the sacred lands of the Gambia. According to Wright, before the twentieth century, the expanding peanut economy encouraged more people to come to Niumi and clear more land to grow peanut. He adds that the whole of central core of Niumi State was covered in forest, most of which "Niumi's Mandinka inhabitants knew a good half of the 400-square-mile area as "the bad devil place," a region where jinns or evil spirits ruined the lives of anyone attempting to settle there."[77] Sarr explains how Muslim clerics and mystics used their spiritual powers to defeat spirits in much of the Gambia's uncultivated lands kept and perceived as devils' abode. This thesis draws new perspectives to the encroachment of spirit lands in the *Jeeri* by local clerics, mystics and peanut farmers.

While the indigenous beliefs in the *jinns* and evils spirits preserved most of the forest covers in the *Jeeri*, the emerging ideas of colonial conservation and capitalist exploitation of resources contradicted these local beliefs. In addition to the search for more land for expanding peanut farms, the former spirit lands were encroached upon because the new forest and wildlife parks compelled many people to look for new farmlands. The forest parks created during colonial rule also terminated the fallow periods of farmlands, and this destroyed fertility of farmlands across the Gambia. In Dumbuto, Kiang District, for instance, the farmlands in the Taabanding Jellebali and Soto Jamba Wuleng were never cultivated because it was believed that malevolent jinns and spirits resided there. According to oral sources, in the past all those who attempted to cultivate these farmlands died within a fortnight. For Soto Jamba Wuleng, it was so venerated that the community only gathered for rain calling or if they were to curse someone. My informant, Lamin Darboe explains that in 1900, when the two British travelling commissioners, Messrs. J.H Ozanne and Cecil Sitwell and their entourage were ambushed and killed in nearby Sankandi, the people of Dumbuto aided the fugitives and some of them sought refuge there. Unbeknown to the community, someone among them informed the British, thus seventy people were killed and Dumbuto was destroyed in the subsequent British punitive expedition the following year. According to Darboe, the

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[77] Wright, *The World and a Very Small Place in Africa*, 43.

defenseless population sought refuge in Soto Jamba Wuleng grove and cursed the British informant in their midst. He said the informant was eventually afflicted with a bad disease and the entire generation of his family later died. However, when the colonial Forestry Committee established three wildlife parks called Faba, Brikama, and Mutaro Forestry Parks around Dumbuto, the community was forced to encroach upon its sacred sites, as the Forestry Committee seized their farms and rice fields.[78]

Because of the Gambia's erratic rainfall pattern, the communities embarked on rain calling rituals to compensate for the poor rainfall. The rain falls within about five months, from June through October. During rainy season, men and women cultivate food for their families, but Gambian farmers often bore continual drought during rainy season.[79] Like the Chisumpli cult of the Chewa in Malawi, the Gambian communities performed rain-calling rituals during rainy season's continual drought. According to Ellis Parrinder, the spirit wife who headed the Chisumpli cult regulates the environment in two main ways: she presided over annual rain-calling ceremonies and controlled the natural resources found around her shrine. She used rituals to bring rain in sufficient quantities, usually to support agricultural production, to end droughts, and to drive rain away in the case of overabundance of water.[80]

Among the *soninke* (non-Muslim) Mandinka communities of Niamina, rain-calling ritual was an important aspect of the communities' interaction with the environment. In the sacred swamp of *lee-malibali* (literary, "swamp without shame") a rain calling ceremony was performed to bring needed rain. The communities came together and cooked a great quantity of food that may amount to even hundred calabashes full. Members of the community carried the food to the open swamps, accompanied by drumming. When the food was eaten, everyone must take off their clothes, and danced naked after stating their wish for more rains, and the crowd returned to the village

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[78] Interview with Lamin K. Darboe, Headmaster Dumbuto Lower Basic School, at his residence in Dumbuto, Kiang West District, 28th May 2017. I also had an extensive discussion with Mr. Lamin K. Jammeh, a native Dumbuto and Vice Principal of Sankandi-Niorro Jattaba SS School at his office in Niorro, LRR, 26th May 2017.
[79] Ibid., 43. and Sarr, *Islam, Power and Dependency in the Gambia River Basin*, 21.
[80] Ellis Geoffrey Parrinder, *African Traditional Religion*, (Westport, CT: Greenwood, 1976), 16 &71.

dancing naked. Before reaching the town, often, heavy rain fell.[81] According to Jacob Olupona, by ritualizing natural events and raising the ontological status of ecological features and natural resources to the supernatural realm, implicit cultural and spiritual value is added to the environment, while believers are called to preserve, maintain, and respect important natural features in that environment.[82] Similarly, in Niamina, it was believed that desecration of *lee-malibali* and adjacent forest would be met with furious punishment from the spirits. Like the Chisumpli, the Mandinka of Niamina protected the environment surrounding *lee-malibali* and the adjacent *Wulufa Konko* sacred forest.[83]

The Sacred Sites and Indigenous Resource Management

The scholars of Senegambia have established an important relationship between many communities and the environment. Most of them have emphasized a pattern of relationship that sacred shrines and forests were at the center of both social and political organization. Yet, with a new perspective, this chapter draws attention to the roles sacred sites played in resource management. Even after penetration of Islam and colonial rule, many communities in the Senegambian region continued to practice a common two-tiered religious belief patterns in which the Supreme God was linked to the heaven and localized spirit shrines or forests. The worship and rituals at the spirit shrines and forests took place in many communities in the Gambia until independence in 1965. The sacred groves, forests and pools, and shrines were frequently owned or controlled by specific communities and specialists; all of them performed different functions and socio-political outcomes across the region.[84]

In his influential study, Robert Baum provides the structure of the Jola traditional religion as a complex tradition or path that focused on the relationship between the people and *Emitai* (the Supreme Being), and the spirit shrines served as intermediaries

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[81] David P. Gamble, The South Bank of The Gambia: Places, People, and Population, Nyaamina, Jaara, and Kiyang Districts, unpublished Gambian Studies No. 31, (Brisbane: California, 1996,), 16.
[82] Jacob Olupona, "Religion and Ecology in African Culture and Society," ed. Roger S. Gottlieb, (NY: Oxford UP, 2006), 190.
[83] Gamble, The South Bank of The Gambia: Places, People, and Population, Nyaamina, Jaara, and Kiyang Districts, 16.
[84] James F. Searing, "'No Kings, No Lords, No Slaves': Ethnicity and Religion Among the Serer-Safen of Western Bawol, 1700-1914," *The Journal of African History*, Vol. 43, No. 3 (2002); 421.

between the people and *Emitai*.[85] Although his study is on the Jola of Southern Senegal, similar religious belief existed among the Jola of the Gambia. The *Karengak* (the sacred forest) was the intersection of the inhabited human realm, the spirit world, and the power of nature among the Jola of the Gambia. At the *Karengak*, the deities can be communicated with, and if need be, their powers detrimental to humans can be placated, controlled, or appeased.[86] Like the shrines of Esalulu Baum studied, the Foni Jola shrines were directly linked to *Emitai* (supreme being) because they were created in response to his revelations. Other spirit shrines belonged to individual families, and they represented spiritual forces with a separate existence. For instance, each clan in Foni Jifanka had its own shrine. When a child was born among the Jimbangsial, Kanachi, Jiramba, or Kalefechi clan, he was entrusted to a tree or a forest. The spirits of that forest will now be obliged to protect that child, his compound, and clan, and the families and communities in turn were obliged to conserve the forest sacred to their clans, families or communities.[87]

Unlike the Serer-Safen, the spirit shrines did not define a political community of the Jola. James Searing recognizes the village *xerem* (sacred grove) as the source of social cohesion within the village and the surrounding villages. The *xerem* was seen in religious rather than political terms, and it was the source of political authority and dispensation of justice. While the *boroom-xerem* (the master of the shrine) was both the spiritual leader and the war chief, the shrine's power in protecting the village from outside incursion was more vital than human military efforts.[88] Among the Foni Jola, not every family had access to *Karengak* (sacred forest), but most of the political decisions were taken there, and more importantly, it was the site of initiation. Any decision taken in the *Karengak* was a guarded secret between life and death, when divulged, it often led to

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[85] Robert M. Baum, *Shrines of Slave Trade: Diola Religion and Society in Precolonial Senegambia,* (NY: Oxford UP,1999), 25-27.
[86] Interview with Yunus Gibba, Lecturer Gambia College. Mr Gibba is a native of Jifanka. I have had numerous conversations with him in May and June of 2017. I have had discussions with Mr. Landing Nyassi, a student at the University of The Gambia and he is a native of Foni Sitannonku. 16th May 2017.
[87] Ibid.
[88] James F. Searing, "'No Kings, No Lords, No Slaves': 418.

death.[89] Apart from shrines, families had their own fetishes or idols mainly in a form of statues, group of objects, large trees or sacred groves that marked the family's origin. As a rule, all the related Jola settlements or even unrelated settlements sometimes came together during ceremonies and joined forces in defence of their territories. In each case, a temporary leader called *kanda* was selected, but he must be *fukoff fumanman* (someone with second sight) and approved by the spirits of the *karengak.*[90]

The Jola religious beliefs compelled them to respect and preserve the environemnt. Like Okot P'Bitek describes how ritual customs around shrines preserve natural spaces in Uganda, the *karengak*, the family shrines and trees similarly protected environment in Foni. In his study of the shrines of Central Luo Chiefdom in Uganda, P'Bitek explains that the "immense forest trees" around Jok Rukidi, one of the shrines in Central Luo Chiefdom was because of its sacredness. He shows that much of the forest outside the shrine had been cut down for building and other materials, due to some local land-use practices, or to clear land for farming and grazing, but not near Jok Rukidi.[91] Among the Jola of the Gambia, the communities must protect *Karengak*, shrines, and sacred trees at all cost. All my informants in Foni agreed that, if the *Karengak* and the houses of their ancestors caught fire simultaneously, they would rescue the sacred forest and leave their houses to burn, because the sacred forests controlled their being as humans. More importantly, to protect the sacred forest prevent a general spiritual punishment, which is often affliction with serious diseases and death in many cases. Even if there was a need to clear some parts of the sacred forest, this must undergo a lengthy process of rituals to please the spirits, and the neighboring settlements were consulted, and the communities come together to build fire belts to protect other parts of the forest. Another important reason why the sacred forest was protected was the presence of the *Kawumak* (human representation in animal form). In the Jola cosmology, *Kawumak* resided in the *karengak* (the sacred forest). In an event of fire outbreak or death of an

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[89] *Interview with Yunus Gibba and Landing Nyassi*
[90] Ibid.
[91] Okot P'Bitek, *Religion of the Central Luo,* (Kampala: Uganda Literature Bureau, 1980), 59-60.

animal in the forest, the Jola believe, it would eventually lead to the death of their human representation at home. [92]

Deidre Badejo believes the ritualization of the environment moved it into the realm of the sacred. His study of the Osun Grove in Osogbo, Nigeria, shows an example of the ritualization of the environment, which is commonplace in African traditional religions. Badejo shows that ritualization not only function to conserve the environment, the environment provides the avenues when the essence of rituals in African religion is realized. Nature necessarily plays an important role in religious ritual and spirituality because of the African traditional religion functions in the natural environment and in people's lives.[93] Similarly, for the Jola every tree, every forest and every object in the environment is sacred and would respond when worshipped. A reason for protecting and sustaining big trees in the Jola communities was to invite spirits and *jinns* to dwell among them, to protect the community and share their assets and spiritual powers with them. Outsiders were often amazed at the extreme dexterity of Bukarabu drummers (the Jola ensemble of three to four drums with one player), or skills of the Jola flute players, hunters and even thieves. The Jola believed they were gifted skills from the spirits of the forest.[94]

The centralized communities of the Senegambia region also show the persistence of shrines even after conversion to Islam. James Searing gives an example of Mpaal, a strictly Muslim Wolof village in Northern Senegal. It was governed by a Muslim cleric when monarchy was weak in the mid-nineteenth century, and Mpaal's Muslim community protected itself with firearms and prayers to Allah, as well as the spirits from the village shrine. The villagers made offerings to spirits at the shrine, and the protecting spirit *Maam Kantaar* produced rain in times of need, and showered Mpaal's enemies with "burning coals and flames" during danger. Searing aptly compares this to the non-Muslim decentralized Serer-Safen setting of Bawol, the *Borom-Xeerem* (guardian of the shrine)

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[92] Interview with Yunus Gibba and Landing Nyassi
[93] Deidre Badejo, *Osun Seegesi: The Elegant Deity of Wealth, Power, and Feminity,* (Trenton, NJ: Africa World Press, 1996,), xi-xiv.
[94] Interview with Yunus Gibba and Landing Nyassi

among Serer Safen to the Muslim leader (*Serin*) of Mpaal.[95] This interestingly parallels the roles of shrines and sacred groves in Muslim dominated centralized communities in the Gambia. Sanementereng in Brufut, Kombo District, perhaps attracted more prayer seekers than any shrine in the Gambia. Though presumably pre-Islamic, the beliefs associated with Sanementereng had been to some extent adapted to Islam. According to tradition, a hunter from Brufut found an old man praying at the site. He (the old man) invited the hunter to a prayer, after which he told him whatever one prays for in that vicinity, his prayer would be answered. The legend has it that the resident jinns of Sanimentereng appear in human form, tall, and often dress in white. Pilgrims to Sanementereng were led by an elder from Sanno Kunda in Brufut town and alms were placed at the foot of the massive baobab tree standing at the foot of the sacred forest.[96]

The study of rituals at the shrines in Sanementereng draws parallels to what David Robinson calls the Africanization of Islam. In *Muslim Societies in African History*, Robinson argues that African societies had adopted Islam gradually and differently, and each society adapted Islamic practices to African realities on the ground just like what happened to every religious persuasion in any society in the world.[97] Similarly, in the Gambia, pre-Islamic shrines and rituals were often transformed and given Islamic aura and identity. In addition to revealing the persistence of pre-Islamic beliefs and rituals in the practices of the Muslims of Senegambia, the rituals at Sanementereng provided important protection and conservation for forest and wildlife around it. It was strictly prohibited to hunt and cut or clear forest around Sanementereng because of the fear of the vengeance of the spirits in its abode. The locals of Brufut would often narrate the revenge of the spirits of Sanementereng on the allied soldiers stationed in neighboring Bakau during World War II. The soldiers who were on training were warned about the sanctity of the Sanementereng forest but refused to heed. While those who left their initials on the baobab tree were said to have been punished by the spirits at night, the soldier who wrote

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[95] Searing, "'No Kings, No Lords, No Slaves'; 422.
[96] Baba Ceesay and Hassoum Ceesay, *A Guide to the Monuments and Cultural Heritage Sites of The Gambia, unpublished* (National Center for Arts and Culture, 2012), 43.
[97] David Robinson, *Muslim Societies in African History*, (NY: Cambridge UP, 2004), 44-45.

"Scotland for Ever" was said to have died soon after. I haven't seen any record of such events in the Gambia's World War II records, but this explains how the people in Brufut and Kombo in general venerated Sanementereng and conserved its resources.[98]

The colonial Forestry Committee established over twelve forest parks in Foni and Kombo Province, drawing the communities' attention from the sacred sites they had preserved for many years. Although the *karengaks* of Foni, sacred forests and pools in Kombo such as Sanenmentereng, Katchikally, and Folong-ko remained intact until independence, they were often under constant threat of encroachment, urbanization and commodification.

Paul Simmon's study of the Bandyaranke of Senegal gives a vivid description of how human-nature totemic relationship conserved wildlife. [99] The Badyaranke society is organized into at least twenty-six *catyi* (matrilineal descent groups) referred to as matrisibs. Most of the matrisibs possess animal totems, referred to as "my mother's brother," which are never killed or eaten by the respective members, but otherwise serve no further manifest purpose. Most matrisibs are allied with other matrisibs to form exogamous pairs, and of such pairs, their members observe the same totemic taboos.[100] In Senegambia, familial relationship was achieved through *yele* (blood) and *dendeh* (cordial relationship through support of one another, good neighborliness, or friendship), and totemic animals were seen as *dendeh* relatives, much as De-Valera Botchway and Yaw Agyemang describe totemic affinity as spiritual, not physical, between the animal and a particular clan of the community, sometimes historical favors or precedents between clans and their totemic animals, or certain qualities of the animal the clan admires and adopts as a totem.[101]

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[98] David P. Gamble, "The South Bank of The Gambia: Places, People, and Population, The Kombo Districts," unpublished Gambian Studies No. 51, (Brisbane: California, 2006), 60-61.
[99] Bandyaranke are small ethnic community found in Senegambia, and they are often referred to as "Pajadinca" by Mande and Fulbe speakers of Senegambia.
[100] Paul Simmons, *Eyes of The Night: Witchcraft among a Senegalese People,* (Boston: Brown and Company Inc.,1971), 14.
[101] Botchway and Agyemang, "Indigenous Religious Environmentalism in Africa"; 69.

In his travel accounts, Dr. Raçon, the eighteenth century French explorer of the interior of Senegambia, relates his surprise when the chief of Dikhoy, a village near the Gambia River describes a bird as his brother. He narrates that, while his servant was playing with a small bird, "a kind of pretty sparrow which he had caught that morning on the march," the chief of the neighboring village begged for the bird to be freed. [102] The chief explained to Dr Raçon that once the ancestor of the Sidibe clan was out hunting elephants, he lost his way and was dying of thirst, suddenly one of these little birds led him to a stream of water. Since then, birds have been relations to the entire Sidibeh clan. The Keitas are relations of the hippopotamus because their ancestor, Sundiata Keita, according to the tradition, was once turned into a hippopotamus while he was bathing at Koulicoro.[103]

In some totemic relations, members of the clan could be afflicted with diseases when they harm or eat the flesh of their totems. The Fulbeh of the Gambia are divided into clans called *bulenda.* Each clan abstains from eating animals of a certain species. Thus, the Baldehs, Bandehs, and Bahs may not eat *gerral* (guinea-fowl). They believe that, to eat the flesh of *gerral* would cause a severe disease of the skin. The Suso or Sussoko clan among the Mandinka would not harm or eat the flesh of *sa'a* (snake). According to tradition, the ancestor of the Suso or Sussoko clan descended from the seventh egg of a snake. The Njai clan is found among most of the ethnic groups of Senegambia. Their totem is *gaindẽ (*lion) because of their admiration of lion's ferocity, courage and royalty. According to tradition, the Njai clan adopted lion as a totem when they ruled the pre-colonial Jolof Empire. [104] The human affinity with nature is further seen in totemic representation in all the Gambian communities. Many Gambian communities retained their strong sense of relationship to their totemic animals even after penetration of Islam. They will neither injure or would allow to be injured. The totemic relations demised over time as the society's attention was drawn to wildlife parks and the

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[102] Sir John Frazer, *Totemism and exogamy: a treatise on certain early forms of superstition and society, vol. III* (London: Dawson Pall Mall, 1968), 544-545.
[103] Ibid.
[104] In a personal discussion with Saiba Suso, Samba Bah and Musa Dampha. They are all students here at Ohio University. They narrated their family's totem to me.

responsibilities of protecting animals was seen as the roles of the salaried rangers at the established parks.

Rites of Passage and Indigenous Resource Management

The natural environment played an important part of rituals that accompanied every stage of person's life in Gambian communities. The spirituality and mystery to be found in the environment helped in transition to life stages of birth, adulthood, and death in Gambian communities, and the religious veneration helped to protect the environment. Until recently, almost every Gambian went through these three life stages, in fact, Jacob Olupona suggests that the religious traditions and ritual practices surround events that happen in everyday life of Africans. He argues that the birth of a child, transition to adulthood, marriage, and death were the most prominent and ubiquitous kinds of life events that were celebrated with religious rituals in Africa. Rituals associated with these significant life stages, he adds, often contained aspects of both communal and personal ritual, and the environment was central and gave meaning to them.[105]

In the Gambia, the environment played important roles in ensuring childbirth and child protection. Rituals at shrines, sacred groves and forests had always rendered natal services to mothers and their children. In case of infertility or a difficulty in delivery, the community often sought the powers of the wilderness spirits, spirits of the shrines or sacred groves to correct the anomaly. For instance, in Kiang, the Mandinka performed a ritual called *dimba tulungo* (literary means "the mother's play") when there was an outbreak of child disease, or for a barren woman in search of cure. This was a ritual-feast to entertain the spirits whose powers could cure all the diseases and endow mothers with babies. During this feast, enough rice was cooked without condiment. All the women in the community who had children would dress "in very dirty rags, some in sacks, and wearing beads of empty tomato tins."[106] Members of the caste and slave descent dressed half-naked. When the older women blessed the food in the name of the spirits, they would eat, dance, and beg the spirits to either cure the disease, or bless the childless

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[105] Olupona, *Religion and Ecology in African Culture and Society*, 274.
[106] A.K. Rahman, "dimba tulung," in David P. Gamble, *Mandinka Ceremo*nies, unpublished Gambian Studies No. 34, (Brisbane: California, 1998), 98-99.

woman with a child. Islam and colonial rule had significantly transformed the belief systems and diagnosis of illnesses, as most of non-Muslim and pre-colonial reproductive difficulties were diagnosed as *kuntofengo (bareness caused by spirits)* resulting from the interaction between the human and the spirit realms. The *kuntufengo kalpato* (potent ailment for kuntofengo) was feasts (such as dimba tulung) in honor of spirits, or sometimes through herbal cure. But Islamization and colonial rule changed the diagnosis as well as biomedical cure for bareness. David Gamble believes Kanyeleng-*ya* (being a Keneleng) superseded *dimba tulung*.[107] *Kanyeleng* is a woman who cannot bear a child or whose children die at an early age. In the Senegambia region, childless women formed a *Kanyeleng* group to "appropriate, domesticate and own particular space through rituals in order to cope with the challenge of childlessness."[108]

Although little is known about *dimba tulung*, *Kanyeleng-ya* has been well studied. Historian Bala Saho highlights Kanyeleng women's ritual and their spiritual understanding of their public health nightmare, but new perspectives can be drawn in childbirth rituals and community's relationship with the ecology. The *Kanyeleng-ya*, *dimba tulung*, and the rituals childless mothers embarked upon at the sacred pools around the Gambia reinforces the spiritual relationship between human society (*deck*) and the surrounding environment (*all-a*). In addition to *dimba tulung* and Kanyeleng-ya rituals, the crocodile pools in Katchikally in Bakau, and Folongko in Kartong, and Berending crocodile pools were important sites the spirits of the environment heard and responded to the cries of the childless mothers. The crocodiles in the sacred pools and the surrounding forests were jealously guarded and conserved. As were the customs for the mothers to name their children for the sacred sites visited and were blessed, the number of people named for these sacred sites highlight their importance to the Gambian society, thus, names such as Katchically, Folongko, and Nyunka (grove). The *Kanyeleng* were naturally addicted to outrageous names such as Suntukung (dumpsite), Kenbugul (no one

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[107] David P. Gamble, *Mandinka Ceremo*nies, unpublished Gambian Studies No. 34, (Brisbane: California, 1998), 98-99.
[108] Bala Saho, "Ritualizing and Domesticating Space: Kaneleng Women Coping with Childlessness in the Gambia," *Mande studies*, 14 (2012), 100-101.

wants), Nyamokono (in wilderness), Terenman (surprise), or animals such as Wonto (giraffe), and Sulu (hyena). It was believed that if a child was named for anything within the surrounding environment, the resident spirits of that environment were pleased, therefore protected the child to adulthood.[109]

In Gambian communities, the ecology played an important role in circumcision and initiation ceremonies which were held during pubescent stages of the youths. Peter Mark's study of *bukut* (Jola initiation) in Southern Senegal shows it "as a powerful instrument of socialization and moral education," in which the period of seclusion and instruction was often an effective catalyst and protector of the Jola culture and identity.[110] Generally, initiation tied youths to their communities, culture, history and tradition as well as their responsibilities as members of their communities. During seclusion and instruction in the bush, the initiates were taught about the secrets of marriage and raising a family, as marriage and procreation were expected to be one of their major contributions to the community.[111]

The most important feature of initiation was the seclusion from the community and closeness to the spirits of ancestors. Often, in a period of several weeks and months, the initiates were kept in the natural space, such as groves, under big trees, forest or grassland, where the youths can be in closer contact with the invisible spirits of their ancestors and the forest. The male initiation took longer time of seclusion in a sacred forest, under a sacred tree or in a grove. A.K Rahman's accounts of male initiation ceremonies in Kiang and Baddibu in the 1940s and 50s describe that the initiates entrusted themselves to the spirits of big trees in the surrounding forest. In Foni, according to oral accounts, the sacred forest (*karengak*) was the main custodian of male initiation. Every village had its own sacred forest, and sometimes even wards and

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[109] I discussed the idea of naming and why *kanelleng* name children after environment with many informants. Interview with Lamin K. Darboe, Headmaster Dumbuto Lower Basic School, at his residence in Dumbuto, Kiang West District, 28th May 2017. Interview with Jaliba Kuyateh, at his Brikama residence, 31st May 2017.

[110] Peter Mark, *The Wild Bull and The Sacred Forest: Form, Meaning, and Change in Senegambian Initiation Masks*, (NY: Cambridge UP, 1992), 48-49.

[111] Ferdinand de Jong, *Masquerade of Modernity, 110-113.*

families had their own forests. As a rule, entry into initiation forest was limited to initiates and graduates of initiation.[112] The initiation sites and forests throughout Senegambia remained untouched for generations. In any case, the sites of initiation were remembered by each initiation badge of any generation, as these sites were reminders of their transition to adulthood. Many graduates from initiation schools remained grateful to the spirits of those sacred sites they were initiated in and continued to honor the taboos regarding utilizing forest products of those sites.[113]

Female initiation in Senegambia has been well studied, but still misunderstood. Most of the scholarship conflates initiation with clitoridectomy. While clitoridectomy was an important aspect of female initiation in the Gambia, its main purpose to the communities was the transition from childhood to adulthood. The rituals done during rites of passage prepared women spiritually to become mothers and in practical terms they were taught about marriage and raising a family. Other important lessons they were taught were sexual intercourse and reproductive health in general. The male initiates were taught to be respectful, obedient, to keep secret, to be loyal to their community, and were prepared to face danger to protect their families and the community.[114]

Another rite of passage in the Gambia that shows relationship between the society and ecology was death. One of the most important rituals for the dead in Gambian communities was burial signifying a return to earth where all humans come from. As the abode of the dead, the cemeteries, grave yards, and shrines dedicated to the dead ancestors must never be disturbed or desecrated, consequently, they were conserved with much veneration. For instance, among the Jola of Foni, the ancestors who passed away are living in *Esuneh* (the world of the ancestors), a special place where they are connected to the world. The Jola believed that, while the body returns to the earth, the spirits or soul remains as a presence in the lives of individuals. Despite *esuneh* generally

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[112] David P. Gamble, Mandinka Ceremonies, unpublished Gambian Studies No. 34, (Brisbane: California, 1998), 18-33, 34-40.
[113] My informants in Foni give a good insight into the sacred forest, its role during bukut and after. Landing Nyassi, Yunuss Gibba, and Seyfo Ebou Kolley of Bondali all explained the circumcision sites are protected.
[114] Ibid.

conceived as a sphere beyond the realm of the living, the *emiteih ewunowon* (individuals with second sight) could reach there and see their ancestors. Often, these individuals with second sight interpreted the likes and dislikes of the ancestors to the living relatives. For the ordinary people, the resting places of the departed were avoided and respected; the land must not be tilled, trees must not be cut there, gun shots must not disturb resting ancestors, and hunting at grave yards would receive vengeance from the departed ancestors.[115]

The Stratified Society and Utilization of Forest Resources

Perhaps the biggest attempt to conserve the environment in the Gambia was the stratification of the society. Most communities were stratified into social groups; nobles, freeborn, artisans and slaves, and the access and utilization of natural resources were also stratified. The third strata of the social structure, *nyamalolu* (artisans) included the blacksmiths (*numulu*), leather workers (*karankelu*), and bards (*jalolu*). These were endogamous cluster of clans that offered technical services to the rest of the society and a great skill was associated with each trade. Members of each clan were believed to have inherited arcane spiritual knowledge, but the most feared of them were the blacksmiths.[116]

The hunters were another set of professionals that exploited the forest resources more than ordinary members of the society. Although hunting is a non-endogamous profession, entry into hunting guild remained limited to few outstanding individuals because of the peculiar spiritual demands and beliefs associated with it. According to hunter-griot Bakary Kamara, "The hunter's world is a strange world where the lines between human beings and the great animals are shadowy and fluid. Man becomes animal, animal becomes man, and each possess similar spiritual and mental qualities."[117] When Mande expansion began in the thirteenth century, the hunters and the blacksmiths led the way. While the great Mande armies were formulated from among hunters, the

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[115] Interview with Nyakassi Gibba, and Landing Nyassi

[116] Patrick R. McNaughton, *The Blacksmiths: Knowledge, Power, and Art in West Africa,* (Bloomington and Indianapolis: Indiana UP, 1988), 3.

[117] Bakari Kamara, *Two Hunting tales of Senegambia,* ed. Daphine S. Goering, (Oral History and Antiquities Division, 1979), 2-4.

Mande blacksmiths armed them. In most Senegambian societies, hunters and blacksmiths' occult powers were relied upon to tame malicious spirits in the forests.[118]

Because Gambian society generally considered the forest as the place of extreme darkness (*dibi),* only people with occult powers can exploit some resources *without any negative* repercussion. Darkness or the night was the metaphor for the forest because of its total obscurity, ambiguity, and potentially a dangerous place submerged in sorcery and malevolent evil.[119] The animals and the trees in the forests were also believed to have possessed *nyamoo* (a spiritual protective force), which "animals have more than plants; greater animals have more than lesser animals; man has more than animals; greater men have more than lesser men; and various spirits have more than greater men."[120] The difference and potency of power of *nyamoo* between some species remained blurred. Sometimes larger animals like hippopotamus, crocodiles, or lions' *nyamoo* was more potent than lesser men, but less than greater men like rulers, warriors, and hunters.[121] In addition to the protective force of animals and plants, malevolent and capricious supernatural creatures called *jine* (the wilderness spirits) also dwelled the bush. One must possess much personal power and know the appropriate placating rituals to hunt certain animals or cut certain trees in the forest, or you must be initiated into a life term apprenticeship in artisanship or hunting guild in order to exploit forest resources more than the ordinary members of the community.[122]

During many years of training, the apprentices learnt *dalilu* (a recipe for protection in the bush) in order to extend the exploitation of the forest resource beyond ordinary people, probably to the level of hunters and blacksmiths. Almost all the living things were believed to have useful parts that can be detached and combined with other parts from other living things that can be served as protection. This protection can be plant parts *jambo (*leaves*), sulo (*roots*), fato (*bark) that can cure diseases and afflictions,

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[118] George E. Brooks, *Landlords and Strangers: Ecology, Society, and Trade in Western Africa, 1000 - 1630,* (Boulder: Westview Press, 1993), 46-47.
[119] Patrick R. McNaughton, "The Shirts The Mande Hunters Wear," *African Arts 15 (3):* 91.
[120] Bakari Kamara, *Two Hunting tales of Senegambia: 3-4.*
[121] Ibid.
[122] Patrick R. McNaughton, "The Shirts The Mande Hunters Wear": 56.

and the combination of plant and animal parts could serve as protection in a form of *safo* (amulet). In the apprenticeship process or even after, the hunters and the *nyamalolu* needed *sabo* (spiritual incantation) for protection, and they could only get this from their *karamo* (master) through lengthy years of apprenticeship.[123]

The *nyamalolu* clans were endogamous and were believed to have inherited special spiritual powers, but they underwent many years of apprenticeship to turn novices into professionals. In fact, the *nyamalolu* were very protective of their spiritual powers, because that made them different from the rest of the population and could not be accessed by members of other social groups. Hunter societies throughout the Gambia and the Mande world were non-endogamous, therefore, apprenticeship was necessary in order to exploit some forest resources. Novice hunters were taught by *Karamo* (master) who were often older members of the profession. They taught them how to get by in the bush, how to identify danger and how to work around it. Ultimately, for them the bush does not become benign, but it does become manageable. By extension it becomes a natural resource to which few other human beings, artisan class and the hunters have recourse to exploit to their own good.[124] The colonial conservation and agricultural activities changed the local norms of forest exploitation.

Conclusion

This chapter gives another important dimension of land use and local ideas or perceptions of forest that are yet to be explained by Sarr, Carney, Baum or Wright. It shows that veneration of ancestors and nature spirits that animate the natural environment and totemic beliefs preserved the forest cover and wildlife of the Gambia. It established that the Gambia's major geographic features such as the islands, creeks, and swamps represented a cultural and religious symbol to the communities which protected them from human encroachment and exploitation. The ritualization of shrines and sacred forests during rites of passage such as childbirth, initiation and death conserved the surrounding flora and fauna. This chapter finally shows that the stratified social structure

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[123] Interview with Lamin K. Darboe, Dumbuto Village.
[124] Ibid.

of the Gambian communities balanced the competing interests in the exploitation of forest resources.

Whiles notion of sacredness and the role sacredness plays in conservation generate a fierce academic debate, this chapter agrees that many Gambian communities knew and appreciated conservation results, but they did not necessarily work for them. It emphasizes that the access and use had been mitigated by religious practices, customs and totemic values, and the communities' motivation had been to guarantee human access to nature. Contrary to the indigenous exploitation of resource management strategies was the colonial conservation models instituted in the Gambia in 1938, which had led to the development of nature conservation areas as zones cleared of all human influence and settlement, with highly restricted access to resources.

CHAPTER 2: COLONIAL CONSERVATION AND CONTROL IN THE GAMBIA

Introduction

The first serious step in forest and wildlife conservation in the Gambia was taken in 1936 when D. R. Rosevear, then Senior Assistant Conservator of Forests, Nigeria visited and reported on the forest resources of the Protectorate of the Gambia. D. R. Rosevear's visit was followed by an appointment of a Forestry Committee by the Gambia's colonial government in 1938, composed of E.W. Leach, the Senior Agricultural Superintendent as the Chairman, R.G. Biddulph, Commissioner Central Province, Sheikh Omar Faye, Bathurst politician and member of the Executive Council, and L.de V. Bottomley, the General Manager of the Bathurst branch of the United African Company Limited. The Forestry Department remained a branch of the Agricultural Department until 1952 because of lack of trained forestry personnel. The colonial administrators also believed that the joint venture of the two departments could restore the fertility of the soil by changing destructive African farming and resource utilization methods. [125]

The first report submitted by the Forestry Committee to the colonial government highlighted its objectives of forest and wildlife protection, and the main agenda of production and exploitation of the forest resources guided by the colonial economic principles. Although the outbreak of the Second World War prevented any serious reforestation action being taken, the Forestry Committee revised three important pieces of legislation that were supposed to protect the forest and wildlife of the Gambia.[126] The 1938 amendments called for aggressive enforcement of the 1893 Protectorate Public Lands Regulations Ordinance, the 1916 Wild Animals, Birds and Fish Preservation Ordinance, and the 1929 Bush Fowl Protection Regulation. In addition to these amendments, the District Authorities in all the provinces had made forestry regulation orders under the Native Authority Ordinance of 1933. These regulations were in a form of proclamations pronounced by the chiefs, and 1938 were also amended in. They

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[125] ARP 9/6 Report of the Forestry Committee Appointed by the Government, 1938-1940, NRS, Banjul, The Gambia
[126] Ibid.

enforced early burning and controlled bush burning in the dry season and during farm clearing. The Native Authority Ordinance also protected edible trees, palm trees and regulated palm wine tapping.[127]

Although the scholarship on the Gambia neglects colonial conservation, much has been written on the establishment of conservation areas in the colonial West Africa. Most of the scholarship highlights the establishment of forest and wildlife parks in the colonial West Africa as a form of colonial economic penetration, but some works discuss the local rejection of colonial conservation institutions and polices. For instance, Richard Grove and Toyin Falola examine the British colonial government's attempts to introduce forest conservation programs in its West African colonies. They assert that conservation in the Gold Coast and Nigeria was characterized by tensions between the indigenous power holders and the colonial government. Their analyses show that while the colonial state under the influence of the new conservation ideas attempted to assert firm environmental control and land-use planning, the indigenous leaders adjusted to the weaknesses of the colonial government, as in many successful instances appropriated and manipulated the colonial conservation agendas and mechanisms to their advantage. Grove and Falola argue that, unlike other parts of the British West Africa, colonial conservation was not used to control and restrict African subjects, rather, it was a western economic penetration into West African environment. Colonial conservation had significantly transformed the general pattern of land use but the utilization of forest resources was dictated more by the indigenous people than the colonial state. Grove and Falola's work concentrates on the Gold Coast and Nigeria between 1870 and 1916; conservation hadn't begun in the Gambia then.[128]

Scholars like Andrew Millington describes the establishment of the colonial conservation in West Africa as a form of restoration of soil fertility and forest cover destroyed by African farming methods. In Milington's study of environmental

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[127] CSO 2/1655, Forestry Control-Legislation under Protectorate Public Lands and Native Authority Ordinance 1938, NRS, Banjul, The Gambia

[128] Richard Grove and Toyin Falola, "Chiefs, Boundaries, and Sacred Woodlands: Early Nationalism and the Defeat of Colonial Conservationism in the Gold Coast and Nigeria, 1870-1916," African Economic History, No. 24 (1996): 1-3.

degradation, soil conservation and agricultural policies in Sierra Leone, he shows that early colonial surveys in the former British colony concurred on the causes of denudation on wasteful and reckless shifting cultivation of African farmers. This led to the formation of Sierra Leone Forestry Department in 1911. He shows that numerous soil conservation strategies were implemented in Sierra Leone by both the colonial and the independent governments but very few of these strategies implemented a particular mechanical or biological strategy; instead, they placed spatial and temporal restrictions on African agriculture and agricultural methods.[129] Unlike Millington, some authors think colonial conservation left a great legacy of resource management and exploitation for post-colonial African governments. Olusegun Areola notes that in the area of forest conservation, the colonial governments in West Africa set up coherent conservation policies that had lasting value for the independent African countries. For him, colonial forestry management had land and resource management as its core-objective and in this, it was clear that the objective was not to keep large areas unutilized, but to develop the resources in a "rational" manner. He argues that this was why the colonial governments reserved lands for lumbering, plantation forestry, and wildlife management.[130]

This chapter offers a new perspective on colonial conservation policies in Africa by drawing on local archival and oral sources to argue that the forest and wild life parks established in the Gambia and the policies that regulated them were forms of colonial hegemonic control over the Gambian people, their cultural and political spaces. The forestry and wildlife parks were guises for the establishment of scientific environmental knowledge, and they were means of state control over the Gambian environment. While economic interests were paramount, this chapter examines the effect of resources exploitation on local communities. It also discusses the establishment of the Forestry Committee and the amendment of the forestry regulations as well as the enforcement of the conservation regulations and the local response to them.

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[129] Andrew Millington, "Environmental degradation, soil conservation and agricultural policies in Sierra Leone, 1895 -1984," in *Conservation in Africa: people, policies and practice*, eds. David Anderson and Richard Grove, *(*New York: Cambridge UP, 1987): 229 -248.
[130] Olusegun Areola, "The political conservation in Nigeria," in *Conservation in Africa: people, policies and practice,* eds. David Anderson and Richard Grove, (New York: Cambridge UP, 1987): 277-292.

The British Colonial Rule in the Gambia

The British began administering the Gambia colony with the acquisition of Bathurst in 1816, and in the 1920s acquired the Ceded Mile and MacCarthy Island 190 miles upriver. Between 1821 and 1843 and 1866 and 1888 respectively, the Gambia colony was administered from Sierra Leone. By 1892, the border between the British (the Gambia) and French (Senegal) Colony had been delimited, and the following year the British administration in Bathurst was empowered to incorporate the hinterland of the Gambia, which consists of the land on the either side of the River Gambia, over four thousand square miles mainly inhabited by the Africans. The Protectorate was divided into two provinces, the south and the north banks, and the travelling commissioners were appointed, J.H. Ozanne for the North and Cecil Sitwel for the South Bank. By the 1930s, the Protectorate was divided into five provinces: Kombo and Foni, Central, MaCcarthy Island, North Bank, and Upper River provinces.[131]

The Gambia Yard Tax Ordinance passed in 1895 highlighted the fundamental issue that underlie the British colonization in the world; the colonies must pay for the cost of colonial administration and provide products needed in Britain. In order to maintain the upkeep of the colonial officials and instruments of oppression such as the police and the army, the Colonial Office in London often emphasized that the colonies must be self-sufficient, and their budgets must always be balanced. The Yard Tax Ordinance enabled the raising and collection of revenue in the Protectorate of the Gambia, where every owner or occupier of a yard that contains more than four huts would pay four shillings per annum and one shilling for any extra hut.[132] While pre-colonial Gambian farmers produced more food crops for consumption, taxation and many other colonial fiscal policies compelled them to cultivate peanut to meet the financial demands of the colonial government. The license for traders and tax on migrant farmers were other means of

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131 PUB 5/6, The Protectorate Ordinance, 1894, National Records Service, Banjul, The Gambia, & See Donald R. Wright, The world and a very small place in Africa: A history of Globalization in Niumi, The Gambia, (Armonk: M.E. Sharpe, 2004.), 178.

132 PUB 5/5, Protectorate Yard Tax Ordinance, National Records Service, Banjul, The Gambia

raising revenue.[133] Michael Crowder points out that the colonial fiscal demands led to upsurge of labor migration in colonial West Africa. The stricter taxation and labor code in the French Upper Volta forced many able-bodied men into migrant labor in cocoa plantations and mines in the Gold Coast, and similar colonial policies in the French and Portuguese colonies forced seasonal laborers to work on the peanut-producing lands of the Gambia.[134]

The Gambian people encountered colonial rule in many ways. While in many districts that had the experience of centralized power accepted the authority of the newly appointed colonial chiefs and their hierarchy of messengers, the colonial administration and its centralized administrative structure was new to the Jola of Foni District. There had not been traditional rulers and warrior chiefs among the Jola before colonial rule. Many of them rejected the colonial chieftaincy positions and boycotted the chiefs appointed from the mainly Mandinka ethnic group. While the Jola resistance to colonial rule was peaceful, there were instances of violent dissention to colonial rule in the Gambia. When the Travelling Commissioner Sitwell and his entourage were ambushed and murdered in Sankandi, the colonial administration used considerable force in 1901 to punish Sankandi and Dumbuto, and dissenters in other parts of the Protectorate.[135]

The British colonial policy that inspired the self-sufficiency of the colonies hindered development in the Gambia. In British West Africa, the development projects took place in the areas that were of interest to the economies of the colonial governments. In the Gambia, the colonial government's priorities were clear from the onset. The administration was preoccupied with roads, causeways and bridges, and the chiefs were under constant pressure to maintain them in order to facilitate the transportation of peanut from the hinterlands to the wharfs.[136] When the government spent £1 million on a

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[133] Webb 1992, p.555 & Carney 1993, p.333

[134] Michael Crowder, *West Africa Under Colonial Rule,* (Evanston: Northwestern UP, 1968), 274.

135 Sana Saidykhan, "The Invention of Chiefs Were There Were no Kings or Subjects: A Study of Chieftaincy in Foni, 1893-1923," unpublished master's thesis submitted to the University of The Gambia, (June 2014): 44.

[136] Donald R. Wright, "The Foundations of Modern Gambia: British Rule, 1816-1965," in *State and Society in The Gambia since Independence in 1965-2912,* eds. Abdoulaye Saine, Ebrima Ceesay and Ebrima Sall, (Trenton: Africa World Press, 2013), 7-8.

spectacular poultry scheme in 1948 to produce eggs for the English markets and thousands of pounds sterling on the fishery, rice, and peanut cultivation expansion schemes, there was only one hospital in the protectorate, the Bansang Hospital. It was built in 1938 and the entire North Bank Province only got a health center in 1951. The Royal Victoria Hospital had been built in Bathurst in 1854 but it served mostly the colony's expatriate European staff. The education system controlled by missionaries was as bad, with 400 pupils in three schools in the colony and one in the Protectorate. [137]

The Forestry Committee and the Conservation Policies in the Gambia

The British main colonial agenda of economic self-sufficiency of colonies and effective exploitation of resources to satisfy the needs of the metropolis engendered the colonial conservation policies and approaches in the Gambia. When the Forestry Committee was established in 1938, it utilized effective protective approaches to manage and control resourceful territories and restricted local communities from the resources and places they drew economic, cultural, and spiritual livelihoods. Colonial conservation policies enabled the British to exert further control over the social, cultural and economic spaces of Gambians.

The unequal power relations that characterized the nineteenth century colonial encounter in Africa influenced the asymmetrical colonial conservation policies. Severe denudation, inadequate and inefficient African resource management techniques were the rationale used by the colonial governments throughout Africa to justify their established conservation models. Consequently, the colonial conservation policies undermined the African resource management and conservation practices, and the European resource management based on scientific knowledge were instituted. For instance, the Native Authorities' forestry regulations which were used alongside colonial government's laws recognized some form of indigenous resource management and control methods, yet they emphasized the control and power of the colonial administrators. The Native Authorities' proclamations captured three main clauses in dealing with deliberate firing for hunting,

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[137] Bella Southorn, *The Gambia: The Story of the Groundnut Colony, (London: George Allen & Unwin Ltd,),* 220-221.

negligent or needless burning during farming, and farming in forest lands. Despite differences from district to district, all the proclamations respected indigenous farmlands, reserved forests, and other indigenous resource management practices. For example, the proclamation made in 1937 by Seni Bwiaji of Foni Bintang-Karenai District added additional clauses that gave the villages of Bulanjor, Jakoi Sibrik, Kandonko, and Bajacar rights to burn those portions of dense undergrowth between these settlements they were accustomed to burn for preventing leopards and other wild beasts from congregating.[138] The Forestry Committee in 1938 disregarded the indigenous elements in the chiefs' proclamations and the chiefs were not represented at the committee, nonetheless they became the critical force in the enforcement of the colonial forest and wildlife policies.

The Forestry Committee formed in the Gambia in 1938 represented the colonial agenda of economic exploitation. In its first report in 1938, the compilation of which the committee said was guided by economic principles, made recommendations in its objectives of afforestation and conservation. The committee projected about 1,000 square miles, including swamp areas, approximately 25 percent of the Colony and Protectorate, to be set aside as Forest Reserves. By 1954, only 4 percent of the total land surface was acquired, though 19 percent of the 25 per cent estimate was achieved by 1965.[139] In another major economic design, the committee projected to reserve the residual area of 3, 000 square miles which would permit the existing population to be self-supporting in agriculture, essentially in production of foodstuff and maintenance of quantity of peanut exported per working farmer.[140] They show forest development necessary in order to stabilize the population and restrict its movement, and to control shifting cultivation.[141]

In its ambitious economic plan, the Forestry Committee also sought to utilize the Gambia's geographic location to provide a limitless market for its fruit and forest

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[138] CSO 2/1655 Forestry Control Legislation under the Protectorate Lands and native Authority Ordinance, NRS, Banjul, The Gambia. See the1937 Proclamation under section 9 (f) and (a) and (p) of the Native Authority Ordinance 1933, by Seyfo Seni Bwiaji, Chief Foni Bintang-Karenai, Kassan Town.
[139] ARP 9/ Fifth Annual Report of The Forestry Adviser, the Gambia, 1954, NRS, Banjul, The Gambia.
[140] ARP 9/6 Report of the Forestry Committee Appointed by the Government, 1938-1940, NRS, Banjul, The Gambia.
[141] Ibid.

products. According to their projections, the Gambia was well placed in exporting fruits and forest products to the French West Africa through the Gambia River, and as "it is the nearest British tropical colony to Europe and so enjoys a considerable advantage in exporting its produce to Great Britain."[142] Seedlings of fruit trees and palm oil were later distributed, and the village plantations were formed in pursuance of these objectives, but the projects failed after a few years. [143] In fact, the Forestry Committee's main attention had been on the timber market. The committee's major consideration in methods of conservation reaffirmed the economic motives in the timber trade, as the seedlings nursed were often timber trees such as *jallo* (khaya senegalensis), African mahogany (borassus flabellifer), and *santago* (daniellia oliveri), and the imported species such as Yemane (Gmelina arborea), neem (azadirachta indica), and numerous palm tree species.[144]

The annual forestry reports of the Gambia between 1938 and 1965 highlight the central point that the colonial agenda itself intensified environmental degradation in the Gambia. Through commercial exploitation of timber and construction of colonial infrastructure, all forms of forest conservation were undermined. Although the annual forestry reports would not give the statistics on the timber exploited from the newly demarcated forestry parks, the exploitation sections on the annual reports give bleak insight into timber exploitation of already denuded areas. For instance, the 1950 annual report highlights the Forestry Committee's desire to exploit certain indigenous trees locally called *jalo* (khaya senegalensis), *santago* (daniellia oliveri) and *tumbuyiro* (chlorophora regia) scattered throughout the Protectorate "which could give reasonably straight 10ft or more logs."[145]

At the beginning of timber exploitation in the Protectorate, the Forestry Committee's obstacle had been that there were no sawyers in the Gambia. Arrangements were complete by late 1950 to get 4 sawyers from Sierra Leone to train at least 8 apprentices; it was also arranged for a Gambian who had been in the Gold Coast to train

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[142] Ibid.
[143] Ibid.
[144] ARP 9/4 Fourth Annual Forestry Report, 1953, NRS, Banjul, The Gambia.
[145] ARP 9/1 Second Annual Report of the Forestry Adviser, the Gambia, 1950, NRS, Banjul, The Gambia

some more men and to set up as a timber merchant. The colonial administration provided £400 from Farmers' Fund for this exploitation scheme, while only £306 was spent on the entire reforestation projects (on demarcation, silviculture and nurseries) of that year in the whole of the Protectorates.[146] By 1953, the timber sawyers from both the colony and the protectorate of the Gambia were sufficiently skilled to train apprentices, and several had been employed, thus 22 practicing sawyers by the end of the year. The Forestry Committee highlighted that the standard of sawing had improved sufficiently for their produce to compete with imported timber, but production was not yet sufficient to make an impression on the timber market.[147]

The irony of the Forestry Committee's production schemes was its protection orders passed to the chiefs. At the 1952 *Mansa-bengo* (chief's conference), the chiefs were asked to declare all the *Jalo* (khaya senegalensis) and *Tumbuyiro* (Chlorophora regia) trees in their districts as protected. Thus, all the chiefs emphasized the protection of timber and edible trees in 1953 Native Authority Proclamations, but sawyers were later deployed to cut down these protected trees on the orders of the Forestry Committee.[148] The excessive exploitation of forest resources for economic gains explains the Forestry Committee and the surveyor's excitement in 1954 when it obtained "10,000 acre containing much Daniellia oliveri together with good and fairly numerous Khaya trees" in Manduar, Kiang West, which was to become a forest park. Evidently, the establishment of forest and wildlife parks in the Gambia were to satisfy the colonialist economic and political motives, not colonial altruistic interest of protecting African environment.[149]

The colonial conservation policies and the forest and wildlife parks established in the Gambia were anchored on schemes of power relations perpetuated by the colonial state. Maano Ramutsindela's study of the Great Limpopo on the South Africa-Mozambique-Zimbabwe border and the Kalagadi on the South Africa-Botswana border

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[146] ARP 9/1 Third Annual report of the Forestry Adviser, the Gambia, 1950, NRS, Banjul, The Gambia
[147] ARP 9/4 Fourth Annual Report of the Forestry Adviser, the Gambia, 1950, NRS, Banjul, The Gambia
[148] ARP 9/3 Third Annual Forestry Report, 1952, NRS, Banjul, The Gambia.
[149] ibid

shows that the notions of colonial national parks had brought layers of power relations in the colonial Africa.[150] Similarly, in the Gambia, the 1938 amendments to the forest protection regulations perpetuated three layers of power relations in expanding and strengthening the colonial control over the people and resources. The first layer of power relations placed humans over other species to justify resource expropriation and exploitation. The forestry and wildlife parks enabled the colonial government to assert control and authority over plants and animals and restricted the movements of the animals and placed them under human control and surveillance. By 1965, over sixty-nine forest and wildlife parks were demarcated countrywide, and the plants and animals were labelled protected species or pests to be destroyed.

The second layer of power relations strengthened the asymmetrical power relations between the colonial authorities (i.e. European and native authorities) and their Gambian subjects. As they restricted the majority of the Gambian population from access to resources, these power relations gave right of access to forest and wildlife parks and resources to the colonial authorities. Although colonial rule generally weakened the power of the chiefs, the new forestry regulations gave a cadre of provincial administrators - the commissioners, chiefs, and badge messengers - excessive power of control over forest and wildlife matters. For instance, the 1938 amendments of the Protectorate Public Lands Regulations Ordinance passed hunting and timber permits obtainable from the chiefs and commissioners who could "refuse to grant any permission to any applicant under Regulation 5 without stating any cause but an appeal shall lie from such refusal to the Commissioner or Governor as the case may be." [151]

Moreover, the new forestry policies had given Gambian chiefs extraordinary powers. In addition to unprecedented excessive powers these regulations gave to colonial chiefs, it further segregated them from their subjects. In addition to their control of timber permits and gun licenses, the chiefs received handsome commissions from timber

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[150] Maano Ramutsindela, "Glocalisation and Nature Conservation Strategies in 21sr Century South Africa," *Tidjschrift voor Economische en sociale Geografie*, vol. 95, No. 2, (2004): 63-67.
[151] CSO 2/2319 Wild Animals Preservation Regulations, 1938-1948. See The Protectorate Public Land Ordinance 1938.

royalties, gun licenses and pasturage fees. In 1938, it was agreed at the Commissioners' conference that the chiefs and *Alikalolu* (village heads) would receive 40 percent commission on all timber permits.[152] Meanwhile, the scholarship on colonial chieftaincy in Africa highlights the chiefs' dramatic loss of power and autonomy in decision making and functions such as spiritual leadership, as well as their custodianship of local resources and cultural values of their communities during colonial rule. Obviously, in the colony of the Gambia, the provincial commissioners were given a free hand to depose, suspend, fine in case of misconduct, and appoint new chiefs. Assan Sarr's study reveals erosion of land-based powers of the chiefs in the Gambia, which is an example of the colonial administration's reorganization of the institution and seizure of chiefs' customary rights as custodians of the local resources.[153] But the extraordinary powers the colonial conservation policies gave to chiefs and the district authorities recognized their roles as the decentralized arms of the colonial state. The chiefs' support was needed to enforce the forest regulations for the colonial state which aimed to extend its control over the environment and its resources.[154]

The final layer of power relations forest and wildlife parks engendered in Africa as described by Ramutsindela strengthened racial and class boundaries. The European officials were privileged more than African officials in the exploitation of forest resources. Although the conservation legislation and policies in the Gambia, unlike settler colonial Southern and Eastern Africa, gave equal access to all the residents of the colony, the regulations were favorably enforced according to class and racial boundaries. In March 1950, the Commissioner Central Province raised his concern to the Colonial Secretary about "the increase in the number of non-native shootings parties" in the Protectorate who did not possess hunting licenses in flagrant violation of the Wild

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[152] CSO 2/1655, Forestry Control Legislation under Protectorate Lands and Native Authority Ordinance, NRS, Banjul, The Gambia. See the extract from the Records of a Conference of Commissioners held at Georgetown on the 11th and 12th of April 1938, "7. Issue of Free Permits for felling trees,"

[153] Assan Sarr, *Islam, Power and Dependency in the Gambia River Basin: The Politics of Land Control, 1790-1940*, (NY: University of Rochester Press, 2016), 165.

[154] Buba Misawa, and Joseph K. Ajaye "Chieftaincy at the Confluence of Tradition and Modernity: Transforming African Rulership in Ghana and Nigeria", *International Third World Studies and Review*, volume xv11, (2006.): p.2.

Animals, Birds and Fish Preservation Regulation 1948.[155] One of those hunting parties was identified as the Colonial Development Corporation (CDC)'s European staff. The colonial secretary's office wrote to the CDC management to remind their non-African staff "who indulge in shooting as a means of recreation" about conservation regulations that prohibited shooting protected birds and hunting without licenses. Although the CDC staff claimed that they shot vultures which depredated their young chicks at the Yundum Poultry Farm, it is common knowledge that vultures feed on carcasses not live-chicks. Generally, no European had ever never punished.[156] There is evidence aplenty that African hunters were unfairly restricted and fined for any form of forest regulation violations. In 1954 alone, seven hunters were fined £2 each for setting fire to Kono Woro Forest and hunting without permits in Kiang East District. While the punishment of hunters in Kiang highlights the stringent nature of conservation laws, it also reveals how these laws were selectively enforced. [157]

Ramutsindela points out how the European hunters negotiated with colonial officials and obtained exclusive hunting rights in some British Southern African colonies through which colonial hunters almost wiped out wildlife through hunting rights exclusively given to them.[158] In the Gambia colony, the European officials, particularly the CDC staff were similarly favorably treated in the South Bank Province hunting violations. Although discriminative enforcement of hunting regulations were not serious in the British Gambia as in Southern Africa, the conservation laws seemed to give European hunters freehand to hunt in violation of forestry regulations. The 1948 amendments of The Protectorate Public Lands Regulations Ordinance of 1893 and the Wild Animals, Birds and Fish Preservation Ordinance of 1916 prohibited the equipment and techniques at the disposal of the Gambian hunters, because the Forestry Committee

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[155] CSO 2/2319 Wild Animals Preservation Regulations. See the Senior Commissioner Central Province, Mansakonko's letter to the Colonial Secretary, Bathurst, 11th March 1950.
[156] CSO 2/2319 Wild Animals Preservation Regulations. See a dispatch from J. Sealy, the Colonial Secretary Office, Bathurst to M.J. Philips Manager, Colonial Development Corporation, Yundum, 17th March 1950.
[157] ARP 9/5 Fifth Annual Report of The Forestry Adviser, Gambia, 1954
[158] Maano Ramutsindela, "Glocalisation and Nature Conservation Strategies in 21sr Century South Africa": 65-67.

deemed them "barbaric." Apart from the locally made Dane gun, a few Gambian hunters could afford flintlock or any precision gun the 1948 amendment recommended. All other paraphernalia at local hunters' disposal, such as bright lamp or portable light, or hunting techniques such as to encircle or surround by fire, use of flare, poison or poisoned weapons, pit enclosure, gin trap, and snare were all prohibited.[159]

In addition to prohibition of hunting equipment and techniques by the forestry policies, the wildlife parks and hunting licenses restricted many Gambian hunters. For the Forestry Committee, the projected four shillings annual license fee was a paltry sum, but this was too expensive for local hunters who did not sell their hunting exploits. Hunting was one of the means African communities engaged with the environment and it enabled them to interact, communicate and develop sense of trust and reciprocity with the animals, plants, and the larger environment, but the forestry policies in the Gambia destroyed and dispossessed the Gambian hunters' rights to hunt.[160]

Analysis of the colonial conservation policies in the Gambia gives an important perspective to complex economic, political and cultural milieu of colonial rule in Africa. Generally, the establishment of forest and wildlife parks in colonial Africa was justified by fear of presumed environmental destruction caused by inappropriate African resource management practices and threat to wildlife through "barbaric" means of hunting and farming. While acknowledging the destructiveness of African practices such as peanut agriculture and production of raw materials, these activities were done within the framework of European insatiable demands for African resources. Colonial conservation in the Gambia, like anywhere in Africa, heightened the blame on Gambian hunters for increased scale of hunting and trade in wildlife in colonial Gambia.

Jeremy Rich's study of the chimpanzee trade in Gabon provides an important parallel for the analysis of primate trade phenomena in the Gambia in the 1930s and 40s. Rich shows that since the late nineteenth century, the Gabonese hunters and merchants

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[159] CSO 2/2319 Wild Animals Preservation Regulations, 1938-1948. See the Protectorate Public Land Ordinance 1938.
[160] CSO 2/2319 Wild Animals Preservation Regulations, 1938-1948. See the 1938 & 1948 amendments to the Wild Animals, Birds and Fish Preservation Ordinance, 1916.

were engaged in primate trade with the Europeans along the Western coast of Africa. Although the local hunters and traders were motivated by financial gains obtained from the chimpanzee and gorilla trade, the Europeans later labelled the hunters as cruel. The colonial laws in Gabon legitimated the trade in primates, and the trade in itself was kept afloat by European and North American demands for primates. Some European residents in Gabon labeled African hunters and merchants as backward and protested against what they called "African cruel treatment of animals."[161]

Bathurst, especially in the late 1930s and 1940s, had its fair share of nuisance caused by primate trade. The primate merchants brought monkeys and baboons to be sold off at the Bathurst sea port to steamers voyaging to Europe. In the late 1930s, the steamers such as Elder Dempster began enforcing charges for animal transportation. Consequently, many of the crews stopped buying primates, and many baboons and monkeys were often abandoned in the hands of traders in Bathurst. In addition to nuisance caused by their large number in the island, the animals were kept in "conditions of cruelty and filth" while packed and huddled together in some compounds occupied by Syrians and Africans. While there were stringent laws such as the Cruelty to Animals Ordinance 1934 that could have protected these animals, the governor often tasked Bathurst African city councilors to abate the nuisance caused by primate trade. He would often condemn African traders for their cruelty like Rich said of the colonists in Gabon, but never applied law to stop the trade.[162]

The primate trade in Bathurst was followed by the heydays of private animal collectors. While the 1948 amendments of the Wild Animals, Birds and Fish Preservation Ordinance, 1916 strengthened the acquisition of hunting licenses and prohibition of indigenous hunting methods, it provided new regulation for the exportation of animal species. The Wild Animals and Birds (Export) Regulations 1948 allowed trapping, capture, and exportation of wild animals and birds to zoological gardens, academic or

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[161] Jeremy Rich, "Chimpanzees in the Colonial Maelstrom: Struggles over Knowledge, Race and Commodities in the Gabonese Primate Trade, c. 1850-1940", in *Landscape Environment and Technology in Colonial and Postcolonial Africa, eds. Toyin Falola and Emily Brownell,* (NY: Taylor and Franciss, 2012); 37, (Athens: University of Georgia Press, 2012), 37.

[162] CSO 2/1393. I. Monkeys Owned by residents in Bathurst, II. Cruelty to Animals Ordinance 1934,

research institutions, or dealers in distribution of pets, but the regulation objected to acts such as export to circuses, travelling exhibition or amusement shows. The private wildlife collectors applied for permit from the governor's office. Consequently, thousands of animals and species were exported from the Gambia between 1948 and 1955 mostly to museums, academic and research institutions in Britain and the United States. One example of accepted permit applied by one C.F.F Grace, resident in M.R.C. laboratories Fajara for 13 monkeys, 6 ground squirrels, 6 Gambian pouched rats, and 200 Gambian toads (*buffo regularis*) is an example of thousands of exportation permits accepted in 1953 alone.[163]

The primate trade and exportation of animals and birds emphasize the fact that environmental and wildlife protection issues were façade of the economic, political and cultural motives of colonial rule. For James Mackenzie, the exportation of animal and bird species was part of the grand schemes of the British colonial empire. In his study of the origin and development of more than a dozen museums in a number of former British territories including Canada, South Africa, Australia, New Zealand and many British colonies in Asia, Mackenzie argues that the museums were tools of the empire and the colonies endeavored to supply them. He shows that the emergence of the museums in the nineteenth and twentieth centuries was at the height of European colonization and the spread of industrialization from Europe to the rest of the world. Mackenzie argues that the museums became "a central point of the process of ordering the world." The British Empire appropriated museums to familiarized and naturalized "the unknown as the known, bringing the remote and unfamiliar into concordance with the zone of prior knowledge, both geographically and intellectually."[164] Therefore, the demands of the museums dictated the primate trade and the 1948 amendment of regulations to allow exportation of animals and birds from the Gambia, but stringent restrictions to forest resources remained on the Gambian population.

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[163] CSO 2/2319 Wild Animals Preservation Regulations, NRS, Banjul, The Gambia. See C.F.F. Grace's application to the Governor, Government House Bathurst, 7th March 1953 and the Governor's approval letter.

[164] John Mackenzie, *Museums and Empire: Natural History, Human Cultures and Colonial Identities,* (Manchester: Manchester University Press, 2009),7-8.

The Local Response to the Conservation Policies

The colonial conservation policies and the forest and wildlife parks established in the Gambia between 1938 and 1965 disrupted Gambian access to forest resources and dispossessed their customary rights to resources. The conservation regulations criminalized Gambian customary practices of resource exploitation, consequently some clauses in the regulation faced stiff resistance from the rural population. As Laura Mitchel points out, the fundamental tension between African populations and the European colonialists was rooted in different ideologies of nature and conflicting ideas about natural resources utilization. In her studies on conservation in colonial South Africa, Mitchel shows that despite intense competition for land between Dutch speaking settlers and the Khoisan of South Africa, the violence was exacerbated by the competing notions ascribed to nature. The settlers' ideas about landscape and appropriate use of the landscape stemmed from Christian logic and materialist perspective as an object to be owned, controlled, exchanged and commoditized. The Khoisan inhabitants, on the other hand, understood nature as linked to humans. Similarly, different perspectives in utilization of forest resources were the fundamental point of contention between the Gambian population and the colonial administrators.[165]

As elsewhere in colonial Africa, the Gambian farming methods were condemned by the colonial officials and the conservation policies were directed at transforming the infamous shifting cultivation. In 1938, when the Forestry Committee accepted and instructed the effective enforcement of the forestry regulations passed under 1933 Native Authority Ordinance, the chiefs protested to the governor when he visited the South Bank Province. The forest proclamation the District Authorities passed in 1934 varied slightly from district to district, but the principles behind each were to stop firing during hunting, slash and burn during farm clearing, and cultivation of forest lands. The colonial records show that regulations prohibiting shifting cultivation, (a form of farming common in tropical Africa in which the area of ground is cleared for vegetation and cultivated for a

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[165] Laura Mitchel, "Appraising Nature: Pastoralist Practices, Hunting Logics, and Landscape Ideology in Colonial South Africa," in *Landscape and Technology in Post-Colonial Africa,* eds. Toyin Falola & Emily Brownell, (Routledge, 2012), 43.

few years and then abandoned for a new farmland) was a source of innumerable prosecutions in the provinces because the defiant farmers regarded them as "an infinite hardship."[166] One of the points in the regulation the farmers objected to was prohibition of slash-and-burn farming method, but the most contentious paragraph of that order reads as, "No person shall destroy any trees by farming any land which has not been farmed within the previous ten years, except for the purpose of growing rice."[167] The farmers' objection to this order, particularly in Kiang West where many farmers were fined, was that the order limited the area available to be farmed and the land less than ten years old has not sufficiently recuperated. In the Gambian shifting cultivation system, soil exhaustion appears about the fourth year in a particular field, the symptoms being the appearance of *silo* (stryga) in the farms. The farmer then migrates to fallow land, leaving his farm to revert to bush. [168]

Commissioner D. Bayley of Kombo and Foni Province agreed that the district authorities' forestry regulations interfered with Gambian farming methods. He argues that under the conditions of the Gambian farming methods in which shifting cultivation was the commonest practice, the farmers restore fertility to exhausted land through a long period of bush fallow.[169] Commissioners R.G. Biddulph of Central Province and N.M. Assheton of the MaCcarthy Island Province all agreed that the regulation against shifting cultivation which was practiced everywhere in the Gambia was quite unenforceable.[170] However, the Agricultural Superintendent, MaCcarthy Island Province, who chaired the

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[166] CSO 2/1655, Forestry Control Legislation under Protectorate Lands and Native Authority Ordinance, NRS, Banjul, The Gambia. See the letter from the Senior Agricultural Superintendent McCarthy Island Province, Yoroberi Kunda to the Colonial Secretary, Bathurst 29th March 1939, reacts to farmers' objection to the 1938 amendments to the Native Authority Ordinance, 1934, & Commissioner SBP (Kombo and Foni) Province's letter to Colonial Secretary, 22nd March 1939.

[167] Ibid.

[168] CSO 2/1655, Forestry Control Legislation under Protectorate Lands and Native Authority Ordinance, NRS, Banjul, The Gambia. See the report on the South Bank Province for the Quarter Ended, September 30th 1939.

[169] CSO 2/1655, Forestry Control Legislation under Protectorate Lands and Native Authority Ordinance, NRS, Banjul, The Gambia. See the letter from D. Bayley, Commissioner South Bank Province, Cape Point, to the Colonial Secretary, Bathurst, 5th October 1938.

[170] CSO 2/1655, Forestry Control Legislation under Protectorate Lands and Native Authority Ordinance, NRS, Banjul, The Gambia. See the letter from the Commissioner MaCcarthy Island Province to the Hon. Colonial Secretary, 25/8/38, & a letter from R.G. Biddulph. Commissioner South Bank Province (Central Province), Mansakonko, 22nd March 1939.

Forestry Committee agreed that enforcement of the regulations would be difficult given "the best native opinion regards the regulation as vexatious and unnecessary," but he believed "limiting cultivation to land farmed within the previous ten years is not in my opinion a definite hardship. Some such order appears necessary if we are to get the people to pay more attention to the lands they use."[171]

The enforcement of forest regulations put constant pressure on the district chiefs of the Protectorate of the Gambia. While the local population lost its customary rights to appoint, recognize, and depose chiefs, the chiefs remained the important contact between them and the colonial administrators. Evanson Wamagatta's study of colonial chiefs in Kenya aptly describes them as "shock absorbers." As the links between the colonial administrators and their African subjects, the chiefs received orders from the colonial commissioners and passed them to African subjects, as well as the wrath of their European overlords and complaints from their African subjects. But as the links too, Wamagatta argues, the immediate repercussions of the violence the chiefs perpetrated against the local population never reached the European administrators. The colonial chiefs in general pleased no one, as they were scorned by their own people and often vilified by the colonial administrators.[172] The constant pressure from Gambian farmers explains what seemed to be the chiefs' rebellious position on the regulations they were made to pass. In addition to shifting cultivation regulations, the chiefs also verbally expressed their objection to tree cutting and palm wine tapping regulations.

In March 1939, the chiefs expressed their surprise that the new forest regulation passed the payment of license for cutting trees for domestic use. The 1938 amendments to the Protectorate Public Lands Regulations made fees payable for cutting timber, and the chiefs were appalled that 5 shillings was to be charged per any rosewood, rhun palm, cotton and any other trees. But the amendment prohibiting cutting mahogany trees

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[171]CSO 2/1655, Forestry Control Legislation under Protectorate Lands and Native Authority Ordinance, NRS, Banjul, The Gambia. See the letter from the Senior Agricultural Superintendent McCarthy Island Province, Yoroberi Kunda to the Colonial Secretary, Bathurst 29th March 1939.

[172] Evanson N. Wamagatta, "British Administration and the Chiefs' Tyranny in Early Colonial Kenya: A Case Study of the First Generation of Chiefs from Kiambu District 1895-1920," *Journal of Asian and African Studies* (2009): 372-73.

"measuring less than 8 feet in girth at a point not less than 5 feet from the ground," and cutting, felling or destroying any tree "with a girth exceeding 4 feet 3 inches from the ground" baffled them most.[173] They wouldn't know how to enforce these regulations or how their subjects could measure the trees to be felled. The chiefs were also concerned about the permits payable for cutting *duto* trees (cordyla Africana). From *duto* trees, mortars and pestles were made. The chiefs believed the commodification through payable permits as expensive as five shillings would increase the prices of household utensils.[174] Indeed, the mortars and pestles were made by the Laobe, a clan among the Fulbeh. Most of the Laobe were customarily attached to family patrons and would not sell their products. Permits for cutting *duto* tree led to commodification of household utensils as the chiefs feared.[175] The chiefs' objection to some of the clauses in the forestry regulation discredits simplistic views that the chiefs were collaborators during colonial rule. It shows that the chiefs negotiated their ways to satisfy the competing interests of the colonial overlords and African subjects.

Generally, the British administrators in the Gambia were averse to allowing Africans crossing the border from the French territory into Gambian forests. For the colonial authorities, most of the Laobe crossed from the French territory to fell *duto* for their products. The Forestry Committee often openly highlighted its disdain for also the Konaji, a clan among the Mandinka who often crossed the border from the French and the Portuguese territories. They cut large quantities of bamboo for bamboo screens (locally called *krinting*) and mats.[176] The British compartmentalization and enclosure through the forest and wildlife parks restricted the indigenous people, but also Africans outside the colony of the Gambia. Indeed, the British repugnance for the Konaji and

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[173] CSO 2/1655, Forestry Control Legislation under Protectorate Lands and Native Authority Ordinance, NRS, Banjul, The Gambia.
[174] CSO 2/1655, Forestry Control Legislation under Protectorate Lands and Native Authority Ordinance, NRS, Banjul, The Gambia. "Chiefs asked about Forestry rules," a letter from the South Bank Commissioner (Kombo and Foni Province) to the Colonial Secretary, 8th October 1938, & another letter sent by the Comm. SBP (Kombo and Foni Province) 22nd March, 1939.
[175] ARP 9/6 Report of The Forestry Committee appointed by the Government of the Gambia, 1938-1940, NRS, Banjul, The Gambia.
[176] Ibid.

Laobe from the French territory, and their extreme shield of the forest and wildlife parks in the Gambia against their incursions were part of the British general agenda of nationalism and imperial grandeur.

Another cause of considerable discontent for forestry regulations in the Gambia was the amendments to the palm wine tapping and palm tree cutting regulations. The 1938 amendments to the Protectorate Public Lands Regulations 1915 enforced payment of annual permit for extracting or collecting palm wine from any species of palm tree or gathering palm nuts and palm kernels. In February 1938, the Executive Council presided over by the Governor Thomas Southorn reduced the fee for cutting palm trees from ten shillings set in 1937 to five shillings.[177] But the amendments to section 9A and 9B which restricted palm wine tapping and palm tree cutting caused much disgruntlement particularly in Kombo and Foni Province. These sections of the new regulation prohibited cutting of leaves from "any palm tree measuring less than 30 feet from the ground" and tapping palm wine from "any palm tree measuring less than 40 feet from the ground."[178] The first reaction came from Commissioner D. Bayley of Kombo and Foni Province who sought clarification from the Colonial Secretary the reasons and purposes of the amendment. He had right to be concern because much of alcohol sold and consumed in the Gambia was tapped and consumed in Kombo and Foni Province. Commissioner Bayley confessed that he was at loss when he was questioned in his province about the reasons for the amendments to section 9A and 9B. He argues that from his experience, palm trees do not die when their top leaves are not removed, and he thought there was comparatively few oil palms of 40 feet left in his province.[179] The governor's response to him relied on the Agricultural Superintendent's advice that though "a rhun palm is not killed by the destruction of the top leaves" it destroys its healthy growth. The governor

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[177] CSO 2/927 Palm trees and Palm wine tapping reporting 1928-39. See (before the executive council in Bathurst 22/2/38).

[178] CSO 2/1655, Forestry Control Legislation under Protectorate Lands and Native Authority Ordinance, NRS, Banjul, The Gambia.see The Protectorate Public Lands Regulations 1938.

[179] CSO 2/1655, Forestry Control Legislation under Protectorate Lands and Native Authority Ordinance, NRS, Banjul, The Gambia. The letter from the Commissioner South Bank Province [Kombo and Foni Province], D. Bayley, Cape St. Mary to the Colonial Secretary, Bathurst 7th September 1938.

thought the excessive and indiscriminate tapping of oil palms would affect the future supply of palm wine.[180]

Moreover, the palm wine industry seemed to be a threat to the colonial government's long-term goals of palm fruit and oil exportation. The North Bank Province's Quarterly Report of March 31st, 1940 seemed to confirm these threats, and it consolidated the governor's position on rejecting the pleas to re-amend section 9A and 9B. The Commissioner North Bank Province, F.C. Evans, reported that the customary palm nut collection had not been undertaken in his province in the year under review because of large-scale palm wine trade. He estimated that as much as 150 gallons of palm wine were shipped daily from the North Bank Province to Bathurst. He opined that palm wine industry represented an undue strain on Niumi and Jokadu's palm tree belt and would in future prevent proper regeneration of palm trees as most of them exhibited marks of over tapping.[181] Consequently, the governor passed a memo to the provincial commissioners that he saw no necessity in relaxing palm wine tapping regulations arguing that the large quantity of palm wine being marketed regularly in Bathurst would have been affected if the forest regulations were restrictive.[182]

When the governor met the chiefs in Brikama, the discussions on palm wine tapping and palm tree cutting regulations dominated the proceedings. The chief of Kombo North argues that the inhabitants of his district requiring palm sticks for building or domestic purpose (but not for sale) should be allowed to cut one tree free for every tree cut with a permit. The governor replied that the payment for a permit to cut rhun palms was due to the need for conserving the tree. He knew that a small area had been set aside as a forest reserve in Kombo North, and this area contained some rhun palms, but the area was not sufficient to justify an increase in the exploitation of rhun palms in the rest of the district. If the Chief of Kombo North would consult the Commissioner and put aside

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[180] Ibid.

[181] CSO 2/1655, Forestry Control Legislation under Protectorate Lands and Native Authority Ordinance, NRS, Banjul, The Gambia. See Quarterly Report, Quarter Ending, 31st March 1940, North Bank Province.

[182] CSO 2/1655, Forestry Control Legislation under Protectorate Lands and Native Authority Ordinance, NRS, Banjul, The Gambia. See Ag. Colonial Secretary, R.H Gretton to the Commissioner South Bank, 11, June 1940.

further area as forest reserves, the Governor would re-consider the matter at a future date.[183] The chief of Kombo St. Mary also requested that the tapping of palm trees over thirty feet should be allowed. The governor argued that the Regulation was made in the interests of the chiefs and their subjects. There was no ban on cutting palm fruit from small trees, but a tree which had been tapped would not fruit for nine or twelve months, and so not only was the palm fruit lost, but also the natural regeneration of the trees.[184]

What the chiefs did not tell the governor was their inability to enforce the infamous section 9A and 9B of the forestry regulations. The commissioner Kombo and Foni Province wrote to the colonial Secretary cataloguing the chiefs' failure in enforcing the regulations. Commissioner Bayley highlighted the considerable dissatisfaction in the Kombo at the regulation which requires a palm tree to be not less than forty feet in height before it could be tapped. He said that the regulation had the result that it had been completely "disregarded in actual practice and has become dead letter."[185] He remarked that most of the Kombo palm trees were single trees and not in close groves (where they tend to grow higher) and that the number of trees actually over 40 feet was very small in proportion to the total. Commissioner Bayley maintained that "the present situation is therefore very unsatisfactory both from the agricultural and legal points of view, as many immature palms are being tapped, unimpeded, and the law is brought into open disregard and even disrepute which is extremely undesirable politically." He added that "several Native Authorities had said that they wish to pass Rules to this effect, but I have reluctantly and to point out that this is impossible while the overriding Government statutory regulation was still in force."[186] He suggested that the regulation reduced the height of the palm tree to 20 feet to be tapped in Kombo, and 30 feet in Foni where

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[183] CSO 2/1655, Forestry Control Legislation under Protectorate Lands and Native Authority Ordinance, NRS, Banjul, The Gambia. See the extract from the visit of His Excellency the Governor, Sir W.T. Southorn on April 8th, 1940 to Brikama.
[184] Ibid.
[185] CSO 2/1655, Forestry Control Legislation under Protectorate Lands and Native Authority Ordinance, NRS, Banjul, The Gambia. See the letter from the Commissioner South Bank Province [Kombo and Foni] to Hon. Colonial Secretary, Bathurst, 28th September 1940.
[186]Ibid.

people tapped for domestic use.[187] As a result, Governor Southorn passed in 1941 amendments to Section 9A and 9B saying "restrictions on this practice which were previously in force were found to be excessive and largely unenforceable."[188]

The different ideologies in utilization of natural resources between the Africans and the European colonialists was more apparent in the bush burning and bush fowl hunting regulations. In the acknowledgement of Gambian rural population's customary burning of bush for pasture, the district authorities were instructed to set early customary burning seasons between December and February 28th each year. The colonial officials believed early burning would enable fires to be controlled within desired forest.

The regulations of the Protectorate Bush Fowl Regulations, 1929 placed bush fowls under protection with annual opened-hunting season from September 1st to February 28th.[189] Following the amendments to the forest regulations in 1938, the Forestry Committee through the Colonial Secretary's office sought views on the closed and opened bush fowl hunting season from the senior government European officials. The Senior Medical officer, the Secretary to the Bathurst Chamber of commerce, and the Senior Agricultural Superintendent all advised for the closed season to remain in order to protect the bush fowls from African hunters, but the provincial commissioners North Bank, Upper River and Central Provinces thought it was unnecessary in their provinces, as bush fowls seemed not under any constant threat there.[190] The Commissioner Kombo and Foni Province wanted the closed season to remain given the danger Bathurst guns posed to bush fowls in his province, and the North Bank Commissioner asked his two

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[187] Ibid.

[188] CSO 2/1655, Forestry Control Legislation under Protectorate Lands and Native Authority Ordinance, NRS, Banjul, The Gambia. See the Memo: No. 73, 8th May 1941, Amendment No. 2) Regulations, 1941, (No. 21 of 19141).

[189] CSO 2/693, Shooting of Bush Fowls-As time for the Protection of Bush Fowl 1929-39. See The Protection of Bush Fowl (Kombo and Foni Province) Regulation, 1929.

[190] CSO 2/693, Shooting of Bush Fowls-As time for the Protection of Bush Fowl 1929-39. See Commissioner Upper River Province to the Colonial Secretary 10 February 1937, and the letter from Commissioner North Bank Province to the Colonial Secretary 2nd February 1937.

western-most districts, the Lower and Upper Niumi should be included in the protection zone in order to prevent Bathurst guns from entering there.[191]

Although no African was consulted about the bush fowl hunting season amendments, it seems the Police Commissioner spoke for them. He highlighted the fact that the threat to bush fowls came from the Europeans who hunted for sports, not Africans who hunted for their pots. The inappropriateness of the timing of the closed season which many Gambians objected and which later led to numerous court fines in 1938 was also highlighted by the Police Commissioner. He noted that "until the end of January and early February, there are a lot of Bush Fowl chicks about which are unable to fly and rely on their mother for protection and food. During this time of the year and until the grass is burnt 75% of the Bush Fowl shot at are not recovered, and the majority of the number are left in the grass to die."[192]

In October 1938, the South Bank Province's Quarterly Report catalogued a number of prosecutions in Foni and Kiang Districts for violating hunting and bush burning regulations. Many of the cases had some fifteen to twenty African defendants.[193] By tradition, between May and the first rains in June, many Gambian communities came together and set out in the bush for *fellebayo* (group hunt). The communities embarked on group hunt for two important reasons, for food and to kill or push the pest away in preparation for the upcoming farming season. Significantly, that timing was right because the reproductive period of the bush fowl was understood to be between December and April and they would not want to interfere with that because *fellebayo* involved burning. Similarly, the customary bush burning was done shortly before rains in order to clear forest undergrowth of dangerous animals and also the regenerating bushy shrubs of grassland provided pasture for the livestock. Many communities, like those fined in Foni

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[191] CSO 2/693, Shooting of Bush Fowls-As time for the Protection of Bush Fowl 1929-39. See the letter from Commissioner North Bank Province to the Colonial Secretary 2nd February 1937, letter from the Commissioner South Bank Province to the Colonial Secretary, 3rd February 1937.
[192] CSO 2/693, Shooting of Bush Fowls-As time for the Protection of Bush Fowl 1929-39. See the Commissioner of Police's letter to the Colonial Secretary, Bathurst, 29th January 1937.
[193] CSO 2/1655, Forestry Control Legislation under Protectorate Lands and Native Authority Ordinance, NRS, Banjul, The Gambia. The Extract from North Bank Province, Quarterly Report, Quarter Ending, 31st March 1940.

Bondali and Kiang West, violated the burning and bush fowl hunting seasons in defence of their customary rights. If the colonial authorities had consulted them, the spirited objection to these regulations would have been avoided.[194] Moreover, the general discontent from the rest of the population highlights the colonial officials disregard for the African knowledge and ideas about their environment, and the European insistence on imposing the perceived scientific ideals on "savage Africans." However, at the height of the colonial agricultural activities (theme of the next chapter), the communities were remunerated financially and later compelled to embark on more *fellebayo* in order to destroy the pests that posed threat to the colonial agricultural activities.

Conclusion

This chapter argues that the colonial conservation policies and the forest and wildlife parks established in the Gambia engendered the colonial political and cultural control of the Gambian environment, as well as the establishment of its scientific environmental knowledge. It also established that the British colonial rule in the Gambia and its main agenda of economic exploitation, which influenced the activities of the Forestry Committee established in 1938 to protect and also produce forest resources for the colonial government. Finally, this chapter shows the enforcement of the conservation regulations and the Gambian population's objection to the forest regulations which undermined their local conservation methods and restricted their interaction with resources in their environment.

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[194] I discussed Fellebayo with Lamin K. Darboe Headmaster Dumbuto Lower Basic School, at his residence in Dumbuto, Kiang West District, 28th May 2017.

CHAPTER 3: THE COLONIAL AGRICULTURAL ACTIVITIES IN THE GAMBIA

Introduction

The scholarship on the Gambia generally neglects the effects of agricultural activities on the environment. Most of the existing studies are devoted to the effects of the peanut as a single export group on the economy and how environmental factors such as diseases and rainfall, and non-environmental factors such as labor shortage and prices at the world market shaped the Gambia's economy. For instance, Kenneth Swindell and Abou Jeng's study of the peanut economy of the Gambia from 1834 to 1934 shows the role of migrant farmers, merchant credit and climate as the key factors that shape the export economy.[195] In his recent work, Swindell emphasizes that environmental and global market disturbances generally shaped the Gambia's peanut economy. He shows the severe pressure the presence of migrant farmers put on the food stores, and food cultivation similarly competed with the peanut agriculture.[196] Tijan Sallah traces the contribution of migrant farmers to pre-colonial and colonial peanut export trade in the Gambia, and he studies the evolution of migrant farmers' contractual agreement in the Gambia. Sallah makes a fascinating comparison between the migrant farmer phenomenon in the Gambia and sharecropping practiced in other parts of colonial Africa.[197] For Judith Carney and Michael Watts, the colonial rice mechanization schemes transformed the gendered division of labor in the rural Gambia. They emphasize that the Colonial Development Corporation rice schemes in Jahally and Pacharr set the model for post-colonial irrigation schemes as well as the seizure of agricultural land from women.[198] James Webb emphasizes ecological change in agricultural system between 1945 and

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[195] Kenneth Swindell and Abou Jeng, *Migrants, Credit and Climate: The Gambian Groundnut Trade, 1834-1934*, (Leiden: Brill, 2006).
[196] Kenneth Swindell, "Enter the 'Experts': Environmental and Agrarian Change in The Gambia, 1900-1951," in *State and Society in The Gambia since Independence, 1965-2012*, eds. Abdoulaye Saine, Ebrima Ceesay and Ebrima Sall, (Trenton: Africa World Press, 2013), 27-56.
[197] Tijan Sallah, "Strange Farmers and the Development of The Gambia's Peanut Trade, "in *State and Society in The Gambia since Independence, 1965-2012*, eds. Abdoulaye Saine, Ebrima Ceesay and Ebrima Sall, (Trenton: Africa World Press, 2013), 57-78.
[198] Judith Carney and Michael Watts, "Disciplining Women? Rice, Mechanization, and the Evolution of Mandinka Gender Relations in Senegambia," *Women, Family, State and Economy in Africa, vol. 16. No. 4. (Summer 1991): 651 -68.*

1985 because of the changing economic demands. He shows that Gambian men abandoned the food grain cultivation for peanut because of better prices after World War II, and Gambian women on the other became entrenched in the swamp rice cultivation.[199] Richard Schroeder's work similarly emphasizes the gendered confrontations in the face of international intervention in the North Bank of The Gambia. The women in sustainable development projects transformed the household production system and environmental programs.[200] In this thesis, I wish to redirect the scholarship to the environmental effects of the colonial agricultural activities in the Gambia.

Between 1938 and 1965 commercial agricultural production intensified at the site of the Colonial Development Corporation's rice mechanization schemes in Kudang and Walli Kunda, and the Gambia Government Rice Farm in Jenoi, Western Jarra. In addition to the destruction of forest and wildlife in the area, these rice schemes and others like them were the focal point for the introduction of agricultural machinery, herbicides, and insecticides, as well as the catalyst of the colonial land grabbing in the Central and MacCarthy Island Provinces.

The introduction of the animal-drawn plow also contributed to the destruction of the environment. Indeed, the animal-drawn plows revolutionized agriculture, particularly in peanut cultivation, but they set in motion an irreversible economic and social transformation of rural Gambia, as well as devastation of the environment by causing soil exhaustion and increasing the intensity of erosion. This chapter also examines the colonial government's obsession with the Gambia's cattle population, as more heads meant more cattle taxes and pasturage fees. This was the catalyst for the major inoculation drive against rinderpest. When the cattle population grew unabated, the colonial agricultural activities, particularly rice mechanization schemes in Fulladu West, were a subject of continual cattle depredation. The district authorities in Upper and Lower Saloum had constant brushes over cattle grazing sites in Pakala Causeway, Batti

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[199] James Webb, "Ecological and Economic Change along the Middle Reaches of the Gambia River, 1945-1985," *African Affairs, vol 91, No. 365* , (Oct 1992): 543-565

[200] Richard A. Schroeder, *Shady Practices: Agroforestry and Gender Politics in The Gambia,* (Berkeley: UCP, 1999).

Hai and Njama swamps. The expansion of agricultural activities in the Gambia also led to the massive campaign against animal pests. This chapter further highlights the war on pests and the methods used (poison bait, trenches, and tail for shilling) to exterminate baboon, bush pig, and monkey populations.

The Colonial Rice Mechanization Schemes

The Second World War significantly transformed the Gambia's status within the British Empire from a small backwater to a territory with strategic significance. When French West Africa declared for the pro-German Vichy regime, Bathurst became a strategic sea port between the major French port of Dakar to the North and Freetown to the south, which was a crucial staging post for Atlantic convoys. Also, the disruption on world trade and the subsequent food crisis during the war heightened the ongoing debate about The Gambia's viability as a self-sufficient political entity given its small size, overreliance on peanut as a single export crop, and also surrounded in three sides by Senegal.[201] Generally, the post war British Empire raised concern about the food security in all its overseas colonies "and overriding importance of substantial technical changes in methods of production especially methods of agricultural production."[202] In the early 1940s, the British parliament approved a legislation in which the Colonial Development Fund (CDF) would give financial support to development activities in the colonies. This funding would give additional assistance in meeting recurrent expenditure in the colonies on agriculture, education, health and housing.[203]

The colonial administration in the Gambia had earmarked its agricultural development policies based on the availability of the CDF assistance. While the Department of Agriculture popularized its policies on the goals to improve the standard of living of the Gambian population, the expansive mechanization and food grain cultivation the policies entailed were still shaped by the British imperial economic

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[201] Swindell, "Enter the 'Experts': Environmental and Agrarian Change in The Gambia, 1900-1951": 44.
[202] AGR 1/41 Cotton: Cultivation of, Locally, 1944 NRS, Banjul, The Gambia –see the Letter from A. Creech Jones, the Colonial Secretary, the Colonial Office, Downing Street, London, to Governor of the Gambia, Bathurst, 22nd February , 1947.
[203] Ibid.

agenda. [204] The British Empire's post-World War II development policies emphasized the British objectives to increase the production of raw materials and earn dollars on the international markets to aid the reconstruction of the metropole devastated by the war.[205] The post-World War II agricultural activities in the Gambia paralleled the post-World War I swamp rice schemes in Sierra Leone. In 1918, Sierra Leone's Department of Agriculture adopted the swamp rice development policies which were justified on the colonial government's desire to increase the household rice supplies. For Andrew Millington, the post 1918 disastrous rice harvests and the subsequent political disturbances led to the swamp rice cultivation scheme in Sierra Leone. He argues that the 1919 rice shortage and subsequent riots necessitated the political expedience of rapidly increasing rice production.[206] Certainly, the unbearable pressure on food supplies in Bathurst due to the influx of war laborers, as in Freetown during the war, culminated into numerous colonial policies aimed at augmenting the household food supplies. The colonial agricultural development in the Gambia during World War II highlights colonial officials' dependence on the models from Sierra Leone. As Sierra Leone embarked on swamp rice schemes in 1922, the Gambia's Department of Agriculture was created in 1924 to deal with dependence on peanut, soil deterioration, and capital deficiencies. In

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[204] Colonial Secretary's Letter 11th March 1940 explained "the extraordinary gazette dated the 20th February, 1940, in which was published the announcement that His Majesty's government in the United Kingdom" to ask for the parliament to approve legislation in which CDF could give financial assistance to the British colonies in Africa. found in AGR 1/52 Food Crop Prospects, 1944 NRS, Banjul, The Gambia

[205] The British Empire's Post-War colonial development policies had numerous contradictions. It had two main aims: firstly, to increase the production of raw materials, to aid the reconstruction of the metropole and earn dollars on the international markets; and secondly, to improve the standard of living among the colonial populations were certainly influenced ideologically and pragmatically by the Marshall Plan reconstruction efforts. While they attempted to appease the US Anti-Imperial stance, the British Empire also safeguarded its interest against the soviet expansionist activities in the world, thus the development of colonial populations evidently remained a bogus bravado. See Charlotte Lydia Rile, *Monstrous predatory vampires and beneficent fairy-godmothers: British post-war colonial development in Africa*, unpublished PhD thesis submitted to University College London, (2013), 3.

[206] Andrew Millington, "Environmental degradation, soil conservation and agricultural policies in Sierra Leone, 1895 -1984," in *Conservation in Africa: people, policies and practice*, eds. David Anderson and Richard Grove, *(*New York: Cambridge UP, 1987): 235.

1926, the Department of Agriculture created a seed supply scheme, and later in 1933 upgraded the scheme to a network of cooperative village seed stores.[207]

The Gambia's population of two-hundred and fifty thousand was too small to meet the labor demands of the expansive food grain cultivation. The colonial administration estimated that only approximately 10,000 hectares out of total of a total of 135,000 hectares were being cultivated, and the colonial fiscal demands had already significantly gendered the agricultural labor. While men grew peanut in the upland, the women cultivated rice in the swamps. As part of its drive for food self-sufficiency, they attempted to take men back to food grain cultivation. The physical characteristics of the swamps (*bafaros*) where rice was grown was another major constraint for efficient use of labor. For many farming communities, the daily commute to the *bafaros* was onerous. It required long hours of trek through knee-deep muck and mangrove roots, and along difficult routes. Rice seedlings and harvests were transported to the settlements often from further afield to the uplands. (Explain.) The Department of Agriculture in its first post-War major agricultural activities mobilized male labor in building causeways, bridges, culverts in the swamps to make the rice fields accessible to the rice cultivators. Colonial records have shown that over 150 kilometers of causeways, bridges, and culverts were constructed by 1955.[208]

On the orders of the colonial government, the chiefs and the village heads encouraged their subjects to abandon peanut for food grain cultivation. Some overzealous chiefs excessively coerced the rural population in making these agricultural objectives successful. For instance, Cherno Bandeh of Fulladu West "ordered demolition [of] all village *bantabas*[209] to encourage yard owners to undertake plantings" of grain.[210] Mama

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[207] See AGR 1/5 Agricultural Department: Food Crop Prospects ad Report on Seed Stores [1920s and 30s], NRS, Banjul, The Gambia

[208] CSO 2/1668, Bridges, Culverts and Crossings in 1938 and subsequent years, NRS, Banjul, The Gambia, and Webb, "Ecological and Economic Change along the Middle Reaches of the Gambia River, 1945-1985": 553-53.

[209] A *bantaba* is a platform built under a tree at the center of the village for resting and village palavers. Resting at the bantaba during farming season is often interpreted as laziness. Chief Cherno Bandeh's call for the demolition of *bantabas* reinforced the British administrators often cited laziness of Gambian farmers.

Tamba Jammeh, the Chief of Illiasa District passed heavy handed but successful agricultural policies during this period. He first initiated Village Famine Reserve farms in 1940. This scheme required every village in his district to cultivate a communal grain farm for consumption during times of need, particularly during usual difficult months in the Gambia between July and September. He cleared and established rice fields in Kannikunda and Bambali swamps in 1941, which were later described as some of the biggest rice projects in British West Africa. In 1943, Jammeh ordered that every married man in Illiasa must cultivate a plot of rice. There was a fifty percent increase in food production and Illiasa was declared food self-sufficient, and in 1957, the Duke of Edinburgh visited Illiasa rice farms to see the success story himself.[211] While the food production increased in the colony, the Agricultural Department's food grain self-sufficiency drive reveals the contradictions in the British colonial administration in Africa. In the 1890s, when the colonial government changed its seemingly disinterested attitude towards peanut cultivation controlled by the private firms in the Gambia, it had lent its full support to peanut agriculture even at the expense of the food crops. The colonial government willingly regularized and controlled the rice importation to make up for the difference. By the 1930s towards the beginning of the war, the Gambia ranked sixth among the peanut exporting countries in the world, contributing 3.62 per cent of the world's total export.[212]

The major large-scale approach to food grain cultivation after World War II in the Gambia was the establishment of rice cultivation schemes in Jenoi, Kudang and Walli Kunda. These projects were established in the most fertile "Middle Reaches of the Gambia River between miles 140 and 180 upstream from Bathurst." [213] The colonial

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[210] AGR 1/41 Cotton: Cultivation of, Locally, 1944 NRS, Banjul, The Gambia. See the dispatch sent by the Commissioner MacCarthy Island Province to the Colonial Secretary, Bathurst, 10th January, 1940

[211] CSO 84/324 Royal Visit 1957 (Duke of Edinburgh), NRS, Banjul, The Gambia, and Hassoum Ceesay, *Patriots: Profiles of Eminent Gambians*, (Leicester: Global Hands Publishing, 2015), 118-119.

[212] Reginald H. Jarret, "The Strange Farmers of the Gambia," *The Geographical Review* 39:4 (1949): 633-36.

[213] CSO 2/3206 Establishment of Government Rice Farm (Jenoi), see the dispatch from the Director of Agriculture, the Gambia Colony Cape St. Mary to the Director of Agriculture, Sierra Leone, 28th March 1946. International press-cutting bureau reports the acquisition of rice fields in Western Jarra, deployment of staff and commencement of irrigation activities (110, Fleet Street, London, E.C. 4. Crown Colonist

agricultural experts considered this region of the Gambia "as the most promising area in West Africa for rice growing and the area which would give quickest results," the rice schemes had taken over 27,000 acres of fertile agricultural land with better topography, access and rainfall.[214] While the colonial government's first food sufficiency scheme involved labor intensive rice cultivation in the swamps, the second scheme was more large-scale and capital intensive. The second scheme established a large-scale rice production using mechanization and river irrigation through pumps, canals, and dykes distributed in the rice fields. Also, the new scheme departed from the earlier swamp rice improvement project in one important way, female rice growers lost control of land through a 30-year lease program.[215]

While the first rice project increased labor and eased access to rice farms, the second scheme was characterized with massive encroachment and destruction of the mangrove swamps and forest cover. Indeed, the rice farms established in Jenoi, Kudang and Walli Kunda were major attempts to transform the Gambia's agricultural sector, but they each considerably violated the major forest and wildlife conservation policies of the Forestry Department, which was at that time under the Department of Agriculture. In 1946, the Gambia Rice Farm began clearing mangrove and saline grass-lands in Jenoi, Western Jarra. The Jenoi farm began with over 1000 acres of mangrove swamps, and the area's grassland with correct drainage which had been a good pasture for the livestock of Western Jarra. In 1949, a vegetation cover of grasses, trees "averaging 250 to the acre" of marshes and the forest cover were encroached upon and destroyed between Kudang Tenda and Georgetown.[216] The Colonial Development Corporation leased 10, 800 acres in the Pachari/Walli Kunda Swamps and 12, 600 acres in the Kudang swamps. For satisfactory water control, the rice scheme established two pumping stations and

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London,) September 1946, and CSO 2/3312 Gambia Rice Farm, NRS, Banjul, The Gambia, see the memo by Controller of Plans on Gambia Rice Projects (Kundang and Walli Kunda), 3rd November, 1949.

[214] Ibid.

[215] CSO 2/3312 Gambia Rice Farm, NRS, Banjul, The Gambia, see Points on which agreement was reached between the Gambia Government and the Colonial Development Corporation on 21st February 1951.

[216] CSO 2/3206 Establishment of Government Rice Farm (Jenoi), and CSO 2/3312 Gambia Rice Farm, NRS, Banjul, The Gambia, see Memo by Controller of Plans on Gambia Rice Projects (Kundang and Walli Kunda), 3rd November 1949.

constructed 49 miles of irrigation canals, with 60 miles of feeder ditches, 34 miles of drain and 47 miles of roads.[217]

The scholarship on the Gambia's environment emphasizes how the colonial rice irrigation schemes shaped the post-independence emphasis on rice irrigation and the subsequent gendered conflicts caused by both colonial and the post-independence irrigation schemes. Most of the works highlight that the rice irrigation schemes failed because of the poorly designed irrigation system and more importantly the colonial government's attempt to integrate the disinterested population into wage labor. I wish to draw new perspectives on the colonial rice cultivation schemes in the middle reaches of the Gambia River. The transformation and expansion of rice cultivation encroached upon and destroyed the forest cover, habitats of the wildlife, and seized agricultural land from the rural farmers.

The establishment of the rice irrigation scheme in Walli Kunda led to encroachment of hippopotamus habitats in Kai Hai Islands. The Kai Hai were a series of small uncultivated islands along the Gambia River located between the Baboon and MaCcarthy Islands. The two largest islands of Kai Hai, the Kajakat and Fataworo, are often inundated knee deep by tidal water, and generally, the Kai Hai had the largest concentration of the Gambia's hippo population. After the delineation of 12,800 acres for Colonial Development Corporation in the Walli Kunda Swamps, over 1000 acres of rice land seized belonged to the neighboring Saruja, Brikama-ba, and surrounding settlements. Many of the settlements that lost their rice farms to the irrigation scheme crossed the Gambia River in search of rice farms in the Kai Hai Islands in the adjacent Niani District. Moreover, during lease negotiations between Chief Cherno Bandeh and Fulladu West District Authority, and the Colonial Development Corporation, the rice lands belonging to the nearby settlements were excluded, and the manager of CDC, Mr. M. J. Philips, assured the elders of the district that "he wished to disturb the village people as little as possible." He promised that every step would be taken to leave them

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[217] Ibid.

much land, or they would be compensated for any land seized from them.[218] However, in a dispatch to the Colonial Secretary, Mr. Philips insisted that the delineation of rice farms would "depend largely on the levels" of the land, not rice lands belonging to nearby settlements. Consequently, the CDC rice field delineation encroached upon many rice farms.[219] While the seizure of the rice fields in Fulladu West highlights the colonial government's desire for profits over the improvement of the lives of the colonized people, it demonstrates the colonial government's interest in profit over the protection of wildlife.

Certainly, the colonial agricultural activities in MacCarthy Island Province generally legitimized the destruction of the hippo population. The rice farmers who were evicted from Fulladu West sought ferry for daily transport to their fields and wire to fence their fields from the marauding hippos. The Fulladu West District Authority was tasked to pay for the fencing at Kai Hai Islands when the CDC reneged on its promises to the displaced farmers, and the Marine Unit in Bathurst installed "dumb ferry" (barge) for them between Walli Kunda and Barajally Tenda, yet they had to trek a very long distance to the fields in the Kai Hai Islands.[220] The hippos faced the fury of the colonial war on pests when the wire fence failed to protect the rice fields from the depredating animals. In 1947 alone, fifty-three hippos were confirmed shot, and the following year the colonial administration funded a seven-week expedition organized by the Oxford University Exploration Club to study the rice cultivation and hippopotamus control in the Gambia. John Clarke, who did the study along the middle reaches of the Gambia River, made only eight confirmed sightings of hippos mostly between Baboon and MacCarthy Islands. He

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[218] CSO 2/3312 Gambia Rice Farm, NRS, Banjul, The Gambia. See the Points on which agreement was reached between the Gambia Government and the Colonial Development Corporation on 21st February, 1951 & Commissioner MacCarthy Island Province wrote to the Senior Commissioner Humphrey Smith about "Rice lands for persons evicted from Walikunda." 27th April 1951.

[219] CSO 2/3312 Gambia Rice Farm, NRS, Banjul, The Gambia. See M.J. Philips, Manager, CDC's dispatch to the Colonial Secretary, Bathurst, 6th April 1950.

[220] CSO 2/3312 Gambia Rice Farm, NRS, Banjul, The Gambia. See the dispatch from Senior Commissioner Humphrey Smith, Bathurst, to the Commission MacCarthy Island Division, Georgetown, 27th April 1951.

noted the colonial government's conflicting interest in rice cultivation and hippopotamus conservation.[221]

The hunting exploits of Abdu Saidykhan give an important insight into the colonial destruction of hippopotamus in the MacCarthy Island Province. Before his death in 1968, Mr. Saidykhan (fondly called Abdu *malifala*, meaning Abdu, the hippo killer) had killed over two hundred hippos in the creeks and swamps along the Gambia River. He was one of the demobilized World War II veterans of the West African Frontier Force the colonial administration relied on to hunt animal pests in the Protectorate. Saidykhan returned to his native McCarthy Island Province to hunt hippo around the same time that the Colonial Development Corporation's rice cultivation schemes began in the province. Even before the establishment of the CDC rice schemes, the hippo had been a menace to the food grain cultivation activities. A hippo's one-night grazing could destroy thousands of acres of rice, and they had already laid waste many acres of rice in MacCarthy Island Province even before CDC rice mechanization. In fact, some settlements in Sami and Niani Districts fled their settlements because of the marauding hippos. Saidykhan obligingly rendered his service at no cost to the distressed calls of the farmers throughout the hippo infested north and south banks of McCarthy Island Province. According to my informants, he was averse to killing calves or nursing hippos, and he distributed the meat of his kills for free. He was generally liked by the farming population because he rid their farms of pests.[222]

Although Saidykhan was respected for his spiritual powers and regarded for the protection of nature, he was at the service of the colonial authorities. The colonial chiefs and commissioners in the MacCarthy Island Province were his main patrons. He often kept the tails of his victims and would occasionally parade them before colonial

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[221] John R. Clarke, "The Hippopotamus in Gambia, West Africa," *Journal of Mammalogy, vol. 34, No. 3 (Aug. 1953):* 299.

[222] I had an extensive discussion with Jaliba Kuyateh at his Brikama residence about Abdou Saidykhan. Mr. Kuyateh is one of the most popular musicians in Senegambia today. He grew up knowing Abdou Saidykhan as his father's friend. Also see Hassoum Ceesay, *Patriots: Profiles of Eminent Gambians,* (Leicester: Global Hands Publishing, 2015), 170-175 & Jay Saidy, "Abdu Mali Fala (1924 – 1969): The Legendary Exploits of a Gambian Hippo Hunter," Occasional paper of the Gambia Cultural Archives, (1977).

authorities. In 1946, Commissioner John Murphy of MacCarthy Island Province accompanied him in one of his hunting expeditions around the hippo infested Mali Bolong (Hippo Creek) along the MacCarthy Island. Although Commissioner Murphy later prohibited people from accompanying Saidykhan in his expeditions because of the risk involved, he was so impressed with his skills that he granted him an annual free gun powder ration for his work.[223] Saidykhan died in 1968 on one of his hunting expeditions. While the legend and scholarship remembered him as one of the greatest hunters of his time, his hunting activities between the 1940s and 60s in MacCarthy Island Province give a new dimension to his life. Indeed, he represented tradition in preserving the ethos of indigenous hunters, but Saidykhan also represented how modernity exploited tradition to accomplish its objectives, in this case, the colonial destruction of the fauna of the Gambia in the interest of commercial agriculture.

In 1953, the CDC rice mechanization schemes in Kudang and Walli Kunda were reduced to the status of experimental farms. The colonial government realized that even rice imports proved far cheaper than mechanization in the Gambia. Its replacement, the Gambia Rice Farm, was also an economic failure, yet due to technical failure. The food grain cultivation came to a halt, and the Department of Agriculture concentrated on the upland peanut cultivation with animal drawn plows over the indigenous hand hoe.[224]

The Introduction of Animal-Drawn Plow

In 1952, Hector Davidson, then an agricultural officer at Masembe Agriculture Station in Kiang East District, pioneered the introduction of animal-drawn plow in the Gambia. He first built an ox cart intended to expedite the transportation of harvests and building materials, but his long-term goal was to teach new farming methods to the local farmers. Davidson put forward his plans to improve farming methods and guide local farmers in using the ox plow at Mixed Farm Schools. The Department of Agriculture had already introduced ox plows in the 1930s, but the local farmers were reluctant to adopt them because many did not see animal plowing as viable. Only few chiefs and farmers

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[223] Ibid.
[224] Webb, "Ecological and Economic Change along the Middle Reaches of the Gambia River, 1945-1985": 556-57.

experimented with the plows before 1950s. The Department of Agriculture accepted Mr. Davidson's plans in 1955, a decade later, over 1, 874 students had graduated from twenty-four Mixed Farm Centers established countrywide.[225] The Mixed Farm Centers integrated the Gambia's cattle population into the upland farms, and subsequent introduction of the ox-plow into the agricultural systems indeed revolutionized the agricultural sector, but it was equally fraught with massive environmental destruction.

The Department of Agriculture's goals of establishing Mixed Farm Centers had been to replace local hand hoes with an animal-drawn plow. In addition to training farmers on the scientific care of livestock and new farming methods, the Mixed Farm Center graduates were later contracted to plow the farms of those farmers who did not attend the centers. As part of the main agenda of Agricultural revolution in the Gambia, the Department of Agriculture hoped to lead the country in a "mechanical ladder" in mechanized farming. At the first rung of the proposed mechanical ladder was the simple ox-drawn double-moldboard Emcot plow. The second stratum was the more complex Aplos tool-bar plow, and the third was a small inexpensive tractor; and the final rung was a full-size tractor and a completely mechanized agricultural system. Often, the Department of Agriculture emphasized that the mechanical ladder was aimed at providing "every small farmer with reasonably accessible progressive steps in a logical sequence to advanced mechanization."[226] By 1965, the program had successfully completed the first rung of the mechanical ladder. The introduction of ox and donkey plows was much easier and successful, but the Gambian farmers remained awed at using horses in drawing farming implements. A horse had been a war tank in the whole of Senegambia before colonial rule, and it was only the chiefs and the wealthy who could afford them during colonial rule. Many farmers did not see it economically viable to buy a horse to draw farm implements. However, after independence the Gambia's horse

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[225] CSO 2/1042 Ploughing in the Gambia, CSO 2/1983 Agricultural Machinery 1942, NRS, Banjul, The Gambia, & Peter Weil, "The Introduction of the ox plow in Central Gambia," in *African Food Production Systems,* ed. Peter F. M. McLoughlin, (Baltimore: John Hopkins Press, 1970), pp.244-246
[226] Ibid.

population was integrated into agriculture, and this expanded the cultivable land and generally increased agricultural yield.[227]

Erik Green's study of Master Farmers' Scheme (MFS) in the British Nyasaland (Malawi) recalls how the animal-drawn plow created a class of wealthy farmers in the Gambia. In Green's study, the main goals of MFS in Nyasaland was to create a class of "yeoman" farmers who would act as models for the farmers by giving them support to transform indigenous farming methods.[228] While in Nyasaland a few wealthy farmers were selected in the scheme, the Mixed Farm Centers which were the forerunners of animal plowing in the Gambia invited all the farmers for instruction at its twenty-four centers around the country, but only wealthy farmers met terms and conditions of the Mixed Farm Centers. A few students who could afford oxen for practical lessons were accepted in Mixed Farm Centers, and only a few Gambian farmers could afford this condition especially after the cattle plague impoverished many families. As a result, most of the graduates from the Mixed Farm Centers were from affluent families, and commercial plowing later consolidated their control of social and economic capital. The Department of Agriculture stuck to its mechanical ladder despite opposition from farmers, politicians, and traders most of whom argued against piecemeal introduction of agricultural machinery in the Gambia. The agricultural department officials argued that the expensive price of light tractors would benefit only rich farmers, yet animal drawn plow consolidated already powerful families in the rural Gambia.[229]

The scholarship on the Gambia credited the introduction of the animal drawn plow to considerable economic improvement of rural farmers and increase in government

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[227] My discussion with Ousman Saidykhan gives an important insight into introduction of animal drawn implements in the Gambia and how reluctant some farmers were at the beginning of the schemes. He also explained some of the social improvement it gave to some students who returned from *ninse bungo-to* (literally cow house, but he is referring to Mixed Farm Centers). These discussions were done in Jarra Sukuta between June 16th to 18th, 2017. See Robin Law, *The Horse in West African History,* (Oxford: Oxford UP, 1981). The horse had generally been only a cavalry mount, and thus became an important element of military and political affairs.

[228] Erik Green, "Labor Costs and the Failed Support of Progressive Farmers in Colonial Malawi," in *Landscape, Environment and technology in Colonial and Postcolonial Africa,* (Routledge: Taylor & Francis Group), 173-201. This is in a different font—fix

[229] Weil, "The Introduction of the ox plow in Central Gambia": 239.

peanut exports. Some of the works show how the animal drawn plow offered common Gambian farmers a new way to gain the symbols of high status, cash and access to imported products. While peanut exports increased, the economic status of farmers improved, but the animal drawn-plow led to fragmentation of Gambian families. In a Gambian *dabada* (production unit), the whole compounds joined labor to cultivate *maruo* (the household land reserved for food production) and individual family members grew *kamanyango* (a land cultivated by individual members of family for cash). The joint pool of labor for *maruo* cultivation became unnecessary at the advent of animal-drawn plows. Eventually, families separated, and even settlements fragmented in search of more land for cultivation. Consequently, introduction of animal drawn-plow had significantly reversed the gains in the food grain cultivation. Many farmers who adopted animal drawn plow grew more peanuts than food crops. Early millet and sorghum had been the most affected.[230]

A new insight could still be drawn from the introduction of animal drawn-plows in the Gambia. Generally, animal drawn-plows led to the expansion of cultivable land and further destruction of forest cover. The dramatic 34 percent increase in peanut production was credited to the introduction of animal drawn-plow, 30 percent to the use of improved seed, and 25 percent to the use of fertilizer.[231] During World War II and into the immediate post-war period, the producer peanut prices were raised in a series of dramatic steps, and in 1950, it rose to 29 pounds per ton. Although the peanut prices at the world market steadily slumped in the 1960s, the Gambia Oilseed Marketing Board (GOMB) maintained some relatively steady prices, for example, the £27 per ton in 1963 was stable enough for Gambian farmers.[232] Consequently, peanut prices and animal drawn-plows accelerated land use and tenure. Many farmers used more land for cash-crop production rather than food crop. The fallow periods of lands were eliminated, and

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[230] See Weil, "The Introduction of the ox plow in Central Gambia": 265-67 describes the economic and social transformation the animal drawn plow wrought in rural Gambia. & Donald R. Wright, *The World and a Very Small Place in Africa*, (Armonk: M.E. Sharpe, 1997), describes how peanut economy in generally and plow improved the economy. Many rural Gambian stored their wealth in cattle, as the peanut economy boomed, more cattle were bought as saving of the peanut wealth.
[231] See Weil, "The Introduction of the ox plow in Central Gambia": 252.
[232] Jarret, "The Strange Farmers of the Gambia": 37.

land degradation advanced at unabated rate. Gambian farmers had realized a continual decrease in the crop yields in the lands they used to cultivate with their forefathers. Despite increase in the land areas cultivated, the yield continually dropped.[233]

The Cattle Improvement Schemes and Grazing Disputes

The colonial cattle and livestock improvement objectives in the Gambia also significantly destroyed the environment. As Emmanuel Mbah describes of the colonial innovations in the cattle industry in the British Southern Cameroons, the cattle improvement projects in the Gambia were similarly motivated economic principles of the colonial government. Mbah's study shows that the British attempts to make cattle the pillar of the economy of the region was conceived on the economic gains of the colonial government. Between 1916 and 1960, the revenue from cattle taxes (*jangali*), which became one third of all revenues by 1940s, motivated the British policies in Southern Cameroons.[234] The Department of Agriculture in the Gambia's post war policies highlighted the demands to make the Gambia sufficient in meat and milk. Although they had not expected the Gambia to export meat and milk, it was hoped that it could sustain the ever-increasing internal demands which relied on supplies from Senegal and Mauritania. The Agriculture Department also aimed to integrate the Gambia's cattle population into its plowing project.

Like the British Southern Cameroons, the Gambia government was obsessed with the cattle population, as more heads meant more revenue from cattle tax and pasturage fees. The cattle improvement projects were hampered by the continual rinderpest outbreak in the Protectorate, consequently, the control of rinderpest became an important task in making cattle a mainstay of the Gambia's economy.[235] The cattle inoculation against rinderpest began in the Gambia in 1935. It started with double inoculation of serum and virus. The chiefs and village heads were compelled to mobilize cattle owners

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[233] I had discussions with Mr. Lamin Nyagado, curator at National Arts and Culture Oral Documentation, Fajara, about the introduction of Plow and its effects on the Gambian Agriculture. 17th May 2017.
[234] Emmanuel M. Mbah, "Cattle in British Southern Cameroons: Innovations in grazing and Environmental Control," in *Landscape, Environment and Technology in Colonial Africa*, eds. Toyin Falola and Emily Brownell, (Routledge: Francis and Taylor), 202-203.
[235] AGR 1/52 Food Crop Prospects, 1944 NRS, Banjul, The Gambia. See the policies of the Agricultural Department, 1945, NRS, Banjul, The Gambia.

to bring forth their cattle for inoculation and report any cattle crossing the border from the French territory. Because of the successes in the rinderpest inoculations, the cattle population increased from 35, 000 heads in 1934 to 160, 000 by 1955.[236]

While the colonial administration's desire to integrate the cattle herds into the mixed farming system was a considerable success, the government's attempts to change the Gambia's dependence on imported cattle were a failure.[237] According to Tad Brown the cattle trade failed because the colonial veterinary officers assumed the position of middlemen in the cattle trade. They refused to observe the local credit-based norms of exchange between dealers and cattle owners, because the colonial officials refused to deal in credit with their African subjects. As a result, the government scrapped the market-based approach for a loss. While veterinary science manifests the British imperial grandeur, its failure to command the cattle market reveals its disregard for local knowledge and customs.[238]

Some overenthusiastic colonial chiefs took over cattle trade from the government. Chief Matarr Ceesay of Upper Saloum was prominent among them. In April 1952, Ceesay organized in his district the first ever cattle market. Butchers and cattle dealers from around the country travelled to Njau to buy cattle. His cattle fairs attempted to control the overgrown cattle population but also his own dissatisfaction with price hikes caused by the cattle importers from neighboring Senegal and Mauritania.[239]

As Emmanuel Mbah shows of Southern Cameroons, the environmental concerns of overgrown cattle population such as soil deterioration and depredation of farms increased over time in the Gambia.[240] The colonial government was first drawn to cattle trespassing crises at the Colonial Development Corporation's rice schemes in MaCcarthy Island Province. Cattle trespass in Walli Kunda rice scheme became so rampant and

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[236] Ibid.
[237] CSO 2/1399 Cattle Inoculation, No. 257 –I Provision for estimation 1934, II Expenditure 1933
[238] Tad Brown, "Await the Jarga; Cattle, Disease, and Livestock development in Colonial Gambia," *Agricultural History*, vol. 90, 2, (Spring 2016): 231.
[239] Hassoum Ceesay, *Patriots: Profiles of Eminent Gambians,* (Leicester: Global Hands Publishing, 2015), 103-107.
[240] Mbah, "Cattle in British Southern Cameroons: Innovations in grazing and Environmental Control": 202-203.

destructive that the project management wrote a complaint to Colonial Secretary about Fulladu's cattle population. The colonial government built a fence and a cattle grid at a total cost of £3, 750.[241] The overgrown cattle population led to numerous minor grazing disputes throughout the Protectorate in the 1950s and 60s, but Upper and Lower Saloum grazing disputes attracted national attention and warranted government intervention.

The Upper Saloum District Authority demanded pasturage fee from cattle owners under Native Authority Ordinance 1933. Section 16 of the Ordinance regulated grazing and passed the payment of pasturage fee, but it was never enforced. Chief Matarr Ceesay discussed and agreed in principle with the Senior Commissioner Humphrey Smith at his office in Bathurst to enforce this regulation. His argument was to avert environmental problems in his district as the cattle of the region converged in Upper and Lower Saloum for *egu-kol* (dry-season grazing). The *Egu-kol* was an important source of social cohesion and economic improvement for cattle owners and their hosts. As it was an important source of income to cattle owners, the farms of their hosts were fertilized during this period. Upper Saloum's Pakala Causeway, Bati Hai and Njama swamps were the main grazing sites for the cattle of Upper and Lower Saloum, and the neighboring settlements in the French territory. The Chief of Upper Saloum complained about the environmental problems of overgrazing, but he also wanted to exploit the presence of the foreign cattle to raise revenue for his district. The Upper Saloum District Authority prohibited cattle entering these swamps without their authority, and any cattle from other districts of the Gambia including Lower Saloum must pay annual pasturage fee of 3 shillings per head. The cattle from outside the Gambia must pay 6 shillings per head.[242]

In March 1952, some heads of cattle were impounded, and fines collected from cattle owners of Lower Saloum on the orders of Chief Matarr Ceesay. Over twenty cattle owners of Lower Saloum sought the services of Bathurst lawyer, Pierre Sarr Njie, in a

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[241] CSO 2/3314, Colonial Development Rice Project-Walli Kunda and Kudang, 1949, NRS, Banjul, The Gambia. See the dispatch from Colonial Development Corporation 19th June, 1951 to Ag. Colonial Secretary, Bathurst, and A dispatch from the Colonial Secretary to CDC, Agric. Dept. and government Acc. 31st July, 1951.

[242] CRC 1/ 4 Central Division: Grazing Disputes, NRS, Banjul, The Gambia Native Authority Ordinance 1933 (Cap. 80 of the Laws) Control of Grazing (Upper Saloum) Rules 1952.

civil suit against Chief Matarr Ceesay and the District Authority of Upper Saloum. The twenty plaintiffs from Lower Saloum sought redress for the fines they paid, seizure of their cattle (though they were later released), and restrictions from grazing sites.[243] With strong backing from the colonial government and the office of Attorney General, the Upper Saloum District Authority won the subsequent four years legal battle, but continual bickering over gazing sites continued. The continual cattle trespass in Fulladu and grazing disputes in Saloum highlights the colonial administration's obsession with profit without considering the environmental effects. The overgrown cattle population contributed to overstocking and soil deterioration more than the indigenous farming methods the colonial administrators so hated.[244]

The Colonial War on Pests

Bernard Moore's study of colonial/apartheid vermin extermination in Namibia gives an important insight into aspects of colonial technology transfer and fervor surrounding commercial farming. He shows that from the 1930s to 60s, defensive vermin control practices were "modernized" into offensive vermin extermination strategies. Moore emphasizes that the technological shift in colonial Namibia was driven by colonial/apartheid desires for a stable white agricultural sector less dependent on local black labor. Generally, agricultural machination in Africa set the stage for the extermination of wild animals in the name of pest control.[245] Since 1917, the colonial authorities in the Gambia had always considered animal pest a considerable threat to their agricultural plans. The chiefs in the Protectorate were issued guns and gun powder kegs to hunt down animal pests since 1917, but the colonial agricultural activities between

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[243] CRC 1/ 4 Central Division: Grazing Disputes, NRS, Banjul, The Gambia. see Upper Saloum Cattle Disputes (Summary), 1956.

[244] Ibid. The colonial authorities and even Chief Matarr Ceesay of Upper Saloum feared a legal case between the two districts. The colonial government feared disturbance of peace in the area and many more litigations in other parts of the colony. Chief Matarr Ceesay later quickly lifted the ban on the cattle of Lower Saloum and he invited them for discussion to solve the misunderstanding. Although a discussion at the neutral ground between the two districts took place in the presence of Chiefs Matarr Ceesay and Ali Touray of Lower Saloum, the decisions taken at that meeting were not accepted by Lower Saloum Cattle owners.

[245] Bernard C. Moore, "" Vermin are Like Weed in Your Garden": Fences, Poisons and Agricultural Transformation in Colonial Namibia," AHA Today, 20 July 201 available http://blog.historians.org/2017/07/agricultural-transformation-colonial-namibia/

1938 and 1965 culminated into an unprecedented scale of wildlife destruction. In the 1940s, the provincial commissioners' reports were replete with accounts of large-scale destruction of crops by ever-increasing baboon, monkey, and bush pig populations. Many of the commissioners cited the threat animal pest posed to the colonial administration's agricultural activities and urged immediate actions to be taken to destroy the pest population. [246]

The government sought advice from Game Departments in Tanganyika (Tanzania) and Kenya on how to destroy the Gambia's pest population. Instructions from Tanganyika suggested two methods of baboon and monkey destruction: poisoning and driving. The instruction pamphlet outlined steps in preparation of arsenite of soda and laying the bait in the areas monkeys and baboons are known to sleep. About the driving methods, the pamphlet instructed that "a number of natives with nets are required, all should be armed with spears or clubs, a number of men with short guns or small-bore rifles are also required."[247] The driving bands would drive them in forming an enclosure around them and persons with guns would shoot.[248] The instructions from Kenya were similarly inhumane: shooting and poisoning were the most preferred methods. The pamphlet prepared by the Game Department of Kenya outlined in detail the methods to destroy monkeys, baboons, pigs, and other mammal pests.[249] Despite the prohibition of these methods in the Gambia's forestry regulations, the driving and shooting methods were soon trialed in the Gambia, first in Upper River Province. On the 19th June 1946 campaign alone, "the total causalities were 1, 157 monkeys, 50 deer, and 13 bush

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[246] CSO 2/1795 Gunpowder, etc., required by Protectorate chiefs -1940-42 & The Quarterly Reports of the Commissioners North Bank, Central, MaCcarthy Island and Upper River Provinces 1940 -1942, all found in CSO 2/ 3208 Destruction of noxious beast, NRS, Banjul, The Gambia.

[247] Dispatch from the Chief Secretary to the Government, The Secretariat, Dar Es Salam, Tanganyika Territory, 20th April 1946 and enclose copy of general instructions issued by the Game Department of the Territory, in CSO 2/3208 Destruction of noxious beast, NRS, Banjul, The Gambia.

[248] Ibid.

[249] CSO 2/3208 Destruction of noxious beast, NRS, Banjul, The Gambia. See the dispatch from Chief Secretary to the Government, the Colony and Protectorate of Kenya, and a Pamphlet prepared by the Game Department of the Colony and the Protectorate of Kenya, 9th May 1946.

pigs."[250] The Governor congratulated the Commissioner of Upper River but raised concern about the unnecessary killing of deer. Driving and shooting were ordered in every part of the country and these campaigns significantly reduced the monkey, baboon and bush pig populations.[251]

The Governor's tour in Kiang in February 1949 reignited another phase of pest destruction. When the Governor visited Kiang West, the farmers sought permission from him to attack the baboon population.[252] In March 1949, the Executive Council approved £150 budget for the deployment of troops in Kiang to destroy all forms of animal pest. After this successful military expedition, the Governor passed directives to the protectorate administrators to devise a campaign plan against the animal pest destruction. One of the potent weapons the provincial administrators devised was "2 shillings per tail inducement" to local hunters, which they believed would encourage the local population to rise against animal pests. The Protectorate Administration bought 20 single barreled shot-guns and 12, 000 rounds, and 12 bore cartridges to augment the locally made Dane gun the local hunters used. The Gambia Oilseed Marketing Board covered the cost of weapons and ammunitions worth £2,000 and £3, 000 respectively on reward to the hunters.[253]

The Governor, Thomas Southorn sought advice from the West African Institute for Trypanosomiasis Research (ITR), Kaduna, Nigeria, which advised the Nigerian government on its successful "Operation Baboon" in Northern Nigeria in 1945. The instructions from ITR were the same as the methods used in Tanganyika and Kenya, with an exception of poisoning of waterholes with Sodium arsenite where baboons were

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[250] CSO 2/3208 Destruction of noxious beast, NRS, Banjul, The Gambia. See congratulatory Dispatch from the Governor's Office, Bathurst, to the Commissioner Upper River Province, Basse, 16th July 1946 and a letter from the Colonial Sectary to the Senior Commissioner Protectorate Administration, 6th June 1946.
[251] ibid.
[252] CSO 2/3208 Destruction of noxious beast, NRS, Banjul, The Gambia. See the Senior Commissioner's Letter to the Colonial Secretary 25th February 1949.
[253] CSO 2/3208, NRS, Banjul, The Gambia. See the letter from the Chairman Gambia Oilseed Marketing Board to the Colonial Secretary of 18th August 1950.

known to have frequented.[254] The Director of Medical Services in the Gambia objected to suitability of Nigerian methods to the local conditions citing widespread waterholes which serve as drinking spot for different games and livestock. But the Colonial Secretary suggested that the controlled use of "Paris Green held by the Medical Department" could be effectively utilized against the baboon.[255] The Director of Medical Services objected to these suggestions too, and poisoning methods were generally scrapped in the Gambia.[256]

The general campaign against animal pest began again in September 1950, when the executive council approved the proposal. Often, the Senior Commissioner for Protectorate Administration, Mr. G. Humphrey Smith gave monthly update of war on pests in a usual macabre title, "the scores since the inception of the scheme."[257] By 1952, 57, 234 baboons, 26, 131 monkeys and 25, 736 bush pigs were killed. The animal pest population was so depleted that, by 1953, the hunters complained that victims hardly come by. The campaign ended in late 1953 when over 75, 359 baboons, 28, 637 monkeys, and 27, 470 bush pigs were killed.[258]

The Gambia government's campaign against baboons had generated a considerable acrimony in the British Parliament. When Times Newspaper reported in mid-February 1952 about "outlawry of baboons" and the two shillings per tail inducement to local hunters, the Secretary of State for Colonies received hostile questions from the British Parliamentarians. In his response, the Secretary of State for Colonies justified the campaign against baboons on the threats they posed to colonial agricultural activities and the need for agricultural expansion in the colonies to feed Britain destroyed by the war. While the Secretary of State for Colonies silenced the hostile

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[254] CSO 2/3208 Destruction of noxious beast, NRS, Banjul, The Gambia. See the letter from Mr. T.A.M. Nash, Chief Entomologist, West African Institute for Trypanosomiasis Research, Kaduna, Northern Nigeria of 25th August 1949.
[255] CSO 2/3208 Destruction of noxious beast, NRS, Banjul, The Gambia. See the dispatch from the Ag. Director of Medical and Health Services, Bathurst, to the Colonial Secretary, Bathurst of 12th September 1949.
[256] Ibid.
[257] CSO 2/3208 Destruction of noxious beast, NRS, Banjul, The Gambia. See the scores since the inception of the scheme between January 1950 and July 1953.
[258] Ibid.

parliamentarians, he highlighted the British desire to feed the metropole, rather than hungry population in the colony.[259]

Conclusion

This chapter redirects the scholarship on the environmental effects of the colonial agricultural activities in the Gambia. As most of the works on the Gambia examine environmental factors such as diseases and rainfall, and non-environmental factors such as labor shortages and how prices on the world market shaped the Gambia's peanut economy, this chapter shows that colonial agricultural activities led to unprecedented destruction of Gambian environment. While the agricultural production expanded between 1938 and 1965, a large swathe of forest cover and marine habitats were encroached upon. The introduction of animal-drawn plow and Mixed Farm Centers built around the country expanded the cultivable land and destroyed the environment. When the cattle population grew unabated, the agricultural activities particularly rice mechanization schemes in Fulladu West became a subject of continual cattle depredation. The District Authorities in Upper and Lower Saloum had constant brushes over cattle grazing sites in Batti Hai, Pakala Causeway, and Njama. This chapter further highlights the war on pests and the methods used (poison bait, trenches, and tail for shilling) to exterminate baboon, bush pig, and monkey populations.

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[259] CSO 2/3208 Destruction of noxious beast, NRS, Banjul, The Gambia. See Times story of February 15th, 1952, a newspaper cutting, an urgent dispatch from the Secretary of State for Colonies, London, to the Governor, the Colony of the Gambia. REPLY URGENTLY NEEDED: PARLIAMENTARY QUESTION by Mr Peter Freeman and Lord Ailwyn regarding pest destruction campaign 27th February 1952.

CONCLUSION

This thesis is a study of forest and wildlife conservation in the Gambia between 1938 and 1965. It examines the colonial conservation policies and how agricultural activities, particularly the introduction of animal drawn-plow and mechanized rice farming undermined conservation. This thesis established that the colonial conservation policies neglected the local ways of forest and wildlife conservation in the Gambia. It also established that the colonial conservation in the Gambia was an extension of colonial control over environment, its resources, territories, and people who inhabited those territories. While the Forestry Committee established in 1938 attempted to protect the forest and wildlife in the Gambia, the Department of Agriculture's policies and activities undermined the conservation activities.

When the Duke of Edinburgh visited the Gambia in 1957, he was the first Royal in four centuries (after Prince Rupert in 1649) to visit Britain's oldest connection in Africa. Perhaps Prince Philips's four-month world tour which began in 1956 was part of the renewal of the empire's commitments to the colonies after the devastating war and subsequent independence agitations, but his visit also highlighted the Gambia's new-found status in the British Empire because of its strategic location for Atlantic convoys during World War II. Even when the post-war struggle for independence engulfed the whole of the colonial world, the Duke's engagements in the Gambia highlighted the imperial interest in consolidating its grasp of the resources in the Gambia. He visited agricultural development schemes and chiefs' conference held in Sankwia. The Duke's visit assured the Gambia's administrators of imperial support in food security and technical support in agricultural production expansion.

The hunting expeditions the Duke undertook during his visit are significant to the analyses in this thesis because they contradicted the stringent conservation policies. While crocodile shooting tours gave the Duke an outlet for pleasure, symbolic demonstration of masculinity and imperial domination of the environment, it significantly demonstrated the schemes of power relations perpetuated by the colonial state. The conservation regulations, like the colonial encounter in general, strengthened racial and class boundaries, as the European officials were privileged more than African officials

over the exploitation of forest resources (which extended to the Duke during his visit), the Gambian population was generally restricted, and their customary practices of resource exploitation were criminalized. Through conservation, the colonial authorities in the Gambia asserted control and authority over plants and animals, restricted the movements of the animals, and placed them under human control and surveillance.

The colonial conservation activities in the Gambia undermined the indigenous conservation methods. The veneration of ancestors and nature spirits that animate the natural environment and totemic beliefs based around a sacred identification with animals, plants, sacred forests and groves conserved the environment before colonial rule. While the indigenous belief system was reinforced by the local ideas of resource utilization according to needs, the emerging ideas of colonial conservation and capitalist exploitation of resources contradicted these believes. Consequently, the colonial conservation models instituted in the Gambia in 1938 led to the development of nature conservation areas as zones cleared of all human influence and settlement, with highly restricted access to resources.

The analyses in this thesis established that the colonial conservation and agricultural policies and activities were contradictory. While the Department of Agriculture initiated several projects: rice and other food grain cultivation for food sufficiency; peanut cultivation to develop a viable cash crop; and exploitation of forest timber products and huntable exotic game, the Department of Forestry had put in stringent measures to protect the forest cover and wildlife of the Gambia. The outcome of this contradiction was stringent conservation policies often with severe consequences for the African residents of the colony. As Gary Wilder argues about the French nation-state of the Third Republic during the inter-war period, the British Colonial Empire in Africa had been a mess of contradictions. For Wilder, the French Third Republic was racist, and it had disenfranchised the colonized people in general and Africans in particular contrary to the claims which show the French state as republican and its contradictory imperial practices were dismissed as minor aberrations. He emphasizes that within the French

republican framework, the racist, exploitative and authoritarian imperial instincts contradicted the internal dynamics of the republican imperial nation-state.[260] Moreover, this thesis established that the British administration in the Gambia similarly adjusted policies and activities according to its motives of political domination and economic exploitation of resource. Therefore, its policies and activities were not uniform and not intended for any complementarity.

The Department of Agriculture's policies of intensification of commercial agricultural production between 1938 and 1965 and the subsequent Colonial Development Corporation's rice mechanization schemes in Kudang, and Walli Kunda, and the Gambia Government Rice Farm in Jenoi, Western Jarra expanded food production, and these projects were the focal point for the introduction of agricultural machinery, herbicides, and insecticides, as well as the catalyst of the colonial land grabbing in the Central and MacCarthy Island Provinces which displaced many farmers in Fulladu District. While these agricultural expansion schemes reinforced the colonial economic agenda, the Department of Forestry's policies of forest and wildlife protection were significantly undermined.

This thesis contributes to the general debate on political ecology of conservation by highlighting the role of diverse actors and institutions in environmental degradation in the Gambia. It also challenges the ahistoric and colonialist approaches that blame African resource users for environmental problems yet ignoring the colonial commercial and agricultural activities. As one would expect, this thesis does not comprehensively address the establishment of national parks individuals' wildlife and forest parks in the Gambia with specific details based upon the nature of colonial policies and the specificities of complex ecological, economic, and social settings of the communities they were established, rather it gives a general socio-economic and political perspectives of the Gambia between 1938 and 1965 within larger colonial political and economic policies. I hope this thesis becomes a spring board for more research on environment and society in

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[260] Gary Wilder, T*he French Imperial Nation-State: Negritude and Colonial Humanism between the Two World Wars, (Chicago: Chicago University Press, 2005),* 118-122.

the Gambia. For a comprehensive understanding of the nexus between conservation, agriculture and rural development in both colonial and postcolonial Gambia, further research is needed in historicizing and contextualizing the development agenda in both colonial and post-colonial Gambia.

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