

Understanding Sudan

A Teaching and Learning Resource



Shifting Views of Desert Boundary Change: Dryland Human-Environmental Relationships in 20th Century Sudan

I. This discussion will track shifts in perceptions of dryland environmental change, mostly in 20th century Sudan

A. Views about the existence and root causes of desertification have oscillated with changes in rainfall, ideology, and scientific knowledge

1. How views of desert boundary change shift during different periods and how these affect policy

a) Feeds into a long debate about whether deserts are increasing because of climate fluctuations or human activity

B. The other goal is to examine Sudan during the colonial period looking at how colonial officers constructed a view of their local environment, one which was largely at odds with other views that were prevalent in other British colonies and also internationally

II. Timeline (Show Timeline)

A. Multi-scale examination of changing views over time

1. Looking at interaction of political economy

2. Relating this to prevailing views of environmental change that dominated during different time periods

B. Rainfall

1. Driven by drought; concerns about desertification peak in drought years, but also international influences

III. 1930s-1940s

A. International, two environmental concerns

1. Progressive desiccation of West Africa

a) Sahara encroaching southward into Sudan zone

b) E.P. Stebbing, a forester working for the British colonial forestry service writes about the encroaching desert in West Africa

(1) He estimates that the desert is moving southward 1k/yr

(2) Then blames it on bad practices of farmers and pastoralists

(a) Trees dying, wells drying up, pastures being depleted

(b) Proposes planting a shelter belt of trees across West Africa (15 billion trees)

(c) Argues that it is not climate (countering the view of the Anglo-French Forestry Commission)

2. The Dust Bowl—1930s—a major global environmental problem

a) Put human-induced soil erosion at the forefront of international concern

- b) This filtered into how different African Colonies viewed their environment
- c) East and Southern Africa
 - (1) Dust Bowl concerns lead to coercive policies about terracing, agricultural practices

B. Sudan

- 1. Each of these international trends filter down to Sudan
 - a) 1940s—Stebbing travels to Sudan and writes a book “Creeping Desert in the Sudan” and elsewhere extending ideas about West Africa to Sudan
 - (1) Travels Kordofan, arguing that progressive desiccation that is happening in West Africa is occurring in Sudan
 - (a) Basically that degradation was occurring because of shortened fallow periods, setting of fires shifting cultivation and overgrazing
 - (b) Call on administration to act
 - b) Dust Bowl concerns lead to the formation of a Soil Conservation Committee report (1944) addresses some of the concerns
 - (1) Headed by Tothill who was the lead of the Soil Conversation Committee in Uganda and responsible for policy there
 - (a) Conclude that there is human-induced degradation
 - (b) Have clear policy recommendation that are not really implemented in a coercive way

IV. The Questions here is why the alarmist rhetoric present in other British colonies was not adopted into policy in Sudan?

A. Did not have a white settler community

- 1. David Anderson argues that this was an part of the aggressive movement to control Africans in Kenya and in Southern Africa
 - a) In Kenya
 - (1) White criticized African agricultural practices
 - (2) Partly to prevent African reserves being extended into White highlands
 - (a) Policy ended up being harsher than Uganda or Tanganika

B. Nature of the Environment

- 1. Western Sudan, Kordofan and Darfur, in particular were difficult areas to control
 - a) Vast territories, with a large proportion of pastoral populations, who are moving around
 - b) Difficult to tax even though the products, livestock, were of high value
- 2. British did not even try—built less roads in Sudan than any other colony

C. Organization of Administration

- 1. Indirect Rule or Native Administration was the governing structure in Northern Sudan
 - a) Indirect rule in Northern Sudan, particularly in Kordofan tended to give much power to local leaders
 - (1) Almost get a sense of joint administration
 - (2) The British inspector had large territory to control and was more an infrequent visitor than a ruler
 - (3) Empowering pastoralists (camels, sheep, goats, cattle)

- (a) Gave most judicial, tax-collecting authorities to local chiefs/sheikhs
- (b) Created Dar, homelands, that each ethnic group could control
 - (i) Policies gave lots of power to certain ethnic groups, the Kababish, camel pastoralists
- (c) Policy was very understanding of need for movement in pastoral systems
 - (i) Understood the ecological reasons why people move
 - (ii) Enforced northerly limits to cultivation
 - (iii) Nomadic routes and corridors which were sufficiently wide were opened up
 - (iv) Law stipulating late date of harvest which allowed pastoralists to enter agricultural areas and graze residue

2. Segregation of the political service from other services—agricultural and forestry, for example

- a) Foresters would have liked to see much more aggressive policy, they weren't integrated into the political service which controlled much policy on the ground
- b) Members of technical services tended to be in towns or at research stations
 - (1) Wrote reports, but didn't seem to have much power in seeing what policies got implemented

D. Nature of colonial service

1. The political, service, which administered areas, there was a certain ideology present that was very sympathetic to local rural populations

- a) Getting a job in the Sudan required a successful study of Arabic
 - (1) Most people in the Sudan political service were fluent
 - (a) Were on probation until passed an Arabic exam
 - (b) Crucial because many were alone in the field
 - (2) Very few amenities, spent much of their time on Trek, travelling around by camel, horse or donkey, meeting with local officials, arbitrating conflicts, etc.
 - (a) Many Trek diaries seemed to have a sophisticated understanding for the most part of desert ecology and the practices of different pastoral groups
 - (i) CEA Lea was the epitome of the desert D.C.
 - (ii) Served in Northern Kordofan from 1930-33
 - (a) Considered a plum assignment
 - (b) Spent most of the time on Treks
 - (iii) In the Trek diaries, often see disdain for towns and expatriate social life
 - (a) Unfavorably compares the urbanized Sudanese, who have rejected tribal heritage to the nomad
 - (b) Romanticizes the Arab, the desert dweller
 - (c) Part of this is rooted in a disdain for the growing urbanized, educated elite

- (d) Fear of a new nationalist class being created
 - (e) So lots of support for traditional leaders
 - (f) But also a lot of ethnic essentialization, in particular to other non-Arab groups in Sudan
 - b) Other ethnic groups who were treated in a more paternalistic fashion, particularly the Dinka of southern Kordofan
 - (1) See statements such as sorry state of Pagan cattle versus Arab cattle
 - 2. the specific nature of the British colonial experience in Kordofan led to a shaping of environmental views, one that was more positive and less interventionist, particularly towards pastoralists
 - a) interesting because in other colonies there was much intervention in conservation
 - b) and at a time when other forces, internationally, were calling for more intervention
- E. 1950s-1960s
 - 1. With the end of colonialism, some changes began to happen that affected pastoralist peoples
 - a) Nationalist educated Sudanese came to power, taking power away from traditional leaders and giving it to other actors, government bureaucrats business men trade unions, etc.
 - b) What some call the marginalization of pastoralism in Sudan
 - c) End of Native Administration, politically marginalizes pastoral groups
 - (1) Changes how politics are structured
 - (2) Taking away land rights, particularly grazing routes
 - (a) Marginalization of important grazing areas in central Sudan
 - (b) This access to wetter regions was very important for pastoral populations during dry years
 - d) expansion of large irrigated and mechanized schemes in Sudan
 - (1) Profitable export oriented farming—part of moving power to new wealthy entrepreneurs
 - (2) More and more disputes between farmers and pastoralists
 - (a) Breakdowns of grazing corridors
 - (b) Settlement of disputes tended to go against pastoralists
 - e) these are wet years in terms of rainfall, so desertification is really not on the radar screen
 - (1) but these policies affected how people moved which is crucial during drought years
- F. 1970s-1980s
 - 1. Period when two severe droughts hit Sudano-Sahelian Africa: 1968-1974 and 1984
 - a) During this time, concern over desertification spikes at the international level
 - b) Very much influenced by research that takes place in Kordofan and Darfur
 - c) Hugh Lamprey of United Nations Environment Programme makes his famous report that leads to views of enormous desert increase
 - (1) Desert boundary has shifted south by 90-100km. in the last 17 years, particularly in Northern Kordofan
 - (a) This is where the oft repeated stat of desert moving southward by 5-6km. per year comes from

- (i) Reproduced internationally
 - (b) in March of 1986, Vice-President Bush was being urged to give aid to Sudan because desertification was advancing at 9km per year
 - d) Another geographer Fouad Ibrahim was conducting research in Darfur province in Sudan did research arguing that the desert was marching southwards
 - (1) Due to human activity, particularly overgrazing, overpopulation and cultivation of millet
 - (2) Mainly use yield to look at desertification
 - e) both of these studies are scientifically problematic
 - (1) Lamprey's—because it compares a wet year and a dry year
 - (2) Ibrahim's because it uses yield to say there is degradation
 - (a) Both of these are going to be correlated with rainfall
 - (b) So hard to say desertification is happening
 - f) These two researchers helped to generate international consensus around the issue of desertification
 - (1) This shift towards viewing desertification as a major problem was intertwined with narratives of overpopulation, bad grazing and poor agricultural practices
 - (a) Deserts were increasing and they were increasing because of the actions of humans
 - (2) These ideas based on very little research dominated environmental views
 - (3) United Nations Conference on Desertification(1977) takes place in 1977 and adopts a plan of action to deal with desertification
 - (a) One of the ideas is to plant a shelter belt of trees in the Sahel
 - 2. Sudanese national policy follows this with
 - a) DECARP—Sudan Desert Encroachment Control Rehabilitation Programme
 - (1) Very receptive to western AID
 - (2) Sudan is responding to a huge humanitarian crisis
 - (a) Some argue that desertification arguments enables state to successfully extend power in regions
 - 3. In 1980s, a group of Swedish geographers from Lund undertake research in Central Sudan, many of them in Kordofan (Hellden, Alchrona, Olsson)
 - a) Used satellite imagery to look at changes over time
 - b) Start to argue that there is no widespread phenomena of desertification but that desert boundary change is related to rainfall
 - (1) When rainfall is low, desert boundaries expands when it is high the desert contracts
 - (a) This starts a new perspective on desertification
- G. 1990s
1. This is when the anti-desertification debate begins
 - a) Research from Sudan percolates up and starts a whole new questioning about desertification
 - b) As focus on desert boundaries change with climate

c) Binn's article "Is Desertification a Myth?", Hellden "Desertification—Time for an Assessment" and Thomas and Middleton's book "Desertification: Exploding the Myth"

d) Calls for better definitions of desertification, questions about climate versus agricultural practices, and questions about the motives of the different actors for promoting a desertification agenda

(1) Particularly critical of international aid and international aid bureaucracies in promoting desertification to expand territories of control

2. Nationally in Sudan

a) This is at the same period when Sudan retreats from international aid

(1) National Islamic Front takes over and retreats from international affairs

(2) Sudan becomes a pariah state with policies of targeting civilians, human rights abuses and support of terrorism

b) Droughts do not end in Sudan, in fact the early 1990s have some very severe droughts and famines in the north and also famines induced by war in South

(1) Instead of a massive international aid response, the government is very isolationist, not concerned with environment

(a) The motto was at this time "eat what we sow, wear what we produce"

(i) Government ignores drought to promote self-sufficiency

(ii) Asks for little economic help

(iii) Propaganda campaign showing pictures on the television of abundant harvests

(b) The international aid community loses interest as well

(i) Turns eye to the horrific crisis in south Sudan

(c) Also meaningful scientific research comes to an end

(i) International researchers pull out

(ii) Local research is politicized—Islamists

(a) Weakening of university system

(b) What was one of the most researched countries in Africa becomes one of the least researched

(d) Kordofan

(i) Drought, praying for rain is the solution, government encourages rain prayers

(ii) Indeed one of the few dissertations to emerge from Kordofan in the 1990s was "The role of prayer in bringing rain"

(e) So in the end, the massive desertification campaign that was mounted in the 1970s and 1980s had very few concrete policy outcomes

(i) Now scientific consensus is that natural climatic fluctuations are the cause of drought cycles, so that it is not really on the radar screen

(ii) Now with the Darfur crisis, the desertification is now on the radar screen in the Sudan again due to declarations that the Darfur crisis is due to climate change

V. What this presentation illustrates is how perceptions of environmental change, its causes and the resulting policy have shifted in 20-21th century Sudan

VI. Views have largely shifted in response to rainfall

- A. When there is low rainfall, people move into crisis mode and react quickly by proclaiming that desert boundaries are shifting permanently
- B. When cooler heads prevail and the science becomes better, people talk about desertification in very different terms
 - 1. less about desert boundary change and more about localized degradation
 - 2. but also reflects international beliefs about desertification and desiccation
- C. And national trends on governance structures and ideology
 - 1. empowering pastoralists in the 1930s and 1940s
 - 2. modernization in the 1950s
 - 3. governments wanting international aid in the 1970s and 1980s
 - 4. Islamic governance, state control and isolation in the 1990s
- D. The conclusion is that Sudan has been very important in the global desertification debate