1994-1999

Barkhadle, Ahmed MI, Luca Ongaro & Sandro Pignatti 1994 ***Pastoralism and plant cover in the lower Shabelle region, Southern Somalia.*** Landscape Ecol. 9: 79-88.

Marka-Qoryooley area (SW from Muqdisho), 900 km2, 44 30-44 45E, 1 45-2 00 N. Rangeland c40%, agricultural land c60%. Recent alluvial soils of Shabelle R.

Landsat TM for preliminary landscape classification. Also, NDVI calculated. Photointerpretation of air photos from which a preliminary veg/land cover map at 1:50,000 was produced *(not in this paper),* which was ground-checked.

Phytosociological sampling and classification of Z-M (B-B); 35 sample sites (plots), 400 m2 in very dense woody veg, 800 m2 in degraded open veg dominated by herb layer. Cover-abundance collected (i.e. presumably ocular estimates) in these cover classes: +=rare & cover <1%, 1=1-5% cover, 2=6-10%, 3=11-15%,4=16-20%,5=21-40%,6=41-70%,7=70-100%. This non-conventional scale adopted for better evaluation of cover under 20% which is very common here. This scale also allows use of the data for grazing capacity estimation.

Matrix of 35 samples (rows) and 143 species (columns) [actually, the other way around, at least in the releve tables presented] produced with a clustering software package. These 143 species include 44 trees & shrubs, 77 dwarf shrubs & forbs, 22 graminoids. The releves are complete, and I suspect that the sporadic presence of many of the species reflects plot size: 20x20m equivalent will likely miss many species that are distributed irregularly.

Three life-form groups: trees & shrubs >1m, dwarf shrubs & forbs <1 m, graminoids[pk]. Collected 400 specimens with vernacular names, and it is ambiguous whether it was these names that were used to match up with sci names in Kuchar 1986 Plants of Somalia.

Rangeland veg classified into 3 groups, by degree of degradation. (1) The 'natural community' is dense bushland of Combretum hereroense-Grewia tenax. (2) Moderately degraded is open bushland with these (tho much less abundant, and the Combretum is so scarce that I can't see how you can fairly use the name in the CT name) and Acacia zanzibarica. (3) Heavily degraded is open bushland with these (though virtually or totally absent!) and Acacia oerfota and Pupalia lappacea. Agricultural land has Cullen [Psoralea]-Heliotropium community of cultivated and fallow areas, and riparian forest in small pockets.

"In general, the high density of trees and woody shrubs indicates the climax stage of the bush vegetation." *I very much doubt that Combretum-Grewia is anywhere near climax, likely it was acacia woodlands that were cleared or harvested, and the veg now is secondary types.* The mean no. spp in the 'climax' stands is stated as 25 [error in Tab.1, it's 35] including 10 trees & shrubs, 12 dw shr & forbs, 13 graminoids; the releve table of 13 'climax' stands has 85 spp. Moderately and heavily degraded bush stands average 19-21 species, and the main difference in terms of species numbers is far fewer graminoids, *which is very curious. It makes me wonder if these 3 bush types are related. Note also the relative scarcity or absence of the 'climax' dominants!*

The 'climax' bushland type is referred to Pichi-Sermolli's (1957) Xerophilous bushland, and White's (1983) Acacia-Commiphora (Ac-Com) bushland & thicket, but I don't see how it can be zonal Ac-Com bushland, it has some acacia cover but very low commiphora cover. The veg is very dense, w/ an upper layer 3-6 m averaging 58% cover and a total (cumulative) cover 70-90%. Grazing intensity 10-20% on the Barkhadle 1992 scale. The moderately degraded bush type has 65-70% cover with tree-shrub layer 39% cover; grazing rate 20-30%. Heavily degraded bushland is dominated by unpalatable species, upper layer 6% cover, grazing rate 70-90%. Extreme overgrazing by cattle and sheep generates land without vegetation, called *galgalimo* ('bare ground').

Farah, Ahmed Yusuf 1994 ***The milk of the Boswellia forest: frankincense production among the pastoral Somali.*** EPOS, Dept. Social & Economic Geography, Uppsala Univ., 142p.

Simple map shows 4 frankincense-growing areas in N Som, a big one centrally and 3 smaller ones toward the Horn. Biblio heavily references IM Lewis who evidently influenced the author. Poetry interspersed, and gets pride of place it deserves in any Somali sociology. Editor (TiiaRiitta Hjort af Ornäs) says this bk shows how the FR sector in Somalia applies a value system derived from the dominating camel culture and can only be understood in rel to it.

(For botanical information, refer also to Thulin & Warfa 1987.)

To understand FR you need to understand common property categories: *nool* (animate or pastoral wealth) and *mood* (inanimate). Also understand the camel economic standard: rival community poet spokesmen derive metaphors and images from the pastoral culture in the glorification of their economies. FR collectors describe their resource & industry as being as important as camel herds.

Persistent failure of cooperatives in FR due to econ differences and unbalanced relations between local traders and their kin client collectors.

An estimated 10,000 families depend primarily on incense gathering *(in Somalia I assume).*

Narrow torrid N coastal strip (Guban) and the highlands (Ogo) within which FR is produced in the maritime escarpment. The interior plateau = the Haud, where pastoralists congregate during wet season. *(Here's another characterization of the hawd, and that E-Hiraan yicib zone fits this definition)*

FR in W part of escarp is claimed to be slightly redder than the white R of the East.

"Frankincense fields which mostly lie in vast expanses of rugged and rocky mountain terrain understandably defy precise demarcation." The collection areas (*xiji*) or fields are territorially-bounded and belong to a core (mostly <10) of agnatic families owning one or more incense fields by inheritance. Myrrh trees, in contrast, are very widely distributed in NE trop Afr, and are not subject to such prescriptive rights as the more valuable FR trees. Open access applies to myrrh trees, just as to pasture and water, therefore exploitation is causing considerable damage to the trees. *Does he mean tree condition, or tree loss, or what?* Two types of myrrh based on

production method: the superior *hussul* is collected from natural exudation, *zara* after bark scarification.

Both FR and Commiphora gums (incl myrrh) have been harvested for centuries, which makes it difficult to explain the sharp distinction in ownership rights. He (unwittingly?) answers this forthwith: FR is very much localized, and it is more expensive.

"The importance of the frankincense trade in the history of the whole Somali nation can hardly be overestimated. [This very sentence overestimates it because Somalis are prideful pastoralists, their almost sacred object is the camel, and gum-resin collecting is definitely 2nd fiddle where Boswellia grows; and anyway what people were here in the time of the classical civilizations anyway?] According to the Somali historian A. A. Hersi, the northeastern coast of Somaliland derived its importance from the ancient trade of incense goods. Myrrh and frankincense were produced substantially in southern Arabia and the Gulf of Aden maritime coastal region of northeastern Somalia. Valued for their medicinal properties, pleasant odour and sacred religious utility, gums and resins of Somaliland were exported since ancient times to classical civilisations, the Egyptians, the Assyrians, the Persians and Macedonians. To acquire these esteemed aromatic forest products ancient peoples of these civilisations were reported to pay high prices and even periodically organised fabulous expeditions to reach these exotic goods in their original sources, southern Arabia and the Horn of Africa."

"The frankincense trade…stimulates nostalgic feelings among Somalis, particularly the inhabitants of the geographical frankincense region. Somalis boast of an early mercantile culture, and they're "interested in accounts of the pharaonic Queen Hateshepsut's fabulous expedition to the Horn of Africa in the 15th century B.C."

In modern times i.e. from 19th century, Aden was the major export node for Somali gums. A parallel livestock trade to Aden, esp thru Berbera, developed following the British occupation of Aden in 1839. Unfortunately the trade relations were unbalanced; Somali merchants speak of oppression by Arab patrons and the dominant business community of Aden. Somalis were at a disadvantage, partly because they were concerned with delay in selling FR due to deterioration of quality. Before Aden, frankincense was exported to Bombay to be re-exported to Europe. From start of 20th century Yemeni nationals in Aden may have monopolized the FR trade. Somali sellers were disadvantaged in various ways – official duty, unofficial tribute (e.g. 12%), improper weighing, backdated cheques, pressure to buy shoddy goods in exchange, and even social tricks such as buyers refusing to see sellers. When Somali brokers finally became established, they weren't much better. Another set of problems inflicted on the producers was mechanisms of exploitation by local traders against their kin collectors.

Attempts at cooperatives and regulation failed. Official stats on FR sales are unreliable: a lot is exported illegally.

Meydi is sorted into 7 commercial grades of which the first 4 are exported to Arabia. No regular grading system exists for Commiphora gums. Saudi Arabia is the chief mkt for *meydi*, importing >80% of the total export value, a high proportion being the most valuable chewing grades, and as

such a prestige product socially valued there and mainly consumed by women. Cheaper commercial grades are exported for use mostly as burning incense.

Somali type olibanum *beeyo* is produced in Somalia & Ogaden. The chief market is Europe where used by the perfumery industry and China where it has some med uses. Eritrea and Ethiopia were the trad sources of this frankincense (presumably *B. papyrifera*). This particular type is used as an ingredient in pharmaceutical products in China, a chewing gum in N.Afr., in trad med in some Arab countries e.g. taken for stomach ailments, and in Eu mainly in church ritual esp in countries with Greek orthodox populations, and also exported for church incense to Latin Am.

B. serrata from NW India is mainly used domestically for making incense sticks. Its fragrance is inferior to that of B. papyrifera.

Somalis in the producing area of FR think that it is used in the military industry in the West, there is even the belief that it forms the explosive power of weapons, even nuclear bombs.

China is the biggest consumer of exported Commiphora gums.

Relies on Lewis 1961 for genealogy, e.g. 6 major clan-families of which the Dir, Isaaq, Hawiye & Daarood are predominantly pastoral while the Digil & Raxanweyn are southern agropastoralists. There are 2 categories of wealth, *nool*(pastoral-type viz. livestock) and *mood* (all other). In the sedentary south the corresponding categories are mobile and immobile. The camel is the most coveted form of wealth, the 'capital resource'. "The fate of the Somalis is thought to be inextricably linked to the existence of the camel herds. It is very difficult for a pastoralist to contemplate life without camels." A famous poet Abi Gaheyr placed camel politics above the rule of Islam, though the camel is not sacred in the literal sense. Camels underpin as well as lubricate the socioeconomic life of Somali pastoralists (pk). The Somali pony was valuable in the past.

A pretty myth is how FR groves came to be. They were cruising thru the sky, got very tired, landed and stayed. They had been created for resource-poor communities in lands unsuitable for agr or pastoral production. Collection areas, *xiji*, are described as fields. They are plots of land subject to rights of collection. In poetic allusion they are described as 'camels', an exalted ranking up there with the national treasure; and the resin is likened to camel milk. The analogy goes further, with productive trees called *meydi*, a popular name for a camel yielding plenty of milk, while a less productive tree is *biajaar*, a camel producing less milk. In some ways they even excel over camels, being resistant to hunger and more economical of minimal rainfall of 10 cm/yr.

B. frereana grows on cliffs, clinging to boulders by its bulbous base. The reverent attitude to such a plant which surely is the work of Allah militates against experimentation and propagation. The establishment of state experimental FR farms was seen by many as meddling with the omnipotent. The equating of FR with camels, and other images and metaphors, reflects the desire of localized systems to attain an independent identity, a validation within the pastoral supremacy of Somali culture – even though the FR industry is surely much older than camel husbandry (pk

part). It's an attempt to place FR within the superior 'animate' category of wealth (and it's sort of transitional between pastoralism and agr.).

The land tenure system in Somalia is based on clan organization, but during the Siyaad Barre regime it was illegal to discuss clans so info on land tenure especially its evolution was hard to research. Furthermore, info about land tenure and registration was sensitive as it involved the interests of rich urban-based settlers and powerful interest groups with vested interests in land. (I'm sure the same is or will happen in E.Afr., land privatization will favor more powerful and better capitalized farmers, businessmen and speculators.) What has happened with FR production has been a tendency away from traditional share-cropping toward a seasonal rent arrangement. The share-cropping system apportions the seasonal production between producer and land right-holder and is highly lucrative to the owner but it is becoming more difficult to maintain. One reaction of owners has been to greatly raise the rent. Official 1980s policy aiming to abolish share-cropping and tenancy arrangements had very little impact due to tenacity of tradition, owner opposition, lack of incentive for gov officials to implement the law.

Free access to water and fodder is a cultural element of Somali pastoralism, this promotes widest possible use and is reinforced by a strongly held Islamic tradition demanding such public use of natural resources and proscribing restrictions to use. Artificial WPs, notably traditional lineage wells, *barkads*(cement-lined tanks) and *ballis* (artificial ponds) are subject to prescribed rights. Barkads and ballis are the property of those who invest in their construction, viz the extended fam and not the lineage. They are used for fam needs and may have a commercial basis, surplus water being sold. Though land i.e. forage and water are free, customary association is recognized(?) between clan and particular territory. It has arisen thru "frequent exploitation, effective occupation, implicit state tolerance of the status quo, and the existence of the traditional wells and trading villages." Territoriality is more strongly developed and institutionalized by tradition in S Som.

In contemporary Somalia as in some other developing countries, the crucial issue is the antithesis (sic) between customary norms which maintain group control over resources, and statutory laws that tend to deny or undermine trad regulations, e.g. legislation declaring land to be the property of the state.

Territorial rights to incense fields are held by groups of agnatic families, comparable to individual rights held by cultivators over a plot of land. The rights apply only to the FR; pasturage is communal i.e. free-access. Oral tradition recalls start-up problems in how to allocate FR exploitation rights. Stockholders were worried that FR and stock production are incompatible so large-scale gum production would bring havoc to herds. FR foliage is liked by stock, but access is limited by FR producers, though the FR system has made some crucial concessions to the dominant pastoral system. FR lopping for stock has been retained as a right of pastoralists, and all resources other than FR are free for exploitation.

I find it kind of ironic as well as specious that oral tradition speaks of a shift from pure pastoralism to specialized rights for FR production. This "economic transformation of previously pastoral groups" was resisted by the richer pastoralists who worried what FR production would do to their camel-herding traditions. What's ironic is that FR production has a

far more ancient history than herding especially camel-herding. In fact, for this reason I doubt this oral history. FR collecting long predated camel-herding in the Horn of Africa, and when camels arrived this new production system was interpolated into the already ancient FR production system. This ch.3 on resource ownership is therefore weakened by the illogic of historical evolution of rights and privileges; furthermore it is repetitive and requires tightening and clarification.

Conocarpus lancifolius Damas (Som). Trees in Erigavo region valleys were subject to owner rights, similar to frankincense trees. They yielded timber for export to Aden but after mid-20th century it lost its export value, which made it easier for the Siyaad Barre gov to take control over the trees. Henceforth potential uses would have to obtain a permit from the gov, they didn't need authorization of the previous owners.

Author found 2 cases in which FR fields were exchanged for wives (i.e. the FR rights were the bride-wealth or dowry).

Most FR gatherers are semi-settled, herd-poor tenants who rent the property (i.e. the FR field) from absentee pastoral holders. Because FR collecting is seen as more difficult than pastoralism, and perceived to profit traders more than producers, collectors take the earliest opportunity to change occupations.

All FR fields have distinctive names. Natural physiographic features act as boundaries; stone piles are erected on some featureless boundaries. Field size varies, and seasonal FR output ranges from 200-2000 kg. Yields are expressed in camel-load (150 km). Collectors are alert to FR use and misuses: they recognize scars from bark removal for tannin extraction, they see signs of lopping, and tree removal leaves a white coloration on the rocky site which is visible from a distance. *(Too bad yicib was not owned; or was it?…)*

Tripartite system of earnings distribution: to owners, to creditors (merchants), and to collectors. Another system was wage labor. A third was field rental without entering into a share-cropping or wage arrangement. By and large the system disadvantages and exploits the collector.

Keeps talking about 'cultivation' in relation to FR production but that's not correct, it's simply harvesting.

Seasonality and tapping cycles are 2 separate yet linked themes in FR management. Nothing on growth of FR trees, pop dynamics, size-class distribution, areal distribution, reproduction, stability.

A chapter on 'Frankincense sector poetry'. Poetry is extremely deep and important in Somali culture. It has political motives, viz to influence the opinion of kinsmen or the public at large. It plays a crucial role in clan politics. Poetry is as important in spreading ideas and ideology among the Somalis as the media in the West (part pk). Some poetry has a more conventional role, praise and work sentiments. As for frankincense poetry, it uses livestock motifs – since livestock is the default world-view basis of Somalis. Such poetry glorifies the frankincense economy, even by

pointing out its merits in comparison to stock-keeping. Here is part of a poem from Bosaso district, elaborating some important features of the frankincense economy:

It (frankincense forests) does not require transhumance into the interior of Nugaal

Nor does it pasture on grass and it refrains from water altogether

It is not persistently moved after the fresh grass of the latest rain…

Our Boswellia forests never fail to yield some reserve resin (milk)

Which is continually milked out for economic exploitation…

May Allah not deprive me of the frankincense forests for they are my herds.

The demanding task of farming is seen as punishment imposed upon sedentary humans for Eve's sin. But farmers, just as frankincense collectors, glorify their work through verse, often through analogy between camel-herding and farming. The buying of sorghum by pastoralists in the dry season is seen as a mark of superiority of farmers. Nonetheless, the pervasiveness of nomadic-life figures of speech underlines the extent to which pastoralism permeates the thought of Somali society.

"Honour is a man's prerogative in male-dominated Somali society. To label a man as possessing woman's attributes is one of the worst forms of abuse." Poetic curses, i.e. invective verses, may liken the targeted man as one with women's virtues. Rhetoric, specifically through verse, seems to be the acme of high art in Somali society.

The 2nd-last ch discusses the problems with the cooperative created by the Siyaad Barre regime to collectivize production and marketing of frankincense. Many confusing levies & deductions, organizational problems, etc. Therefore a parallel [black] mkt developed, wherein superior grades of incense were sold to private traders and the inferior grades to the public enterprise. Corrupt gov officials made deals with traders. As with the traditional free-enterprise system, the actual producer benefited the least. The author's conclusion is that the cooperative movement has not been a success: inefficiency, corruption and graft are the major impediments to the establishment of an effective modern enterprise.

Hyphaene thebaica Fiber woven into baskets used in collecting frankincense.

Boswellia *Meydi* is not thought to have significant medicinal virtues, possibly partly because it is powerful (strong). A *beeyo* solution is taken for VD and back problems, also chronic cough, polio and chest congestion; and applied to wounds.

Meydi is used as a chewing gum, having a pleasant, perfumed and somewhat medicinal taste, protects the teeth from decay and is also thought to strengthen the gums. Saudis seem to cherish this chewing gum more than Somalis. They claim that meydi prevents stomach worms.

In Somali *theology(?),* different *saar* spirits belonging to different transcendental groups are thought to be appeased by particular brands of perfumes or incense. It may be dangerous to offer the wrong perfume; it may offend the spirits who take revenge by inflicting more harm on the patient. "The subordination of ritual incense to perfumes in the spirit possession cult in Somalia could be explained by the fact that *saar* is denounced by orthodox Islam as 'pagan', and by men in northern Somalia as a foible of women engaging in 'superstitious expensive exercises'." Broadly speaking, 2 types of possessing spirits are recognized, holy and unholy; both consume particular perfumes and foods and differ in response to incense offering. Ritual incense is thought appropriate to holy spirits, also saints, while unholy spirits respond to favored perfumes but do not like ritual incense. Incense is not used in witchcraft and other malevolent magical rites. Fortune tellers, female usually, are sometimes derogatorily called *fooxiso*, i.e. 'incense burner', and signifying the importance of incense burning in the rite. They may recite magical spells while frankincense is burned in the domestic censer. The crux of the rite is in reading the pattern of the ascending smoke. Domestic incense-burning is believed to guard the dwelling from malicious spirits as well as attracting holy spirits, the guardians of faithful Muslims. Incense is also burned at the tombs of saints, aimed at winning the favor of the saints so they will intervene on behalf of the people. (Note the radical difference from trad African attitudes to ancestors, i.e. 'ancestor worship', which aims to appease the spirits so they won't harm them.)

"The mysterious appeal incense has had throughout human history and with which it is still connected in Somalia, seems to derive primarily from its ritual importance in divine worship." Incenses and perfumes were also found necessary for comfortable living in mediterranean and Middle East urban areas with their disagreeable smells from putrefaction. Domestic fumigation is widespread among Somalis and urban people prefer *uunsi* incense. The urban poor, as well as rural villagers and nomadic families, fumigate with *foox*, the lowest commercial grade of *beeyo*, less fragrant than *uunsi*. *Meydi* produces inferior ritual incense *foox* than does *beeyo*. *Foox* consists of bark flakes, powder and tiny pieces of incense. *Foox* is claimed to be both pleasant and able to dispel any bad smell. Incense is also burned to repel flying insects during meals. Women use incense to fumigate their clothes and hair for the pleasant odor it imparts.

A minor use in its native habitat is as an energy source. Collectors burn incense tears inside the dark rock-caves where they stay during the night; the flame usually provides enough light. It can be only an emergency practice, as it is not economical to use expensive frankincense as a light source. Meydi emits a steady light comparable to candlelight and is more suitable than beeyo which bursts into mass flame and smoke.

Small incense balls are sometimes used domestically as fire-making catalysts, e.g. when fuel is damp: they instantly burst into flame and help the wet wood catch fire. The inflammable property of incense is recognized to the extent that passengers on trucks carrying incense are banned from smoking.

Young leaf protein 7%, oil 3%, fibre 25%, CaO >3%, phosophorus pentoxide 0.3% (UN Tech Assistance Prog. 1952 qb…). Leaf is good stock fodder. Camels browse the foliage while goats on their hind legs browse the lower foliage. Leaf of seedling and smaller tree is devoured by

camel and shoats. Branches may be illicitly lopped or trees cut down to provide dry-season fodder for animals incapacitated by drought or disease.

Bark contains tannin, therefore is removed to dye and disinfect milking and water vessels: the vessels are smoked. Thought especially important to tan goatskin water containers. But this is a destructive form of exploitation.

Commiphora myrrha The most important medicinal use of myrrh is thought to be its disinfectant ability, e.g. having a drying and healing effect on wounds, skin diseases, post-circumcised girls – and the smoke is also used. A drop of myrrh under the tongue is used for throat infections, common cold, and throat and gland pain. It is bitter-tasting (indicated by the Arabic *murr* and Somali *malmal*). A myrrh solution is taken by men desiring to reduce their sexual desire, thus for example it is used by unmarried adult theology students. "In northern Somalia, it is a joke to taunt the sexually weak by asking if they have been treated with myrrh." Not used as incense; the smell is said to be offensive and suggestive of burning rubber. It is used to drive snakes away from nomadic huts. A chief ingredient of ink.

Mohamed, Hassan A 1994 ***Refugee exodus from Somalia: revisiting the causes***. Refuge 14(1): 6-10.

For centuries the pillar of Somali social structure was the communal system based on family and clan relationships and interactions (Abdi Samatar). Each family unit or household was an autonomous production unit, yet neighboring groups had guaranteed their own physical and social security through formal contracts (*Xeer*) of alliances among men who calculated their loyalties to one another in terms of kinship. Kinship is misunderstood, it is more complex than simple biological relationship. It was both blood ties and *Xeer*. The *Xeer* was a socially constructed system of norms and values established to ensure the security, social justice and harmony of Somali pastoral communities. It was later modified and reinforced by Islamic values. Its role was to codify the political obligations of inter-clan as well as intra-clan lineage mates and their followers who collaborated to share certain labor tasks, defend or extend grazing areas, and redistribute basic productive or subsistence resources to individuals in need. The excesses of segmentary clanism were tamed and constrained by the obligatory values of *Xeer* just as western society is regulated by law and order. But with the advent of the western-style centralized state (notably after independence), the *Xeer* system was undermined by superseding state law. The Somali Independence Constitution of 1960 was written by Italian and American experts - hence the colonized mentality of the Somali elites which led to their failure to develop the country even according to western systems. The trouble with the new constitution was western-style polity, the emphasis on the individual was inconsistent with the pastoral ethos, i.e. group, clan entity. That is a fundamental difference between Somali and Western sociopolitical values, the individual vs. the communal social system and values. (*Note the parallel with the disconformity between communal land tenure and privatization.*)

de Waal, Alex 1994 ***The UN and Somalia's invisible minorities***. Cult. Survival Q. 18(1): 55-57.

A sad, edifying story of ethnicity trumping indigenous rights, and it casts ethnic Somalis in a baleful light, as racists and exploiters.

An example of the misleading 'info' about a homogenous Somali race was given by Said Samatar, who categorically stated that Somalia does not have racial/ethnic or religious minorities except for cluster of Bantu. "Somalia is essentially a homogenous nation of constituent, segmented clans in which political forces are carefully balanced to share power in normal times." In fact there are significant minorities, systematically marginalized since independence in 1960. Almost all live in the south, and fall into 3 main groups.

(1) The largest is Rahanweyn-Digil, agropastoralists along the 2 rivers and the region between. Their language, Af-Maay, is not mutually intelligible with standard Somali. A subgroup, in the north, includes the Midgan, Turnal and Yibir. They are a caste of artisans - chiefly potters, leatherworkers, smiths and hairdressers. (2) Diverse farmers who are not ethnic Somalis, living in much the same areas as the previous. They include remnants of indigenous peoples and some Bantu. Most are culturally assimilated by the Rahanweyn, while the bantu are descendants of 19th-cent slaves. Often collectively known as WaGosha, 'forest people', many retain bantu languages. Two notable subgroups are the Bajun fishers of the S coast and former slave communities on the NE coast. (3) People of the coastal cities, which are ancient trading centers. They are multilingual in Somali, Arabic and a dialect of Swahili.

Discusses the Gabaweyn, farmers on the upper Jubba (Gedo). Land along the lower Shabelle started being seized or bought from the 1950s, in the 70s the gov took land for state farms and projects to resettle drought-stricken nomads and refugees. In the 80s land-grabbing severely impacted the Gabaweyn, it was the elites acquiring land historically occupied by minorities, and calling it cooperative farms. After 1990, they suffered further marginalization and atrocities and by end of 1992 the Gabaweyn lands were almost completely deserted, the people having fled famine, caprice of 'liberators, and revenge of the Marehan. Meanwhile Marehan aid workers and administrators monopolize aid to the region and have used this to facilitate the final stage of their land grab. Their rhetoric fits their plans, e.g. "return the land to its legitimate owners" is referring not to the Gabaweyn but their initial dispossessors. The Jubbaland Peace Agreement of Aug 93 illustrates this: none of the minorities along the Jubba were represented at the conference and the land issue was scarcely mentioned, all delegates agreeing to return land to 'legitimate' owners - meaning the usurping ethnic Somalis.

Declich, Francesca 1995 ***"Gendered narratives," history, and identity: two centuries along the Juba River among the Zigula and Shanbara***. Hist. Afr. 22: 93-122.

Many of the people living along the Juba R in S Somalia are descended from former Bantu speakers who began arriving at the start of 19th century, hence Gosha ('Forest'). Most were escaped or freed slaves. Nowadays some define themselves as Zigula, originating in Handeni Dist of NE Tanz. Others call themselves Shanbara, derived from a word for an alliance of 5 groups who came from different parts of E Africa.

The Shanbara and Zigula are settled in c140 villages along the Juba R or its immediate hinterland. Italian and German colonial sources indicate that the early inhabitants, the Waboni and Wasugua, were overwhelmed by runaway slaves (from C Somalia) seeking freedom along the Juba R. The Waboni (Bon?) were hunters and fishers speaking their own Cushitic-based language.

The number of former slaves in the Gosha area, estimated at 30,000-40,000 from early British and Italian data, are likely overestimates. Yet there are suggestions that large numbers of people carried on slavers' ships were sold along the Benadir coast and thereafter employed in the plantations along the Shebelle R. This was in the 19th century. And that is how the Gosha area experienced the arrival of many slaves fleeing Somali Benadir, with the earliest large influx by mid-19th century, and a lot more in the 2nd half of the century, and comprising people from many different E African cultures. The interactions among the various groups, and their sometimes unhappy relationships with visitors, are complicated. For example, the young Yao, Nassib Bundo (whose emissaries encouraged massive numbers of people to escape from the banadir plantations), is blamed for the outcome of a visit in 1875 by Egyptians who killed the Makua chief Faraxan Makua; the visitors were being welcomed so it was a misunderstanding but Bundo is said to have told the Egyptians to kills the Makua chief. The Makua regret the loss of their original Bantu language in contrast to the Zigula who take pride in their identity (origin). Though they have lost their Bantu language and speak a mixture of Maay maay and Somali dialects.

"When the colonialists arrived in the area concerned in this study, they imposed their idea of an 'hereditary chief' on local people by paying salaries to men they selected to act as representatives of the population. This was already the case in 1891, although by 1911 it had clearly proved to be an ineffective method of political control. The hereditary chiefs chosen by the British did not have sufficient authority over their 'subjects,' who preferred elected chiefs…As a result of the new system of administration, the locals abandoned their responsibilities and became accustomed to having their problems solved by the colonial government." The colonialists fostered a concept of political authority which excluded female ancestors, i.e. those groupings that gained power from claiming female ancestors as their forebears. The outsiders (colonialists) dismissed the existence of female ancestors. Some immigrated from the agricultural areas on the Shebelle R.

Written records of oral sources have misrepresented, intentionally or not, the historical and cultural information they reported, especially silencing some voices notably of women. The researcher is particularly emphatic that information on the basic matrikin grouping, the *mviko*, was suppressed or misrepresented. The *mviko* is one of the most important kin groupings in the Gosha area; everyone belongs to one and membership is inherited from one's mother. People belonging to a *mviko* share a common set of rituals. Among the Zigula, people sharing the same *mviko* are called 'children of the same mother'.

According to female informants, the *mganga* fem Wanankhucha became a leader of the Zigula who were to settle by the Juba R where they fought the Bon, Somalis and other groups which progressively arrived in the area. "Women's perception of history does not include memorizing the deeds of warrior heroes." That's kind of droll, and correct: they had mothers, heroines: could men ever recite names of heroines (such as Wanankhucha)? "Memories of Wanankhucha

expressed today depend on the informant's gender for their emphases." "The story of Wanankhucha nowadays resonates with a female audience; male informants tend to downplay her role in the flight from slavery.

Ehret, Christopher 1995 ***The eastern Horn of Africa, 1000 B.C. to 1400 A.D.: the historical roots***, p.233-262 *in* Ali Jimale Ahmed, ed., The invention of Somalia, Red Sea Press, Lawrenceville NJ, 265p.

A very exciting paper because it narrows down the entry time of camel into central Somalia. Camel-dependent pastoralists have been here a thousand years, and the camel has indubitably had a profound influence on the vegetation. I would go so far as to say that a new dynamic balance has been reached, after an early dynamic shift (cf range theory..). I would not go so far as to say that massive extinctions resulted, only a shifting of dominance and distribution patterns. The reason is that despite the potentially tremendous impact of the camel as a catholic browser, large areas of bushlands were inhabited by camel only in the wet season due to the distance from water. But with development of new waterpoints in the 2nd half of the 20th century, an opportunity has presented itself to examine the impact of camel in those areas within striking distance even in the dry season. Particularly fruitful has been a study of the distribution of Cordeauxia, locally a major camel browse, and the impact of camel on this shrub of seasonal vs year-round browsing regime. A surprise was yicib in the Shabelle Valley – that must have some kind of cultural tale to tell…

In the 1st millennium BC, 6 ethnic groups occupied parts of the Horn.

- In the N were Eastern Cushites, cattle-keepers who also cultivated some grain e.g. wheat, maybe as early as 3000 BC in the Eastern Horn. These Ahmer-Dharoor are represented today by the Afar and Saho in NW Som. By end of BC they had extended S from Harar-Hargeysa to upper Shabelle R (Ethiopia).
- A group of Southern Cushitic, the Dahaloans, occupied the lower interior between Jubba and Tana and the lower area between Jubba and Shabelle, cultivating sorghum, legumes, and had livestock.
- The Eastern Omo-Tana, progenitors of Maay Somali, lived in upper Jubba (Ethiopia). The rest of the Horn had HG societies, through lands less suited for agr. There may have been 3 separate traditions:
- Most (Berdaale grp) were throughout Cent Som-S Ogaden. The Eyle may be their cultural heirs.
- Other hunter-gatherers were scattered among the Dahaloans, and their probable descendants are the Aweer who speak a Garre language. Maybe their forebears spoke Khoisan languages.
- Scattered fishing communities, presumably today's Reer Maanyo.

By early AD, grp1 likely spread down to middle Shabelle (S Ethiopia), and by 5th century to the Hiiraan part of Shabelle. Meanwhile, at very end of BC, Pwani people (Bantu) from E.Afr. entered the bottomlands of Jubba & Shabelle Rivers and by 4th century were as far as the Hiiraan part of Shabelle R.

Camels were in the Danakil lowlands between latest BC and early AD. "Camel raising, of immense long-term significance for history in the Eastern Horn, was as late as 500 probably little known farther east than the Danakil depression." Camels had great importance in the Danakil for transforming the ancestors of the Afar into a people able effectively to exploit the desert. But intervening highlands E of the Danakil were too wet (and cold?) for camel, and seem to have held up full adoption in the Eastern Horn till after mid-1st millennium.

In 6th-7th centuries the proto-Doy people, well established in lower area of Shabelle and Jubba Rivers, expanded N possibly as far as Buuloburti. Out of these new settlements arose proto-Maxay, ancestral to the Maxay. The timing may have been a consequence of clearing among Pwani communities which reduced tsetse hazard. Eventually only traces of Pwani dialect in modern vocabularies of the Maxay and Maay here, but other traditions especially music and dance remained strong and were adopted by many modern Maay communities here.

The Maxay expansion progressed northward, reaching Harar-Hargeysa highlands by 9-11th centuries. Meanwhile *they must have interacted* with the Ahmar-Dharoor who were living as far south as Buuloburti. The rise of a distinct Northern Maxay society, between Buuloburti and Jowhar, was probably c8th century. The Ahmar-Dharoor were gradually absorbed into the expanding Northern Maxay society. (*That's a benign view; I bet there was lots of conflict*.)

Why should Maxay ethnicity have prevailed if the Ahmar-Dharoor were well-established? Large-scale camel husbandry. This had spread from the Danakil south to the riverine region no earlier than 500-800 AD, by which time was a solidly established set of breeding practices. He suggests the camels got south from Danakil via middle Shabelle into the hands of expanding Maxay society. The original Maxay society of 6-7th centuries was principally of Dir clan-family. A second clan-family, the Hawiye, is probably a later offshoot.

"Camel-raising transformed the scope and reach of food-producing ways of life in the Eastern Horn." Because it was possible to utilize poor sandy soils lacking surface water or good grass cover (*and, not mentioned, having lots of browse*). "For the first time also the very dry lands lying to the north and east of the Shabelle River…would have become exploitable by pastoral people in a systematic and regular fashion." Between 900-1400, fuller and wider establishment of camel pastoralism through the Eastern Horn. The map of 14th century shows Maxay occupying a broad arc from Muqdisho N to Harar, E almost to the Horn, but the interior (lower Ogaden, Galgaduud and Mudug) with hunter-gatherers though these are queried on the map.

There's something odd in this account. It first sounds like camel pastoralists swept up from the interriverine region maybe as early as 6th century. But then he says that camels were introduced to and taken on by the Maxay as the camels came south via the Shabelle. In the first place, why be limited by the Shabelle valley? The whole point of camel husbandry is that it frees you from the river. But it could have been a traditional or at least well-established route due to the Ahmar-Dharoor, since the Ahmar-Dharoor had by now been settled along here for at least a century or two. Anyway, why would camels first have to be taken to S Somalia, husbandry practices developing there, then move upward to Hiiraan. A simpler scenario is that as camels were brought south from Danakil, they would be incorporated into pastoral systems as they went

along, first in the upper Ogaden, then lower Ogaden, then Hiiraan and finally into the interriverine region.

By 9-10th centuries, Swahili groups well established along Banaadir coast. Between 1000-1400 Islam penetrated inland through trade, competing with the indigenous Cushitic monotheism whose God was *Waaq*. As elsewhere in world history, true pastoral nomadism in which people move with pack animals and belongings, was a relative latecomer, likely not till after 900 though maybe not widely established, especially in driest areas (e.g. the N) till 13-14th centuries when 2 new clan-families, the Darood and Isaaq, emerged and whence the nobility ideology of camel nomadism originated. By 15th century they spread into a big area E of the upper Shabelle, e.g. Ogaden and Hawd, until then largely Hunter-Gatherer society. *(I can't believe that. If the camel-owning Maxay penetrated N to the highlands by say 10th century, surely they would have been able to spread throughout the Ogaden, so I assume they were occupying it when the Darood and Isaaq moved in and (likely through conflict) established dominance. Therefore by the time the Darood and Isaaq swept south the H-G's were likely long gone.*)

Some Maay-speaking cattle herders in the interriverine region took up nomadism (when?). Camel raising became important in the poorer interriverine stretches.

When camel-herders arrived in the Somalia region, this must have changed the ecological dynamics of the acacia-commiphora bushlands. Prior to their advent the bushlands were populated by wild browsers. These much favor acacia over commiphora. When camels arrived, acacia browse could be seasonally important as e.g. Elmi (1990) found in Cent Somalia. However, commiphoras are favored over acacias by camels. In effect commiphora browse was an empty niche that was filled by the camel. Some of the top browse for camels is commiphoras, hence utilization of commiphoras would have reduced the competitiveness of commiphoras over acacias still being utilized by rhino, giraffe and browsing antelopes. In contrast to this dynamic, the stock-keepers' domestic uses highly favored acacias, as structural wood, fuel and charcoal, tools, and fencing for their livestock. Their only use for the soft commiphora wood was for carving e.g. utensils, camel bells, also gum-resin collection which would not harm the commiphoras. This suggests a competitive advantage for commiphoras over acacias. I would therefore surmise that the overall competition between acacias and commiphoras would balance out as before camels arrived. However, in the 20th century, particularly with access to guns by Somalis, game suffered a big decline, some browsers eventually going locally extinct. Ecologically this would favor acacias over commiphoras, and so it is today with heavy browsing of commiphoras by camels (and goats) and acacias reserved for domestic uses. Today in Hiraan Region (as a typical example of acacia-commiphora bushlands), acacias (Senegalia + Vachellia) provide 20.5% of the relative woody cover, commiphoras 15% (and the next 6 genera 20%). Was this the pre-Somali cover? Will we ever know?

Kapteijns, Lidwien 1995 ***Gender relations and the transformation of the northern Somali pastoral tradition.*** Int. J. Afr. Hist. Stud. 28: 241-259.

A general look at customary life, with more emphasis on females.

Kusow, Abdi M 1995 ***The Somali origin: myth or reality***, p.81-106 *in* Ali Jimale Ahmed, ed., The invention of Somalia, Red Sea Press, Lawrenceville NJ, 265p.

He calls this a fairly radical reappraisal of Somali hist, based on neglected & misinterpreted oral traditions of the Reewin of S Somalia. The traditional view is that Somalis originated on shores of Red Sea, expanding S since 10th cent, driving out Oromos who had earlier pushed Bantus S of the Jubba. Also, Arab influence was exaggerated, esp for the N. In 1950s, Lewis and Cerulli postulated N-S migration routes and trends based on mythical but ideologically enduring N Somali oral tradition. Cerulli and Lewis "became the holy scripture of Somali history."

Since 1966 scholars reversed this, hypothesizing some place between S.Eth. & N.Kenya as the original dispersal point. In 1982 Cassanelli in 'The shaping of Somali society' challenged all earlier historical analysis and said history must be examined from a regional rather than genealogical perspective. But scholars neglected the role of S Somalis.

Pre-cushitic negroid grps on the Shabelle, e.g. the Shidle, Eile, Dube, but no evidence they were Bantu. Their continued survival is explained by their fishing occupation, filling an ecological gap that doesn't compete with surrounding Somalis.

What about place names with the word *galla* (e.g. Gaalkaya), suggesting the Galla came from Somalia? It doesn't mean Galla (i.e. modern-day Oromos in Ethiopia, who don't refer to themselves as Gallas anyway, and their famed migration wasn't till c1530), nor 'infidel' as suggested by H.Lewis. It means 'camel' in the Reewin language.

Kusow's theory is that Reewin and Proto-Reewin arrived at end of 2nd millennium BC (p93 he says they first came end of 2nd century BC but a couple other places indicate end of 2nd millennium BC. Confusion, i.e.). They adopted dryland farming (or did they already come with this knowledge?) to complement cattle nomadism, and then adopted camel nomadism as farming supplement. Then (maybe 500 AD) in reaction to pop increase and land shortage, the Proto-benadir group, probably the Hawiye, diverged due to taking up more extensive camel nomadism and migrated N, later splitting into Dir, Darood & Isaaq and continued to expant N til a reverse migration in 16th century due likely to desertification. (*Maybe the vestiges of yicib in Shabelle valley are what remains of former extensive yic bushlands gradually eroded by 1000-1500 yrs of camel pastoralism. But this can't be the right theory. It is clear from my investigations that with access to water, camel herds can rapidly decimate and eliminate yic stands. There must have been some kind of restrictions on camel foraging – maybe due to cultivators, either pre-Somali or to Reewin offshoots – that allowed yicib to survive to this day. Or yicib survived because camels were only brought to the riverine area for watering and not maintained in the valley; and it's only the population pressures of the last few decades, say, that have led to the inevitable local extinction of yic; and some of this may also be due to cutting for fuelwood, not just camel browsing*.)

Among the Reewin are the *Gaaljeel* ('camel-lovers'), a subclan of the Hadamo clan family, living in Bakool region. *And W Hiiraan, huh? I always wondered why a group had this name, I thought it was due to a specialism and emphasis on camel husbandry exceptional even among Somali nomads. Now I see it's only to separate them from the bulk of the Reewin who*

deemphasize camel because at least traditionally they emphasized cattle and cultivation. But the author has a slightly different theory. He suggests that because they have *gaal* in their clan name, the Galljecel as well as the Abgaal were the first groups to diverge from the Proto-Reewin and start extensively using the camel as sole mode of survival.

The Reewin have 2 major clan segments, Digil and Mirifle, each divided into several clans each in turn into a dozen subclans. The Reewin form 40% of the Somali population, culturally and linguistically distinct, practising agropastoralism, and speak a language as different from official (N & Cent Somali) as Spanish differs from Portuguese (*is original of this IM Lewis, or John Said, or who?*) All this "despite a successful academic campaign over the past 100 years to dismiss their history and language." S Somalia is linguistically more diverse than N Som and has several dialects not mutually intelligible. (*Note he says dialects but surely they are languages. This exemplifies the casual confusion, the imprecise interchange of 'dialect' and 'language' in the lit*.)

Why did northern clans diverge from the Proto-Reewin? Look at traditions among the Reewin, specifically water and farming rights. They developed an elaborate system of water sharing based on lineage and seasonal water availability. Water shortages meant the firstborn lineage grp, usually also the most powerful, could revoke rights of other lineages. Persistent shortage meant that the non-firstborn lineage groups had no choice but to migrate to unoccupied land. The occupier becomes the firstborn lineage in the new area. The same true of dryland farming. (*Note same as rights on new land in some Tanzanian tribes*) This process accelerated due to population increase (no data) and intro of camel in southern Somalia around middle of first millennium *(I think that's what he means*). Having camels they could move out into the more arid regions N (i.e. E) of the Shabelle, regions probably occupied by HG groups. (*Any vestiges of these? E.g. in the writings of early explorers? Or remnants settled along rivers? Maybe long gone?*)

'Rahanweyn' was coined by others but the name is (correctly pronounced) Reewin (*reer* = family, *weyn* = old), and suggests they were the first Somali-speaking group established in Somalia, and whence the distinct N dialect [*sic*] evolved.

Mukhtar, Mohamed Haji 1995 ***Islam in Somali history: fact and fiction***, p.1-27 *in* Ali Jimale Ahmed, ed., The invention of Somalia, Red Sea Press, Lawrenceville NJ, 265p.

Waves of immigration to Somalia 7-10th cent by Arabs & Persians. Even Benadir ('city' or 'centre') is of Persian origin (though Kassim 1995 says *Bendar* means 'ports').

Islam came to Cent Som i.e. Muqdisho much earlier than to N Som where pagan customs are discernible. But ultimately Arab influence was stronger in the N. "The ethos and patterns of life among the nomadic northern groups of Somalia are very close to those of the Arabs. They are belligerent, less law abiding, arrogant, destructive, and look down on any profession except herding." More specifically, they are like Arab Bedouins. The genealogy and lineage systems (*Abtirsiinyo*) are part of nomadic social life, and this weakens southward and disappears in S Som where land is the critical political bond.

The Reewin or Elai/Eelay (not Rahaweyn) inhabit the area from Shabelle R to Kenya, speak Mai (Maay), and have a territorial rather than genealogical political system. They are agropastoralists, have been here a very long time.

Thurow, Thomas L, Dennis J Herlocker, Salim B Shaabani & Richard M Hansen 1995 ***Resource use by large herbivores on the coastal plain of Central Somalia.*** Gnusletter 14(1): 12-17.

Ceel Dhere District. Relative (presumably) cover 49% grass, 25% sedge, 24% dwarf shrub, 2% forb (Herlocker & Ahmed 1986). Diet of camel, cattle, sheep, goat and Speke's gazelle from fecal samples. Growing-season samples in Nov and May, dormant-season samples Jan and March. Microhistological analysis done at Kiboko Range Res. Stn, Kenya.

Historically Speke's gazelle and oryx, latter has been hunted to extinction here.

The major plants were Cyperus chordorrhizus, Cenchrus ciliaris, Indigofera sparteola (not intricata), also Leptothrium senegalense, Panicum pinifolium, Aristida kelleri.

Diet table, for dry (Jan, Mar) and wet (Nov, May) season for camel, cat, gt, sheep, Speke's gazelle.

Camel preferred dicots (72% diet) in dry season, monocots (80%) in growing season, of which grasses 6% wet-, 18% dry-season diet. No seasonal difference in preferences for other herbivores. Monocots 95% for cattle, mostly grass; monocots 78% for goat and sheep with grasses somewhat more in wet vs. dry season. Monocots significantly preferred by cattle (95%), sheep (78%) and goat (78%). Monocots formed 60% of Speke's gazelle diet, which was proportional to graminoid abundance. In wet and dry season respectively, grasses contributed 30% and 40% of gazelle diet.

Unruh, Jon D 1995 ***Post-conflict recovery of African agriculture: the role of 'critical resource' tenure.*** Ambio 24: 343-348.

Somalia. Conflict and ensuing famine in Somalia in the late 1980s and early 90s led to internal displacement of at least 2M people and emigration of an additional 1M to neighboring countries. Migration to the river valleys was frequently the last resort among coping options available to both pastoralists and agriculturists fleeing conflict and food shortage. A map shows that the areas of intense armed conflict or raiding in cent and S Somalia were mostly in the Shabelle Valley. Prior to and during conflict, both gov and clan-militia leaders stationed forces here so they could feed themselves. *(I would hypothesize therefore that the interior areas, outside the Shabelle Valley, would be less populated and therefore yicib would be less impacted as was happening to it over the previous several decades due to water development. On the other hand, an influx of pastoralists into the Shabelle Valley would put heavy pressure on feed resources, leading to more than usual dry-season penetration into the interior by camel owners, hence pressure on yicib on the E side.)*

Another map indicates that one of the major refugee camps of internally dislocated people in the early 1990s was in the Beledweyne-Mataban area (based on Metz 1992).

This paper is an exercise in predicting the complications of land resettlement following the end of hostilities, and the problems especially of land tenure that will arise due to influx of returnees.

Unruh, Jon D 1995 ***Pastoralist resource use and access in Somalia: a changing context of development, environmental stress, and conflict***, 21p *in* J Sorenson, ed., Disaster and development in the Horn of Africa, Macmillan, London, 272p.

General overview of recent history of Somalia and problems of pastoralism. The markers of the pastoral system. From 1960 to the 1980s Somalia was the target of much aid, favoring the range resources rather than pastoralist strategies. "The objective was to stabilize and improve range resources to increase quality livestock production and income for pastoralists. Range resource control and improvement was seen as a bureaucratic activity requiring government intervention." But an important part of the whole enterprise of stock production, marketing and out-of-country trade, had its ups and downs, and drought also impacted stock production. Meanwhile animal health improvements and proliferation of water points led to large increases in herd size, while implementation of grazing reserves was unsuccessful. Hence range degradation. Strife among clans was another problem that gradually blew up into a high degree of violence, negatively impacting nomadic resource use, with "Coalition cohesion regarding land and water resources becoming increasingly confused, transient, and less meaningful as the traditional authority of clan elders was undermined by modern weapons." Conflict continues to play a big role in pastoral decision-making and resource access.

The text jumps back and forth in time, and among a variety of topics, making it hard to weigh the impact of various developments and issues.

Zeleza, PT 1995 **Beyond communal wisdom: land and cattle in African agrarian systems**. Afr. Devel. 20: 147-157.

"Unlike Kenya and Zimbabwe, the self-styled revolutionary governments of Somalia, Ethiopia and Mozambique sought to radically transform the agrarian systems they inherited. Following the 'revolution' of October 1969, the new Somali government announced a series of agrarian reforms aimed at stimulating growth and economic development within a socialist framework. The state assumed control of all land in an effort both to eliminate customary land tenure arrangements, which were perceived to be inefficient, environmentally destructive, and conductive [sic] to the capitalist processes of land concentration and speculation, and to facilitate the establishment of state farms and cooperatives. The reforms, combined with the fluctuations in the Somali domestic and external economy, Roth [M.Roth, Somalia land policies and tenure impacts: the case of the Lower Shebelle] contends, actually led to the rise of a class of big absentee urban landholders. The creation of large state farms, cooperatives, and private plantations displaced many peasants from the fertile river valleys."

Little, Peter D 1996 ***Conflictive trade, contested identity: the effects of export markets on pastoralists of southern Somalia***. Afr. Stud. Rev. 39(1): 25-53.

The western rangelands of the Lower Jubba are considered among Somalia's finest cattle-grazing areas due to relatively high rainfall (>500 mm in many locations) and availability of seasonally flooded areas, which are more likely than other types of pastures to have good stands of perennial grasses during the dry seasons. (*Contrast this with Central Somalia where perennial grasses are patchy and indeed absent from large areas*.) Also in the regions west of the Jubba River are excellent areas for camel production. During the 1980s, many camel herders from Gedo region in the northern Jubba Valley moved their herds to Afmadow District (west of Jubba River and north of Kismayo District) to take advantage of good water availability and of rangeland seasonally vacated by cattle herders. By 1988 herders were spontaneously privatizing waterpoints and surrounding pastures with thorn fences. This expansion was facilitated by creation of thousands of *waro* (private water points). These camel herders were Marehan, confident in being of Barre's clan. But by 1988 armed skirmishes at WPs were not uncommon between Marehan and Ogadeen.

Lovett, JC & I Friis 1996 ***Patterns of endemism in the woody flora of north-east and east Africa***. Proc. 14thAETFAT Conf.: 582-601.

The arid regions of Horn of Afr are rich in species of restricted distribution. Factors: geological heterogeneity (limestones, sands, gypsums) is correlated with floristic heterogeneity *[acc to Gilbert 1986, but what's this mean?]*. Also, disjuncts between NE & SW Afr. They mention some taxonomically isolated endemics: Cordeauxia, Bottegoa, Puccionia macradena (on gypsum in N Som), Givotia gosai.

Many monotypic endemic amaranths, some shrubby but most herbaceous: Lopriorea ruspolii (C,S Som, NE K), Rosifax sabuletorum (S Som), Eriostylos stefanini (C,S Som), Polyrhabda atriplicifolia (N Som [also N Ogaden – my col]). Also notable Neocentema robecchii, Pleuropterantha 3, Chionothrix 2.

It is exhausting, tedious and uninformative except in a strictly linear fashion to read paragraphs of instances. It's analogous to the old descriptive plant ecology with tedious lists of species per locality or region. Where are the numbers, the analyses, the GIS-enabled mapping? Somebody must do this, let us see pattern and connection, not choppy lists.

Why these endemics? They present 3 hypotheses: pleistocene refugia, geol formations, climatic regimes. They conclude (how?) that the patterns are due to climatic history determined by tectonic events [or non-events!]. Where this conclusion came from I cannot fathom. Needs analysis, rigor, and comparative analysis.

Mukhtar, Mohamed Haji 1996 ***The plight of the agro-pastoral society of Somalia***. Rev. Afr. Polit. Econ. 70: 543-553.

"Despite advances in modern communication and the proliferation of information, there remain areas of the world about which little is known. One such place is Somalia." *Would be useful quip for a CR paper.*

Nearly every Somali scholar and politician presents Somalia as one of the few culturally homogeneous countries in Africa if not the world. The Somali people are said to have a single language and share a monoculture. In fact, Somalia has always been divided into southern agropastoral clans and northern nomadic clans, with distinctively different cultural, linguistic and social structures. The so-called monoculture arises from study in the northern part of the country where most research into Somali culture was undertaken. "The myth of Somali homogeneity played a major role in the rise of nomadic clans to political predominance, and the appropriation of resources from the less warlike and intensely religious agro-pastoral groups in and around the inter-riverine region." A major factor in the Somali conflict is struggle among clans for control of limited and increasingly scarce resources especially land and water. More specifically, it is a violent competition between Darood and Hawiye clan families for political and economic dominance of the inter-riverine region.

The inter-riverine region is populated mainly by the Dighil and Mirifle clans, also groups of Bantu origin (Banadiris, Jareer, Bajunis) who are mostly merchants, fishermen, hunters and cultivators along the coastal strip and southern islands. The language spoken is the Reewin, locally known as Mai, as opposed to Maha which is spoken north of the Shabelle. Mai is to Maha as Spanish is to Portuguese. They are distinguished from the nomads by their agropastoral mode of production and settled mode of life which produced a distinct culture and social organization.

Much scholarly attention has been given to N Somalia on the theme of resistance to colonialism, especially the rebellion by Ina 'Abdulle Hassan. Southern Somali resistance is not often discussed, perhaps most importantly because Somalia's history has been seen through the eyes of what some scholars call 'orientalist' scholarship, which classified southern Somalis as Bantu, culturally inferior to the northern Arab-influence nomads and its obsessive mythic monolithic culture.

Heemstra, Harm H 1997 ***Soil erosion control and land reclamation project in Boroma and Baki Districts of Awdal Region – Somaliland.*** Range Management Consultancy Report, GCP/SOM/043/EC, FAO, Borama, 41p. efaidnbmnnnibpcajpcglclefindmkaj/https://www.faoswalim.org/resources/Land/Range_Management_Consultancy.pdf

W Somaliland. The objectives were measures to reduce soil erosion especially through range management techniques, and rehabilitation of eroded land. Grazing systems were not functioning when the consultant arrived, but there had been seasonal grazing reserves and remnants of one still showed the high potential of the area, with good grass cover under Acacia etbaica woodland. Currently there was communal range use by villagers and nomads. Fuelwood collection was another cause of degradation. The main vegetation was wooded bushland (i.e. bushland as per EA classification). Mostly Acacia etbaica, A. bussei and A. nilotica and some A. senegal and A. tortilis. Woody cover ranged from 10-50% depending on rate of cutting for fuel and fencing material. Understory cover of dwarf shrubs, forbs and grasses was only c15-20%. Range condition at various sites was fair, some poor but with potential, e.g. *Dareemo* (Chrysopogon aucheri) grass present, along with the acacias, and a low proportion of unpalatable plants. *Dareemo* was almost gone in some locations, an early sign of overgrazing.

Recommendations included rotational/deferred grazing, dry-season grazing reserves and revegetation of degraded areas by reseeding (mainly Chrysopogon and Cenchrus ciliaris) and planting. Recommended monitoring with transects along 100 m lines and plant frequency and density in 1x1 m quadrats.

Anderson, David M & Vigdis Broch-Due, eds. 1999 ***The poor are not us: poverty and pastoralism in eastern Africa.*** James Currey, Oxford, 276p. (review by GL Giblin in Int J Afr Histor Stud 34, 2001)

Some of the papers show that relations between pastoralists and others, viz farmers, town dwellers and development experts, have been shaped by the manner in which pastoralists are imagined by non-pastoralists. There's been historical shifts: first pastoralists were extolled for their rich and egalitarian culture, then they became backward and poor (and now again a major shift towards extolling of traditional wisdom). Outsiders have consistently maintained that pastoralists resist change and improvement, hence require intervention, education and control. Development agencies have (always) believed they would ameliorate pastoral poverty, never mind that pastoralist definitions of poverty and status are not what outsiders call poverty. When development projects work as planned they increase pastoralists' dependence on outside agencies. Thus they make pastoralists feel poorer, since pastoralists often associate poverty with dependence and lack of autonomy. Development agencies persist in attacking the pastoralist 'problem', and share their view with governments, media and the African public in general.

Catley, Andy 1999 ***Community-based animal health care in Somali areas of Africa: a review***. PARC-VAC of OAU/IBAR, 57p.

Executive Summary. This review is based on the question "*Are community-based animal health systems a realistic option for improving primary veterinary services in Somalia?"* This question has arisen due to positive experiences with community-based animal health in remote, pastoral areas of eastern Africa. Lessons from southern Sudan indicate that well-coordinated, large-scale community animal health worker (CAHW) systems can form the basis for improved service delivery in conflict zones. On a smaller scale, reviews of CAHW projects in dryland areas of Kenya demonstrate substantial cost-benefit through the prevention or treatment of a few important livestock diseases. In some areas, such as the Afar region of Ethiopia, CAHWs have played an essential role in rinderpest eradication. To varying degrees, these areas were characterised by limited government veterinary services, civil disorder and logistical problems related to large systems boundaries and poor infrastructure. These constraints are also highly relevant to the current situation in Somalia/Somaliland.

This review collated a number of experiences related to CAHW systems in Somali areas which indicated that community-based approaches are an appropriate way of improving basic veterinary services for pastoral communities. These experiences show that:

■within Somali pastoral communities generally, there is a high demand for animal health services. These communities are characterised by well developed indigenous institutions and livestock knowledge, very strong traditional social support mechanisms and willingness to pay for private services.

■the Somali pastoral economy is closely linked to an active livestock export trade and the market orientation of livestock production systems is increasing.

■there are many useful lessons arising from projects such as,

- the Nomadic Animal Health Auxiliaries (NAHAs) in the GTZ Central Rangelands Project in Somalia up to 1988;

- the ongoing CAHW system supported by ActionAid-Somaliland in Sanaag region, northern Somalia/Somaliland which has been self-sustaining since 1994;

- positive reviews of Oxfam UK/Ireland=s CAHW project with Somali communities in northern Kenya;

- large-scale, integrated and community-based rural development programmes in the Somali region of Ethiopia which have been developing CAHW systems and restocking activities since 1994. CAHWs are accepted and promoted by Somali veterinarians, both government and private.

In summary, CAHW systems appear to be highly relevant to Somalia/Somaliland. Private veterinary activities are already self-sustaining in urban centres and ports, and there are opportunities to work with the private sector to expand basic services into pastoral areas. Such initiatives might build on both the previous veterinary privatisation programme supported by the European Union and the experience of PARC-VAC in community-based animal health systems. Lessons learned from CAHW projects in other areas indicate that in the absence of official regulation, ineffective or dishonest CAHWs are not tolerated by the communities who select them and pay their incentives. Somali herders want good quality medicines for their animals, they want to know how to use the medicines properly and they pay for services which they consider to be valuable. These conditions very much favour the establishment of small-scale, pilot CAHW systems by PARC-VAC in Somalia in order to test ways of working with local partners.

Catley, Andy & Robert Walker 1999 ***Somali ethnoveterinary medicine and private animal health services: Can old and new systems work together?*** *in* Evelyn Mathias, DV Rangnekar & Constance M McCorkle, eds., Ethnoveterinary medicine: alternatives for livestock development, Proc. Int. Conf. in Pune, India, 4-6 Nov 1997, BAIF Devel. Res. Foundation, Pune, India.

Information on Somali ethnoveterinary practices has been documented since at least 1927 when Leese referred to camel diseases in the Somaliland Protectorate. Later, work by Hunt (1951), Mares (1951, 1954a and b), and Peck (1939, 1940) and included descriptions of plant remedies, traditional vaccination, cautery, use of broths, and use of salt in the form of salt bushes, salty wells, and salt-rich soils. Mares also provided an extensive list of Somali names for livestock diseases and parasites. More recent accounts of Somali ethnoveterinary practice show considerable agreement with the earlier work and even 40 years after the publication of Mares work, herders in northern Somalia were still using soups, cautery, and medicinal plants (Catley and Mohammed 1996). A brief review of the literature indicates common terminology for some livestock diseases throughout Somali-occupied areas. For example, the words gendhi, dhukaan,

caal, cadho and cambaar are very widely used by Somali herders from north-west Somalia to northern Kenya. Accounts of Somali ethnoveterinary practice are summarised in Appendix 1 to this paper.

Further discussion indicated that although indigenous methods were very important, people also recognised that for many diseases, modern drugs were the most effective treatments. Even traditional healers noted the limitations of traditional veterinary practice and stated that:

"At this time people who have traditional knowledge may not tell other people because if their advice or treatment is unsuccessful, it may cause a quarrel."

"Nowadays people use traditional methods less because they are always seeking the easy option. Also, some plants are difficult to find and some are no longer available because of changes in climate and vegetation."

Somali pastoralists possess very detailed ethnoveterinary knowledge but while traditional methods are still widely used, herders are also aware of the benefits of modern medicines. One NGO animal health programme in Somaliland in northern Somalia found that the introduction of private veterinary pharmacies was welcomed by pastoralists although they were also worried about the loss of their traditional skills. Another NGO programme in south-east Ethiopia highlighted the importance of ethnoveterinary practice in the absence of an effective modern service, though it also demonstrated strong support for private pharmacies.

In 1996 Oxfam UK/Ireland and the Department of Livestock Production in Wajir District, Kenya, conducted a study to investigate the effects of increasing numbers of water points and settlements on Somali pastoralism (Department of Livestock Production/Oxfam UK&I 1996). The study used participatory appraisal methods in seven sites followed up by interviews with pastoralists. This work demonstrated dramatic increases in water points and human settlements in Wajir District compared with the situation in the 1940s. Water points increased from four to 24 and human settlements increased from four to 45. One effect of these changes was an alteration in dry season/wet season grazing patterns so that distinct seasonal grazing areas were no longer distinguishable when compared with the situation in the 1940s. At the time of the study, the former wet and dry season areas tended to be used throughout the year.

Changes in grazing patterns and increases in livestock populations were investigated in more detail with reference to fodder availability. Table 4 is an example of the type of data which was collected. It details 10 grass species which were considered by pastoralists to have shown serious decline in availability during the previous 25 years. Regarding ethnoveterinary remedies, these findings are of interest because changes in flora might affect the distribution and availability of medicinal plants. Table 4 indicates that the grass species Chrysopogon plumulosus (dareemo) was one species which was thought to have shown a marked decline in availability. This plant is well-known as a styptic to control haemorrhage from wounds and during castration of livestock (Catley and Mohammed 1996, Mares 1954b).

In addition to studying grass species, information was also collected on 152 browse species. Species showing serious decline included plants from the genera Barleria, Blepharispermum,

Ipomoea, Indigofera, and Cucumis -- genera which also feature in recent reports on Somali ethnoveterinary practice (Catley et al. 1996). Throughout the survey area pastoralists reported declining animal health since the 1940s despite the wider availability of modern veterinary services. The Wajir survey also included details of changes in the species composition of pastoral herds, the most notable of which was a tendency for camel herders to diversify into keeping cattle. This change was associated with increased water points and high market prices for cattle.

There are some consistencies in ethnovet practice and terminology no matter where Somalis live in the Horn of Africa. Some of the refs are listed. Some excerpts:

Although Somali ethnoveterinary knowledge has been regularly documented during the last 70 years, few of the recent or on-going animal health programmes in Somali areas [including SNR] have attempted to incorporate indigenous knowledge into modern systems of veterinary service delivery. Although it might be argued that the Somali pastoral economy has developed with limited access to western pharmaceuticals, options for complementing western systems with traditional systems have tended to be overlooked.

In part, the need for aid programmes to deliver western drugs and vaccines might be related to the immediate post-war environment in Somalia and south-east Ethiopia. In emergency and relief situations, aid agencies may need to provide material inputs in order to establish good relations with local communities and ensure their own security. Not surprisingly, elders and warlords tend to request supplies of modern pharmaceuticals from these agencies rather than trials on the efficacy local plant remedies. However, as projects become better established there may be opportunities to understand local perceptions of the value and use of traditional systems in relation to modern systems.

The ActionAid Animal Health Programme in Somaliland in northern Somalia began in 1992 and was based on a network of 30 primary veterinary assistants (PVAs). The PVAs received training in the diagnosis and treatment of locally prioritised diseases and were supplied with modern veterinary medicines for sale at subsidised rates. Later stages of the programme involved support to ex-government veterinary personnel in order to assist them to open private veterinary pharmacies (Catley 1996). From the beginning, work with pastoralists included the documentation of local terminology for livestock diseases and information on indigenous treatments (Catley and Mohammed 1995, 1996).

In 1994 ActionAid used a soft systems methodology to evaluate the animal health programme. The evaluation included scoring of treatment strategies ‘before’ and ‘after’ ActionAid’s interventions. A summarised account of the scoring process in Table 1 and indicates that in the programme area, ethnoveterinary practice declined as herders’ use of PVAs and private pharmacies increased. The review report noted that herders feared the erosion of their traditional knowledge and loss of traditional medicines (ActionAid 1994).

A more recent NGO animal health project in south-east Ethiopia worked with local veterinary authorities to understand the options for improving veterinary service delivery. During the early stages of the project, workshops were conducted with various stakeholders including livestock

owners, community elders, religious leaders, women, traditional healers, livestock traders, private veterinary drug vendors, and government veterinary personnel (Save the Children 1997). Stakeholder groups provided information on existing strategies for treating sick livestock and highlighted the importance of religious healing and traditional medicine (Table 2).

Further discussion indicated that although indigenous methods were very important, people also recognised that for many diseases, modern drugs were the most effective treatments. Even traditional healers noted the limitations of traditional veterinary practice.

Much of the literature on Somali ethnoveterinary medicine refers to traditional pastoralism and relates livestock husbandry to specific grazing areas and a range of plant, water, and mineral resources. The full use of indigenous knowledge requires access to both a diverse range of medicinal plants and graze or browse species. Traditional Somali pastoralism is based on mixed herds and a preference for camels above other livestock types. However, the ethnoveterinary literature should not be viewed in isolation. For many years there have been reports of changes in Somali pastoralism linked to increasing human and livestock populations, increasing water points, increasing sedenterisation, and a shift towards a market-orientated rather than a subsistence economy.

This paper has shown that Somali pastoralists possess very detailed ethnoveterinary knowledge but while traditional methods are still widely used, herders are also aware of the benefits of modern medicines.

Regarding changes to traditional pastoralism, work in south-east Ethiopia has indicated that communities are already beginning to recognise the problems associated with increased water points, sedenterisation, and private access to land, and are taking action to solve these problems (Jama Suguule and Walker 1997). Such local action in the absence of outside interventions could be highly relevant to pastoral development in other Somali-occupied areas.

When considering private sector services in Somali areas, there are numerous examples of private, indigenous systems which operated before the recent 'privatisation' focus of major aid donors. Traditional koranic teachers received payment in livestock, water was purchased from private water sources and traditional healers acted as private individuals. News of 'privatisation' is now a regular feature of local and international radio news to which many people in Somalia have easy access.

Valentin, C, JM d'Herbès & J Poesen 1999 ***Soil and water components of banded vegetation patterns***. Catena 37: 1-24.

(from abstract) A review of vegetation stripes. They call it banded landscapes or tiger bush (called vegetation arcs in N Somalia), in drylands (50-750 mm) on very gentle uniform slopes 0.2-2%. Usually perpendicular to slope, sometimes to dominant wind direction. For a given gradient, mean annual rainfall determines the contrast between the vegetated and bare phase (stripes) as well as band length and interband width:band width ratio. Vegetation bands greatly limit soil erosion. The phenomenon has often been considered a degradation of former continuous plant cover, but frequent failure to reforest the bare interband indicates the key role of

these mosaic components in the maintenance of the banded landscape. Clearing of bands for fuelwood or cropping induces a rapid decline in soil fertility and water infiltration potential. Analyses suggest upslope migration of the bands. Banding should be imitated when designing water-harvesting systems or restoring degraded drylands in order to optimize biomass production and limit land degradation.

First recognized from airphotos and called ‘tiger bush’ in Niger in 1956 and Sudan in 1960. (Actually in Africa first recognized in early 1950s in N Somalia. Note MacFayden 1950, Gilliland 1952, Greenwood 1957, Boaler & Hodge 1962, and Hemming 1965 are all in N Somalia and not E.Africa as stated in Table 1. In Somalia also recognized in Hiraan Region, C Somalia by Kuchar (unpub.). The table lists references from various countries including Australia, African countries, Middle East, Mexico, U.S. Also known from S.America and C and E Asia.

Banded vegetation can be grass, trees, shrubs or trees and grass. How banding originates has not been elucidated.

The existence of banded vegetation was unknown until the advent of airphotos. “Identifying patterns unequivocally in the field remains very difficult.” I concur; it is not at all obvious when one is standing in a region of bands, but becomes evident when one is suspicious that it is a banded landscape and then actually observes the regular alternation of an almost bare band with a densely vegetated band. The authors, in Fig.7, show the alternation of bands of which there are 5: degraded (former well-vegetated band deteriorating), run-off (erosion), sedimentation, pioneer (veg.), central (main or core part of vegetated band, usually narrow, a few metres). The amount of water received and infiltrated into the core part of the vegetated band can be much higher (2-4x) than precipitation.