

**‘Eroding the Concept of Commons:
A history of an idea inapplicable to natural resource management
by Karamojong pastoralists’**

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Introduction

The tragedy of the commons is more intellectual concept than universal experience. Of course there are serious, sometimes urgent, environmental issues of atmospheric gases, water supplies, fish stocks, toxic waste disposal, and irreversible soil erosion or loss of fertility, where economic beneficiaries of activities related to these do not pay the costs of the externalities. Clean air or water, and fish may appear as free public good waiting to be exploited. Yet it is the use of land, particularly the space required for common grazing that is so often the prime example given of common pool resources. It has constituted one of Africa’s many perceived problems. Another has been the growth of population and the connection with the perceived ‘ruin’ that uncontrolled commons must bring. This paper will use the example of Karamoja over the last hundred years, where nomadic pastoralism is the dominant form of production as a continuing tradition in considering the implications of the theory of economics and rangeland management as applied in Africa. Dichotomies between traditional and developmentalist concepts and approaches will be explored.

An Ideological History of the Tragicization of the Commons

My story begins in the Michaelmas Term of 1832 in Oxford, when a Reverend mathematical student of Christ Church, now Professor of Political Economy and Fellow of the Royal Society, William Forster Lloyd (1795-1832), was obliged to give his annual lecture before the University (Lloyd 1833). He started his lecture building on the assertion of the Cambridge cleric, Thomas Malthus,¹ who was still alive, that an unchecked population naturally multiplied in a geometric

¹ Malthus (1760-1834) was no isolated cleric, for he associated with William Huskisson MP (1770-1830), was Professor of History and Political Economy at the East India College at Haileybury (O’Brien 2004:9),

progression,² while the capacity of the soil only increased gradually with the progress of civilization (Lloyd 1833:i). Land in Malthus' account (1826:6) was a 'fund, which from the nature of all soils, instead of increasing', must be gradually diminishing, 'But population could it be supplied with food, would go on with unexhausted vigour without any limit'. It was only man's reasoning capacity that allowed him to calculate the distress of large families that forfeit his independence and oblige him 'to the sparing hand of charity'.³ If people forget this and forget to restrain their procreative tendencies, then they will be afflicted by the whole gamut of 'vice and misery: unwholesome occupations, severe labour and exposure to the seasons, extreme poverty, bad nursing of children, great towns, great excesses of all kinds, the whole train of common diseases and epidemics, wars, plague, and famine' (Malthus 1826:16; Lloyd 1833:6).⁴ Lloyd's contribution (1833:i) identified two parallel issues that encouraged such wantonness that spawned dense populations and stocking of commons: child labour and property in common, which result in factory and field being 'stocked to the extreme point of saturation' (Lloyd 1833:31). Both of these were current political issues, for a Factory Act reached the statute book the next year.⁵

so was in touch with the centre of British colonial ambitions, and the most heavily populated colonies. He was also a founder member of the Political Economy club in London, which was the centre for Classical economists, which would nurture the future rulers of the Victorian empire, such as Rowland Hill, GJ Goschen, WE Forster, and WE Gladstone, (O'Brien 2004:13). The colonial system formed part of their discussions.

² The population of England and Wales increased by 'the staggering figure' of 16.9 per cent in the decade 1810-20 compared with 3.5 per cent per decade 60 years earlier (O'Brien 2004:18). Even with the increased figure it would take about 44 years for the population to double, not 25 as Malthus' world model assumed (1826:11). The mean annual rate of growth behind 16.9 per cent per decade is 1.57, compared to a current world rate of about 1.3 per cent. Malthus was looking at the 1790 census of the USA, where land was still available for food production, and predicted that the 'Indians will be driven further and further back into the country until the whole race is exterminated' (Malthus 1826:8). In his essay Malthus was reacting to the rapid 'perfectibility' of human life and the utopianism produced by revolutionary France and America (Thompson & Lewis 1965:16).

³ Lloyd (1833:i) is quoting Malthus (1826:13) at length here, taking his analysis at face value, even though Marx later accused Malthus of sinning against science because of 'shameless and mechanical plagiarism', and being an apologist of the ruling classes (Meek 1953:22).

⁴ William Hazlitt ((1807:117) complained rhetorically of the 'imaginary, unknown, and unheard of evils with which Mr Malthus is perpetually threatening us'.

⁵ The Factory Act 1833 laid down that the working day was to start at 5:30am and cease at 8:30pm. A young person (aged thirteen to eighteen) might not be employed beyond any period of twelve hours, less

Though he does not identify Lloyd, despite the latter's lectures on value and the poor-laws, Karl Marx would have classed him with the married Protestant parsons, who 'contribute to the increase of population to a really unbecoming extent' (Meek 1953:84), while being apologists for landlordism and the class of 'unproductive consumers', who saved capitalism by from its crises by raising demand for commodities (Meek 1953:36). The Whig interpretation of history conveniently⁶ confined the Enclosure Acts between 1760 and 1830, when in fact they ran from the sixteenth century to the twentieth and the Ministry of Agriculture. No more acts of Parliament were needed to enclose land after 1845, because Parliament relinquished its power to commissioners who could enclose even commons recognized in law.⁷ The justification was the agrarian revolution that increased the productivity of land in a way that should have embarrassed the arguments of Revds. Malthus and Lloyd. The effect of this was to reward the gentry and dispossess the peasant families who then had to sell their labour to the new landowners or in the 'great towns'. Yet it is at this stage that white Anglo-Saxon Protestant morality is solidified behind property (Read 1929) and that its Evangelical missions go out to the world. Henry Thornton (1760-1815) was a banker and 'the greatest monetary theorist of the nineteenth century, indeed one of the greatest of all time' (O'Brien 2004:6). Like Zachary Macaulay (1768-1838), who served 14 years in the colonies, became Secretary of the Africa Institute for five, and was

one and a half for meals; and a child (aged nine to thirteen) beyond any period of nine hours. This reform does not fit Marx's scheme as it was hardly in the economic interest of capitalists and their hangers-on.

⁶ The Whigs were returned with a great victory in the general election of 1830, having struggled to achieve power during the reign of George III (1760-1820).

⁷ W E Tate estimated that enclosure awards cover about half of English parishes. The few private enclosure acts in the 16th century were largely concerned with the drainage and enclosure of marshes, although acts confirming enclosures by decree are sometimes found from the 17th century. Private Enclosure Acts for waste, common land and open fields became more frequent after 1750 and became so numerous that public general enclosure acts were passed, from 1801, to reduce the need for them. The General Enclosure Act of 1845 (8 & 9 Vict. c.118) appointed permanent enclosure Commissioners who were authorised to issue Enclosure Awards without submitting them to Parliament for approval. Manorial wastes and lands subject to indefinite rights of common were excluded from this act, but included in later general acts that were passed annually. After 1899, the Board of Agriculture, which later became the Ministry of Agriculture and Fisheries, inherited the powers of the Enclosure Commissioners. National Archives Available at <http://www.catalogue.nationalarchives.gov.uk/RdLeaflet.asp?sLeafletID=252> Accessed 23.605

father of the Whig historian⁸ who believed in European, especially British, superiority, Thornton supported self-sacrifically the missions of the Clapham Sect, emancipation, and economics.

Evangelical families, including Hanburys, Buxtons, Whitbreads, Barclays, Hoares, Perkinses, and Guinesses, brewed beer, made profits, and sponsored the Church Missionary Society (Brown 1961:281) and commerce with the colonies, in ventures such as the Uganda Company (Ehrlich 1953). It was scions of the capital accrued by brewing for banking in London who were the first Britons to pioneer Karamoja: a Hanbury was the first soldier, or European even, to enter in 1898 and a Buxton, great-grandson of the 'Great Emancipator' who saw his Whig bill to end slavery enacted in 1833, was the first missionary in 1929.

Laissez-Faire Empire

Only convinced imperialists had wanted to annexe Karamoja, for it had been repeatedly ravaged by a series of enzootic diseases from 1876 right through to 1920 and its semi-arid landscape offered no foreseeable economic benefit beyond the duty on ivory already being collected. It became a question of reluctant military occupation and civil administration did not start until 1921 (Knighton 1990:I:182-209). In 1923 Aciya, a government chief (there were no other kinds in Karamoja), had been murdered by a crowd of Karamojong men and women for officially preventing their cattle moving away to the dry-season grazing. When the news reached the Governor, Sir Geoffrey Archer (1922-4), he convened a top-level meeting to discuss future policy in Karamoja. It made a very realistic appraisal of the overall conditions, observing that the only hope for commerce was in livestock products, and that was dependent on the control of disease. The people 'were not agriculturalist, were unlikely to provide useful recruits for the military and police or labourers outside their own areas'. (EA 1307/1908:21.12.23 Notes of a Meeting at Government House)

⁸ Thomas Babington Macaulay (1800-59) wrote the Indian Penal Code, which was used in many colonies including Uganda, and enforced the teaching of English in Indian schools. Those who began Evangelical Christian missions and Classical economics were indeed fathers of the Victorians (Brown 1961).

... It was to be clearly understood, however, that such services should be reduced to a minimum and should in no way be allowed to interfere with the pastoral habits of the natives.

Donkeys should be used as often as possible for transport purposes.

An elaborate system of roads and camps is not required and should not be initiated.

To sum up the policy to be followed is:-

Internal peace and order.

Complete freedom of movement.

An absence of any energetic action calculated to cause resentment amongst the natives. (loc.cit.)

In a covering letter the Chief Secretary rubbed the message in for the Provincial Commissioner, who tended towards 'close interior administration'. It was realized 'that Karamoja is totally different from other districts' and must be treated as such.

His Excellency most emphatically is of the opinion that an energetic administrative policy is not required and is to be deprecated. You should, therefore, impress on the District Commissioner-in-charge, Karamoja, the necessity of adhering strictly to His Excellency's instructions in this respect.

The aim of the local Administration should be to foster a spirit of complete trust and confidence in the minds of the Karamojong, and to this end they should be afforded every opportunity of following their own semi-nomadic pastoral habits in so far as these are consistent with peace and good order. (EA 1307/1908:24.12.23 Chief Sec. to PC, EP)

However such a laissez-faire policy was not to stop intermittent cattle-raiding on common pasture where any could roam. Communal fines punished the innocent, stimulating them to raid in order to replenish their herds. The herds grew, as the Karamojong came to remember the '30s as a time of peace and plenty with the beneficent paternalism of DC Tommy Preston, who moved with them and governed by consent.

The Intervention of Scientific Fears

Protectorate scientists however saw a different situation prevailing, not that Karamoja had changed so much, but the West had. David Anderson (1984) in his article, 'Depression, Dustbowl, Demography, and Drought' showed how images of one of the great environmental disasters in human history, the Dustbowl caused by US agriculture 1930-36 and Hugh Bennett's literature on it had impacted Kenyan official thinking with settler political support, so soil erosion issues were publicized continually. After all, any concept of imperial trusteeship could not

countenance bequeathing a desert. Calculations were made of the carrying capacities⁹ of pastures in order to conserve their soil and these were set as targets for the reduction of African livestock (Anderson 1984:331). Experiments on reconditioned pastures in Machakos and Baringo formed the conviction that compulsory destocking would end overgrazing (Anderson 1984:331).

An overriding concern in the history of pastoral development in Kenya has been the danger of overgrazing as a result of “overstocking beyond the capacity of the land”. It was believed, almost as matter of faith, by administrators and range planners alike, that the rangeland areas were vastly overstocked and overpopulated. (Hogg 1987:302)

Comparison with fenced demonstration farms or commercial ranches, especially when they preserved their grazing by herding on common pasture, were seldom fair,¹⁰ since such conditions could not be sustained against pastoralist cultures in the context of traditional, communal agro-pastoral systems, which were therefore deemed less productive. They were thought uneconomic because of African irrationality towards cattle, aberrant accumulation of too many, and ignorant, incompetent, backward society, locked into custom, tradition, and innate conservatism (Anderson 2002:127,135f,140,156). When scientist socialized with settler in Africa, it has to be asked whether there were scientific confines from which the terms, ‘carrying capacity’, ‘overstocking’, ‘desertification’,¹¹ ‘desiccation’, and ‘degradation’ could escape (Anderson 1984:342f; 2002:140; Leach & Mearns 1996). All were used in the ideology of the inevitability of economic collapse

⁹ Stock carrying capacity can be simply defined as the maximum possible stocking of herbivores that rangeland can support on a sustainable basis (Leeuw & Tothill 1990:2). For Africa this is normally expressed in terms of hectares per tropical livestock unit (weighing 250kg on the hoof). What is sustainable is further elaborated by Abel (1993:1.6) distinguishing between economic and ecological sustainability, the latter being higher for considerable quantities of soil can be gradually eroded before the damage becomes irreversible. The concept assumes a static, spatial measure to which transhumance on commons with elastic boundaries does not fit.

¹⁰ The cost of scientific input or of capital for infrastructure such as fencing was not usually considered, just quality of pasture and livestock productivity.

¹¹ ‘Desertification’ is has certainly been associated with mega-science projects. In searching for spin-offs from the US space programme research was driven by the technological possibility of using satellite data on the Sahelian drought from NASA, so a Drought Analysis Laboratory was set up at the Goddard Space Flight Center (Reining 1979:3,9). Reining’s (1979:1,4) presupposition was that carrying capacity was the measure of population pressure, which needed investigation because ‘through the mass medium the public has learned of the problems of over-grazing, and many accept the possibility that man’s actions can cause desertification’. The satellite images then were distinctly grainy, but suggested to Reining (1979:14) that the very light character of fields in all season revealed the sub-soil was exposed.

and environmental disaster, if settlers were not granted monopoly rights over land and cattle sales.

Anderson (1984:332) mentions Karamoja in particular, because after droughts in 1927-30 and 1933-4, there was official anxiety lest the arid north extend south, as if it were the Sahara Desert or a contagious disease. This was certainly the concern of the agriculturalist, Tothill, who was interested in cotton grown by the Teso, the south-eastern neighbours. Karamoja had no cotton due to its uneven rainfall and high run-off, so he noted that it was the only Uganda district prone to gully erosion, as well as sheet erosion due to removal of vegetative cover (Tothill 1940:60,72,75). In fact the area was in the 'process of reduction to desert' (Tothill 1940:85). Serious erosion was caused by cattle tracks¹² and overgrazing. Uncontrolled grazing had formerly been balanced by bovine death from epidemics (Tothill 1940:503). Now evidently the government must control the situation.

The most pungent reports concerning Karamoja were from EJ Wayland and NV Brasnett (1937; 1938) who were directly conscientized by news and analysis, including Hugh Bennett's, of the dustbowl in the USA (Anderson 2002:160,181).

Man may thoughtlessly prepare the stage for a rapid and disastrous act of denudation which merely awaits the appropriate call for its performance—as in America where of late, we learn, some 100,000,000 acres of erstwhile excellent land have been so despoiled that they may never be cultivated again, and the great winds which swept the plain, after the forest had been felled from it, "removed the rich top-soil from a further 169,000,000 acres which are now covered with fine dust that was once fertile earth. Another 789,000,000 acres have been lost some of their top-soil and may soon lose it all". (Wayland & Brasnett 1938:5 citing The Times 31.7.36:15f)

They translate this directly to their own responsibility, 'In many parts of Africa man has greatly assisted or even invited such desiccation'. Their orbit was Uganda (though Wayland had himself pointed out the tendency of areas of desiccation to spread in Ceylon¹³) and the prime target for such alarm could only be the visibly unique district of Karamoja. Lumping cattle, sheep, and

¹² As pictured by Wayland and Brasnett. Commissioned by the Governor of Uganda

¹³ Wayland and Brasnett (1938:4,46) also foresaw Karamoja becoming 'irreclaimable' to the extent that the 'inexorable advance' of its 'desiccating influence' would wither and destroy front and second lines put up against it. The front line therefore in the battle 'against an advance of desiccating conditions from Turkana' should be the escarpment with Karamoja.

goats together as equal units totalling 812,000 head and asserting that they did not graze a fifth of the district, they calculated that there were 90-100 head per square mile, compared with only one sheep per square mile in some parts of South Africa. Since the Pax Britannica had allowed the livestock population to reach a peak, the livestock should be greatly reduced in number' (Wayland & Brasnett 1938:47).

More stringent recommendations were to follow. Blocks and strips of land along the hilly fringes of Karamoja should be demarcated and protected (even though this was a 'council of perfection'). These amounted to 6,400 square miles (Wayland & Brasnett 1938:50,55) or 60 per cent of the whole district! Succession of rich pastures to a forest climax need to be prevented 'for economic reasons (presumably to keep the herders out!), so the most efficient vegetative covering would be 'closed forest' of Lantana camara, being 'the greatest safeguard against overgrazing, denudation and erosion', being resistant to fire and long regarded as 'one of the world's most dangerous weeds' (Wayland & Brasnett 1938:50). In Fiji it killed cattle, which would require the Forest Guards to 'to prevent cattle trespass in the Crown Forest' (*loc. cit.*). As if this were not enough, their interim report, which had been written on the strength of an aerial survey before their visit to the area, had dealt far more on the danger of cattle to erosion (Wayland & Brasnett 1938:55), but it seems that an encounter with the DC, Tommy Preston had squashed further recommendations beyond encouraging cattle exports. Ideas of establishing industrial development were reversed; now Karamojong should 'become less cattle-minded' and be induced to seek occupations and interests outside the district. Indeed they believed it best 'to remove the people altogether', but the Administration would not allow it and it would cause problems elsewhere. Forest clearing to stop the tsetse fly spreading 'must be prevented at all costs' (Wayland & Brasnett 1938:55f). Honey-hunters were doing incalculable damage to forest growth by burning trees, especially the Ik north of Kamion whom Wayland (1931) misnamed Wanderobo: 'they are a very small tribe and will have to be moved in any case' (Wayland & Brasnett 1938:56). The Kenyan government would also have to shift the honey-hunters from Turkana.

Genocide would therefore appear to be the logical deduction from this environmental priority, and could have been the outcome had the recommendations been implemented, but the government scientists do not go there, for unstated reasons. What is stated is bad enough for its dismissal of African livelihoods by any standards of the twentieth century and what is intellectually worse is that it is done on the basis of no thorough scientific research in Karamoja. They were given the population, livestock, area, and rainfall data by others, and can only say that 'We are lamentably ignorant of the meteorology of Karamoja'. WS Martin was detailed to write a note on soils and soil erosion (Wayland & Brasnett 1938:82-4), but his analysis does not justify his conclusion. 'Cultivations by former inhabitants and activities of the present pastoral people cannot be held entirely responsible for the present position', but unless steps are taken to control their activities, 'Karamoja must become more and more desert-like', for it 'is an a state of unstable equilibrium' the threatened the rainfall distribution on its neighbours to west and south, because of the removal of vegetative cover leading 'to progressive or accelerated deterioration' (Wayland & Brasnett 1938:84).

To provide further scientific evidence, a botanist, William Julius Eggeling, was required to study there for a month at the height of the dry season in 1936. Actually his main concern was the collection of flora for which he was commissioned and paid by Kew. He gathered 500 plant specimens, 12 of which were new to science, and his richest source were the mountain forests, which had little to do with herding or soil erosion, when 'all Karamojong' were afraid of all but the lowest slopes of Mount Kadam (Eggeling 1938b:4). Thus he did not tour any further than 'just north of' Mount Moroto (Eggeling 1938a), but was till able to conclude that 'the whole story of vegetation in Karamoja is the same', comprising types which have retrogressed from higher ones (1938b:5). This echoed the common view of capitalist development that nothing new came out of Karamoja. In obedience to his superiors, Eggeling dutifully mirrored the thrust of the report by Wayland and Brasnett, especially where it was obliged to coincide with the view of the District Commissioner, compulsory measures for the desired aim of reducing the cattle

population were impracticable (Eggeling 1938b:3f). Therefore missionary agency was the most promising solution, since this would wean the Karamojong off their irrational affinity for the cattle that were threatening to spread Turkana's desertification to the cotton fields of Teso.

The removal of vegetation allows the sun's heat to be reflected back into the atmosphere deterring the formation of rain-clouds. Certainly overgrazing and overbrowsing and the destruction of trees for agriculture, bark, and homesteads was seen to denude the vegetation cover. By 1935 government assessments of Karamoja's cattle-carrying capacity had already been exceeded with 250,000 head each of cattle, sheep, and goats (Eggeling 1938b:3). That Karamoja is not a desert is partly due to the recolonization by plants of areas eroded down to rotted rock which assists the percolation of water. Thus, a cycle is created between savanna, steppe, bushland and dry thicket, and rotted rock (Langdale-Brown, Osmaston, & Wilson 1964:89f.). However the perceived dangers of overgrazing were to an extent more a matter of the colonial mind in this period (Beinart 2000:273).

Though it has increased substantially since, in 1959 only 37,250 hectares were under grain crops in the whole of Karamoja, ie. 1.4 per cent of the land area (Langdale-Brown, Osmaston, & Wilson 1964:78). The rest, apart from inaccessible mountain areas, is grazed for part of the year, though overgrown grasses in the wetter areas are not very nutritious and East Coast Fever in the south-east and the tsetse fly in the north limit grazing. However more recent calculations suggest that the upper grazing limit is 750,000 mature cattle (Novelli 1999:XXXVIII). More recent calculations that the upper grazing limit is 750,000 mature cattle (Novelli 1999:XXXVIII) have already been frustrated by estimates of more than 1,000,000 cattle with 750,000 sheep and goats. An accurate head count is hardly possible now (see graph of cattle and human populations), but with the unusually successful outward raiding of the last 15 years these figures could be countenanced by external grazing beyond the borders contracted in mid-century by the Protectorate government. The application of a carrying capacity to Karamoja is one long history of an alien imposition with much less than adequate scientific evidence

The scientists had a different view to the administrators whose long-term sojourns in Karamoja fostered a love and administration for the cattle-herders and their antidote to the pressures of modern life. Even after Sir Andrew Cohen started to force development as the prelude to Ugandan independence, the district Commissioners typically did not want outsiders of any sort, whether missionaries or experts, to interfere with the pastoralist life, to the point that they were later accused by Mario Cisternino of creating a 'human zoo'. Yet this was no more than an expression of Karamojong priorities that actually safeguarded the desire of scientists to reduce the livelihood in the name of the environment. All were employed by Uganda for the whole Protectorate, to whose development the Karamojong were not contributing.

Legitimizing the Destocking of African Commons

Europe's ideologies, more than its technology then, has affected Karamoja, scientism¹⁴ more than science. The movement for the enclosure of common land in England was not allowed to fade with the agrarian revolution and the rise of capital there. While wheat was imported in ever larger quantities, the ideal of land as private property was for export. This was how the American plains were carved up and ploughed, and this was where the apocalyptic dustbowl phenomenon occurred. Yet range science originated in the USA during the 1890s, when drought occasioned a crisis in the livestock industry (Adams 1990:29), but enclosure was generally assumed. From the 1960s in Zimbabwe by contrast American range science was 'applied in a confident and prescriptive manner in the traditions of "scientism" as if it were based on established scientific "laws" and "facts"' (Adams 1990:29). The economic imperative of internalizing costs and benefits in a rangeland system, so that no herder would gain at common expense, made territorial control a prerequisite of governments. 'The concern with land management is closely linked to

¹⁴ In the mid-twentieth century CS Lewis strove valiantly against scientism as science was popularized and magnified (Mineko 1997:60). Logical positivism led the way in this trend, as AJ Ayers 'thraldom to scientism was complete', except that he ended by admitting "'nearly all of it was false"' (Aeschliman 1983:60).

the so-called “civilizing mission” of the colonizers’ (Abel 1993:2.6). Despite the scientific laws crumbling in America in the light of evidence, they continue to be conventions imposed on hapless Zimbabweans and Tswana¹⁵ (Abel & White 1993:1).

Even William Allan (1965:292) had noted in his influential guide, The African Husbandman,¹⁶ that ‘Since the amount of precise information on stock carrying capacities is usually insufficient for practical purposes, such as destocking and the regulation of livestock numbers, empirical formulae based on observation and experience are commonly used’, meaning that a figure like 15 acres per head of adult stock was borrowed from elsewhere.¹⁷ In fact such figures were ‘largely conjectural’,¹⁸ for the stock carrying capacity of the grazing or browsing land was ‘enormously variable’ and indeterminate (Allan 1965:291-4). In sum carrying capacity was what range scientists said it was (Abel 1993:1.13). Recent research, as distinct from policy in Africa, has concluded that carrying capacity is an unsound concept of questionable validity in Africa (Bartels 1991).¹⁹

¹⁵ ‘The carrying capacity concept, and the stocking density recommendations which stem from it, have been seized upon by the emerging middle-class of Botswana as a justification for the privatization of rangeland in Botswana’ (Abel & White 1993:1).

¹⁶ A reviewer saw the calculation of a critical population density as basic theoretical concept for evaluating traditional land use, and urged that it ‘should be read by planners and administrators alike’, since the population problem had reached emergency proportions’ (McLoughlin 1965:626-8).

¹⁷ Scoones (1989:3) gives a 1944 example from Zimbabwe, ‘So much has been said about overstocking in this district after the most cursory examination by folk deemed to have expert knowledge’. ‘Sandy’ Field, DC in the 1950s, used to keep boffins out of his closed district of Karamoja in order to preserve himself and the Karamojong from being told the place should be ‘white with sheep’. If they were not deterred, he would mount a hunting expedition before they arrived. His technical officers however wanted to see their skills used for ‘development’.

¹⁸ In Zimbabwe, ‘The actual assessment of carrying capacity was still based on guesswork an experience of commercial ranching’, but paddock grazing schemes quickly became unsustainable (Scoones 1989:9,21).

¹⁹ Leeuw & Tohill (1990:15f) support the underlying principle on which ‘carrying capacity is based’, but their research obliges them to recognise the limitations of data and its ‘utility for Africa’. ‘Eminent experts disagree by factors of four or five over the “correct stocking rate of a given range’ (Timberlake 1985:76).

Garrett Hardin (1915-2003), an American biologist,²⁰ robustly resurrected Classical economics' fear of the commons for world issues (1968). He began not on a scientific base, because he believed there was no technical solution possible for the problems of population or environment. He did not demonstrate this empirically: indeed he granted that scientists commonly assumed there was one! His authority lay unashamedly in the proposition of Malthus that population grows geometrically, while the world is finite (Hardin 1964:7), so that Bentham's utilitarian goal of 'the greatest good of the greatest number' is rendered impossible (Hardin 1968). Hardin continues his argument with William Lloyd's of 136 years earlier: on common grazing in a limited world each is compelled to increase his herd without limit.

Adding together the component partial utilities, the rational herdsman concludes that the only sensible course for him to pursue is to add another animal to his herd. And another.... But this is the conclusion reached by each and every rational herdsman sharing a commons. Therein is the tragedy. Each man is locked into a system that compels him to increase his herd without limit -- in a world that is limited. Ruin is the destination toward which all men rush, each pursuing his own best interest in a society that believes in the freedom of the commons. Freedom in a commons brings ruin to all.

It is not so much the commons that are per se the cause of all entropy, but their outcome in situations of what Hardin sees as inevitably increasing population: 'the commons, if justifiable at all, is justifiable only under conditions of low-population density'. Is this science or the fearful value judgment of a misanthropist?

The tragedy of the commons develops in this way. Picture a pasture open to all. It is to be expected that each herdsman will try to keep as many cattle as possible on the commons. Such an arrangement may work reasonably satisfactorily for centuries because tribal wars, poaching, and disease keep the numbers of both man and beast well below the carrying capacity of the land.²¹ ... the inherent logic of the commons remorselessly generates tragedy. (Hardin 1968)

²⁰ Born into an originally Dutch family, Gerrit Hardin was disabled by polio from the age of 4, yet moved among the Californians for Population Stabilization (CAPS) and the Carrying Capacity Network (CCN). The editors of Science had informed him that The Tragedy of the Commons had been reprinted more times than any other piece in the history of that august journal. Much lauded and honoured in the USA as an intellectual heir to Malthus and Darwin, as well as opposed, Colorado Governor Dick Lamm once called Garrett Hardin 'one of the prophets of our time' (Kolankiewicz 2003). Now there is a society by his name, which claims, 'He understood as a boy that those who refuse to decrease excess population are being cruel, not kind.' Available at http://www.garretthardinsociety.org/gh/gh_influences.html Accessed 15.9.05

²¹ Thus carrying capacity is a concept that has been applied to people in development as well as livestock (Khanna, Ram & George 1971; 1999), as has been done for the neighbouring Pokot (Moonen & Verolme 1991).

As with Malthus and Lloyd the prospect of the human race multiplying appears horrendous. 'Freedom to breed will bring ruin to all', so is intolerable (Hardin 1968). Hardin repeatedly returns to the common pasture as 'the classic paradigm', which in an overpopulated (or overexploited) world, of a system that 'leads to ruin because each herdsman has more to gain individually by increasing the size of his herd than he has to lose as a single member of the community guilty of lowering the carrying capacity of the environment' (Hardin 1976). Thus another quantitative term has been added to 'population', one that becomes the judge of all folk: 'For posterity's sake we should never send food to any population that is beyond the realistic carrying capacity of its land' (Hardin 1976). At this point science has vanished into ethics and 'is' has become 'ought',²² yet these views have to be addressed for the effects they have on policy. Stephen Sandford has long noted that such ethics has no idle impact on Africa: 'One major problem has been an obsession with the doctrine of the "Tragedy of the Commons" and a misplaced faith that the private ownership of land is the only answer to the dilemma that the doctrine poses.' Arguments for conservation of grazing can have 'their origins not in science, but in ideology' (Abel & White 1993:1).

So also in Karamoja, before and after independence, water development, disease control, became ends in themselves to join the suppression of cattle raiding,²³ so government intervention involved alien impositions and gained no validity by upsetting the delicately adjusted ecological balance (Baker 1972:187). For fear of soil erosion the government authorities prohibited seasonal grass burning, with the result that crude protein levels in the fodder remained at 0.3 per cent, until the rains had come, and even then the mass of dead grass hampered the growth of the new, harbouring ticks, especially Rhipicephalus appendiculatus, the vector of East Coast Fever (Baker 1972:191), which was troublesome from the 1950s (Dyson-Hudson, VR 1960). Furthermore bush

²² This puts Hardin into the colonial ranks, when Governor Archer has used the word 'should' seven times in the short quotation of his memo on Karamoja, Wayland and Brasnett four times.

²³ However economic or conservationist a policy was, it was rapidly reduced to a purely administrative or security problem (Dyson-Hudson 1962:794).

encroachment was not controlled, encouraging the invasion of tsetse fly. Installing dams and valley tanks in the drier central and eastern areas discouraged transhumance and stimulated soil erosion around the new permanent sources, and encroachment by semi-desert succulents (Baker 1972:196). Yet the herders were blamed for recalcitrance and uncooperativeness in plans for grazing and selling their cattle, while the élite of independent Uganda scorned them as they still do, as ‘primitive’ and ‘uncivilized’, ‘ignorant’, and ‘hostile’ (Baker 1972:196; New Vision 28.05.03; 13.9.03; 20.1.05), even if the press is now self-censored. The memory of the Namalu blood and bone meal plant, whither herd-owners were obliged to sell their ‘scrub stock’ at 7 shillings a head has remained for ever a stench in Karamojong sensibilities and a reminder that ‘The Government eats our cattle’. Unsurprisingly they remain unimpressed by any rangeland development schemes.

As Elinor Ostrom has emphasized, a problem with the Classical economics statement of common pool resources dilemma is that it leaves policy-makers with only two possible solutions to the presumed ever-present ‘tragedy of the commons’: privatization or appropriation by national government for management by an agency (that will sooner or late descend into corruption or impotence (Dolsäk & Ostrom 2003:6). In short co-ercion is the logic of collective action and commons need external, ideally international, control to ensure the compliance of all actors (Ostrom 1990:6). Yet such compulsory imposition, as with the experience of grazing control and destocking among the Karamojong, works to threaten the institutional capital that may already be there to facilitate local solutions (Ostrom 1990:184). A joint effort, not just an economist’s idea, is required from a large proportion of the resource users, which requires reciprocity and trust above all, so that actors can give the goal of the common good actual priority over immediate self-interest to foster ‘self-enforcing patterns of human interaction’ (Ostrom 1990:184); Keohane & Ostrom 1995:1; Ostrom & Ahn 2002; Dolsäk & Ostrom 2003:6). The bite in the dilemmas lies in the assumptions of Classical economics that there is perfect information and communication from which actors take separate decisions purely in their rational, individual self-interest

unfettered by common or binding agreements yielding a third best option that is not Pareto-optimal for total utility or welfare (Ostrom 1990:3). However Ostrom and colleagues (Keohane & Ostrom 1995:1) point to common pool resources that have been successfully governed for centuries through tacit or enforceable agreements.

Nevertheless Ostrom assumes a philosophical line of argument originating with Aristotle and running through Thomas Hobbes, William Lloyd, and Garret Hardin who ‘should be required reading for all students ... all human beings’ (Ostrom 1990:7). Her own research is in the context of the nation-state, so that all the envisaged solutions employ modern institutions and enforcement agencies, backed and legitimated by state law (Dolsák & Ostrom 2003:11). However cooperative the ideal arrangements are, the power of the state is there to prevent the fall into conflict, chaos, and violence when these are not working and trust is lacking (Ostrom 1990:183). So this analysis rarely has to come to terms with African contexts where ‘effective hierarchical government’ and the rule of law and active modern institutions (Keohane & Ostrom 1995:22) are almost totally absent as in Karamoja. ‘Arrangements worked out by participants, intimately knowledgeable about details of their activities are more likely to be workable than blueprints developments by policy analysts and imposed by politicians and bureaucrats’ are envisaged, but still suppose Western rationality (Keohane & Ostrom 1995:22). What the developmentalists miss is that the Karamojong have long had these institutions and processes: the age-class system, the elders’ assembly, and the contingent decisions of family herders and cattle-camp leaders, which ensure a mobile spread of grazing while set within a non-hierarchical but highly communal society that builds much mutual reciprocity through exchanges and gifts of livestock. This is overlooked because of the state’s concern to achieve a monopoly of violence, especially when it vitiates the work of Western development agencies. It needs to be borne in mind that the law of the land cannot be enforced and penal institutions run without the state using violence, but this is claimed to have legitimacy.

Karamojong Institutions, Trust, and Ecology

In the Karamojong cluster it is true that mutual reciprocity is mainly intra-tribal, sometimes only intra-sectional, , though exchange relationships and intermarriage can exist beyond the tribes, Inward grazing by allies or enemies may be negotiated to mutual advantage. Yet cattle-raiding with its attendant wounding and loss of life is endemic to the pastoral system. The direct mortality of this is usually grossly exaggerated, and it is forgotten that cattle-raiding goes in cycles of escalation and de-escalation, which include traditional, sacrificial peace ceremonies. An effect of the raiding is to create shifting no-go areas, where herders fear to graze allowing some years in which fodder species may regenerate. Where a section or tribe has lost most of its cattle as happened to the Dodoso after 1979, then grazing may be much less intense for years. In any case the opportunistic, tracking strategy²⁴ means that herders' decisions avoid grazing in all sorts of places for much of the year for a host of reasons, not least the poor quality of the grazing. Cattle die if forced to graze in one place, a process accelerated by the lack of stored feed or concentrates. Thus it is that developmental interventions are more likely to interrupt grazing patterns that, beyond the devising of any one mind or central authority, are systematically attuned to a relatively fragile environment.

One example is the traditional institution of 'Freeing the Cattle' (akiwodokin). When the grass around the settled areas begins to dry up, the cattle herdsmen become restless, wanting to move away to the dry-season grazing lands with their herds. Embarking on the nomadic life each year is seen by the herdsmen as liberation for both them and their cattle. They will often be scores of miles away from their paternal herd-owners and the cattle will be able to roam as far afield as they need in order to satisfy their appetites. Together they represent the future well-being of society; the herdsmen are the rising generation and the herds are the social and economic capital.

²⁴ This analysis recognizes research in Southern Africa that demonstrates the superiority of 'tracking' or 'opportunistic' strategies that manage herd mobility to access water, grazing, and minerals in daily response to the changing complex of environmental and biological factors and to maximize output per hectare over Western schemes that concentrate on productivity per animal and attempt to manage the environment (Abel 1990; 1993; Abel & White 1993; Adams 1993; Hogg 1987; Homewood & Rogers 1987; Beinart 2000; Scoones 1989; Tapson 1991). There conclusions have been accepted by social scientists observing East African pastoralists (Little & Smith 2001; Livingstone 1977; Markakis 1993; Niamir-Fuller 1999) without the detailed studies of rangeland science.

The elders know that if the herders resolutely refuse to return to their families there is little they can do to stop the dissolution of their tribe or section. The most fatal of curses will not undo the damage done, if the threat of it is ignored. Thus it is of the utmost importance that the herdsmen leave in a sanctioned and amicable way.

As the herdsmen grow restless, one of them, an esorokit, asks for a council (atukot) to decide a lunar date for akiwodokin and the move away. Until this happens it is an act of wilful disobedience, punishable by a beating or the sacrifice of an ox, to take cattle off to the dry-season pastures. Oxen are sacrificed to please the elders, who divine the propitious occasion. A facilitator (ekeseran) is appointed to announce and organize the assembly, so that all the males may attend the sacred grove of the section with as many herds as possible -- no mean operation. The elders feast on the sacrificial oxen and gourds of milk. The herdsmen and the stock in their care are blessed with the chyme and the elders' prayers. Then the herdsmen leave, in the accepted order of clan or locality, through the brushwood gate and are given a clay spray blessing and a token beating with a switch to remind them of their duty to the elders.

An example of the communal reciprocity repeatedly engendered in the assembly of elders representing all their families and herds is given by these translated records of prayers.

Anything bad connected with my people and my cattle,	
Anything bad connected with sorghum,	
Anything bad connected with water,	
Anything bad connected with whatever,	
Anything bad connected with paths,	
Anything bad connected with food,	
Anything bad connected with everything,	
Have they not gone on a journey, emigrated, set together with the sun?	They have set!...
All the cattle and the herdsmen,	
did they not come together?	They did come together!
God, is He not hearing what we hear?	He is hearing! (P5)
That one who is against the Jie, whether sickness, or enemies, or government, to the west	
go!	Go!
With our animals,	
do not meet!	Do not meet!
Our cows, our cows, from the west,	
Face to the east!	Face to the east!
The enemies following our cows with a bullet on the way,	
meet!	Meet!
	(Lokitela-ebu 1.4.02)

At the Kotyang akiriket [27.3.02] we prayed for the year to Akujũ, for wealth in cattle, for the health of the Itunga and animals, for rain, water, peace (ekisil), and for victory over enemies. Whenever there is akiriket, let them pray for rain and victory! 'What can we do about UPDF? We prayed for them to go.'
(J20)

'Akujũ listens to prayers and blesses. Three requests are made: for the health of the people, the multiplication of animals, and good crops.' (J8) 'People can sacrifice for sin, but Akujũ's curse will run its course. Killers may not be forgiven on earth or in heaven, as the man may be the continual enemy of Akujũ for shedding blood. Akujũ is not happy: He may listen to the enemies' sacrifice.' (P5) Just as the elders pray for something good, and it is at once asserted by the response to be the case, so it is in reverse. As soon as they curse (aki-lam/pyed/cen), the social and environmental world has been changed. If the elders fail to act to put human affairs right, they will have their own consequences. Divine judgment happens on earth through the curses, penalties, and retributions of his own people or through 'natural' calamities.

Sickness, loss of livestock, and famine are God's curses. Karamojong will accept such judgment from him as warranted, but not from any man. Destocking is thus built into the Karamojong pastoralist economy, unless some scientist should come along and persuade them to do away with the 'hypothesis' of Akujũ. Hitherto the Karamojong have preferred to entrust themselves to the mercy of Akujũ rather than Western 'scientism'. Science only provides a tentative theory, never proof, because the best scientists are not purely objective (Abel & White 1993:1) because of their transcendental presuppositions as has been known since Kant.

People perceive their environment, with its opportunities and problems, through a 'cultural filter' (Popper 1986). The environment cannot be perceived objectively, for information is sorted, selected and processed in a culturally biased manner. Thus people of different cultures will usually reach different conclusions from the same information. (Abel 1993:1.3)

So in Karamoja there was and is a gulf in the perception of social rôle of cattle between two separate worlds of planner and the unplanned, leading to a gross and continuously deepening misunderstanding of the survival strategies and multiple socio-economic rôles of livestock (Baker 1977:151). Little research is devoted to understanding their existing way of life, and the excuse

given is that it is collapsing anyway (Ocan 1992a; 1992b; Gray 2000; Mirzeler & Young 2000; contra Knighton 2002).

Conclusion: The Fenced Path of Policy

Given the continual round of proposed interventions and funding proposals that sustain the aid industry and the Ugandan national budget, it is high time that considerable spell of humble reflection began. Long ago Walter Goldschmidt found the emerging picture of ranching to be ‘one of almost unrelieved failure’ and Michael Horowitz cited ‘an almost unblemished record of project non-success in the Sahelian livestock sector’ (quoted in Timberlake 1985:78). Despite much more careful scientific analyses of soils, rainfall, forage, and output, eminent experts were still disagreeing ‘by factors of four or five over the “correct” stocking rate of a given range’ (Timberlake 1985:76). Empirical results found that pastoralist-dominated ecosystems were more efficient than wildlife ones, and both were more efficient than commercial ones (Western 1981:81). Now the best consensus of ecologists is that there is much to be said for a traditional tracking strategy, from which the Karamojong have never even tried to depart. John Wilson (1973:81; 1985:163), Agricultural Officer in Karamoja before and after independence, complains that the colonial administrators identified pastoralism as the ultimate way of life for the Karamojong and kept them in ‘a museum of the past’,²⁵ but perhaps they were not so far off the mark. Certainly the pastoralists agree (Knighton 2005).

Instead of listening to the ecologists, the Ugandan government accepts the external, US-driven pressures to establish individual property rights in the middle of common pastures.²⁶ The New Constitution of Uganda 1995 Article 237 allows customary tenure as one form in four, but occupants can acquire a private certificated, inheritable title to land. Thus individuals' rights to land have been secured by virtue of occupation, and this can be converted into transferable

²⁵ When looking at the Karamojong rather than their development, Wilson (1972:59) found that, ‘Cattle therefore are of prime importance to the Karamojong male’, and again, ‘cattle are an inextricable part of tribal ritual’.

²⁶ European law in Africa has already favoured sedentary modes of production over mobile with its emphasis on definite boundaries to fix territory in space and time (Niamir-Fuller 2000:120).

freehold, clearly opening up a market in land. The Land Act 1998 provides for communal ownership, but legal title will only be conferred if a communal Land Association is incorporated. Thus the commons that are not forest reserves, wetlands, game and national parks owned by the state, which restricts access to them anyway, are now up for privatization. In Karamoja two leading businessmen brothers, Edward Athiyo²⁷ and Cornelius Kodet, have acquired title to hundreds of thousands of acres in what used to be gazetted as the South Karamoja Hunting Reserve,²⁸ so they would be very grateful if Hima herders would man their ‘ranches’ (New Vision 16.5.02). Of course Karimojong elders and warriors do not recognize any such legal claim.

The Prime Minister, Prof. Apollo Nsubambi has ‘called upon leaders in the area to encourage fellow Karimojong to accept modern methods of ranching, dairy farming and agriculture’ (New Vision 24.1.03). Yet the developmental discourse is too often a cover for genocidal animosity: ‘We should shoot the lot of them’, one government figure is reported as saying.²⁹ One of the main strategies adopted by the ruling party, the NRM, ‘has been the settlement of nomadic cattle keepers’, as this is seen as a panacea for the development of livestock development (Muhereza 2001:103). President Museveni has himself been a front runner in the struggles to eliminate nomadism among his own Bahima people, and a new law has been mooted to ban nomadic lifestyles, which ‘would make it an offence for cattle keepers to continue roaming from one place to another’ (Muhereza 2001:108, 120). The statist solution is usually to sedentarize. It is normally a territorially static one because of the state’s very definition by fixed boundaries, but this militates against ‘the pastoralist imperative of movement’ (Markakis 1993; Little & Smith 2001:423). The English urge to enclose has been grafted on to Uganda, so that the

²⁷ Edward Athiyo leads one of life’s great promotional families. His father Lorika hailed from Sudan and became county chief, but was murdered. Athiyo became DC under Obote and then a cabinet minister, latterly chairperson of the District Service Commission and dealer in precious stones. His brother, William Naburi, now deceased, was MP. His brother Cornelius Kodet, is proprietor of the Mount Moroto hotel, a string of businesses, and 500,000 acres. His sister is Rose Nacha, MP for Nakapiripirit. Each brother has an enormous ‘farm’. The law, if not social reality, is on their side, but Hardin might have approved this anti-commons institution.

²⁸ Settled Fulani pastoralists also seek clearer recognition of their title to demand compensation from the nomads (Raay & Leeuw 1974:15).

²⁹ Personal communication, DGR Belshaw, 20.9.05

African plains await the same fate as the North American prairies. So far the Karamojong, as tenacious custodians of the commons (Lane 1997), have been wise to avoid the imposition of scientific rangeland management, which their fellow nomadic pastoralists in Southern Africa have not been able to resist.³⁰ The tragedy of the commons will be when there are no commons left to them.

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³⁰ 'The imposition of pastoral regulations illustrated the expanding powers of the South African state, founded on presumptions of scientific legitimacy.' (Brown 2005:513)

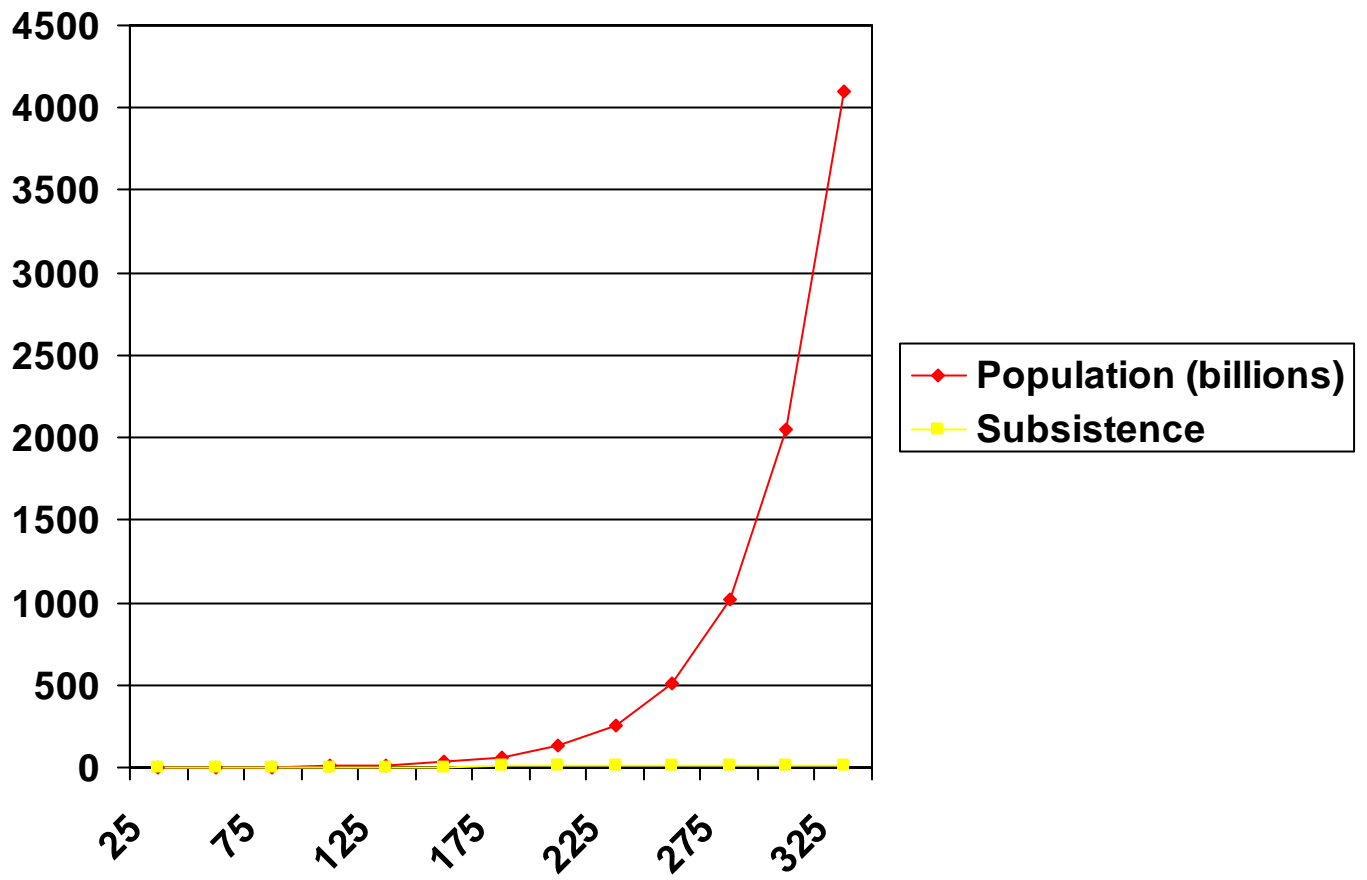
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Graph to Show the Implications of Malthus' Geometric Increase in Population



Graph to Show the Increase of Cattle and Human Populations in Karamoja, 1914-2004

