SECOND DRAFT

SOMALIA: Paradoxes of Private Prosperity, Poverty Pockets, Volatile Vulnerability and Public Pauperisation

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ACKNOWLEDGEMENT AND DISCLAIMER

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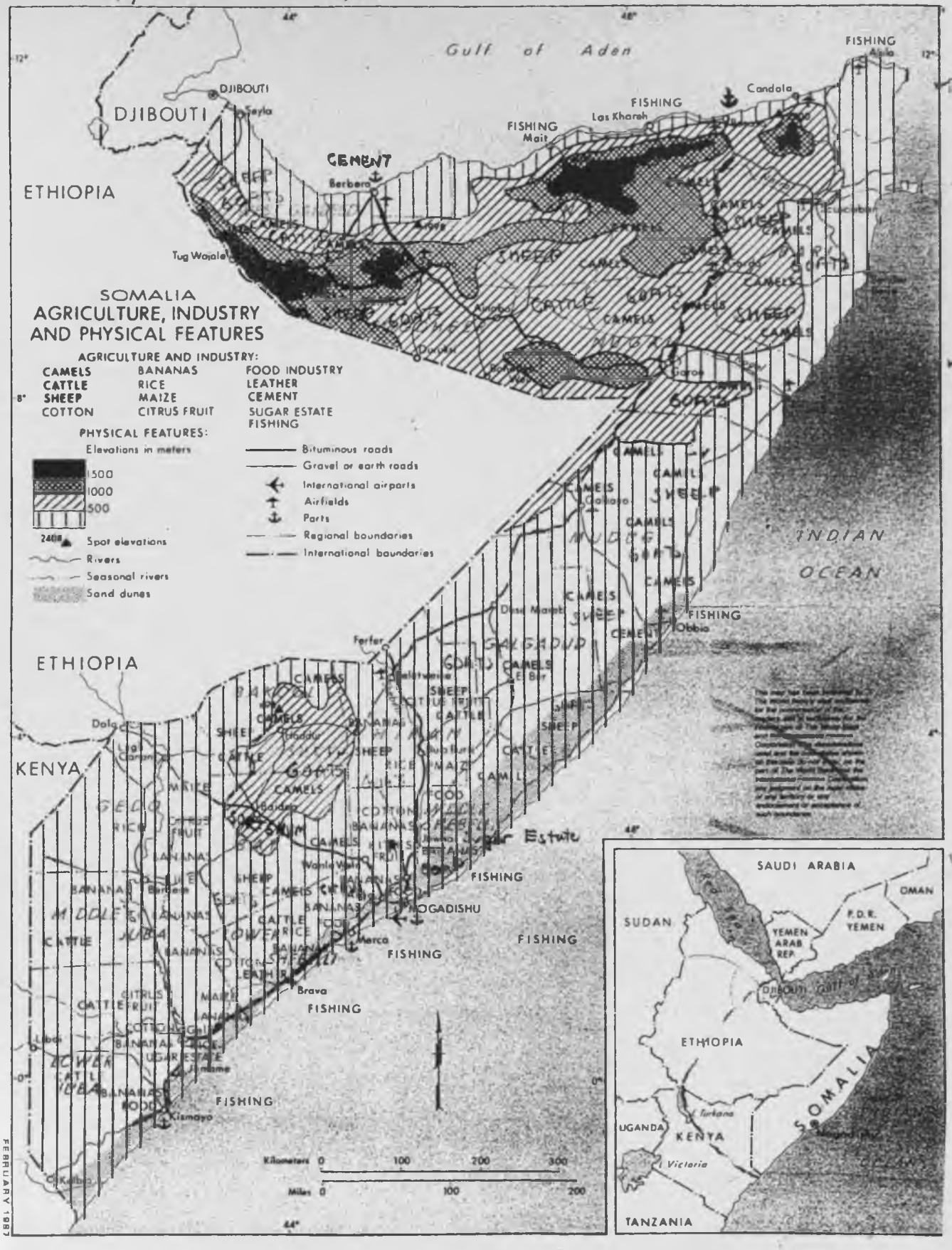
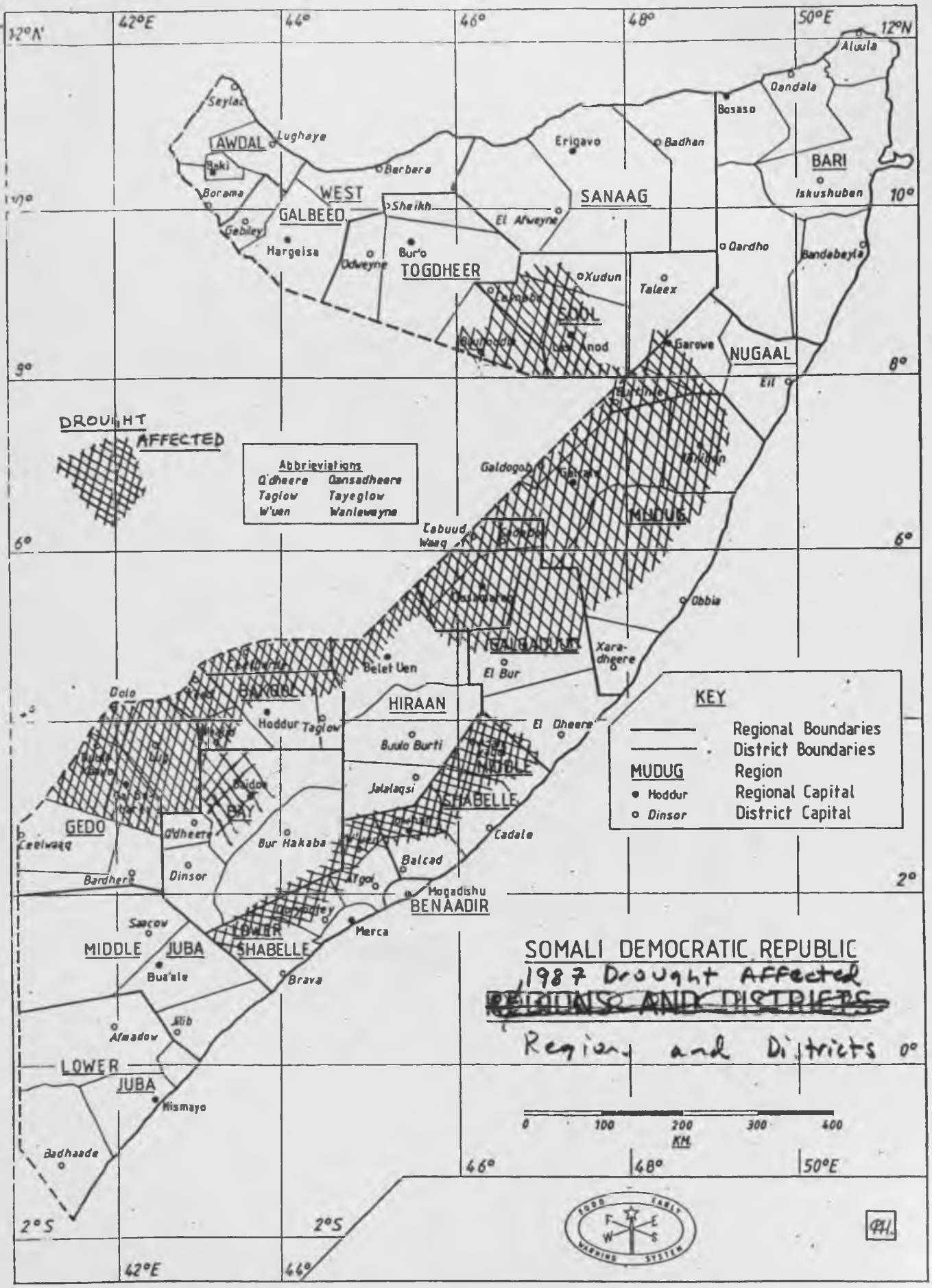
Source: I. M. Lewis, Somali Culture, History and Social Institutions, London, 1981.

Somalia Administrative Units

You need to track down a map that shows all 20 provinces (including the two new ones split out of West Galbeed and Nugal), the districts and the significant towns. The fourth map here (without drought hatch) could be used..... or a cartographer could redraw from IBRD's : Somalia : Regions and Districts by putting in the two new provinces. Except for missing Awdal, Sool provinces the IBRD map is a good one.

This map needs revision by a cartographer to put in sheep goats, cattle where they are and are not shown on IBRD variant, to show Berbera cement, Jowhar Sugar, the (— —) Garoe-Bosaso highway, citrus at Afgoi.





Deirdre: Needs retitling and indicating (as done) Bay was affected per USAID data.

A PREFATORY OVERVIEW

> Yet this gratifying progress is small in relation to the critical short term financial position of the country and the long term needs of the people for a better quality of life.
>
> - National Development Strategy and Programme 1987-1989, 'Foreword' by Second Vice President and Minister of National Planning, Major General Hussain Kulmiye Afrah

> We must look our mistakes squarely in the face,
> Lest we fall into repeating them.
>
> - Rui Balthasar Santos, Rector Eduardo Mondlane University, sometime Minister of Finance, Mozambique

> Such being the nature of our subject and such our way of arguing in our discussions of it, we must be satisfied with a rough outline of the truth, and for the same reason we must be content with broad conclusions.
>
> - Aristotle (Nicomachean Ethics, one of earliest political economic studies)

> Out of Africa there is always something new.
>
> - Pliny, the younger

This study concludes that - especially for children and mothers - very real problems of basic service access and of poverty exist in Somalia today and that in some respects the situation is deteriorating and marked by high levels of vulnerability. It further finds that these human problems - or priorities for action - are integrally related to structural and institutional aspects

and dynamics of Somalia's macro and sectoral political economy. To that extent and at that degree of abstraction its findings are fairly conventional wisdom for Somalia or for Sub-Saharan Africa (SSA) more generally.

But the parameters of deprivation and vulnerability, the structures of production, incomes and distribution, and therefore the potentially viable strategies for reducing poverty (especially of basic service access) and enhancing child and mother survival in Somalia diverge substantially from the stylised conventional wisdom - e.g. of the World Bank and the International Monetary Fund - and from the stylised counter conventional wisdom - e.g. of UNICEF and/or IDS (Sussex) - applicable, or at any rate applied!, to SSA as a whole. Somalia simply has not had any of the standard subtypes of SSA national economic history since 1960:

a. it has not had relatively good growth to 1970, a 1970-73 lull followed by a 1974-75 external crisis of adjustment leading to recovery to high growth over 1976-79 and a subsequent deeper, more prolonged and more intractable external balance based crisis since 1980 (as, e.g. have such diverse political economies as Tanzania and the Cote d'Ivoire);

b. nor has it endured prolonged economic stagnation and per capita decline since the mid-1970s (or even 1960s) as have several SSA economies for diverse reasons (e.g. Ghana 1973-82 absence of policies; Chad continuous internal conflict; Zambia secular mineral price decline since 1974; Uganda and Zaire, a combination of the above; Mozambique, external aggression);

c. most emphatically it does not show improved access to basic social services running well ahead of economic growth over most of the period 1960-85 as is the case in many SSA economies;

d. even its drought shocks have been different as to timing and nature of impact from those of many other SSA countries;

e. there is little evidence of the secular decline in per capita food availability (or even production) which has characterised SSA as a whole and many (by no means all) of its constituent economies since the mid-1960s.

Levels of absolute poverty and of malnutrition appear to be markedly lower in Somalia than in most other low income SSA economies. Further there is no evidence of secular deterioration - except in respect to basic services - nor of worsening income distribution in the sense of growing grinding poverty co-existing with extravagantly flaunted private and public conspicuous consumption and accumulation. Several factors explain this:

a. GDP seems to have been on a 3 to 4% secular growth trend since 1970 with fairly secondary deviations;

b. GNP has grown markedly more rapidly - probably on a 6 to 7% trend - because of burgeoning remittances as a result of migrant labour earnings especially over 1976-1982;

c. remittance incomes have been fairly widely distributed and together with intra extended family transfers have limited growth of abject poverty;

d. domestic public sector revenue has shrunken in real terms since 1979 and officially channelled real exports have risen very little while real per capita gross public resource transfers (external grants and loans) have fallen since 1975 (and net ones after debt service actually paid have fallen even more) creating massive constrictions on the public sector and on productive sector (as opposed to consumer goods) imports.

In such a case two dangerous temptations confront the analyst and/or policy advisor. One is to stick with the conventional (or counter conventional) wisdom and to chop and stretch Somalian reality to fit its procrustean bed. The other, more subtle one, is to embrace iconoclasm for its own sake and to argue that everything in Somalia is the inverse of what it is elsewhere, that basic economic principles and policies have little or no relevance - in short that like Alice in Wonderland one has gone "through the looking glass" into a totally new and non-comparable reality. This too is incorrect.

To illustrate, to evaluate Somali weather in terms relevant to most other African economies is unsound. Somalia is drier than most (not all, cf Botswana, Namibia, Mauritania, Cape Verde) and also more vulnerable to swings in rainfall level and distribution (regionally and seasonally). But to assert

that drought is the norm and rain the exception in Somalia is at least as grave a misperception. Somalian production and consumption patterns are adapted to particular contextual levels, distributions and variabilities of rainfall (and river levels). With these levels and swings, which are normal for Somalia (or for particular regions), they can cope. Radically worse seasons, especially several in a row, do create severe hardship and in extreme cases like the 1973-74 "long-tailed" (because even the long-tailed wild antelope died) drought bring massive dislocation, deprivation, destitution and death.

Even the most basic empirical data, analysis and conceptualisation in Somalia are scanty, fragmentary, apparently inconsistent and with what appear to be arithmetic and measurement, logical and conceptual errors. In this context to be precisely right is rarely a realistic goal; to be precisely wrong an ever present danger. What this study has sought is to achieve approximate correctness at the levels of conceptualisation, of orders of magnitude and interactions and of policy and programme direction and to begin laying a base on which future work can build to narrow the ranges and sharpen the focus of approximations and policies.

In that context several crucial features of Somalia political economy in relation to UNICEF's focus on children, women and vulnerable groups (or human being oriented development more generally) emerge:

1. Private prosperity - albeit modest - building up steadily over a decade, openly visible in urban consumption levels and fairly widely distributed.

2. Pockets - not an all-engulfing sea - of personal and household poverty, which nonetheless must be of real concern to Somalians and those working with them, but which probably require specific more than macro-economic approaches.

3. Volatile vulnerability - to drought and to several aspects of the external economic environment - at household and national, seasonal and medium term levels, only partially now tackled in terms either of damage limitation or risk reduction.

4. Steady pauperisation - no other word is strong enough - of public sector

economic and social services since 1979 directly linked to shrinking domestic real resource mobilisation and to real per capita resource transfer levels, and especially makeup, provided by external cooperating governments and agencies (usually termed donors albeit over half the transfers are loans which lie at the basis of the very real external debt service problems).

In the context of these paradoxes it is not easy to chart a general course forward, albeit certain elements can be identified, e.g. greater linkages with community-based mobilisation of personnel and of voluntary user fees for basic services. Nor can a complete range of programmes be specified in any detail. But some can, as can parameters within which others can be articulated more precisely if the will, the conceptual energy, the openness to consultation with poor and vulnerable groups to gain insights and ideas and the material resources are forthcoming.

CHAPTER 1

THE UNCONVENTIONAL ECONOMY OF SOMALIA

Overview

Each economy has its own contextual characteristics which define fundamental magnitudes such as production and distribution and ultimately human welfare and levels of living. The economy of Somalia exhibits certain characteristics which qualify it as an "unconventional" economy in relation to other economies in sub-Saharan Africa.

The economy of Somalia is unconventional in the sense that key sectors of economic activities take place outside the aegis of the national accounts. A great part of the national income arises from remittances of Somali workers abroad, sent in through informal channels; the majority of imports - partly as a result of the remittances - and a significant proportion of exports are transacted outside the purview of the customs authorities and at essentially free-market exchange rates; and, as a result, a great part of the internal trade in manufactured goods also escapes official control. This is in addition to the standard SSA pattern of shaky estimation of small scale domestic production and trade and by-passing of nominally single channel grain corporations whenever their prices are below actual market prices. Moreover, the social structures in Somalia are such that there are no clear-cut divisions along occupational lines such as, for example, wage earners, traders, etc.; rather, most extended families are composed of multi-occupational groups. These distinctions render most officially recorded macro-economic magnitudes such as gross domestic product, balance of payments and wages highly deceptive if taken by themselves as reflections of the performance of the economy, or of the real welfare of the people.

To all this, one must add the one overwhelmingly and relatively distinctive characteristic about the Somali economy: that it is an economy in which up to one-half of the population depends directly or indirectly on nomadic pastoralism for its livelihood, a proportion not significantly exceeded in any other country in the world and matched in relatively few. Not much is known about the production possibilities in the nomadic sector and the - usually

exaggerated - pictures of starvation during periodic droughts contribute to the analysis of the economy in doomsday terms. Pastoralism engenders not only uncertainties about statistics, but also serious conceptual problems about the meaning of income figures in Somalia.

The unconventional nature of the economy also conditions certain fundamental economic flows in Somalia. Remittances not only contribute to the basic prosperity of urban areas, but the manner in which they are are remitted - at essentially free-market exchange rates in the form of consumer goods - provides a great part of the explanation for the inflationary process in Somalia. Export transactions on the free market, without the intervention of marketing boards, as in other SSA countries, obviate some of the usual arguments for exchange rate manipulations, while similar - informal - marketing arrangements for food crops detract from the hypothesised SSA type "urban bias" model (albeit in respect to domestic food crops this absence or evasion of official channels is, in fact, conventional. If there is urban concentration we have to look beyond the usual surplus extraction mechanisms - over-valued exchange rate, export taxes, effective price control on food crops at the producer end - for an explanation. Ultimately, the unrecorded as well as uncontrolled flow of goods - especially exports and imports - increasingly circumscribes the resources available to the government (or at least the plausible means of tapping them) to provide basic services to the population in the form of health, education, water etc.

Thus, understanding of the welfare of the population of Somalia - the objective of this report - requires an understanding of the nature of Somalia's economy. The second section of this Chapter is devoted to this, most of the discussion being focussed on showing the basic differences of the Somali economy compared to other African countries, the patterns in measuring the standard of living of differing Somali population groups, and the different perceptions of trends in the national economy that emerge from such an alternative view. This discussion provides the basis for the subsequent estimations of poverty and nutrition levels (Chapter 2) and for related topics such as income security augmentation (Chapter 5) and policy perceptions (Chapters 6 and 7). The reason for spelling out in detail the nature of the economy is not only to lay out the analytical framework, but more important to fill a gap. Only recently has this kind of analysis begun to be done. Most previous analyses of the economy - whether in assessing economic performance

or estimating poverty levels - has taken the conventional route of describing GDP growth rates and measuring incomes in conventional terms. This sort of analysis is practically useless, either as an explanation of the observed welfare trends or as a guide for determining policy - in particular state fiscal and expenditure allocation. Our analysis of this "unconventional" economy we believe contributes in important ways to an understanding of the constraints and possibilities of the Somali economy.

In other parts of this report we look at the situation with respect to the provision of public services. Chapter 3 is concerned with health and water and Chapter 4 with education. Chapter 7 deals with the broad programmatic conclusions. Several annexes show the details of problems with estimation procedures in Somalia.

Macro-Economic Framework

There are five respects in which Somalia's economy differs from those of other SSA countries:

(1) Different population groups have distinct production/consumption bundles;
(2) Most family units undertake multiple economic activities;
(3) Extended family transfers are important in practical as well as ideological terms;
(4) Remittances are the largest source of cash incomes;
(5) Most external and internal transactions are effected under free-market conditions (albeit this is less unconventional than most recent writing on SSA might suggest).

These differences render the problem of measuring performance and welfare in Somalia qualitatively different compared to most other African countries. They also determine in important ways, some of the major macro-economic relationships in the economy, such as the inflationary process, the exchange rate as well as income distribution. Table 1 sets out in a schematic fashion, the most important distinguishing features of the economy of Somalia compared to SSA countries.

TABLE 1

Problems of Measurement in the Somali Economy

Common to SSA countries	Peculiar to Somalia or Unusually Important in Respect to Somalia
Livestock (nomads small proportion of population in most SSA countries)	High macroeconomic importance of: 1. Difficulty of surveying nomadic sector, 2. Difficult in separating consumption and saving, 3. Problem of measuring herd size and and changes in herd size, 4. Problem of estimating milk production.
Crop production valuing subsistence production.	Very large annual variations in area planted.
Smuggling of exports	Substantial Proportion of Smuggling due to: 1. Nomadic disregard for national boundaries. 2. Nomadic isolation from and avoidance of officialdom.
Smuggling of imports	"Franco valuta" system - extreme of "no forex" licence" approach.
Foreign Exchange Flows various forms of capital flight	Remittances from Gulf States
Standard of Living measuring subsistence and informal activities	1. Comparing different types of subsistence "incomes", 2. Remittances exceed total non-agricultural GDP, 3. Multi-occupational groups within families, 4. Intra family transfers scale.

In all SSA countries there is a self-provisioning and local exchange (subsistence) element of rural production which is hard to measure in official statistics. However, rural production in most involves crops as the most important element and the output of combining land and labour is relatively unambiguous. In Somalia there are two types of rural production - pastoralism and farming. Both have measurement and conceptual problems significantly different from most other African countries. The problem in measuring pastoral output is the fact that there are at least two conceptually different types of output, each with its own problems. The first involves the net change in herds. Even if estimated accurately, herd changes are virtually impossible to allocate between present and future consumption and fixed investment with any accuracy. Net additions to herds can represent any ratio of current consumption and stock accumulation; even negative values are possible when herds fall. Short-run stock changes cannot be approximated by a set of technical coefficients or extrapolation from the past, as they depend overwhelmingly on the exogenous factor of weather and anticipated changes therein and except in (unusual) uniformly very good or very bad years vary sharply from province to province and even district to district.

Second, there are products derived from living animals. Milk is the most important in Somalia. Along with meat it is the main staple of the pastoralist diet. When the difficulty in identifying output is combined with the further difficulty of conducting surveys among people repeatedly shifting their location and markedly unwilling to allow outsiders the power of knowing their herd sizes, measurement is extremely problematical and precision impossible.1/ Thus, to cite the most glaring example, milk output has been consistently understated in all national account estimates. Indeed, in at least one, milk is not even included.2/

Given such problems, it is not possible to say with any confidence whether in any particular year "pastoral GDP" went up, remained the same, or fell. Since livestock output is perhaps two-fifths of the total GDP, the implication is that one must use aggregate GDP estimates with extreme caution, particularly when the different authorities produce diametrically different statistics. It is also the case that the role of the livestock sector is probably considerably understated in the balance of payments. For generations Somali pastoralists have marketed their animals with minimal regard for customs and excise prodcedures, let alone national boundaries, and what appears in the

official external accounts may have limited bearing on the true levels and changes in levels of commerce.3/ This is true both for payments received by exporters and the number of beasts exported. At various times one or the other factor dominates; at present, the first is thought to be more important than the second.

Even in the crop sector, the problems of measurement are different from most other SSA countries. Elsewhere in the region, the amount of land planted varies relatively little from year-to-year: if land is suitable for farming under prevailing technology and population levels, it is usually planted. Therefore, variations in crop output can be approximated reasonably closely by variations in yields. In Somalia, the extreme variability in annual rainfall and the timing pattern of rains results in a corresponding variability in area planted. If the year is extremely dry, large areas away from the rivers may not be planted at all whereas in several other East African countries planting with low, nominal or nil yields is a more common pattern in drought years. It appears that year-to-year changes in the area planted have been as much as 30 percent in the 1970s and 1980s albeit these may be overestimates. This variation makes accurate measurement of crop output extremely difficult, for one must estimate both yields and area planted. Further there are great differences in yields for different qualities of land. As elsewhere total hectarage and yield per hectare are supposedly aggregated from field hectarage and yield estimates by districts, but there are distinct doubts as to the accuracy of the underlying local estimates from which they are aggregated. As the discussion in the next section demonstrates, the large potential variation in crop output is reflected in considerable differences in estimates by different agencies.

Secular trend estimates - which cross cancel erratic annual fluctuation whether linked to weather or to non-systematic errors of estimation - may be more reliable. They appear to suggest a fairly stable 1970-85 growth of livestock output (strictu sensu of herds, but there is no reason to suppose radical reproduction, natural death or offtake rate shifts) at 1.5% to 2% a year and of crop production over the same period at 3% a year (perhaps with two subtrends - see Annex 2 to Chapter 2 on Secular Nutrition Trends).

Up to this point the discussion has referred to gross domestic product - production which arises within the boundaries of the country. A fundamental

characteristic of Somalia is that its Gross National Product (basically GDP plus net remittances) differs considerably from its gross domestic product. This is because of remittances from Somali workers and businessmen abroad.

The numbers involved as well as the level of remittances are matters of considerable uncertainty (see Annex 2 to this Chapter). Thus, both the total national income accruing to Somalis and the foreign exchange accounts of the country are in considerable doubt. And as a result of the particular way remittances enter the country, official estimates of imports are grossly understated. During the late 1970s and early 1980s a system called the "franco valuta" was in operation. Although discontinued for some time, its essential features persist. Under this system, Somalis working in the Gulf States exchange the currency in which they are paid into Somali shillings to be transferred to their designated recipients. The foreign exchange obtained by the intermediaries is then used to import commodities into Somalia. Secondarily workers bring in goods when they return home on visits. All observers agree that these transactions go virtually unrecorded in the offical balance of payments. More importantly the systematic up-bidding of the foreign exchange in the hands of the Somalian workers abroad contributes greatly to the inflationary process in Somalia, all the more so since the country has become almost totally dependent on imported consumer goods. At each period imported goods arrive in Somalia at a higher shilling price which then spills over in the other sectors. Another major source of remittances is from the large Somali communities in East Africa who view Somalia as their (or at any rate their extended family's) home. These remittances - given the nature of Kenya, Uganda and Tanzania exchange and trade control - are necessarily in the form of extra-legal exports to Somalia - whether for use there or in the form of gold, gems and parallel market convertible currency to be utilised to finance third country imports.

The most comparable economy to Somalia in this regard is that of Lesotho where the although true import and - to a lesser extent - migrant remittances data are somewhat better. That economy, however, differs significantly because there is a negligible domestic productive sector base but a much sounder fiscal one as contrasted with Somalia.

Assessing macro-economic performance

The problem of assessing performance at the aggregate level is quite difficult given the measurement problems discussed above. This is illustrated in Tables 2, 3, and 4. They contain relevant GDP data from three sources - the Government of Somalia (and ECA), the World Bank and the IMF.

Starting with the GDP figures (Table 2) it may be noted that according to the IMF, Somali's GDP was almost forty percent greater in 1985 than in 1978, while the World Bank's estimates suggest that the level was virtually the same. Further, the ordering of the estimates in any given year changes. At the outset, the World Bank has the largest absolute real GDP, followed by the government, then the IMF. In subsequent years the IMF shifts from last to first place, with the other two agencies alternating for second place. Looking at growth rates, in three of the seven years the estimates do not agree among themselves as to whether GDP went up or down or remained the same. We also note another important characteristic of the Somali GDP: large and violent fluctuations in the growth rate. Taking the last three years of the GDP series, estimated growth rates fluctuated from minus 16 per cent to plus 18 per cent. Such violent fluctuations should caution us about using Somalia's annual GDP figures as any basis for assessing welfare. Even if such drastic observations can in part be due to underlying economic factors they may - and in Somalia's case do - not directly affect consumption or public services fully in the year in which they are recorded. Actually as Table 3 shows these movements are largely due to changes in livestock herd size.

Both the World Bank and the IMF show a steady upward trend in livestock value added from 1980, while the government index shows a somewhat lower trend. The difference reflects a largely subjective judgement on the relative importance of exogenous weather factors (evidently weighted more heavily by the Somali government) and trend coefficients seeking to reflect natural increase under normal conditions.4/ The variations for any given year are enormous. Particularly out of line is the IMF estimate.5/ Growth rates are worlds apart; in no year is the highest growth rate less than double the lowest, and in 1983 the IMF shows a robust rate of expansion of 6 percent for the sector, compared to the Somali government judgement of a 50 percent decline, apparently related primarily to the IMF estimate being virtually an offtake estimate without regard to opening and closing herd size.

TABLE 2

Various Estimates of GDP for Somalia, 1978-1985*

	1978 value (Sh m)	Growth rate (%) 1978/79	1979/80	1980/81	1981/82	1982/83	1983/84	1984/85	1985 value (Sh m)	Index 1985 (1978=100)
MNP	6243	-10	3	9	6	-16	6	18	7303	117
World Bank	6805	-13	-4	7	6	2	-2	7	6938	102
IMF	6118	-1	2	5	11	2	2	10	8398	137

* GDP at market prices. Constant 1977 prices for Ministry of National Planning (MNP) and World Bank. IMF gives its figures in 1976 prices; here adjusted by 1977-1978 inflation rate of World Bank to render the three series comparable . All growth rates rounded to nearest whole number.

Sources: Somali Democratic Republic, Ministry of National Planning, General Directorate of Statistics, National Account Aggregates, 1977-1984 (85 est) (Mogadishu, 1986); Ministry of National Planning, National Development Strategy and Programme, 1987-1991 (Mogadishu, 1987); World Bank (February 1987); and statistical tables provided by the IMF, Washington.

TABLE 3

Estimates of Livestock Value Added, 1978-1985

	1978 value (Sh m)	Growth rate (%) 1978/79	1979/80	1980/81	1981/82	1982/83	1983/84	1984/85	1985 value (Sh m)	Index 1985 (1978=100)
Somalia	2155	-30	13	19	7	-51	35	19	2406	112
World Bank	2392	-46	9	20	13	4	6	2	2574	108
IMF	2457	-5	-1	10	16	6	1	11	3537	144

Note: See Table 2 for sources and notes.

TABLE 4

Estimate of Crop Sector Value Added, 1978-1985

	1978 value (Sh m)	Growth rate (%) 1978/79	1979/80	1980/81	1981/82	1982/83	1983/84	1984/85	1985 value (Sh m)	Index 1985 (1978=100)
MNP	646	1	2	22	4	-4	6	43	1376	213
World Bank	575	1	0	4	2	-11	8	29	798	139
IMF	588	1	3	6	30	-11	8	23	1183	202

Note: See Table 2 for sources and notes.

There is considerably more agreement among the three authorities with regard to the crop sector (Table 4): at least here there is no year in which one estimate indicates an increase and another a decline. However, the large difference between the Somali Government and IMF estimates for 1981 and 1982 is quite striking. Further, we note that in 1985, the World Bank considered the crop sector to have generated over 40 percent less value added than the government did.

The problem in assessing the performance of the crop sector is not so much the disagreement among the estimations as the credibility that can be attached to the enormous increase all three judge to have occurred in 1984 and 1985: 1) from where did the resources come to achieve this? 2) what motivated people to allocate additional resources to crop production?

The increase in official producer prices in 1984 and 1985 - albeit largely nominal both because of levels of domestic inflation and the fact that farmers regularly by-passed official channels if others offered better prices - could explain why farmers might wish to increase marketed production, but not how they might realise that wish. In order that production should increase, either yields have to improve or more land has to be cultivated (or both); both would require a larger labour input. As in other matters, the authorities disagree as to whether the increased production was the result of more intensive or more extensive use of land.6/

Again, for GDP and for crop outputs trend estimates should be more reliable and informative than annual. Using the - admittedly shaky - Somalia government/ECA data suggests a 1970-85 GDP growth trend of 3 to 4% a year. The 1970's were somewhat below trend - a very severe, two year drought and the events of 1977-78 provide an adequate explanation - and the 1980's somewhat above - partly because of recovery from the mid to late 1970's setbacks noted (see Annex 2 to this Chapter).

What we have demonstrated so far is that what the GDP account measures is measured haphazardly and in a way not necessarily bearing any very close relation either to consumption or fixed investment levels and changes. The major problem, however, is not what they do measure and how, but what they do not measure - remittances and, presumablly, consequential commercial sector GDP. Remittances are so pervasive and important in the cash flows that any

analysis that fails to take account of them will have missed the essence of the economy. To give just one example of this: at a time when all GDP accounts showed falling per capita income and implied increasing poverty in the early 1980s, the perception in the urban areas was of relatively good conditions and lack of visible signs of widespread poverty. More strikingly, at a time when the average real wage has fallen to under a fifth of its previous levels and can hardly buy more than 10 days' supply of food for an average family, wage earning households are not in general living in abject poverty. There are reasons other than remittances for this apparent contradiction. Allowances (unrecorded in aggregate data and also untaxed) have risen as a share of employer payments. Most public sector employees (including e.g. bank tellers, postal clerks, receptionists, drivers) collect user fees from customers/clients in cash or kind to augment their incomes. Many households have non-wage income sources. However, the dominant additional income source for many (probably a majority of) urban wage earning households is remittances. Annex 2 to this Chapter gives our estimates for the number of Somalis regarding Somalia as their home abroad and amount of remittances. The order of magnitude is quite staggering.

Remittances probably exceed 20 times the Somalia-based wage bill, exceed a third of total GNP (GDP + Remittances - External debt service paid), and are about the same as or somewhat larger than non-agricultural GDP. The last comparison shows the importance of remittances in the monetary flows in the country since subtracting agricultural GDP from total GDP strips out the self provisioning (subsistence) and intra-sectoral trade valuation problem. It also shows the importance of remittances in the urban economy, for, although it is recognised that not all remittances flow to the urban population, most apparantly do.7/ On this basis remittances constitute a major part of the monetary economy, more than doubling the urban-based consuming power. The final two comparisons we have to note in the table are with official remittances and government deficit. Remittances channelled through the banks totalled only $35 million in 1985. This figure is correct for what it shows - officially recorded remittances. However, if this were the total amount of remittances coming in, nothing about the basic dynamics of the Somali economy could be explained. Finally the comparison with government recurrent deficit shows the sheer magnitude of the monetary flows implied by the remittances compared to the government deficit - a comparison not necessarily indicating how the former could, in fact, be used to resolve the latter.

The most important type of remittances is undoubtedly that coming from the Gulf countries. It is of recent origin at least on a large scale. In magnitude it surpasses all other categories of remittances, and the way it is transmitted has had profound consequences on the economy. While the other types of remittances have been more or less 'traditional' to the Somali economy, remittances from the Gulf countries in significant amounts date mostly from the mid-1970s. The channel through which they are transmitted - the franco valuta system, and its less open ancestors and descendants - in which traders buy foreign exchange from workers abroad to finance the return flow of consumer goods with payment going to the workers and relatives in shillings, explains not only the obvious signs of a consumer boom in Mogadishu, but also the Gulf market exchange rate and through that the inflationary process. The rising incomes from remittances have increased urban purchasing power and therefore the case of selling imported goods. It has been easy for traders to raise prices and margins. As a result they have secularly bid up the price of the Saudi riyal relative to the Somali shilling and then raised shilling prices in Somalia to correspond. This is especially true as the 'free market' (intra-foreign currency bank account) and auction rates are now approximating the Gulf rate and the official rate will probably be more or less unified with them.

Conclusion

The vast numbers of problems discussed above indicate that there is a wide gap between the Somali economy as it is measured and the Somali economy as it functions. To distinguish between the two, we shall use the term the "official" economy to refer to the former and the term the "total" economy to refer to the latter. What the official statistics and those of outside agencies, which may be included under the term "official" measure will be called the "recorded" or "official" economy.

Pursuing the analysis of the Somali economy the hypothesis cannot be rejected that the relationship between the total economy as it actually functions and the official one as it is measured is a purely random one in any given year. At least since the emergence of the "remittance economy" usually little relationship can be found between the two. This is illustrated in Table 5.

TABLE 5

Remittances and Domestic Incomes 1984

Remittances from Gulf workers	($m)	250-325
others	($m)	200-225
total	($m)	450-550 of which ca 300 financed imports.

S Sh equivalent at Gulf Rate of Remittance Financed Imports	(Sh m)	45,000
Wage bill in Somalia	(Sh m)	2,184
GDP	(Sh m)	74,350
Non agricultural GDP	(Sh m)	29,182
Recurrent budget deficit	(Sh m)	3,819
Total government financing requirement*	(Sh m)	5,361

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* Excludes extra budgetary PIP expenditure financed from external sources. Converted at Sh 150 = $ these would have added 43,875 m shillings.

Source: Ministry of National Planning (wages, GDP, non-agricultural GDP, budget deficit, financing requirement), Annex 2 this Chapter (remittances).

TABLE 6

Economic Structure and Performance, 1970-1987

Structural Characteristics Period	Official Accounts Show	Apparent Actual Behaviour of the Economy
1970-1976		
1. Controlled economy: prices, imports. 2. Livestock exports stagnant substantial price increase. 4. Migration grows rapidly from 1975. 5. Catastrophic drought 1973-74 and refugee inflow 1978-79.	1. GDP per capita moderate increase. 2. Inflation moderate. 3. Wages sufficient for family needs.	No significant divergence, GNP growth probably moderately higher.
1977-83		
1. Migration to Gulf States over 150,000 workers; franco valuta import system. 2. Export boom for livestock sector. 3. Major drought. 4. Stagnation in urban formal sector. 5. War in the Ogaden.	1. Per capita income stagnant. 2. Livestock export proceeds rise slowly. 3. Remittances US$40 million a year. 4. Deterioration in current account of balance of payments. 5. Formal sector wage declines dramatically.	1. Per capita National income rose. Remittance financed imports $300-400 million. 2. Pastoralist income rose dramatically. 3. Massive increase in consumer goods imports not visibly financed. 4. Sharp falls real urban wages, real manufacturing output, constant price government expenditure; boom in construction and commerce; rapid urban informal sector expansion. Wages/ salaries become secondary income source for most formal sector employee households.
1984-1987		
1. Reduction in number of employed migrants. 2. Drop in demand for livestock exports (Saudi restrictions). 3. Weather on average more favourable than previous period (until 1987). 4. Liberalisation affects urban and crop sectors.	1. Per capita income increased. 2. Catastrophic decline in livestock exports. 3. Remittances US$50 million a year (increase over 1977-81). 4. Massive deterioration in current account of balance of payments.	1. Per capita National income growth declines. 2. Pastoralist income from exports stagnant or fell. 3. Current account of balance of payments weakened - apparent shift in consumer import makeup. 4. Urban commerce sector intact, construction declines, real wages and constant price government expenditure collapse.

The period 1970-1976 was nominally marked by stringent control over the economy. Producer and retail prices of foodstuff were fixed by government and generally adhered to up to 1973/74 and the great drought. Nationalisation took place in respect to financial institutions and plantations. Inflation was kept below or only slightly above the double-digit level. With wages recording periodic increases, decline of the real wage was kept within limits and the wage remained sufficient to purchase an average family's basic needs. Basic consumer goods industries were established behind high tariff walls, albeit even then smuggling made the effectiveness of that protection somewhat problematic.

In the next period the character of the economy completely changed: the armed conflict in the Haud and Ogaden, the drought of 1978, and the loss of financial and personnel flows from the USSR were three of the causes, but the most important - and in the opposite direction - was undoubtedly emigration to work in the Gulf countries. With rising oil prices of 1973-74 and the ensuing boom in the Gulf economies emigration turned from a trickle into a flood. Remittances began to arrive as suit-case imports with visiting workers, and more and more as large scale commercially intermediated flows. With the growing shortage of official foreign exchange because of the 1977-78 events and the drought, the government sought to use the migrants as a pool of foreign exchange. In 1978 the ban on private imports was removed, allowing importation to occur with self-financed foreign exchange. To all intents and purposes - and despite various chopping and changing of official practice - that remains the basic channel for consumer goods imports other than grain and oil. Remittances created the broad gap between the official economy as it is measured and the total economy as it is perceived. In the period 1977-1983 per capita GDP supposedly - and possibly really - fell, yet this was the period of a great boom in imports and construction. Over 1983-87 per capita GDP is shown to have increased, yet during this period, with growing unemployment among migrants contingent upon the slump in oil prices, the flow of remittances if anything slowed down and the construction boom subsided to significant but lower levels. Visible commercial activity however continued to rise probably because of formal prohibition and actual sharp reduction in imports of q'at (a mildly narcotic leaf).

On a trend basis GNP has probably risen 6 to 7% a year (including an adjustment to commercial sector GDP to cover margins on unrecorded imports)

over 1970-1985. Because initial levels of remittance were very low, their modest growth over 1970-75 probably did not raise GNP growth at that period above 5%. 1975-1983 GNP growth probably exceeded 8%, while post-1983 it may have fallen back to 5%. A complicating factor, as noted, is that in 1984 q'at was banned. The ban though not totally effective did reduce import levels significantly (possibly by over $50 million a year) thus freeing purchasing power for visible (in shops and on barrows) consumer goods imports, even if the true total import level was relatively stagnant.

Notes to Chapter 1

1. For example, annual herd size is based on adjustments to a total derived from a census of livestock in the mid-1970s. Not only is this baseline total in dispute and subject to successive re-estimation exercises, but the annual adjustments are made using informed guesses as to the impact of the year's weather on fertility and survival of animals as variation from equally informed guess "normal-year" estimates. Aerial surveys have been used to verify estimates (though not on a regular basis), but even the accuracy of these has been questioned on the grounds that a significant portion of the "national" herd may have been in Kenya or Ethiopia at the time of the survey (or vica versa of course!).

2. IMF data, as given in Washington in April 1987.

3. To quote from a World Bank report, "A calculation by the IMF from partner country trade data shows that, in 1984, Somali exports were valued at $62 million by Somalia and $123 million by importers [e.g., Saudi Arabia]. The difference of $61 million, as large as declared exports, was presumably transferred abroad for capital flight or remittance via the parallel market." What "transferred" means is less than clear - "paid in Saudi in convertible currency" would seem a clearer statement of the process.

   Some officials of the government and outside agencies (though far from a majority) argue that the remittances have now been largely induced into the national banking system and appear in official statistics. We give reasons for doubting this at other places in this report, doubts which appear to be fully shared by the Central Bank.

4. "Value added in the livestock sector was defined as the net natural increase in the herd during a given year. Net growth rates for different categories of livestock... were assumed to have continued in 1983 at the same rates as in 1978..." IMF, Somalia: Recent Economic Developments (Washington, 1987), p 96 (Appendix IV)

5. The IMF estimate is in fact even more divergent from the others than the indicies in Table II.3 suggest. Careful reading to of the IMF procedure reveals that its estimate for livestock value added includes neither camels nor milk production, which accounted for 35 percent of the Somali Government figure for the sector in 1985 (and apparantly a similar proportion for the World Bank). Ministry of National Planning, 1986, pp. 8-10; IMF, 1987, p. 96.

6. The following tabulation shows Ministry of Agriculture's (Food Early Warning System) and World Bank's perception of how maize was produced in 1984 and 1985:

		Ha ('000)	Qty (Mt)	Yield (100kg/ha)
1984	M of A	189	270	14.0
	WB	350	270	7.7
1985	M of A	234	382	16.3
	WB	350	382	10.9
1986	M of A	245	336	13.7

In other words, in 1984 the Ministry's yield per hectare estimate was almost twice as high as the World Bank's. The 1984-85 increase came from both area and yield increases according to the Ministry but, from yield increases only according to the Bank. The Ministry's estimates appear more plausible albeit a 25% ha increase in one year is not possible (because of seasonal labour constraints) unless prepared but unplanted or planted but nil yield land is excluded from ha estimates. Sources: Ministry figures from worksheets provided by the Food Early Warning System project. World Bank figures from World Bank, Agricultural Sector Review (Washington, 1987).

7. It is known that many of the migrants come from the nomadic sector. In fact it is worth recording that much of the construction labour force in Saudi Arabia in the late 1970s was provided by nomads going directly from the nomadic sector of Somalia. This happened after and because of the 1973/74 drought as well as after and because of the 1973/74 oil price increases. However, in view of the nomads' limited need for cash income, the remittances frequently go to - as well as via - extended family members in the urban areas or are invested by the nomads themselves in housing. At the micro level the main exceptions are remittances used to rebuild, start or expand household and/or family herds. However, sectorally these micro purchases increase other household's cash balances for investment in, or transfer to, the urban sector.

ANNEX 1 CHAPTER 1

NOTE ON POPULATION

Reasoned estimates of the population of the Somali Democratic Republic range from under 5 million to 12.5 million (excluding refugees in UNHCR administered camps). The detailed results of the 1975 Census were never published and those of the 1985 Census and 1987 followup are not yet available. A recent official estimate - subject to correction - is 8.5 million, albeit a later quasi official one is reported to be 5.8 million. Because the 8.5 million figure is preliminary and has not been articulated by district, age or sex and because historic data is based on much lower estimates and cannot be adjusted on available data to fit an 8.5 million 1986 total, a population estimate of 5.5 million is used in this report unless otherwise specified (again excluding registered refugees). The underlying population growth rate is probably of the order of 3% a year, but in the 1970s and 1980s substantial increases in the numbers of Somalia citizens working abroad probably reduced the rate of growth of resident population.

The main results of using a higher population estimate would be to reduce estimates of GDP and GNP per capita as well as the ratios of school enrollment, access to pure water, immunisation, etc. It would not, given the methods of estimation, significantly affect infant mortality rate or life expectancy estimates. Because it would reduce income and calories per capita estimates, such a change in population estimates, would increase estimates of malnutrition.

The probable population distribution is 30% urban (1.65 million, of which at least 0.75-1 million live in greater Mogadishu including its exurbs); 30% agriculture and settled agro-pastoral (largely in Lower and Middle Shabelle and Juba plus Gedo and Bay provinces in the South and to a lesser extent West Galbeed, Audal and Sanaag in the North) and 40% nomadic or mobile pastoral.

The proportion of nomadic population is falling because these communities are the chief source of migration to the cities and (directly or via the cities) to migrant work abroad. The agricultural proportion is probably relatively stable with less out-migration. Despite efforts following the 1973-74

drought, settling nomads has not taken place on a significant scale (with the possible exception of women who set up their own agricultural households, or married cultivators). This suggests that the population growth rates may be 5-6% urban, 2-3% settled agricultural, 1-2% nomadic.

The reality is more complex and less static than these three categories suggest. Agricultural - but especially nomadic - households frequently send younger members to cities to live with relatives while studying or seeking work (in Somalia or abroad). During droughts dependent members of nomadic households (children and women) often move to cities temporarily to receive interim extended family support before returning to their households. Similarly, almost by definition, nomadic population by district varies seasonally, annually and during drought cycles. Undated nomadic population estimates by district or province (and to a lesser extent for Somalia as a whole, since significant migration is trans-frontier) are neither comparable nor aggregatable. This is exacerbated because neither good weather nor droughts are normally national. For example, the 1987 drought affected 10 to 12 provinces (not the entire country) and within them was severe in one-third to one-half the districts, apparently in several cases different ones from those most severely affected in 1983/84.

Settled agriculturalist/pure nomadic is a range, not a dichotomy. The proportion of crops to livestock varies widely by district and by income (with the richer settled agriculturalists tending to have a larger share of livestock in total production). Among the nomadic population some groups do grow crops, including even grain, on a significant scale (e.g. West Galbeed, Audal, Bay) and seem to have - as a consequence - rather different seasonal (climatic) migration and household division patterns. Others (e.g. Mudug) do seek to grow quick harvest crops (beans and watermelon) but as a subsidiary activity. As in numerous other socio-economic fields, fuller analysis is limited because serious surveys are scant and differences among them are hard to allocate among secular, seasonal, drought cycle and/or erroneous observation/interpretation factors.

ANNEX 2 CHAPTER 1

EMIGRANTS, REMITTANCES, EXTERNAL ACCOUNTS AND GNP: SOME ESTIMATES

The question of emigrant workers and businessmen and their remittances to family members in Somalia are crucial to understanding the dynamics and estimating the parameters of the economy. Because most of the remittances and many of the emigrant workers are extra-legal or illegal - or suspect they may be - in respect to Somalia or host country law, or both, hard data are precisely and massively incomplete, while estimates - even based on a range of micro information and opinion - are, at best, approximations.

For the purposes of this Annex emigrants are defined as Somalis living/working abroad whose extended family's basic home lies in the Somali Democratic Republic. This excludes the Somali families and family groups whose basic home is perceived by them to be in Northern Kenya, the Haud, the Ogaden or Djibouti. However, it includes households - notably in Kenya, Uganda and Tanzania - whose initial arrival in their present domicile dates back as far as the last quarter of the 19th Century. The definition is not based on passport (or, frequently, passports) held and has no political meaning per se. It is a working economic definition tied to the extended family relationships which largely determine flows of remittances.

How Many, Where, What Doing?

Emigration from Somalia for economic (and perhaps self-proving) reasons is as old and as endemic as from the hill county of the Lebanon. It is particularly prevalent among - though not limited to - nomads, the urban community households of nomadic origins, and fishermen. The earliest migrants recorded (other than pilgrims who maintained themselves en route and merchants who were usually based in Somalia) appear to be seamen. They were employed by the British East India Company (and probably its European counterparts) from the 18th Century. Their literal or occupational descendants remain significant, albeit overtaken in numbers by the East African and Gulf migrant groupings. Many seem to be based in the UK (and probably in other port cities around the

North Sea as well as Italy) and are fairly ubiquitous in the North Sea and Mediterranean coasting trades.

The next wave was of traders and workers to East Africa beyond the (now) North Kenyan part of the Somali speaking core area. These communities - at least on any scale - appear to date to 1875-1900 (i.e. predating European colonisation beyond coastal towns but postdating the Omani conquests/sultanates/trade routes and the Portuguese trading imperium). Their present numbers in Tanzania, Uganda and Kenya probably number between 100,000 and 150,000. They do see themselves as Somalian with homes in Somalia, even if they are members of the third or fourth generation of their family to work and - sometimes - to be born in East Africa. Trading (including dominance in the rural livestock and hides trade), artisanry and service occupations predominate. A secondary focus of the 1960s and 1970s - long distance lorry driving - has declined, with drivers scattering to Southern African, Gulf and Middle Eastern routes. Somali communities in these countries are closed - i.e. not integrated with other population groups. Some family members do return to work in Somalia. Similarly some seek marriage partners there, albeit most marry within their own East African communities.

The largest migrant community - especially in terms of remittances - is the Gulf one (predominantly Saudi Arabia, secondarily North Yemen but also South Yemen, Oman, the Emirates, Bahrain and Kuwait. Total numbers are probably 150-175,000. In small numbers this emigrant group is quite old (and probably originates in pilgrims working their way on the Hejira). It began to grow with the Saudi economy's growth in the 1950s after the discovery of oil but the main spurt came after the 1973/74 OPEC oil price increases. Most Somali sources identify 1977-82 as the period of maximum growth, with a slackening (or stagnation) of employment to 1984 and some decline since.

Work pursued varies from unskilled construction and service labour through semi-skilled government (e.g. storekeeper) and enterprise (e.g. soap powder production worker) to semi-professional or professional (e.g. nurse, teacher, secretary, translator). Short term work and unemployment now appear to be increasingly common.

Other locations of significant migrant communities include Djibouti, Egypt (fairly recent), Italy (dating to the colonial period but now growing

especially with respect to domestic service), Western Europe (dominantly self-asserted students or refugees whose actual status is less than clear) and North America (similar to Western Europe). Handfuls appear to be present on all continents, except Antarctica, and in most countries. The total numbers clearly exceed 300,000 and are likely to be at least 375,000. Only in the case of East Africa are balanced, complete households common so that the total may be made up of 200,000 male workers (or job seekers), 25-30,000 female workers, 65-70,000 wives not working outside the household and 60-70,000 children.

Remittances

Remittances vary with community and occupation. Only the $25-40 million annually now being remitted via the banking system is fully visible. Restrictions on transfers (notably from East Africa), lack of understanding of or contact with banks, inadequacies of banking facilities (e.g. no bank operates both in Somalia and in the main emigrant domiciles; Somali external accounts are relatively ponderous and entail official service charges and ubiquitous user fees privatised to bank employees) and doubts by emigrants as to the legal status of domicile, employment and remittances combined with Somali merchant desires to secure foreign exchange for direct imports, add up to suggest there is no reason to expect massive changes in this position of unofficial channelling of remittances.

Remittances are largely intra extended family via, and in part to, urban extended family members. These take three main forms:

a. money remitted via merchants and paid in shillings in Somalia;

b. goods (and external currency) brought back personally by immigrants on home visits;

c. goods smuggled as a means of evading exchange control (dominant in the case of Kenya, Tanzania and Uganda).

Uses are also multiple. At recipient level these include:

a. direct family support (e.g. a woman factory worker in Saudi supplementing an employed brother's income in Mogadishu and supporting her own children and their grandmother/aunt who cares for them in Kisamayo);

b. herd acquisition, expansion, rebuilding (especially important in the aftermath of the great drought of 1973/74);

c. acquisition of assets such as urban housing (presumptively the 1978-83 residential construction boom was financed in large part from remittances or trading profits made by merchants buying their forex counterpart to import);

d. external investment (e.g in housing in Cairo and - probably - Italy, bank accounts).

A problem in defining remittances arises because reinvestment in place of domicile (now reportedly significant in both trade and transport in Tanzania and Uganda where the Somali communities foresee economic revival) is not strictu sensu remittance and both third country investment and external travel payments may be made direct without transiting Mogadishu.

From an economic point of view the chief uses are: consumer goods (including vehicles and spares) imports into Somalia, purchases of invisible imports (basically external travel) and purchases of external assets.

The economic dynamics - sketched in the main text - involve the purchase of forex (on the Gulf market or via the "free" inter bank account market in Mogadishu), the importation and distribution of goods, the financing of housing and of shifts in livestock ownership. The share of these flows acquired by the state is effectively limited to import duty/sales tax on imports (if and when collected) and taxes on property/property rentals. The interests of revenue generation - maximum visibility of imports and thus no licensing restrictions on 'self financed' imports - and Fund/Bank attempts to rechannel remittances through the banking system - backed up by import licensing - conflict. As the latter simply renders visible goods imports literally invisible for tax and other control purposes, its chief effect is to

erode the revenue base.

A global ballpark estimate of remittances and direct external investment is $500 million a year since the early 1980s. Of this perhaps $300-350 million finances visible and $50-75 million invisible imports while $75-150 million represents external investment. The largest source - at least 60% - is the Gulf and the second - perhaps 20% - East Africa. Seamen and emigrants in Italy, the UK and Egypt are probably also significant, but much smaller, sources.

This estimate is - at gross level - of the order of 33% of 1985 Somali GDP as estimated by the World Bank or 20 to 23% if one limits the comparison to the $300-350 odd million of visible imports. In addition it is reasonable to assume that commercial and transport GDP is underestimated by - say - 25% of the value of these imports or $75-87½ million. Thus in 1985 Remittance Adjustments might be of the following orders of magnitude:

TABLE 7

GDP and GNP, 1985	($ million)	($ per capita)*
GDP (per World Bank)	1,516	(276)
Remittance Financed Imports	300 - 350	
GDP Adjustment	75 - 87.5	
'Domestic' GNP	1,891 - 1,953.5	(344-355)
External Services and Investment from Remittances	150 - 200	
GNP	2,041 - 2,153.5	(371-392)

* On 5.5 million population estimate.

The difference in per capita 'Domestic' GNP at $350 odd from GDP at $275 odd - together with the very low tax take and the under-estimation of milk production - goes far toward explaining the contrast between apparently low GDP and visible moderate private prosperity. (The % increase in GDP adjusted for milk under-estimation would be lower but its direction and significance would be unchanged.)

The foreign investment estimate radically alters the recorded estimate for

savings out of GDP as - probably - does the increase in incomes related to imports and commerce. Instead of being 0 to negative, national savings are probably of the order of 10% of GDP (say 50-67% external investment and the rest dominated by residential and rental or speculative housing).

One puzzle is the perceived increase in consumer goods imports and establishments trading in them over 1985-87, despite remittances' stagnation or modest decline in real terms since 1984. Two possible explanations are:

1. the speculative and rental property boom peaked in 1984 and has since declined sharply as unlet or unsold properties have piled up on the market;

2. in 1984/85 q'at, the mildly narcotic leaf which until then was ubiquitously and visibly consumed by male Somalis, was banned. At least in respect to imports and open consumption (e.g. in q'at houses) this ban has had an impact. Up to 1984 q'at imports may have risen to $50-75, or even according to some conjectures $100 million, whereas as of 1987 it is doubtful that they reach $25 million.

Both of these shifts in consumption would tend to result in greater demand for and availability of consumer soft goods, electrical appliances (notably video and sound equipment) and automobiles.

Related Parallel Market Activities

Smuggling (of exports and return imports) and under-valuation of recorded exports (with return smuggling) are not related to remittances per se. However, they have a similar impact on GDP/GNP, import supply and external accounts.

Perhaps 20-25% of total livestock exports (by value) are extra-legally exported - to the Yemens and to Kenya in particular. This suggests an order of magnitude of $20 million. Frankincense and myrrh as well as hides and dried fish are also exported in parallel markets - perhaps up to $5 million.

Under-recording of official livestock export value has - per the IMF - run as high as $60 million odd. With minimum export proceed remittance requirements and the convergence of the Gulf and official "free" market rates the incentive to undervalue has declined markedly over the past two years but a substantial amount probably remains (particularly for external investment, luxury import, external travel purposes). This may be of the order of $25-35 million.

The import side of these markets cannot be differentiated from that of the remittance market. In East Africa both are illegal (and often multi stage with, e.g., Tanzania cattle dealing profits exported as cattle to Kenya and thence as washing powder, squashes and juices, tinned butter, etc. to Somalia) while elsewhere most of the transactions are legal on the export side.

If the total additional imports financed are $50 million and exports $60 million with $12.5 million trade and transport uplift on the imports a final revision of national accounts (per World Bank) for 1985 might be:

TABLE 8

Recorded GDP, Estimated GNP: A Reconciliation

	Total ($ 000,000)	Per Capita ($)
GDP - World Bank	1,516	(276)
Trade/Transport Sector Adjustments: Remittances	75 - 87.5	
Parallel Marketing	12.5	
Exports	60	
Adjusted GDP	1,663.5 - 1,676	302 - 305
Remittance Financed Imports	350 - 400	
'Domestic' GNP*	2,013.5 - 2,076	365 - 377
Remittance Financed External Services and Investment	150 - 200	
GNP	2,163.5 - 2,276	394 - 414

* Excluding invisible imports and external investment financed out of remittances.

Trends: GDP, Domestic GNP, Personal Consumption

These data go far toward explaining the sharp contrast between officially recorded GDP levels and growth trends and observable levels and trends of private consumption. The former are low and slow; the latter amount to moderate sufficiency in the rural and modest and modestly rising prosperity in the urban (especially Mogadishu) sectors.

GDP has probably grown at a trend rate of 3 to 4% on the government/World Bank coverage. 1970-79 was near or below the bottom end of this range and 1982-85 perhaps slightly above it. The additions to GDP consequential on the commercial operations related to imports financed by remittances and production channeled to parallel exports probably grew about 6% a year - probably about 5% to 1975; over 8% 1975-82; under 5% 1982-85 (but with a makeup shift from q'at trade to more standard imports).

The remittances embodied in imports have probably grown on the order of 11% a year over 1970-85. This implies 10% a year to 1975; 12½% or over to 1982; 5% (on rising remittances per capita or rundown of short term savings abroad rather than on increased numbers) since 1982.

Roughly speaking this suggests that in 1985 prices the magnitudes were (in $ million):

		1970	1985
A.	Official GDP	850	1515
B.	GDP Adjustment	70	160
C.	Remittance Imports	80	350
D.	Total	1000	2025

In terms of territorial purchasing the increase would have been somewhat less rapid, especially since 1975, because real (constant price) net financial inflows have grown under 3% a year over 1975-85 and perhaps 4 to 5% over 1970-85. However, commodity aid has grown and fixed investment finance fallen within that total so that total national consumption probably has also had a trend growth rate of 5% a year.

Out of that government consumption - after rising sharply over 1970-79 has fallen in constant price terms, collapsing in 1984 and recovering very partially in 1985. Therefore, private consumption has probably been rising at around 6% a year both for 1970-85 and over the past few years when the rise in the share of commodity aid and the fall in that of government consumption have been most marked. A 6% consumption growth rate - i.e. at least 3% per capita - is consistent with visual observation, the broadly perceived upward trend in the size and affluence of Mogadishu and the interim results available from the Mogadishu Household and Urban surveys.

External Accounts, Import Supplies

The 1986 external accounts (per the Somali government) show visible imports of $382 million, visible exports of $94 million, invisible imports of $56 million, remittances of $35 million and factor income (interest) payable of $63 million. The preceding notes suggest that a substantial set of adjustments are needed as set out in Table 9.

The current account balance difference would be offset in the capital account by external investment so that the financing requirement remains unchanged - the remittance and parallel export economies' external transactions are basically balanced. The changes are in the volume of imports and the ratio of self (i.e. Somali) financed to total.

Excluding staple food, petroleum and aid financed investment official imports were of the order of $118 million. These were basically consumer goods (including automobiles) and contruction materials with other intermediate goods a small share. The remittance and parallel trade financed total - for a comparable range of items - totalled $350-400 or 74% to 77% of total imports of these goods. This does explain the gross discrepancy between recorded consumer import levels and even a casual inspection of Mogadishu shops, stalls and barrows.

Similarly, out of recorded visible imports of $382 only $94 million or 25% were financed out of official visible exports. Out of the adjusted total of $732-782 million, $434 to $484 million or 59% to 62% were financed from official and parallel exports and from remittances.

TABLE 9

1986 External Current Account: Official and Probable Actual

Visible Imports	($ 000,000)
Foreign Exchange Financed - Official	103
Remittance Financed	300 - 350
Parallel Trade Financed	50
Adjusted	453 - 503
Commodity Aid Financed	140
PIP (Aid Financed Investment)	139
Total Visible Imports	732 - 782
Invisible Imports	
Non Factor Services - Official	56
Non Factor Services - Remittance and Parallel Financed[1]	60 - 80
	116 - 136
Total Imports Goods/Services	848 - 918
Exports	
Official	94
Parallel Traded - Smuggled	35
Undervaluation	25
Adjusted Exports	155
Remittances - Official	35
Unofficial[2]	465
Adjusted Remittances	500
Interest - Payable	63
Receivable	(2)
Net interest	61
Current Account Balance - Official	-370
Adjusted	-205 - 275

Notes:
1. May in part be direct between external countries not transiting Somalia.
2. Includes external investment made in foreign country of domicile without actual remittance to and from Somalia as well as items covered in Note 1. These may total $100 million.

TABLE 10

Supplementary Table: Emigrants and Remittances, Mid-1980s

Location	Male[1] Workers (000)	Female[1] Workers (000)	Unemployed[2] (000)	Total Workers (000)	Dependents[3] (000)	Total (000)	Remittance Per Employed Workers ($)	Remittances[4] ($ 000,000)
Gulf	100 - 110	15½ - 17½	30 - 40	145½ - 162½	10 - 12½	155 - 175	2,500	300 - 325
East Africa	55 - 60	5	-	60 - 65	90 - 95	150 - 160	2,000	120 - 130
UK[5]	15 - 17½	2½	?	17½ - 20	7½- 10	25 - 30	1,500	30 - 40
Italy	5 - 7½	2½	?	7½ - 10	7½- 10	15 - 20	1,500	12.5 - 17.5
Egypt	5 - 7½	?	?	5 - 7½	5 - 7½	10 - 15	1,500	7.5 - 12.5
Other[6]	10 - 12½	1 - 2½	2½ - 5	13½ - 20	6½- 10	20 - 30	750	7.5 - 15.0
Total	190 - 215	26 - 30	32½ - 45	248½ - 280	126½ - 145	375 - 425	2,250	477.5 - 540.0

Notes:

1. Includes those employed or self-employed part (but substantial) time on a regular basis.
2. Includes fully unemployed, between jobs, adult students without substantial work income, self styled refugees.
3. Wives 65-75,000; Children 60-70,000.
4. Includes allowance for some remittances from those unemployed at any given time but not for whole year and those receiving refugee or other social relief in Europe/North America.
5. Includes seamen estimated at 7½-10,000.
6. Largely Western Europe, Canada, USA.

Supplementary Note

The 1980 Population Survey data contained in the Government of Somalia's 1984 Analytical Volume at first glance do not confirm the hypothesis of a large emigrant community dominantly (except East Africa) made up of single male workers. Indeed they show more males than females resident in Somalia.

Closer inspection reverses this first impression. For the age groups in which single male migration would be expected to be concentrated females do outnumber males.

If one excludes these age groups to determine the average female % in the rest of the population (slightly over 48%) and applies that to the categories affected to estimate net absent males the results are:

Urban	23,000
Nomadic	53,000
Settled Rural	35,000
Total	111,000

This figure again on the face of it is inconsistent with any estimate of 375,000 to 425,000 migrants. However, a rough reconciliation suggests the divergence is not by any means as wide as it appears to be.

Male Workers	190 - 215
Male Unemployed	27½- 40
Total Adult Males	217½- 255
Female Workers	26 - 30
Female Unemployed	5
Wives	65 - 70
Total Adult Females	96 - 105
Excess of Adult Male Migrants	121½- 150

At least the lower end of the range is of the same order of magnitude as the 111,000 1980 estimate. After 1980 (largely over 1980-82) migrants rose by perhaps 15% so that the adjusted net absent adult male estimate would be of

the order of 127,500 which is within the range suggested by the Supplementary Table.

Why the population of Somalia - as surveyed - should be only slightly over 48% female is unclear. Because the proportion of females (except for the migration affected groups) is broadly stable, e.g. 48% in the 0 to 1 age group, higher infant and childhood mortality for females appears ruled out as an explanation. That - contrary to any other recorded experience - only 48% of Somali births are female seems very unlikely. The most plausible explanation would appear to be that there is systematic under-reporting of females (of all ages) to population survey officials - presumably for social, cultural or religious reasons.

ANNEX 3 CHAPTER 1

REFUGEES IN SOMALIA: A NOTE

The Setting

The internationally recognised and supported refugee sector in Somalia has deliberately been excluded from the scope of this report. This is not because they are not people; they assuredly are. Nor is it because they are few in number; the lowest quasi-official estimate is 750,000 or on the order of 15% of the population of Somalia excluding refugees. Nor are they foreign in the sense of not being Somali; almost all are Somalis from the Haud and Ogaden or closely culturally and historically linked Moslem Oromo from the hill country inland of the southern Ogaden. The justification for exclusion is partly structural and partly pragmatic:

a. the refugee camps individually and as a system are administered and financed totally separately from Somalia;

b. the basic service and nutrition provision levels of the camps are at least minimally satisfactory and are in any event virtually totally separate from those of Somalia proper institutionally and in terms of finance;

c. the interaction between the camps and the refugees and Somalia proper and citizens of Somalia are broadly analagous to external border trade rather than to parts of the same economy.

That said, there are interactions. Because the camps have basic medical services and rural Somalia in many districts does not, Somalis do avail themselves of camp facilities. To a lesser degree this applies at primary school level, but at secondary level the camps use (and pay for) places in the Somali state secondary school system.

Truck And Barter

The nature of the goods provided to refugee households results in substantial "border trade" - as evidenced by shops and markets adjacent to camps and by refugee possession and use of goods not distributed to them. The number of food rations distributed probably exceeds the number of refugees. On the other hand, the clothing and basic household goods issued would - by themselves - be quite inadequate. Further the food distributed, while calorifically and nutritionally sound and containing items Somalis do eat, is not a diet any Somali household (let alone a nomadic one) would choose to eat. For example, it does not (for evident logistical reasons) contain milk.

Refugee households do drink milk and do store it in standard Somali artisanal containers. They do have torches, transistor radios, Somali caps, etc. Non-refugee Somalian do eat grain (especially wheat, rice), sugar, cooking oil initially distributed to refugees. This "border trade" - however bureaucratically messy - serves everyone's interests. It allows a logistically handy but hardly ideally need related basket of goods for refugees to be part exchanged with nationals of Somalia. All parties to the trade perceive themselves as better off and both the UNHCR and donor bureaucracies have a much easier life than if they literally sought to provide the actual refugees' consumption basket. In this case at least, Adam Smith's dictum that people were rarely more innocently engaged than when they were busy with small scale truck and barter is applicable.

Enclaves Or Base Camps?

However, there is one respect in which the refugee camps are more integrated into the nomadic social and economic dynamic than is commonly realised. For a number of households they are a modern version of the base camp with assured water and food at which women and young children can be left while adolescents and adult males go out to earn a livelihood.

The evidence in favour of this interpretation turns on the stability of camp population makeup. Ten years ago and today it is dominated by married women, young children and the infirm or aged. Older children and adult males are markedly under-represented. That was a predictable pattern in 1979. Its

continuity implies either household members linked to but living outside camps or large scale parthenogenesis combined with a very high 10-14 year old mortality rate for males and suspended animation for females from 10 to 18. The second alternative clearly is both implausible and counterfactual.

Apparently on the order of 250,000 adult males and older children of both sexes who are part of households whose other members are registered refugees live and work outside the camps.

What is unclear is not so much the answers to where but to how many in each place. The main occupations and locations are:

a. nomadic pastoralism in the Haud and Ogaden (which certainly does persist and feeds beasts into, e.g., the Hargeisa-Berbera distribution axis);

b. nomadic pastoralism in Somalia - perfectly feasible and known to exist for those refugee households whose extended families or broader social groups historically live in the rangelands of Somalia as well as in the Haud and Ogaden;

c. urban Somalia (notably Mogadishu) in wage employment. Again enough cases are known to suggest this is significant;

d. "over the water" in the Somali migrant worker sector of the Saudi economy.

To the extent the second and third places are important issues of income, poverty, health and education for this community have been subsumed in the text. This is so because, when in the rangeland or Mogadishu economy, refugee household members are basically indistinguishable from other Somalis. To the extent they are in the Haud and Ogaden or the Gulf states they do fall outside Somalia and Somalian public service or nutrition issues and programmes.

This analysis does not imply that the refugee population is fraudulent or undeserving of international support. The household members outside the camps do support themselves and augment camp residents' living standards. Forcing them to return would raise the refugee support bill and block any dynamic of integration into Somalia. Even more clearly forcing the 750,000 to rely

wholly on the earnings of the 250,000 would virtually double the numbers of people living in absolute poverty in Somalia. Neither alternative can plausibly be viewed other than as grossly inferior to the status quo.

CHAPTER 2

POVERTY IN SOMALIA

Conceptual Issues

Given the special characteristics of the Somali economy, most conventional types of poverty studies fail to yield meaningful results. Unfortunately past studies of rural poverty in Somalia fall in this category. The table below shows the sort of conventional approaches that will not work in Somalia and the sort of things we should want to see included:

TABLE 11

Poverty Estimation in Somalia: Some Constraints

Cannot Do	Why
GDP in purchasing power terms (Kravitz ratios)	Problems with estimation of GDP; GDP vs GNP
Livestock GDP ("income") vs crop GDP	1. Livestock stock charge is not closely linked to consumption or non-herd investment. 2. Milk underestimated 3. Valuation problem
Household budget survey/common poverty line	1. Valuation problems 2. Seasonal and cyclical factors 3. Different diet and other consumer good use patterns
Solutions	**Limitations/problems**
Urban: household budget survey/poverty line	Should capture remittances on income side
Rural: production streams plus milk/cereal exchange	Valuation problems - standard and divergent crop/livestock calories prices

Should include/allow for

1. Overlap of occupational groups (within households/families)
2. Intra-family transfers
3. Seasonality
4. Cyclicality (drought)

GDP figures provide no clear guide to welfare or poverty levels because of the myriad problems discussed previously as well as because they reveal little about inter-household income distribution. The inclusion of herd changes

which are not like other current income in impact on consumption or non-livestock investment, the undervaluation of milk production and the omission of remittances are major elements. Livestock GDP cannot be compared with crop GDP as a short-cut for comparing relative consuming power of pastorlists and peasants because of the above problems plus the additional one of the "valuation inconsistency" (see below). Any household budget survey also is plagued by valuation problems in comparing urban with rural areas if what is to be measured is either prevalence of poverty or relative consuming power more generally.

In urban areas a household budget survey can be used along with a properly defined poverty line to arrive at the per cent of poverty in the "conventional" manner. Even here modifications on the income side would have to be made for Somalia to take account of intra-urban as well as rural-urban intra family transfers. However, the assumption that low income households could not in general spend above their actual incomes would allow operating on the expenditure side only.

In the rural areas conventional household budget surveys will not yield meaningful results, unless very carefully treated, because of the incomparability of income figures in rural Somalia and indeed more generally in SSA. The reason for this is two-fold: (i) a great part of rural consumption (and income) is household self-provisioning (subsistence) and (ii) different rural groups produce and consume different types of food. Urban/rural comparisons are bedevilled by self-provisioning alone because for poverty purposes - but not for normal budget studies and especially not for national accounts - one kilo of maize bought as maizemeal in a Mogadishu shop is identical to one kilo of maize grown and processed within a peasant household. Maizemeal costs more than maize and the "farmgate" price of maize is not over half the urban retail price of maize, so that equal "income" levels in urban and rural areas as conventionally measured imply different welfare levels. This can be allowed for by using a price differential.

The intra rural comparability problem in Somalia arises from the simultaneous existence of two factors: self-provisioning and diet differences. If self-provisioning (subsistence) was minimal income figures could be used for comparisons. If production/use patterns were similar then again income

figures could be used. In rural Somalia both self-provisioning and different diet patterns are present. A numerical example should help clarify:

	Nomads	Farmers
Product	Milk	Maize
Calories	13,200	13,200
Equivalent Output	171 litres	38kg
Unit Price (Sh)	45	50
'Income' (Sh)	765	190

We have a nomadic family and a farming family each producing just sufficient calories for themselves. Since milk is an expensive source of calories (4 times as expensive as maize in the above example), nomads emerge as much richer than farmers whereas in reality both are getting an equal number of calories from their production. The "valuation inconsistency" (animal calories cost more than cereal) becomes a "valuation fallacy" if we actually say that nomads are four times as rich as farmers, a mistake made in some studies of Somalia. A household budget survey would normally contain figures in shillings and if all output has been counted (self-provisioning is often omitted), would pose severe valuation problems. If self-provisioning output has been omitted, the figures would make no sense at all for estimating poverty. The problems it is worth pointing out are encountered in virtually all SSA household budget survey based work. In Somalia with the crop/livestock valuation problem superimposed on a massive scale they assume even greater importance.

The solution proposed is to measure production streams from nomadic and to farm assets (livestock and land), to value them in terms of calories and compare that against a standard calorie requirement. As not all production is self-consumed allowance has to be made for the part sold or bartered. Finally the estimation procedure has either explicitly to take account of, or at least allow for, fused occupations (semi-nomads, farmer-pastoralists), intra-family transfers and seasonal and inter-temporal variations. The transfer problem is taken into account if the survey is from the consumption side. Table 1 shows past attempts at measuring poverty in Somalia, summarising the source of data and poverty line, the major problems, patterns and results.

Estimates vary so widely - from 0% for the nomads to 70% and 34% to 75% for the farmers - that the usual reaction would be to throw up one's hand and say

"nobody knows" or that "data are poor". The problem with poverty estimates in Somalia is not primarily data limitations per se, but erroneous conceptualisation. In the earliest studies (ILO/JASPA, IBRD) a mechanical procedure was used whereby an urban based poverty line was scaled down by assumed price differentials to apply to nomads and farmers. This is the usual procedure adopted in most developing countries, but, as we have been at pains to show, is not applicable to Somalia because the different population groups consume different types of foods, especially the nomads whose diet is based on milk. The ensuing poverty lines were then applied to a particularly inaccurate budget survey among nomads, farmers and townsmen.1/ The particular survey used is a data problem, but the conceptual problem is prior to it. In a later study (IFAD) the same conceptual problem is encountered in an even more pronounced form, where in assigning money value to nomadic and farm production, it was concluded that nomads were several times richer than farmers. This happens as we by now know, simply because nomads' diet (mostly milk and meat with cereal supplements) is more expensive than farmers' diet (mostly cereals). In Tyler's study, survey estimates of livestock numbers and data on acreage were converted to output (milk, meal, cereals, etc) and then to shillings. An attempt was made to counter the valuation problem by setting different poverty lines for nomads and farmers which in principle could allow comparability for poverty estimation purposes. In practice the adjustment was much too small, given the difference in diet, and the valuation problem remained.

Jamal steered away from putting any monetary unit values on nomadic and farm output. What mattered for estimating position relative to a food poverty line was how many calories the nomads or farmers obtained from their assets, either in the form of household self-provisioning or through barter or cash exchange. Livestock numbers were converted into milk (and meat) using production co-efficients and yields for lactating animals (see Annex 1 to this Chapter). Similarly land was converted into cereal output. Allowance was made for livestock owned by farmers. The figures showed that on a self-provisioning basis, i.e. if there was no trade or barter, the national nomadic herd was able to produce just enough calories for the nomads. For the farmers, cereal ouput in fact afforded them surplus calories. Account was then taken of the possibility of exchanging livestock products for cereals.2/ Since the rate of exchange (in terms of calories) is favourable to the nomads, they could attain sufficiency with a much smaller herd than on a purely subsistence basis,

especially in the South where nearby farmers have a surplus of cereals to sell. The modified poverty line was applied to regional herd figures. Similarly the farm poverty line was also applied to regional figures. Lacking inter-regional distributions a normal distribution was assumed. A figure of 33% poverty was obtained among both nomads and farmers. In the North fewer nomads were in poverty while in the South fewer farmers fell below poverty. The regional distribution of food poverty among nomads was estimated as follows:

North	
Mudug, Bari, Galguduud, Gedo, Hiraan	5%
Sanag, Vagoeyi, W. Galbeed	25%
Nugal	50%
Togdheer	75%
South	
Bay, Bakool, Middle Shabelle, both Jubas	40%
Lower Shabelle	75%

Among the farmers, the southern agricultural regions - Lower Shabelle, the Jubas and Bay - on the average lie above the poverty line. Three other southern regions which are basically nomadic also fall above the poverty line, in their case because of supplementary subsistence from livestock. Middle Shabelle is the only important agricultural region below the poverty line. What field surveys there are do raise questions, e.g. at least in drought periods Bay (whose agriculture is rainfed not riverain) appears to be distinctly worse off than other southern regions.

It is in the North that one would expect more poverty among the crop farmers; however most of them own large herds of animals to augment their calorie supplies, or are (e.g. W. Galbeed) nomadic households with a substantial crop component. Nonetheless, farmers in the North East (Sanag, Nugal) and North West (W. Galbeed, Togdheeer) comprise the largest poverty groups.

The Jamal analysis has been favourably received by subsequent authorities3/ with one notable exception.4/ The claim is not that it is accurate to the last digit or even last two digits, but that it contains conceptually the most meaningful way of defining food poverty in a context in which different sections of the population produce and consume different types of foods mostly

on a household self-provisioning basis. There are many assumptions that go into this kind of analysis and hence only orders of magnitude should be scrutinised. The two findings that stand out from the Jamal study are: (i) there is similar amount of poverty among farmers and nomads in normal years, (ii) poverty among both is much lower than previously estimated. The Jamal estimates, it may be noted, were in terms of food poverty. If anything, they are higher than area sample survey malnutrition data; but at least they are closer to reality than any higher estimates.

Some of the critical assumptions made in the study may be noted:

(i) Coefficients used in converting from livestock numbers and acreage to production streams;

(ii) Intra-regional livestock and crop distribution;

(iii) Distribution of livestock and crops between nomads and farmers;

(iv) Extent and terms of exchange.

No "data" are available on any of the above, so it is pointless to claim the figures are "right", or to look for evidence to prove them "wrong" albeit collection of sample data to produce better estimates would be desirable. The only test is whether the assumptions made were realistic and that the story they tell is consistent with qualitative observation and sample studies using different approaches to estimating malnutrition.

A discussion of the coefficients used in arriving at milk production, the critical rural output, appears as Annex 1 to this Chapter. Intra-regional distribution had to be assumed. As for nomad/farmer breakdown, the assumption made was that agricultural families owned one third as much livestock as nomads. This is a fairly standard assumption but moderate alterations in the ratio would not significantly alter the broad conclusions. Many nomads also grow crops on a regular or intermittent basis and it is believed that the extent of this is increasing. In the Jamal study no allowance was made for nomadic cultivation. This is a shortcoming of the study in that overlap of sectorally defined occupational groups is not fully taken into account. Similarly intra-family transfers were not accommodated because of lack of any

basis for estimation and because they do not usually literally take the form of food. Given the state of knowledge and the lack of baseline surveys, rough-and-ready figures are all that are possible. To pretend to exactitude is likely to result in being exactly wrong. Later an attempt is made to indicate in which direction the estimate would go if other factors were brought into consideration.

Perhaps the most crucial factors - excluding weather - in nomadic poverty are the extent and terms of exchange of livestock products for cereals. Trends in these have implications of seasonal poverty as well as for inter-temporal poverty. In most normal years nomads market around 25% of their small stock in addition to lower proportions of cattle and camels. With part of the proceeds they buy grains and basic consumer goods. The terms of exchange are extremely and increasingly favourable to the nomads. From information gathered in Baidoa in April 1987 one goat could buy around 100 kg of cereals. Thus a rate of exchange is 1 meat calorie for 9 cereal calories.5/ Fourteen goats over the year should buy enough cereals to feed an average size family (6 members) on cereals alone. Thus animals represent a great store of wealth for the nomads.

The other form of exchange the nomads participate in is milk against cereals. This exchange may be transacted for cash or in kind. Again the terms of exchange are favourable for the nomads: 1 milk calorie for 5-10 cereal calories, depending on the season. Thus data collected in Baidoa and Kisimayo markets in April 1987 (dry season) suggested that ½ litre of milk will buy 1 kg. of maize. This is a calorie rate of exchange of 1:9. During the wet season the price of milk drops to one-half of its dry-season level, whereas the price of cereals declines much less - by one-quarter or so: a rate of exchange of 1:6. The nomads then have much less need for cereals but exchange is still heavily weighted in their favour. What is important, however, is to notice the counteracting trends in the terms of exchange and in milk production. In the dry season milk output falls to one-third of the peak season output. At the same time the terms of trade improve, partially counteracting the output decline. However, with the fall in milk output, the nomads are less able - or willing - to part with their milk, because of their innate preference for a milk-based diet. Thus milk/cereal exchange, more favouable though it is in the dry season, would not fill the calorie gap. At this time the nomads increase their sale of animals to bridge the hungry

season.

The asymmetrical nature of the livestock-grain exchange has an important bearing on the limits of exchange. As each livestock calorie buys several grain calories, the nomads would in theory always be willing to exchange. In practice they would do so only within the confines of their basic preference for milk. The farmers on the other hand could afford to exchange only if they have more grains than their basic calorie needs as otherwise they would be pushing themselves into a food deficit. This discussion assumes all nomadic milk sales are to farmers and none to urban areas. Altering this assumption does not affect the conclusions as to nomadic household food availability. It does increase the residual farmer calorie (grain) surplus available for sale to urban areas.

This suggests a regional pattern to seasonal poverty: in the south farms are bigger and yields higher, hence farmers usually produce a surplus of grains above their requirements. Thus southern nomads have a better chance of finding partners in the milk/cereal exchange than their northern counterparts. However here we recall that the northern nomads have bigger herds (and at least in W. Galbeed/Mudug more undertake cereal production), so that their need for exchange is more limited. In the North-West (W.Galbeed, Nugal and Togdheer) herds are smaller than elsewhere in the North, but at the same time farming is well established, thus creating both a greater need and greater possibility of exchange.

A different form of anti-seasonal measure is for nomads to buy up grain with their suplus milk during the wet season. The potential for this should be great both on the nomad's and farmer's sides. This probably happens, again more in the farming areas than in the Central and North Eastern regions. However, the carrying capacity of nomadic household's camels does limit the potential for holding seasonal grain reserves. A further constraint may be that nomadic households on the wet season pasture and water frontier may not, in practice, be close to farmers.

The discussion above suggests that the dry season for nomads within reach of farming areas may not spell the catastrophe that is suggested by casual reading of the coefficients of milk production of one-third their peak level. And mobility - or the search for survival - being the definition of nomadism,

nomads must always try to position themselves near sources of grain as well as of water and pasture during the dry season. While not minimising the real hardship suffered by the nomads during the dry season, these points need bearing in mind.

Over the years it would appear that the terms of exchange have moved further in favour of the nomads. Among the reasons for this are the divergent trends in livestock and farm outputs - livestock output per capita has been falling nationally and per nomadic household has probably been stagnant, while grain output per capita has been constant or increasing (see Annex 2 to this Chapter). Other factors have reinforced these trends. The livestock sector went through boom conditions following the oil price boom. This affected both export and domestic prices. In the grain market, correspondingly, grain imports - especially from 1983 on - depressed domestic prices. While the earlier year grain price figures are often somewhat unreal, being official ones (when most grain by-passed these channels) correcting would in fact increase the trend terms of trade shift in favour of the livestock and milk sellers.

The upshot of these trends was that although the nomads' calorie production per household was stagnant or declined their terms of trade and - thus - real incomes improved. Increase in grain production facilitated these trends and was indeed a necessary condition for them. Thus nomadic diets now are believed to include substantially greater proportions of cereals than was the case in the past. Exchange ratios and growing familiarity with grains have been factors responsible for this.

Urban Poverty

Jamal had also made estimates of urban poverty in 1975, using adjusted figures from the household budget survey of that year. Here we shall update these estimates using preliminary results from the household budget survey of 1984/85. The procedure is to establish a poverty line and apply it against the consumption distribution in the household survey.

As the greatest part of poor people's consumption consists of food, the most important category in a poverty line is the weight given to food expenditure.

Table 13 shows the costing of two food baskets providing 2,200 calories per day, the FAO/WHO requirement. Basket A is composed of 75 per cent of the calories from cereals and beans, and the rest from oil, sugar, etc., no allowance being made for livestock products, while basket B is somewhat less austere, with livestock being substituted for some of the cereals and beans. The more austere basket probably corresponds to that most likely consumed at the bottom end of the urban market, while basket B would correspond to what may be called the "average consumption pattern" in urban Somalia. The apportionment among the three major cereals and beans is by and large in accordance with relative prices and preferences, with wheat in the dominant place, rice second, and maize and beans third. The costing is based on average prices prevailing in Mogadishu in 1984/85 as obtained from the household budget survey.6/

The daily cost of the minimum diet (basket A) for an average person would come to Sh. 26.41. For a family of 6.3 (the household budget survey average) on a proportionate basis, the cost would be Sh. 166. Basket B shows the cost of readjusting the diet, as one would do at higher income levels. By increasing livestock intake in place of cereals and beans an extra expenditure of Sh. 16 per day would be incurred. In the opposite direction savings could be made by including even more cereals in place of fruit and vegetables. Still, the limits are clear. A basket costing Sh. 26 per capita per day probably defines the barest minimum basket at 1984/85 prices and the Sh. 43 one an average basket. For purposes of estimating poverty we shall use the costing of basket A.

In addition to food, the family would have to incur certain other non-discretionary expenditures. Estimates are shown below (Sh. per family per month):

TABLE 12 Urban Poverty Line Estimate, 1984/5

Clothing[a]	Rent[b]	Fuel, light, water[c]	Food	Total
400	850	750	4,990	6,990

a. Equivalent to 2½ yds of cloth per month
b. 3-4 room house in outlying areas
c. Three bags of charcoal plus kerosene and water charges

TABLE 13

Costing of Two Food Baskets at Household Budget Survey (1984/85) Prices
(2,200 calories per day: Shillings)

	Price per kg.	Calories per kg.	Price Per 1,000 calories	Basket A Composition	Basket A Cost	Basket B Composition	Basket B Cost
Wheat Flour	40.0	3,500	11.40	25	6.27	25	6.21
Rice	40.0		11.40	20	5.02	15	3.76
Maize	29.7		8.49	15	2.80	5	0.93
Beans	27.0		7.71	15	2.54	10	1.70
Meat	100.0	2,000	50.00	-	-	12	13.20
Milk	31.3	775	40.32	-	-	8	7.10
Oil	91.0	8,750	10.40	12	2.75	12	2.75
Sugar	40.0	3,545	11.28	9	2.23	9	2.23
Fruit and veg.	30.0	550	54.55	4	4.80	4	4.80
					26.41		42.74

Note: Based on prices as revealed in the Mogadishu household budget survey of 1984/85

TABLE 14

Average Wage, Cost of Living Index, Real Wage
and Minimum Food Basket Cost, Selected Years, 1970-1986

	1970	1974	1977	1978	1980	1984	1986
Average wage (Sh.p.a.)*							
Industry[1]	3 900	4 800	6 168	7 272	8 000	20 000	30 000
Government[2]	5 160	6 000	5 640	6 600	7 300	14 000	18 000
Average[3]	4 284	5 160	6 000	7 068	7 790	18 200	26 400
Cost of living index[4]	100	120	184	202	399	1 854	3 470
Real income (1970 terms)							
Wage earner nominal	4 284	4 229	3 261	3 499	1 952	982	761
Wage earner take-home[5]	3 984	3 876	2 863	3 041	1 645	575	440
Memo item (Current Prices)							
Minimum food basket cost requirement (Sh.p.a.)[6]	2 170	3 200	4 826	4 290	6 220	48 000	65 030

* Coverage of allowances partial to negligible.

1 Includes industries run by autonomous agencies and private firms in industry and commerce. Private sector data coverage, accuracy problematic.

2 Based on data provided by Ministry of Finance, civil service lists.

3 Estimated by giving a weight of 0.7 to industry group.

4 Based on national sources, with splicing.

5 Calculated by applying prevailing tax rates to the average wage (see Jamal 1981, table E.1).

6 1984 basket set at Sh 48,000 based on 1984/85 basket (Table 13). Other years obtained by applying the food price index.

Sources: 1970-1980 from Jamal 1981, table 17. 1984 and 1986 wage, mission estimate, government wages based on trends in civil service pay. Cost of living index from official sources.

This minimum income is set against the income distribution of the household budget survey. A simple calculation shows that 17% of the population fell below the poverty threshold. Although this figure is higher than that estimated in Jamal for 1977, it must still be considered remarkably low, compared to other African countries, and vindicates our visual impression of limited incidence of abject poverty in urban Somalia.7/ Slum areas are limited in extent and obvious signs of malnutrition even more so.8/ The estimates are corroborated by preliminary results from a CIIR-UNICEF-OXFAM study of urban poverty conducted over 1986-87 by a team headed by Rick Davies. Using the same food poverty line as here (basket A) it was estimated that in the Waaberi district of Mogadishu, 7% of household had income below the food poverty line in Nov. 1986.9/ Adding the nonfood needs would push the figure to the 17% level estimated here for 1984/85.

These findings are surprising because of the "wage puzzle". Wages have fallen drastically in real terms over the last 16 years yet the per cent of households in poverty remains low. This paradoxical situation constitutes additional circumstantial proof of the extent of remittances in the economy.

Between 1970 and 1986, the overall average wage increased at the most, sixfold. Enterprise sector wages did somewhat better, increasing 7.7-fold. In the meantime prices increased 35-fold. The average real wage fell to 18% of its level 16 years previously. Most of the decline came after 1978. Up to then, prices only doubled (annual inflation rate: 9.2% p.a.). The wage was then still sufficient to buy the minimum basket (set at 1.4 times the food basket). After that (1978-86) prices increased about 17-fold while the wage increased 3.7-fold. In 1986 the average wage - at least as reported - would have bought just around 30% of the minimum needs (food as well as non-food, again set at 1.4 times the food basket) of an average family - or to put it even more dramatically just 12 days supply of the most basic food. Even this comparison is substantially better than the actual situation, because it is based on using gross pay. At the level of income shown for 1986, a wage earner was expected to pay by way of the development levy and ordinary income tax something like 50 per cent of his income in taxes. Most wage earners in the private sector almost completely escaped this; the civil servants were not so lucky. Per contra both sectors received substantial cash allowances neither included in the wage statistics nor taxed.

Such wage trends should on the face of it have affected the "informal sector"10/ incomes, too, as wage earners are usually the best customers of the petty traders. We should, therefore,have expected to see a massive increase in poverty. This did not happen because (a) wages became a small part of total family income and/because (b) remittances increased. Most wage earners themselves have moved into secondary jobs in their spare time, while most families have become multi-occupational families. Without remittances this kind of diversification would not be enough to explain the poverty paradox, because given stagnating formal urban sector incomes, an increase in "informal" activities would have largely signified work-sharing. Thus the answer to the poverty puzzle in Somalia is not provided by the vitality of the informal sector per se, but rather by the injection of remittance money. Remittances fostered the increase in informal sector activities and ensured its viability.

Perspectives

We have in the foregoing estimation and analysis disputed several previous analyses of the Somali economy. The conclusion we reach is that most Somali households are better off than hitherto believed. This is a relative position - relative to past estimates of welfare. One should not jump to the conclusion that most of the Somali people are absolutely well off. The argument can be set out in a tabular form (see Table 15).

In the previous analyses of poverty in Somalia the nomads and farmers were judged to be extremely poor. This result arose from comparing town-based poverty lines, or more specifically from trying to compare income levels in towns versus countryside. Carefully done this is a valid procedure; mechanically done it yields spurious results. By measuring consumption levels attained by the various sections of the population we find less poverty than previously estimated. Yet the fact that we find one-third of the rural population likely to be in food poverty must be cause for great concern. Moreover, there is the seasonal factor for nomads and the ever-present danger of drought for both nomads and farmers.

TABLE 15

Estimates of Poverty (Late 1970s/Early 1980s

	Source of data	Poverty line	Problems	Poverty incidence % Nomads	Farmers	Urban
ILO/JASPA, 1978 (Hopkins)	Middle Shabelle Survey and JASPA p.l.	JASPA's Urban-p.l. scaled down for rural price differentials.	Middle Shabelle survey flawed. Urban p.l. cannot be applied to rural.	49	67	42
IBRD, 1978 (Hicks)	Same as ILO/JASPA	JASPA	As with ILO/JASPA	70	70	42
IFAD, 1979 (Haaland Keddeman)	Livestock census and acreage data converted to Shs.	Single monetary poverty line for nomads and farmers.	Valuation fallacy	0	75	no est.
Jamal, 1981 (ILO/JASPA)	L/s census and acreage data plus national accounts converted to calories. 1977 HBS for urban.	Calorie poverty line for nomads and farmers. Urban on minimum basket.	Co-efficients used. Does not address seasonality.	33	34	5-7
Tyler, 1983 (WCARRD)	Micro-level livestock and acreage data converted to products and then to Shs.	Monetary poverty lines partially based on dietic differences.	Co-efficients. Poverty lines inappropriate as baskets and prices eccentric.	51	40	no est.

Hopkins, M. J. Somalia and Basic Needs: Some Issues, World Employment Programme Research Working Paper No. 3-32/WP.8. ILO, Geneva.

Hicks, N. L. Poverty and Basic Needs in Somalia (mimeo)

IFAD Alternative figures based on using the Middle Shabelle Survey are also available: 39-72% poverty among nomads, 30-70% among farmers, depending on whether price differential is applied or not and whether first or second round of the survey is used.

Jamal, V. Nomads, Farmers and Townsmen: Incomes and Inequality in Somalia. ILO Working Paper, JASPA, Addis Ababa.

Tyler, Case Study on Rural Poverty FAO: Rome, WCARRD indepth studies No.7, 1983.

In the urban areas too we find food poverty to be much less than hitherto believed. Even minimum-needs poverty is probably below 20%. Here there are no major qualifying perspectives, albeit the seasonal swings in food prices may affect calorie intake intra-year. If anything, the qualifications work in the direction of less poverty than calculated because of intra-family transfers.

We also bring into consideration two perspectives which have a bearing on welfare and one by which we may evaluate the current standard of living. Welfare consists not only of consumption of material goods, but also of social goods - health, education. These contribute to ability to produce, to the enjoyment of life as well as to its prolongation. From this angle the situation in Somalia must be judged to be extremely poor, even by SSA country standards. Worse still, social services are extremely unevenly distributed, with Mogadishu the dominant beneficiary. A great part of the private wealth too is concentrated here.

The way the latter comes about sheds some further light on the non-conventionality of the economy of Somalia compared to many other African countries. In the latter, great regional inequality would usually be held up as a sign of exploitation. The argument would run as follows: the nomadic sector is the driving force of the economy in terms of exports. Government has squeezed this sector, extracting surplus through various means, such as marketing board surpluses, export taxes and "exchange-rate taxation".11/ The model would be the usual Sub-Saharan African country export-squeeze model. The fact is this model does not apply in Somalia. There are no marketing boards, limited export taxes, and, with livestock transactions being conducted at essentially free-market exchange rates, no question of exchange-rate taxation. There are a number of fees and exactions - perhaps 20% of export value - but this is low by SSA standards. Given that perhaps two-thirds of livestock sales are domestic, any attempt to achieve a tighter squeeze would divert sales from the export to the domestic market (as well as increasing smuggling). It is difficult even to establish exploitation by the domestic middlemen - the dilaals. The notion that Somali nomads might be exploited by unscrupulous dealers comes from another "model" from elsewhere in SSA, that at least on the face of it does not apply in Somalia. This is the model of the nomad as an ignorant and innocent being whose plight for survival is constantly exploited by a small group of powerful dealers. Those who know

Somali society well do not subscribe to this model of the nomad, nomadic plight or nomadic economy. From visits to the rural areas and discussion with knowledgeable people one could find no evidence of nomads involuntarily liquidating their stocks of animals to secure their supplies of grain, even during the height of droughts. Indeed, if anything, animals which could have been sold were held until they died - presumably either by misjudgement of short term pasture prospects or a belief that the death rate would be independent of the number of beasts kept so that a larger initial herd would result in more survivors. Neither could one establish any evidence of exploitation. The nomads bring their animals to the market and sell them to one of the many dilaals present. For a camel costing Sh 35-35,000 the dilaal keeps a commission averaging Sh.400. The commission is always per animal and not ad valorem. In return the dilaal provides an important service - quick sale. The nomad can take his money, buy his essential goods in the market and get on his way, leaving the dilaal to locate his own customer in his own time.

The actual exporters probably do make large profits. These however would appear to be largely on the use of the proceeds to import consumer goods primarily for sale on urban markets. Therefore, arguably even this does not represent urban exploitation of nomads. The real question here turns on how high a proportion of true export receipts are "hidden" by under-declaration. If it is over 20% revision of the view that the export (as opposed to the domestic) market for livestock is free of oligopsonistic exploitation would be required.

There is no doubt that most nomadic surplus has been invested in Mogadishu and other towns. But this has happened not through exploitation but voluntary action. The mechanism should not be too difficult to understand. The nomads by definition have a limited need for money, mostly to buy food, clothing, utensils and a few other portable goods. When the boom came in livestock prices, they did not respond (indeed could not) by increasing their off-take (the classic supply-response model) but rather took the boom as a windfall gain, marketing their animals as need arose. The surplus of liquid assets was largely invested in urban real estate. The benefits of this went to nomads' children and relatives in the short term and to themselves when they move to the cities which is a frequent end result. Thus we get quite a different perspective to the question of regional distribution. This takes some sting off the usual demand for redressal of the situation. Certainly the Government

should do much more to provide basic services to the nomads, but we should not expect to see across the board narrowing of the visible goods consumption gaps.

Finally, we restate the concept of "economic development". The real tragedy of Somalia's recent experience is that while the country - and especially Mogadishu - went through boom conditions, it did not develop, either in the sense of building up new production sectors or of strengthening public services. The vital statistics, e.g. infant and child mortality rate, prevalence of infectious diseases, at best barely improved and many have worsened; the infrastructure decayed; the industrial sector declined. The country went into a private consumption spending spree, and one based on genuine incomes not household borrowing, but unfortunately spending sprees never provide the basis for long-term development, especially when they are largely limited to private consumption including urban residential housing and passenger vehicles.

Different Approaches to Nutrition Estimation

As shown in Annex 2 to this Chapter, national production and import grain data are the least shaky general data available in respect to nutritional levels in Somalia. Unfortunately, as indicated above they cannot measure (as opposed to help allow reasonable hypotheses about) intra-rural trade and diet patterns, nutritional distribution around mean levels (by household, let alone or for children and mothers) nor be used to estimate seasonal and cyclical (drought) fluctuations around national averages. These are, to be blunt, grave shortcomings. Equally grave, existing direct nutritional survey micro data are very far from plugging the gaps, although some suggestive evidence exists.

A Survey of Existing Evidence

Estimates of probable malnutrition levels in Somalia range from 25% to 75% nationally and from 0% to 100% for most major groups (i.e. nomads, settled agriculturalists, fisherfolk, and urban residents). All appear to be based either on national calorie estimates, pure conjecture, or small samples. Estimates based on extrapolation from surveys suggest 15% to 20% rural and

TABLE 16

Borama District Nutrition Estimates

Daily Calorie Intake Based on Standard 7-Day Diet in the Dry Season

		Pastoralist	Agriculturalist
Adult	Male	2,000 cal.	2,500 cal.
	Female	1,400 cal.	1,800 cal.
Child	Male	1,300 cal.	1,500 cal.
	Female	1,000 cal.	1,300 cal.

Source: Borama District PHC Programme Dietary Survey Debraweyn Area, (1983), p.2.

somewhat lower urban child malnutrition rates, of which not more than 5% would fall in the severe category (third degree). These are quite low by SSA standards, even if in absolute terms they are distressingly and unacceptably high. Anthropomorphic data appear consistent with these estimates. Small sample measurements suggest not over 20% evidence of malnutrition. However, one WHO study diverges radically, estimating wasting in 12 to 23 month old children in 1983 at 62%, by far the highest in SSA, and one and a half times that estimated for Ethiopia - a result which appears rather unlikely.

A standard problem with anthropomorphic data in SSA applies to Somalia. There is no reference group of well fed Somali children from which to measure deviations. As Somalis can readily be seen to be relatively tall, slim people, the reference groups used may result in exaggerating weight-age shortfalls, underestimating height-age shortfalls and significantly overstating weight-height shortfalls.

Under normal conditions most nutritional related diseases are notably rare in Somalia. They do appear in significant numbers during severe droughts, e.g. 1987 in seriously affected districts. These include scurvy, kwashiorkor, marasmus and night blindness. Vitamin A deficiency and riboflavin deficiency symptoms are only moderately more common. However, anaemia among pregnant women and nursing mothers is widespread, affecting a majority and jeopardising mother and child immediate and long term health, and in some cases, life.

It is reasonable to suppose that there are significant seasonal fluctuations in calorie intake - especially for nomads (whose basic food - milk - is much less plentiful in the dry season) and secondarily for urban residents who face seasonally higher food prices (exacerbated now and for about 15 years to come because Ramadhan comes during the long dry season). The scanty evidence available apparently bears out this hypothesis. For example, a 1983 dry-season calorie intake estimate in Borama District in Audal Province (then part of West Galbeed) for nomadic households shows 2,000 calories for adult males and 1,400 for adult females and 1,300 for male and 1,000 for female children - very significantly under the 2,000 plus calorie per person average usually specified as the "food poverty line". For settled agriculturalists, the respective intake figures were 2,500 and 1,800 for adults and 1,500 and 1,300 for children, suggesting an average much closer to, albeit still somewhat below the "food poverty line". The main problem with this survey is

that while it attempted to record actual food intake, experienced UNICEF personnel present in the district at the time believe it under-estimated milk consumption of nomads.

Similarly it can be predicted that drought will increase malnutrition. A USAID study's preliminary results for two nomadic provinces and one rainfed agricultural and nomadic province in 1987 show 19% to 26% malnutrition (not in fact radically above most other survey data albeit much of that relates to 1983 which was also a drought year in some provinces, though not West Galbeed). It is important to note that the rainfed agricultural districts showed the highest levels of malnutrition. The USAID survey also showed markedly higher levels of nutritional related disease symptoms - especially of Vitamin A deficiency (likely in Somalia to be associated with low milk intake) - than most other studies. Incipient scurvy, marasmus, night blindness and kwashiorkor were all present - not massively but at higher levels than in previous WHO and other normal weather period surveys. Premlinary results of a UNICEF 1987 study in Middle Shabelle suggest significant - but probably under 25% - malnutrition among riverine agricultural community children but significantly higher rates among nomadic household children. These results may arise from two factors pertaining to the period of the survey: the Shabelle River had been full for months from transborder flows so that the late rains probably did not significantly affect agriculture; and most of the nomads in the sample were camping near roads, exhausted and dispirited after long migrations having lost all or most of their animals. These nomads would be expected to exhibit high rates of malnutrition and to be atypical of the nomadic population as a whole.

These data on balance would seem to confirm that malnutrition - especially of children - is significant but not at catastrophic levels in Somalia. The most serious general condition is anaemia among pregnant women and nursing mothers. They also seem to confirm that significant seasonal and cyclical fluctuations exist with both pastoralists and rain fed agriculturalists significantly affected. That is the most that can be said with any confidence because the data are sketchy, incomplete and not always adequately dated as to month or specific weather context.

Secular nutrition trend estimates are even more problematic. Over 1970-86 Somalia's per capita calorie production has fallen perhaps 1% a year - largely

in milk and largely at the expense of those who purchase or barter to obtain it. On the other hand grain and sugar imports (and domestic fish consumption) have risen more rapidly than population so that overall calorie availability has, if anything, improved. Because consuming power per capita has risen - especially since 1977 - through the influx of remittances, it appears unlikely that food poverty incidence has increased, and plausible that it has fallen. In the short term this secular stability seems likely to persist. In the medium term it may, but the sustaining of domestic output and commodity aid food imports, is more problematic beyond the early 1990s.

Toward Baseline Data

The bottom line of the problem of assessing nutritional adequacy, inadequacy, seasonality, cyclicality and distribution in Somalia is that no baseline data exist in reliable, comparable, comprehensive form. To collect them would require a major exercise involving perhaps 21,000 observations over a week period for seven specific groups at three specific times, i.e. 1,000 per group per time.

The seven groups are pure nomadic (e.g. Mudug), nomadic with substantial associated crop production (e.g. West Galbeed), settled agricultural or agro pastoral in a riverine setting (e.g. Middle Shabelle), rainfed agricultural and agro pastoral (e.g. Bay), small town (e.g. Baidoa or Jowhar), secondary city (Hargeisa or Kisamayo), and metropolis (Mogadishu). Each sample should be limited to households of the type specified - mixed samples will not produce reliable differentiations among diet, average nutrition levels or distribution of nutrition among different groups. A desirable eighth sample would be fisherpeople - preferably from an isolated village or small town, e.g. Hobyo or Brava because those of Kisamayo, Berbera and Mogadishu are probably almost all above the poverty and especially the food poverty line. Few, if any, areas are pure examples of any of these categories (see Table 17). Thus district surveys cannot yeild estimates for any of them and if so interpreted will confuse users.

TABLE 17

Family Economic Production Styles in the Northwest, 1980
(West Galbeed/Audal)

Type of Population	Definition	Population Involved
Population P	Families living exclusively from pastoral nomadism: stock breeding	10%
Population PU	Families partly living from pastoral nomadism but with certain members permanently resident in town	6%
Population PA	Families living from pastoralism and agriculture	7%
Population PAU	Families living from pastoral nomadism, agriculture and urban activities	10%
Population A	Families living exclusively from agriculture	0.5%
Population AU	Families living from agriculture and urban activities	0.5%
Population U	Urban families, having neither agricultural nor stock breeding interests	66%

Source: Northwest Region Agricultural Development Project; Feasibility Study & Technical Assistance Report No. 9, p. 29, Ministry of Agriculture, (Mogadishu, 1981).

The observations are needed for each group for: a.) a plentiful food season period (probably August or September); b.) a 'hungry month' before the main rains in a year in which the previous fall rains did not fail (i.e. April); c.) a 'hungry month' after poor or failed fall rains and failed or late main rains (i.e. May or June). The first two should give a basis for assessing seasonal nutritional factors and the third for getting some grasp on the cyclical (drought) impact.

Two sets of observations either "b" or "c" plus "a" can be taken in year one and the other - given typical weather patterns - in year two (although it might need to be delayed to year three if two good or two bad weather years come in succession). The basic observations needed are week long recording of actual food consumption of households and their members. In addition it would be desirable to collect anthropomorphic data and perhaps simple observational medical data on probable nutrition related diseases.

Such an exercise would require careful pre-planning, including examination of the most appropriate feasible sampling techniques (possibly stratified random cluster sampling), means of recording, precise questions/observations and means of training, supervising and remunerating the Somali enumerational staff (ideally from or with some knowledge of the communities they are to observe).

The total cost of design, training, materials, mobility (transport), remuneration, processing, analysis and reproduction would probably be over $500,000 and possibly up to $1,000,000. This is a large sum but not larger than the total already sunk in ad hoc surveys which do not and can never add up to a systematic baseline.

Absolute Poverty Level Estimation

Estimation of broader absolute poverty levels and incidence in Somalia is even more difficult for several reasons. First the number and accuracy of income and consumption sample studies is limited (and again many are not dated precisely enough to assess seasonal or cyclical impact). Further, life styles differ markedly among the settled agricultural, nomadic and urban groups.

The settled agricultural group's life styles do not appear to be radically

divergent from those elsewhere in SSA. They may therefore be comparable relatively easily. However, the nomadic community uses very few soft and almost no hard consumer goods (e.g. torches, improved containers, radios) even when households clearly could afford them (and do invest in urban houses and gold jewellery). In part this relates to the problems of frequent moves and the carrying capacity of camels, but, even within the limits this imposes, there appears to be a certain degree of chosen simplicity and austerity. Paradoxically, this does not represent any aversion to consumption as such. Nomads do invest in cities - including in houses to which they presumably intend to retire. They send family members to relatives in cities and themselves move to them to set up urban households. Once in an urban context their consumption - and housing - patterns become urban.

The urban consumption pattern - especially in Mogadishu - is not quite typical of SSA. It includes more imported and less domestic consumer goods (partly a reflection of availability), a more limited range of hard consumer goods, less alcohol, rather different (for historic and climatic reasons) styles of housing. But the prominent place held by clothing, shoes, electrical goods, automobiles, cigarettes and amenity foods appears fairly standard. Fuller data will be available when the Mogadishu Household Budget Survey and the Oxfam-CIIR-UNICEF Mogadishu poverty study are fully analysed, revised and available for use.

Transfer Payments

A final complication is transfers within extended families and within broader kinship or social groups. These are substantial, complex and virtually unquantified. They appear to be much more significant and enduring (even growing) than in most other SSA economies and societies.

The most important is remittances from family members outside Somalia. These are in large part within households. But a substantial proportion go beyond that to extended family members, e.g. a woman working in a Saudi factory who remits regularly to her brother in domestic service in Mogadishu (but not to two better-off brothers and a married sister), and to her mother (aunt?) for herself and for the remitter's children who live with her in Kisamayo.

Remittances tend to have a built-in rural to urban transfer effect. Most are initially to relatives in urban areas (to whom the merchant/broker can readily deliver them) and when transmitted to ultimate rural beneficiaries a proportion usually remains with the urban relative. Other rural to urban transfers include housing investment (and putting in urban relatives as free tenants/caretakers) and other savings. Less important ones include dried meat and ghee.

Urban to rural transfers take two main forms - cash to the rural family member in the rural area (the less important) and moving of rural household members or households to urban areas where they receive housing, cash, food, clothes and/or employment from already established urban relatives. Similar transfers exist among extended family members with sharply divergent income levels within urban areas but are probably less quantitatively significant.

Two particular types of urban to rural transfers within urban areas deserve special mention. The first is that children of nomadic households (and to a lesser extent settled agricultural households) live with urban relatives to attend school. Indeed this must account for the bulk of nomadic group enrollment which is thus mixed up with urban. The majority (perhaps 80%) of this group are male as (perhaps less markedly) are the majority of rural older children and young adults living with urban relatives while seeking urban or 'over the water' employment opportunities.

The second is a response to cyclical disasters. During and after severe droughts, large numbers of nomadic women and younger children (as well as, probably, older girls) are placed with urban relatives to reduce demands on limited food and water supplies. When the rains return - or in extreme cases when savagely depleted herds have been partially restored - most revert to their nomadic households.

There is some evidence of a similar pattern in respect to households whose women and young children live in refugee camps (as do aged and crippled members of households) but whose adult male and older children are economically active elsewhere. Some may be pursuing nomadic pastoralism (in Somalia or in the Haud and Ogaden areas), a number are clearly living/working in Mogadishu and others 'over the water'. In one real sense this is an adaptation of the nomadic life and production style - the refugee camps serve

as permanent base camps for married women and young children while adult males and older children work outside them. (See Annex 3 Chapter 1.)

In the case of emergency needs - major illness or injury, burial, wiping out of herds or other assets or, less clearly, weddings - cash collections are taken up by kinship and social groups to meet the immediate and some of the livelihood rebuilding cost (e.g. for purchasing a new nucleus herd) of the afflicted households.

These transfers are all private sector and traditionally based. They are widely practised, substantial and supported by social sanctions for non-compliance. Evidently - as demonstrated by Gulf remittances and placing of children with urban relatives for educational access - they are living systems quite able to adapt to new contexts and opportunities. Such transfers do not eliminate poverty nor are all poor persons within the transfer networks. They do substantially reduce inequality levels within extended families and provide interlocking security systems based on diversity of income sources and mutual solidarity. Viewing the Somali extended family as a miniature TNC (as the Boston University study does) may be a distinct overstatement but a perception of Somali society as made up of isolated nuclear households with single sources of income and negligible effective claims on more fortunate relatives for supplementary income transfers would be a far greater error.

All transfers - except urban investment by nomads - are in the form of gifts. However, they are gifts within a context of mutual social obligations. Obligations do arise for the recipients. If they become better-off and/or their relatives suffer disasters, there is a clear and clearly recognised social obligation on them to make transfers in their turn. To term them 'gifts' in a raised eyebrow manner is - rightly - resented by Somalis, but to view them as isolated, one-off transactions is equally inappropriate.

Toward Identifying Poor and Vulnerable Households and People

Six - and perhaps seven - groups afflicted by high levels of absolute poverty can be identified. Three are urban (and especially prevalent in Mogadishu) - street children and their families, women headed households with no

remittances from absent male members, and residents of unorganised areas. Three are rural: riverine cultivators (or ex-cultivators) with defective, unrecorded or otherwise low status titles to the land they till (used to till); nomadic households whose herds have been wholly or nearly wiped out by drought, and rain fed agriculturalists in years of low rainfall (e.g. in the Bay Region). A seventh was - and may still be - fishermen located in villages not near the main ports (Mogadishu, Berbera, Kisamayo) and therefore lacking adequate market access.

Some street children come from households where ill health, disability or unemployment has so reduced family income that they - the children - have become the principal or co-principal breadwinners. They engage in petty trade (e.g. single cigarettes and matches), car-watching, washing and door opening, shoe shining and similar service occupations verging into begging. Their incomes are very definitely on average well below the food and absolute poverty lines. Further, they are losing their chance for education and are thus locked into low income work for life. The vast majority are boys and the minority of girls usually dress as boys. There may be several (less than 5) thousand households so situated.

However, at least these children do have homes and only work on the street. Even more deprived are the children - usually from broken homes - who also live on the streets sleeping in verandahs, arcades and mosques. Their incomes may be comparable, but they have no family support system nor access to sanitation, washing or health facilities (nor of course to education). They are and perceive themselves to be insecure (most carry knives or razors). Despair, combined with lack of a social context, has driven many into habits such as glue sniffing.

Female headed households with no remittances from an absent male member (e.g. a migrant worker abroad or a polygamous family head residing with another wife) also have a high tendency to be below absolute and food poverty lines. Most heads are divorced (very common in Somalia), widowed or deserted. Most are illiterate and a majority have neither access to formal sector jobs nor to the skills and minimum capital needed for economic self-sufficiency above the poverty line in the informal (or self-employed) sector.

They engage in casual labour, domestic service, the petty end of food and mat

trading and household production ranging from mat making to food preparation to dividing up retail sized food packets (e.g. of spices) into single use newspaper-wrapped pinches. Some of the activities seem to yield as little as Sh 30 a month; of necessity these women engage in several such activities. In consequence they have little or no time to follow vocational skills or adult education courses even if suitable ones are available which they usually are not. Nor do they have the capital resources - despite self-help savings and loan groups - to buy stocks adequate to trade at more adequate levels or durable capital goods - e.g. sewing machines - to advance to higher value productions. These households are numbered in fives of thousands. It is necessary to stress that not all female headed households are in absolute poverty. Many have remittance or other transfer incomes and some have significant retail trading or small scale production incomes and/or formal sector employment.

The largest number of Mogadishu households in absolute poverty live in "unorganised areas", (variously termed "squatter", "informal" or "zongo" areas elsewhere in SSA) especially the newer ones, and in ex-urban resettlement areas for those displaced from former inner unorganised areas by urban redevelopment. In most other SSA capitals areas of "squatter settlements" are easily visible by spatial differentiation. In Mogadishu, such enclaves of very poor housing are dotted in most quarters. Smaller clusters are in a badly decayed quarter of the old town and in mixed areas with both affluent and slum housing. Their lack of access to adequate/employment and even the most minimal public services is acute. It is people in the remoter unorganised or re-settlement areas who may need to pay a water carrier Sh 40 for one litre whereas the piped water rate is 40 litres for one shilling. Housing conditions are usually inadequate but vary widely from moderately substantial mud plaster over wattle frames, to temporary shacks of odds and ends and nomadic tents clearly ill adapted to permanent urban use. These areas and enclaves- even the exurbs inhabited by refugees from the drought who have lost their herds - are neither large nor particularly poor compared to those of Nairobi, Lusaka, Kinshasa, Lagos, Accra or Dakar/Pekine. But they are in urban Somali terms inhabited by the poorest of the poor and many do live in absolute poverty and - given the absence of health, water and sanitation services - in ill health, discomfort and environmental squalor.

It is important to underline that these groups and especially the members of

them in absolute poverty are a minority - probably under 20% of the inhabitants of Mogadishu. But their plight is no less real or requiring action; indeed because they are a minority it may be more soluble. More details on the parameters of Mogadishu poverty will be available when the 1984/85 Budget Survey and 1985/87 Oxfam - CIIR - UNICEF poverty study become available.

In the riverine areas a land boom has built up in the past few years. Market opportunities for certain crops have improved, new areas have been made irrigable (agro pastoral potential has increased through tsetse fly control). However, for many cultivators the results have been disastrous. A number held user rights - often for several generations - and had previously had undisturbed possession. Unfortunately technically the land was state land until a formal title was issued. Being of low status and illiterate, these cultivators were slow to understand or to act on the need to secure formal title. As a result in many cases - more established Somalians have asserted historic or other claims, secured legal title and evicted the prior cultivators even when they were second or third generation occupiers. Their plight is often desperate. Most have achieved access - possibly on an equally precarious user right basis - to new land, but it is unirrigable, and, being further away from the rivers, has a lower water table and is more vulnerable to drought. Those who have retained their houses have to walk long distances through the often flooded fields of their dispossessors to their new land with consequential health (e.g. schistosomiasis) and effort problems. Their access to water is very poor especially as drawing water from rivers - even for human and animal consumption - is sometimes limited to registered irrigation right holders. There are no real estimates of numbers actually or potentially afflicted. 5,000 to 20,000 guesstimates have been mentioned but do not appear either to prepresent a consensus or to be based on even the sketchiest of systematic observation.

Nomads who lose their herds to drought are by definition absolutely poor. In UNICEF's 1987 Middle Shabelle survey their nutritional levels were the poorest and their women members appeared the most exhausted. They remain very poor until time, effort, saving every lamb and every shilling and - with luck - migrant remittances or intra family transfers allow basic herd rebuilding. In 1987 it would appear that perhaps 20,000 to 25,000 households (half of those UNDP's emergency survey estimated needed emergency food aid) have been forced

into this category.

Rainfall dependent (as opposed to riverine) farmers are very vulnerable to drought - perhaps more so even than nomads. In 1987 the Bay Region (not listed by the government of Somalia or found by the UNDP field survey to be severely drought affected - at least in respect to livestock) showed the highest malnutrition on preliminary results of a three province (the other two unambiguously drought affected nomadic ones) rapid survey by USAID. The apparent reason was the failure of the fall 1986 rains (and crops) and exhaustion of food reserves before the delayed 1987 spring rains. As crops - unlike milk yields - do not arrive within weeks of rains, the recovery of their nutritional intake levels will necessarily be deferred to July-August as is not the case for those nomadic households whose basic core herds survived with milk yields rising from mid-May. Because the present evidence is limited to one region any estimate of numbers nationally is problematic - 10,000 to 20,000 households may be a likely range.

It should be emphasised that citation of the last two categories of households in poverty does not constitute endorsement of April-June 1987 world press reports predicting mass starvation. However, that rejection equally should not cause the 25,000-50,000 households who - at least for 1987 - probably have lost almost all their income to be forgotten, especially as thousands of households will be plunged into these categories every 3 to 4 years as Somalia's drought cycle comes round. (See Chapter 5.)

Public Service Household Incomes

Another apparent poverty (present real wages) and vulnerability (real wage trend) group, the public service, is not uniformly in that position. It is quite true that wages and salaries are largely in the Sh 600 to Sh 2,500 a month ($4 to $17) range. But that is not the whole picture because of five other sources of income:

a. allowances (rather uneven, and with two major ones, housing and access to transport limited in coverage);

b. supplementary payments either from the government or outside funding

agencies for officers whose services and abilities are considered of special importance;

c. private business incomes (including shares in family enterprise profits);

d. remittances from family members working abroad;

e. an extensive system of user fees collected at most levels of the public services (e.g. doormen for entry, clerks for stamps and ensuring effective posting of letters, operators for phone calls, drivers for petrol purchases, mechanics for repairs) collected in cash or kind.

The last element is not usefully called corruption or bribery. On the part of well paid expatriates that characterisation is at best naive and at worst grossly insensitive or hypocritical. Employees not paid a living income by the state because of its financial exigencies collect user fees from those persons who wish to use their services. The motivating force is not greed, but need. The system is highly decentralised, flexible, market related and privatised - albeit not perhaps in the way the World Bank usually advocates in respect to public service user fees. However, it is also rather uncertain as to application and amount, inequitable in terms of those covered and open to abuse. In respect to poverty its problem is that many employees who are - or should be - engaged in providing basic services (e.g primary school teachers, subordinate rural health staff) cannot afford to do so. Community income supplements - e.g. via Parent Associations paying teachers up to Sh 100 per pupil per month - may help to provide an acceptable user fee structure to permit public servants - especially in health and education - both to deliver services and to escape poverty, but to date do so only to a very limited extent.

Notes to Chapter 2

1. The Middle Shabelle survey, discussed further in the IFAD (1978) report. Taken at its face value the survey seemed to imply that the nomads sold or slaughtered a great deal of livestock - 200 per cent of the herd if continued on an annual basis (p.38) - yet meat production amounted to the equivalent of one goat (p.40). The nomads lost, on an annual basis, 40 per cent of sheep and goats (p.39). The price of hides shot up from Sh. 3 per unit in the first round to Sh. 40 later (p.41). None of these figures make any empirical sense. On top of that, self-provisioning production/consumption was not even included.

2. Seasonally this is also a necessity as milk is not storeable and over the four driest months milk ouput is well below calorie needs.

3. See: in particular Allen Hoben et.al., Somalia: A Social and Institutional Profile. Also Ashwani Saith, "Employment Issues in Somalia: A selected review", Addis Aaba: JASPA (mimeo) 1986; A joint MNP/UNICEF study (Women and Children in Somalia: A Situation Analysis, Mogadishu 1984) has endorsed Jamal's study as the most rigorous.

4. Tyler, 1983.

5. Price of goat (20 kg) Sh 2,000; price of maize Sh 25/kg; sorghum Sh 18.75. Meat calories 2,,000 per kg, cereals 3,500.

6. A conceptual point may be made. Since household budget survey expenditures are tied to the prices as captured in the survey, the same prices have to be used in constructing the poverty line.

7. Strictly speaking the poverty line and the poverty estimates apply to Mogadishu only as the household budget survey was conducted there. Our impression from field visits is that because of a more equal distribution of primary income, stronger links with rural areas and stronger kinship ties, poverty situation elsewhere may be even less severe. However, this may be offset - especially in small towns such as Brava and Jowhar by the much lower average level of income of the urban area.

8. Somalis, being of nomadic origin, are naturally tall and thin and measured against international norms may appear in the category of the mal- and under-nourished. Yet they may be getting adequate numbers of calories - and nobody has suggested their diet is protein-deficient, with highest per capita consumption of meat in urban areas in SSA and very high milk consumption in the rural areas.

9. Private communication by Mr. Rick Davies, the principal author of the study.

10. Problems arise in defining "formal" and "informal" sectors in Somalia. If the definition is on the basis of size a fairly standard pattern emerges for enterprises. However, a high proportion of the larger private ones appear to engage in both "open" and "parallel" trading activities and "parallel" economy activity is not usually classified as

"formal" sector. Equally important is the fact, by no means unique to Somalia that wages (particularly in the public sector) are far too low for household survival. Therefore secondary "informal" sector incomes (whether user fees, remittances, trade or other) are a standard part of the budgets of households headed by persons who are "formal" sector employees.

11. The conceptualisation of exchange-rate taxation is that by holding to a fixed exchange rate, the farmers' terms of trade worsen compared to the country's terms of trade. In the Somalia case, as livestock exports are now largely transacted at the Gulf-based free-market rate there is not heavy exchange-rate taxation. Admittedly if transactions had been carried out wholly at the official rate in the past there would have been significant taxation but at that time undervaluation of exports on official declarations was rampant with the balance paid "over the water" at the Gulf rate and brought back as franco valuta or smuggled imports.

ANNEX 1 CHAPTER 2

FOOD SITUATION IN SOMALIA

This Annex gives estimates of the food situation in Somalia. As in other areas, statistics are deficient, particularly with respect to milk production. The basis for our corrections are shown explicity.

Table 18 presents a "food balance sheet" based on national data and national estimate of population showing the amount of food available from local production and imports. As per the FBS procedures, deductions are made for output retained as seed and animal feed and for output wasted. From the unit calorie value of foodstuffs and the population, figures of calories available per capita are obtained. Breakdown is available in terms of major foods - and can be grouped according to cereal foods, protein foods, providing a summary of the amount and type of calories available.

The calculations from official estimates show food availability at 2,397 calories per capita (after exports are deducted). Imports (as recorded, an understatement except for cereals)provided about 30% of this, with the import ratio being 44% for cereals, 36% for oil, 37% for sugar, and 0 or negative (exports) for fruits and meat.

With domestic production (for domestic use) at 1,631 calories per capita per day, national figures imply that the country itself produces around two-thirds of its food supply. This figure is incorrect because of serious under-estimation of milk production. National figures show milk production as equivalent to 518 calories per capita per day. For the nomadic population this would mean total calorie availability of only 900 calories per capita. A thorough inspection of the data and national estimation procedures shows that national estimates of milk production (as well as FAO's) are far below what might be expected from the national herd under Somali conditions. In the national data, additionally, calorie content of milk is underestimated. Finally, there is also an undestimate of meat production in the national statistics compared to FAO, albeit it is not clear which series is less unreliable - probably the Somali one. Correcting for these three sources of

TABLE 18

Food Balance Sheet: based on national data for crops and amendments for livestock output, 1984
('000 mt, except as indicated) (population 5.223 million)

	Crops					Livestock			
	Cereals, pulses[a]	Oil	Sugar	Fruits, vegetables, roots	Total	Milk	Meat	Total	Grand Total
Output	510.3	53.4[b]	52.2	342	1,425				
SFW[c]	55.0	4.3		32					
Net	455.3	49.1		310					
Imports	359.6	28.7	30.8	-48					
Total	814.9	78.8	82.2	262					
Kg p.c.p.d.	0.35	0.021	0.035	0.112					
Cals/kg	3 021[d]	8 750	3 545[e]	515[e]	693				
- Cals									
p.c.p.d.	1295	225	152	71	1743	518	136	654	2397
o.w. imported	572(44%)	82(36%)	56(37%)	( )[f]	766(44%)		( )[f]		766(32%)
Memo Item National estimate									
Cals.p.c.p.d						423[f]	111		
Amendments									
Output						2180[g]			
cals/kg						775[h]			
cals p.c.p.d.					(1743)	886	210[i]	1096	2839
Alternate cals p.c.p.d.					(1743)	886	111[j]	997	2740

a. Practically all cereals; pulses are included together as calorie value is similar to cereals.
b. Converted from oilseeds assuming 48 per cent extraction rate.
c. Allowance for seed, feed and waste.
d. Composite figure, estimated to conform to national estimate of 1295 cals. per p.c.p.d.
e. FAO's figure from 1980-82 food balance sheet computer print-out.
f. Not allowing for fruit and meat calories exported.
g. Based on national herd and estimated production co-efficients (see later)
h. Normal figure for calorie value of milk.
i. From FAO 1980-82 figure (includes milk). j. Using Somali national estimate.

underestimation, the additional calories we obtain are as follows: milk 368; meat 74; total 442. Total calorie availability increases from 2397 per capita to 2740 to 2839, i.e. to an average level 25% to 29% above national sufficiency. More important, animal calories increase from 654 to 997 to 1096, i.e. by one-half to two-thirds. With these corrections for livestock calories the import content of the food supply drops to around 25%. The milk figures have been derived from production coefficients. They also make sense from the point of view of the visible fuctioning of the Somali economy and the malnutrition levels found in sample surveys.

Tables 19 and 20 show a division of home-produced calories between farmers and nomads. It is assumed that the nomads own three times as much livestock per person as farmers. Assuming the population breakdown to be 1.4:1, this is tantamount to an assumption that nomads own 80 per cent of the livestock in the country and farmers 20 per cent. The 3:1 assumption is often encountered in writings on Somalia, although with agro-pastoralism (mixed farming) having risen the proportions must have changed. With respect to crops it is assumed that farmers cultivate 90% of these and the nomads 10%. This assumption takes account of nomadic cultivation of crops. Its extent is usually quite limited, the main exceptions being in the Northwest and - probably - Bay in which nomadic households split up seasonally to enable some members to undertake farming.

The derivation of the table is as follows. The first column sets out per capita calories from home-produced crops and livestock. The division of these by population groups is then obtained from the assumptions stated previously (10/90; 80/20). Finally dividing by assumed nomadic and farm populations gives per capita calories produced by the nomads and farmers.

The table enables us to establish some important guideposts into the working of the Somali economy. First, contrary to what the import figures might suggest (i.e. crop imports provided 44 per cent of the total supply of crop calories in the country) Somali farmers produce a surplus of total calories (crop as well as of livestock) nearly three-fifths above their requirements. The high import ratio, absolutely and compared to other African countries, where it is generally under 10%, arises because Somalia has a low proportion of crop growers in total population compared to the SSA average.

The nomads on average produce just about or just under enough to meet their calorie requirements. (On the national estimate of milk production, they would be short by around 40 per cent.)

The facts relating to the farmers are worth underlining. The Somali farm sector is often depicted as unproductive, with abysmally low yields - which is true. But, at least in 1984, two Somali farmers managed to produce a surplus to feed one non-farmer. While this is not earth-shattering, it is a better performance than is typical of other African countries. The point to notice here is that Somali farmers comprise only around one-third of the total population whereas in most other African countries their proportion is up to twice as high. In some of these cases two-thirds of the population cannot provide a surplus adequate to feed the remaining third of the population. In Somalia a much smaller farm population feeds itself and produces a surplus to feed a sizeable part of the non-farm population. Yet the paradoxical situation remains that Somalia is food deficient. The reason is not because the farmers fail to produce enough for themselves, but because, first, the nomads who form a larger proportion of the population fail to produce any calorific surplus and, indeed, consume much of that produced by the farmers, and, second, because the urban population is equivalent in numbers to the farmers.

The second most important thing the table enables us to establish is guideposts on the food economy in the rural areas. A consistent picture emerges from our estimates whereas the national estimates cannot be reconciled with known facts about the rural economy. National estimates imply livestock production of around 1200 calories per capita by the nomads. Even after allowing for crop calories produced by them, they would still be desperately short of calories. Indeed <u>all</u> of them would have to be counted as falling below the basal metabolic rate intake level. Barter could not resolve this as on that scale it could not be supported by farmers. Assuming a normal year exchange rate of 1 milk calorie for 4 grain calories, nomads could make up their deficit by placing 300 milk calories on the market (= 0.4 litres per capita), expecting to get 1200 grain calories. Farmers in contrast would, if they exchanged that much on those terms, reduce themselves from a position of comfortable sufficiency to one of precariousness - which they could hardly be expected to do. On the other hand, using our estimate of milk production, barter makes good sense for both the rural groups. Nomads could expect to

find takers for 120 milk calories per day. The situation would then look as follows:

TABLE 19

Nomadic and Farmer Food Production/Availability

	Nomads	Farmers
Produced	2194	3520
Minus milk/cereals	120	683
Plus cereals/milk	480	170
Consumed or sold to Urban Areas	2554	3007

Note: Derived as follows: 120 calories p.c. nomadic population = 120 x 2.32 million divided by 1.63 million = 170 calories p.c. farm population. Apply rate of exchange of 1:4 to obtain 683 cereal calories p.c. given up by farm population.

TABLE 20

Crop and Livestock Calories: Total domestic production (per day) and contribution of nomads and farmers, 1984

	Calories per capita per day	Total calories(m) (pop. = 5.223 m)	Shares		Per capita	
			Nomads	Farmers	Nomads (pop.= 2.32 m)	Farmers (pop.= 1.63 m)
Crops	977	5103	510 (10%)	4593 (90%)	220	2818
Livestock	1096	5724	4579 (80%)	1145 (20%)	1974	702
Total	2073				2194	3520
Memo Items						
Imports (all crop calories)	766					
National estimate	654		(80%)	(20%)	1178	417

Source: Based on Table 21 and calculations as explained in the text.

In terms of nutritional security, what comes through most clearly from the above estimates is the relatively secure position of the farmers compared to the nomads. They have a surplus of calories available from their own output. Moreover, their calorie supply is more evenly spread throughout the year, as their ouput can be more easily stored. By contrast, the nomads have a clearly sufficient supply of calories for themselves only because of their favourable exchange position. Seasonal fluctuations and limits to storing their peak season output mean that they may experience considerable hardship during at least a part of the year, especially in areas with limited grain production. Camel milk will last a month without spoiling; cow, goat and sheep milk spoils faster. Excess cow and goat (but not camel) milk can be, and is, converted to ghee, but there are limits imposed by nomadic mobility both as to production and transport. Thus, while their situation is not desperate, as implied by the national estimates, it is still about at the level of sufficiency, with a strong possibility of lean periods during the dry season (a near certainty for the poorer half of nomadic households) and severe hardship in drought years.

Assuming somewhat different - say 1.3 to 1 - nomadic/farming population ratios or a 70 to 75% share of nomads in livestock would affect these calculations and conclusions only marginally. Nor would assuming that up to half the nomadic population's sales of milk are to urban buyers - as some proportion clearly is - affect nomadic calories availability. It would raise farmer household calorie availability for use or sale. Or sale is relevant because farm households do not in fact consume 3,000-3,250 (the latter if half of nomad milk sales are urban directed) calories per day because they do sell substantial quantities of grain to urban residents.

Milk Production

There is now lively debate about how much milk is produced in Somalia. We shall never know exactly (just as we never know how much maize, sorghum, etc. is actually produced), but reasonable estimates are possible. Confronted by the national estimate of 1425 ml. for 1984 (and by an FAO estimate of 739 ml), we have argued that milk output is drastically under-estimated, since those levels imply massive starvation for the nomads. Using production co-efficients derived from Tyler, on the authority of Mr. Willby a Somalia-based FAO livestock expert, we have arrived at an estimate of 2130 ml.

- i.e. some 1½ times the national estimate and almost 3 times the FAO estimate.

Basically milk output can be estimated from the following equation: Milk output (available for human consumption) = livestock population x lactating females (= breeding females in lactation) x yield (net of consumption by calves, lambs and kids). The problems with milk estimates in Somalia arise from the fact that different authorities have used different figures for all the above variables. While some disagreement is possible, some of the figures are patently wrong.

Table 21 shows the lactation and yield figures used in national accounts and FAO sources and by way of comparison our preferred co-efficients (Willby)

We have applied the Willby co-efficients (except for yield of sheep which in keeping with the majority of informed opinion, we have reduced to 30 l.p.a.) to the present national estimate of 1984 livestock population: cattle 4.2 m, camels 6.131 m, sheep 11.2 m, goats 18.0 m. This gives 2186 ml as the output of milk in 1984. As we have shown this figure yields a plausible picture of nomadic existence - sufficiency of calories averaged over a normal year - compared to the endemic starvation implied by the national or FAO estimates.

TABLE 21

Milk Co-efficients: Three Estimates

	Cattle	Camels	Sheep	Goats
Lactation %				
National Accounts	27	14	50	54
FAO	11.5	6.7	19	22
Willby	26	14	45	48
Yield (l.p.a.)				
National Accounts	300	600	6½	36
FAO	354	550	50	80
Willby	400	1200	65	65

Source: National Accounts Somalia 1985; FAO from computer print-out provided by the FAO; Willby from Tyler 1983. Willby's lactation co-efficients are not too different from those used in the national accounts now; the yield figures differ substantially, especially for camels. FAO's lactation as well as yield co-efficients are substantially different from the others.

ANNEX 2 CHAPTER 2

SECULAR DOMESTIC FOOD SUPPLY TRENDS AND PROSPECTS

Over 1970-1986 it would appear that milk and meat production probably grew about 1 to 1½% a year; food crop production about 3% a year and fish catch for the local market significantly over 3% a year. Compared to a population growth of the order of 3% this implies a 1% odd decrease in domestic production per capita. This has been more than counter-balanced by commodity aid (grain) and commercial (grain, sugar, vegetable oil, amenity) food imports so that there is no evidence of secular decline in average calorie availability - if anything the reverse.

Livestock

Annual livestock national herd estimates need to be interpreted with caution. First a decline in herds is negative investment and a proper offset to (deduction from) GDP. However, its impact on food availability in a physical sense is largely in years following the decline when milk yields are lower and stocks of beasts need to be rebuilt. Second, the Somali method of estimating stock changes (previous year plus births less normal plus drought deaths and less domestic consumption plus exports) is conceptually correct. However, the high death rates (and stock declines) posited in drought years (e.g. 1983, 1987) and rapid herd growth in other years (e.g. 1984-86) to suggest there are empirical problems with both the normal and drought year death estimates used. Further the domestic slaughter figure is an informed guess.

The trend figures computed from the Ministry of Livestock, Forestry and Range data are moderately stable and plausible.

	1970-85		1975-86		Average
	Total	Annual	Total	Annual	Annual
Camels	14%	1%	13%	1%	1%
Cattle	10%	¾%	14%	1%+	1%
Sheep	19%	1%+	20%	2%-	1½%
Goats	21%	1½%	28%	2½%	2%
Total	15%	1%+	20%-	2%-	1½%

These trends are consistent with the secular rise in the prices of milk and meat relative to other food products. In the case of meat the rising price could be (indeed partially is) explained by strengthened Gulf market demand through 1983 but for milk the explanation needs to be domestic.

The nutritional implications are primarily for settled agricultural and - especially - urban communities, i.e. milk and meat buyers. Because of urban and overseas labour migration, the nomadic community is probably growing in numbers at the rate of 1 to 2% a year (comparable to herd growth) and benefitting from relative price shifts in favour of milk and meat.

Crop production estimates suggest a 1970-86 trend growth rate of about 3%. This is comparable to or slightly higher than the growth rate of the settled agricultural population (and higher than that of nomadic groups who do cultivate). That is not implausible even if above the SSA average because that average is dominated by Nigeria, Sudan, Zaire and Ethiopia which are much larger than the average economy and have significantly lower estimated food production growth rates.

However, the crop production growth trend appears to be an average of two quite different sub-trends: 1% a year in the 1970s and 6% in the 1980s. This pattern does run parallel to the imposition, relaxation and removal of centralised marketing but that very fact raises some questions as to whether the estimates do reflect underlying reality.

If centralised marketing was effectively enforced and did decrease grower prices relative to import parity then response to price incentives (negative to early 1980s, thereafter positive with relaxation and removal of controls) could explain part of the shift. However, it would be unlikely to explain as much as half of it. At least 2/3 of food crops are consumed in the agricultural sector or traded directly with the nomadic sector for milk and meat and there is no reason to suppose official grower prices would affect incentives or output growth of this portion of crop output. Further, in 1983-86, high levels of food imports parallel with rising domestic production levels depressed real grower prices so that by 1985 one might have expected an output
stabilisation or decline. Finally, the 1984/5 estimated increase in hectarage

planted, is so high as to raise doubts as to its possibility (and certainly to suggest that no further leeway remains for existing peasant households radically increasing output by applying the same techniques). If 1984-86 output growth is seen as recovery from drought affected 1983 levels either because of more hectares plantable and/or because of yield increases with better rains and higher river levels, the channges are plausible. But in that case, no sustained yield per hectare output increase can be projected.

Alternatively it can be argued that, except for a few years from mid- to late-1970s, grain marketing was in fact (and all other crop marketing formally as well as in fact) dominantly private despite the nominal existence of a single channel agency. In that case, the bulk of the shift may relate to problems of perception and estimation. So long as private grain marketing was illegal and therefore believed to be minor, undue weight was placed on official channel figures and as it was relaxed estimates reverted to more realistic levels.

Probably there is something in each explanation. Both, however, suggest the underlying trend growth of domestic foodcrop production - in the absence of droughts, alterations of perceptions or counterproductive institutional aberrations - is about 3% under present circumstances. In itself this rate does not create any overall national calorie availability problem. Nor - as it is at or above the average population growth of the settled agricultural community - need it create any self-provisioning problem for them. On the other hand it is not adequate either to raise average or poor rural household incomes rapidly, or to counterbalance per capita milk and meat production declines. Nor can it substitute for food imports for two reasons: wheat and - to date - rice are not growable in large quantities in Somalia and the present maize surplus may be a transient phenomenon relating to a run of good years. So long as milk and meat prices rise relative to grain (a global not merely a Somali phenomenen) and commodity food aid is disposed of at artificially low prices (a flaw devaluation would help correct as would import duties on rice and wheat), the terms of trade will tend to move against crop producers, making their real income stability problematic and increasing urban/agricultural community purchasing power differentials.

The medium term domestic food supply prospects seem to be for more of the same. There is no evident reason to expect sharp trend changes. That

argument does run against conventional wisdom and requires elaboration. Somalia has been said to be overstocked for at least 50 years. Over that time the least implausible hypothesis is that herds have grown 1 to 2% a year secularly, i.e. more than doubled. (Higher 1950-1975 growth of estimates seem to relate to fuller perceptions of where and how many beasts there were, more systematic estimation procedures and perhaps to comparing drought and good year herds, rather than to any dramatic secular growth in numbers of beasts.) There is simply no systematic evidence of widespread secular deterioration of pasture nor of changes in nomadic herding, range and water management likely to lead to rapid environmental degradation. There are spot problems apparently linked to permanent water points which over-concentrate beasts.

Clearly under drought conditions the carrying capacity of the range is inadequate for the survival of herd levels appropriate to more normal weather. Deaths do result. But to hold herds at drought-year carrying capacity to limit such losses would result in lower average herds, yields and incomes. That is clearly an absurd option and one the nomadic population is far too intelligent and informed to accept. The present system, despite its very real short term vulnerability to drought, does have a resiliency and secular stability. It is probably consistent with continued modest trend herd growth for up to a decade and perhaps longer.

This is not, however, either to argue that the present system is permanently secure or that no positive adaptations can be made. Clearly there is some finite limit to the carrying capacity of the Somali rangelands under present management techniques and resources. The absence of systemic environmental degradation to date and the lack of success of past public sector investments in capacity improvement do not falsify those contentions.

Limitations on optimal herd size suggest action along five lines:

a. reduction of drought losses by timely provision of veterinary drugs, more secure water supplies and perhaps supplementary fodder;

b. increasing the value per beast by improved weight and quality - perhaps by supplementary feeding before export or slaughter (especially if the present sorghum surplus proves more than transitory);

c. developing new markets - e.g. for chilled kid, lamb and calf carcasses and/or cuts and for chilled beef and mutton which would facilitate greater offtake and - by enhancing flexibility - allow emergency sale and slaughter at better prices than now of animals at risk who otherwise perish during droughts and their immediate aftermath;

d. increasing the desired (by nomadic pastoralists) offtake rate by improved veterinary and drought damage alleviation measures which reduce the security imperative for larger herds to withstand larger losses while leaving an adequate nucleus for rebuilding.

In respect to crops the situation is more problematic. While most of the better river basin land (which benefits from river resupply of the water table as well as from local rainfall) is occupied, not all of it is fully cultivated and additional (albeit high drought risk) rainfed farming land does exist, e.g. in the Bay Region. But both tsetse and river blindness limit use of riverine lands, and salination has eroded the potential of present irrigated hectarage about as fast as new has been brought into use. On present land use and technology patterns, therefore, a 3% growth seems to be attainable for several more years but with increasing drought vulnerability.

What technical changes are known, tested under present conditions, backed by adequate input supplies and economically viable for peasant users (without large public sector subsidies) is not entirely clear. However, the answer seems to be very few and applicable only to a limited range of crops and areas - a situation all too common in SSA. With the exception of large scale irrigation, this situation cannot be changed by instant capital-intensive projects. A number of components (none very dramatic and most fairly time-intensive) can be identified:

a. systematic control of tsetse flies and of the flies which carry river blindness to allow more intensive use of the riverine land including agro-pastoralism (mixed farming) and use of animal drawn implements which are now effectively ruled out by tsetse fly presence in some districts, especially during the rainy seasons;

b. testing/adapting seeds for specific qualities (e.g. drought resistance, higher yields at low water and fertiliser input levels) and specific

locations;

c. testing or developing improved hand and animal implements and soil preparation techniques (including ones related to recent research on ways of reducing moisture loss).

d. building up a timely commercial supply network (private or public) for the supply of those seeds, tools, herbicides (to reduce labour time for weeding, believed to be the key labour constraint in some Somalian farm management systems) and fertilisers which are of proven value and which peasants wish to buy;

e. improving irrigation system management to reduce salination and providing extension advice/support to community based small scale irrigation schemes;

f. developing farming systems and farm household research (covering crops, animals, forestry and related processing activities) to identify areas in which changes are likely to be profitable to peasants and consistent with their overall resources of knowledge, labour, land and capital.

Of these only the fourth can raise output substantially in the short run, but the others need to be begun now to complement and eventually replace the growth to date provided primarily by more households cultivating more total hectares in about the same way.

Large scale irrigation poses somewhat different problems which are in large part beyond the scope of this report. In Somalia, Bardhere Dam on the Middle Juba is technically feasible and could irrigate a very substantial hectarage - as well as replacing thermal generated electricity dependent on imported oil with hydropower. Unfortunately there are several obstacles to realising this potential or at least to utilising it effectively to benefit Somali cultivators and Somalia's nutritional position:

a. The Bardhere Project (dam, powerhouse, irrigation system) will cost at least $500 million;

b. water management and utilisation of such a system requires time to build

up and is dependent for continued success on fairly rigorous flow control (to prevent or flush out salination) and prompt maintenance - aspects which are weak in present smaller irrigation schemes;

c. no viable crop patterns have yet been identified (or tested) in part because and/or (e.g. sugar) price and in others (e.g. tomatoes, perhaps citrus) marketing problems make identification far from easy.

In no way should this be read as a criticism of the Bardhere Dam multi purpose project as such. It is needed before 2000 and - when water and land use/management problems are resolved - could be highly beneficial to Somali agricultural incomes and to Somalia's nutritional base. But it would be unwise to count on early, large nutritional or rural income gains from this source.

Fish consumption - and presumably production - has increased markedly in recent years, especially since 1983. Mogadishu has gone from one to eight fish markets. Part of the increase is due to rising meat prices. However, as the change is not limited to lower and middle income groups part, appears to represent a shift in tastes. The change is largely limited to coastal cities but that includes 20-25% of the population. Since drying for domestic use is uncommon and cold stores absent outside major towns, consumption by settled farmers not near the coast and by nomads is negligible.

The potential for increased artisanal production for local use is substantial. Wider sales than coastal cities, however, depend either on a taste for dried fish developing in rural areas or, less probably, on a domestic market oriented fish tinning industry and least probably on an upcountry cold store chain's development. The augmentation of protein calories and of the incomes of artisanal fishing families (including the women who trade in fish), who are a low income group, could be significant if the recent consumption growth continues.

CHAPTER 3

HEALTH, WATER, SANITATION, FUEL: WHAT FEASIBLE ROUTES?

Health Services Today

Statistically Somalia has 80 odd hospitals and of the order of 300 clinics, health posts and mother/child health clinics. In addition there are two nurses training centres with an annual output of 200. At the Gulf exchange rate the 1985 recurrent budgetary expenditure of the Ministry of Health was of the order of $1.5 million (under $5,000 per facility). Since then real recurrent health expenditure per capita has fallen and is now perhaps $0.2 per person per year. Similarly the total nominal nursing staff was of the order of 2,000 many of them not readily located.

It can be argued that, as most of the budget goes on wages and salaries plus allowances, the Gulf rate is not an appropriate conversion instrument and/or that there is substantial foreign financed health expenditure. The first assertion is only technically true. To the extent that staff are actually present at government health facilities they have next to no equipment, bedding, food or - to an only slightly lesser degree - medicines. Further, since wages and salaries (at the Gulf rate) tend to be in the $6 - $15 a month range, no health worker can afford to be full time without collecting self-set (decentralised, privatised) user fees from patients. The number of nurses even nominally in the government service is a result of massive leakage, to a small extent to the Somali private medical sector (which is small but, in Mogadishu, growing rapidly) but dominantly over the water to Saudi and North Yemen.

It is true that as of 1984 perhaps $25 million of foreign finance appears to have been allocated to the Ministry of Health or to programmes which would normally fall under it (albeit not in most cases appearing in its budget). Some of this was technical assistance which kept perhaps a dozen hospitals and a score of clinics functional. The bulk was for capital projects which merely added to the facilities Somali could not supply, maintain or staff.

TABLE 22

Assisting Agencies for Primary Health Care

Region	Estimated Population	Assisting Agency
Mudug	311,230	USAID
Lower Juba	272,368	USAID
Bay	450,986	USAID
Togdheer	383,867	USAID
Hiran	219,328	Govt. Italy
Lower Shabelle	570,649	UNICEF/WHO
Middle Shabelle	352,040	UNICEF/WHO
Sanaag	216,539	CAA/Australia
Gedo	235,061	CARITAS/W-Germany
West Galbeed/Audal	654,990	UNICEF/WHO
Middle Juba	147,810	Sweden

Source: UNICEF Plan of Operations, 1983

More functionally, several agencies (e.g. WHO, UNICEF) and governments (e.g. Italy, Finland, USA) each spent more on direct health care/preventative services than the Somali government. The total of these expenditures is probably of the order of $15-20 million (including some double counting with the technical assistance component of the previous paragraph).

A private pharmacy network exists in larger cities and most smaller towns. Indeed its existence presumably explains why some out-patient departments in otherwise silent government hospitals and some clinics still function. The staff - for a user fee - diagnose and refer to a pharmacy to purchase drugs. While hardly optimal, this is at least a genuine service.

Similarly there is a private (largely herbal plus traditional birth attendant) non-Western medical sector which probably provides more treatments than the whole "modern" health sector and attends perhaps 80 to 90% of all births. There is every reason to question the adequacy of training (scientific or otherwise) of most of this sector, but none to assume that, on the whole, to deny that it provides a service the public medical system (even including the donor linked primary heath care, tuberculosis and immunisation sub-systems) cannot provide because of an abysmal lack of resources.

Somalia today probably has the most pauperised government medical services in Sub-Saharan Africa. It also has the most remarkable imbalance between recurrent and capital spending - $1 plus million versus about $12 million projected for 1987 and between government ($1 million) and external capital ($12 million) and operational programme (over $20 million) spending. If one adds very rough guesses as to user fees ($2 to 4 million), pharmacy sales ($10 to 15 million), private modern sector charges ($2 to 5 million) and traditional plus community health worker payments in cash or kind ($2 to 5 million) the total spending on health is of the order of $50 million or $9 per capita. If that is even approximately correct, then a combination of reallocation and modest increments ought to be adequate to restore - more accurately develop for the first time - a plausible nation-wide preventative and primary care system.

Health Situation

Somalia has an estimated life expectancy at birth of 40 to 49. The standard UN estimate for Somalia is 43 versus an East African average of 50 and a Sub-Saharan African of 48 in 1983. Whatever the exact figure, it is indisputably among the lowest in the world and in Africa.

Infant mortality estimates per 1000 live births range from 146 to 180 (Ministry of National Planning) to 155 to 210 (various UN, WHO, UNICEF projections and/or sample studies). The 1983 SSA average was estimated at 120 and the East African at slightly over 100. Total under 5 mortality estimates are in the 175-275 range with the 1983 UN estimate 202 versus an SSA average of 143 and an East African of about 120. These figures speak for themselves as do those on life expectancy: the present situation in Somalia is neither inevitable nor humanly acceptable. Given the costs of illness - in time lost by sick persons and family members, high dependency ratios and the necessity (from a household perspective) of high birth rates - they are just as inconsistent with raising human productivity or macro economic growth rates as with improving the quality of life.

The figures also suggest that the main excess mortality is in the 0-5 (and the over 50) age group so that mother/child health care, immunisation and basic primary health care can be the keys to sharp reductions in early mortality and in raising life expectancy.

The dominant cause of neo-natal (under one month) mortality is tetanus (preventable by maternal immunisation) which takes the lives of about 40 of every 1000 live births. Thereafter up to 5 diarrhoea (45 deaths) and measles (25 to 30 deaths) are dominant. BCG, DPT, Polio and Measles immunisation of young children and tetanus toxoid immunisation of pregnant women would be directly relevant to about 50% of infant and child deaths and oral rehydration to another 22% with tetanus, oral rehydration and measles the apparent priorities in that order judging from admittedly imperfect and incomplete sample data.

There are significant year to year and - apparently - regional variations. For example, neo-natal tetanus deaths have been surveyed at 4.2 per 1000 live

TABLE 23

Health Indicators, 1975

Health Indicators	Somali Statistics	Low-income Country Average
Infant mortality age 0-1 per 1,000 births	146-180	130
Child death rate age 1-4 per 1,000 children	28-30	22
Life expectancy at birth both sexes	45-49	48
Crude birth rate	44-45	45
Crude death rate	13-15	18
Fertility rate	7.1	-

Note: More recent estimates suggest a deterioration, e.g. to 174-210 on Infant Mortality.

Source: Analytical Volume, Census of Population:1975, Ministry of National Planning, Mogadishu 1984.

TABLE 24

Estimated Death Rates for Specific Age Groups in Somalia, 1975

Age Group	Urban	Rural	Nomadic	Total
0-1	153	180	n/a	169
1-5	29	30	n/a	30
0-14	15.8	14.1	14.2	14.6
15-49	4.8	5.8	9.4	9.3
50 +	37.4	36.7	28.8	25.7
All Ages	12.5	12.3	13.6	13.2

Source: Analytical Volume, Census of Population:1975, Ministry of National Planning, (Mogadishu 1984) and Table 23.

TABLE 25

Cause of Death for Children in Two Urban Areas, 1977

Age	Tetanus No.	Tetanus %	Diarrhoea No.	Diarrhoea %	Respiratory No.	Respiratory %	Measles No.	Measles %	Other No.	Other %	Total No.	Total %
Neonatal	174	19.1	31	3.4	19	2.1	-	-	127	13.9	351	38.4
1-11 mth			83	9.1	20	2.2	64	7.0	83	9.1	250	27.4
1-4 yrs			75	8.2	25	2.7	47	5.1	112	12.3	254	28.4
5 yrs			12	1.3	2	0.2	15	1.6	24	2.6	53	5.8
Total	174	19.1	210	22.0	66	7.2	126	13.8	346	37.9	913	100.0

Source: A Study of Child Mortality in Mogadishu Somalia by Asli Aden and Sigrid Birk in Journal of Tropical Pediatrics, Vol.27, No.6, December 1981, p.283

TABLE 26

Nutritional Diseases in Somalia, 1980-1982

Diseases	Male No.	Male per 1,000	Female No.	Female per 1,000	Total No.	Total per 1,000
Anaemia	516	32.7	801	48.3	1,317	40.7
Goitre	10	0.6	35	2.1	45	1.4
Riboflavin Deficiency	22	1.4	18	1.1	40	1.2
Marasmus	17	1.1	9	0.5	26	0.8
Night Blindness	n.a.		n.a.		6	0.2
Rickets	3	0.2	1	0.1	4	0.1
Kwashiorkor	n.a.		n.a.		1	0.03

n.a. = not available

Note: These data do not appear to include a severely drought affected period/population. USAID 1987 preliminary survey data show higher incidence notably of marasmus, night blindness and kwashiorkor.

Source: National Morbidity Survey in Somalia, 1980-1982, WHO, (1984), p. 37.

births in Bay Region versus 49.8 per 1000 in Middle Shabelli and at 5.2 per 1000 and 19.1 per 1000 in 1982 and 1981 respectively for the Benadir/Mogadishu region - albeit the latter diversity may be an example of the fragility of data for Somalia more than of violently fluctuating death rates.

Maternal death rates (in pregnancy and childbirth) are probably of the order of 5 per 1,000 (versus less than one half per 1,000 in OECD member States). The available data are for UNHCR refugee camps with much above average health and birth facilities and - even under these conditions - show 3.8 per 1,000. The apparent - interacting - reasons are:

a. severe anaemia affecting over 50% of women of childbearing age (versus 40% of the total population);

b. inadequacy of traditional birth attendant training (and lack of access to any other birth care);

c. the universal practice of a particularly stringent form of female circumcision resulting in the need for a minor operation and/or severe bleeding to allow birth; and

d. the deliberate reduction of eating during pregnancy to hold down infant size to ameliorate the problem noted at "c".

With anaemia, even minor loss of blood will result in severe debilitation and can prove fatal. The results of female circumcision and the limited training of traditional birth attendants make loss of blood common. Both debilitation of mothers and low birth weight increase infant mortality.

The major causes of morbidity (illness) in Somalia are: anaemia, tuberculosis, non-communicable respiratory diseases (especially bronchitis), diarrhoea, measles, residual poliomyelitis, malaria, eye diseases, schistosomiasis and parasitic infestation. Of these, anaemia (affecting 40% of the population), tuberculosis (over 30% among children of 5 to 9 in one survey and .02% in the whole sample on another - the former probably overstating, the possibly comparable Sudan rate is 18%, and the latter almost certainly grossly underestimating) and parasitic infections (47.5%) are common throughout Somalia. Poliomyelitis estimates - like those for tuberculosis - vary sharply

from 0.24 to 1% but are not region specific. Malaria's national average is about 2% but in the riverine provinces it has been estimated at up to 7.2% (Gedo) and in the north-western ones at 2.7%. Similarly schistosomiasis estimates are as high as 19.6% in the riverine provinces (Lower Juba) versus 6.3% nationally and not over 5.1% in non-riverine provinces (West Galbeed/Audal). It is unclear whether specific eye diseases are also regionally concentrated albeit river blindness is likely to be.

Beyond oral rehydration education and immunisation the major programme specifically relevant to any of these diseases is the Finnish tuberculosis project with 800 beds plus links to primary health care out-patient treatment and referral systems in four regions and to dispensaries and direct access in Mogadishu.

Primary and Community Health Care: A Way Forward?

Ten provinces (of 18, counting West Galbeed and Audal as two programmes albeit historically and operationally they have been one) have external donor/community financed primary health care programmes. Two more had them but these have been turned over to the Ministry of Health which (not surprisingly given its fiscal and other constraints) is not proving able to continue them.

The twelve phc programmes cover areas with a population of about 3.8 million. Mogadishu (say 750,000) four nomadic provinces (about 750,000) and Lower Juba (around 200,000) are not covered. Five governments plus UNICEF/WHO and two Catholic agencies are involved at a total cost of perhaps $7 to 10 million a year. A central basic drug revolving stock and purchasing mechanism is operated by WHO/UNICEF.

The basic dynamic of these systems involves:

a. agency provision of drugs, supplies, transport and distributing points to community health workers;

b. some use of Somali Ministry of Health provincial and district personnel to store, transport, distribute and monitor - in return for a

responsibility allowance from the agency;

c. agency/health personnel training (apparently varying from 6 to 24 weeks) of village or mobile community selected community health workers and traditional birth attendants who then operate in their communities without direct supervision;

d. collection of at least some payment for drugs from the communities via the chw's;

e. limited field monitoring and followup by agency/health personnel;

f. community payment of chw's and tba's on any basis acceptable to both.

This system is doubtless not ideal. But it does provide an approach to ensuring access to basic health care which is generalisable both for the nomadic population and in the absence of any minimally adequately funded government health service. It can be linked to preventative programmes (e.g. health education by chw's, iron tablets and maternal education by tba's, immunisation teams collecting or being led to their cleints by chw's) and to diagnostic - drug distribution - advanced care level disease specific programmes.

The first steps toward generalisation would appear to be:

a. mobilising sponsors for the eight provinces not now effectively covered at all;

b. extending existing programmes (the largest and oldest has about 120 chw's of whom 30 are nomads in a pair of regions in which an optimal number might well be 700, i.e. 1 per 1,000 non-nomadic and 1 per 500 nomadic);

c. coordinating training (perhaps using the six near dormant Adult Education nomad training centres) and production of visual diagnostic, prescriptive and health education materials - areas in which there appear to be economies of scale.

Among the potentially interested sponsors would be Denmark and Norway (under a Nordic aegis since Sweden and Finland are already in the health sector), the Netherlands, France (perhaps via a voluntary agency), Canada and the UK (which in fact as the then admninistering authority initiated this community based health care system in the five northwestern provinces in the late 1940s and early 1950s). Whether the operating agency should be governmental or a government financed voluntary agency requires some thought - the more bureaucratic bilateral agencies might well consider "privatising" or "contracting out" to their national branches of such bodies as CARE, SCF, Catholic and/or Protestant church medical aid/development agencies.

The training bottleneck may be the greatest single barrier to expansion. If 1 traditional birth attendant per 2,500-3,000 persons and 1 community health/veterinary worker per 1,500 urban, 1,000 settled rural or 500 nomnadic population is needed then 2,000 trained traditional birth attendants and 7,500 trained community health workers are needed. These ratios need rechecking but appear reasonable in the context of Somalia remembering that tba's and chw's are part time. The present number is probably on the order of 1,000. To date there has been no lack of local enthusiasm for selecting and rewarding tba's and chw's. However, in provinces without a prior history of this approach and especially in Mogadishu (whose neighbourhoods are by no means all communities and where the presence of pharmacies and some standard care may reduce the perception of need), it may take time for demand to build up.

Given that except in cities, and a fortiori in nomadic communities, the workers will have to act without direct supervision up to the minor operation, diagnosis and basic drug prescription, normal childbirth and referral levels, a substantial training course is needed. As literacy is not a practicable entry requirement (especially, but not only, for nomadic community workers), special problems in course design and provision of followup materials for diagnosis, prescription and health education arise. However, experience seems to suggest that a course of not over six months can be designed and lead to competent graduates who are respected by their communities, stay on the job and are able to collect back drug costs.

If it is desired to move from 1,000 to 9,500 community level workers in 5 to 7 years, then 1,250 to 2,000 trainees a year (say 625 to 1,000 places) are needed. To have 18 separate programmes may not be wise. If so, concentrating

courses in the six little used nomadic education centres of Adult Education might make good sense; especially if courses were also mounted in them for training community chosen and based, water and adult education workers.

It is hard to estimate costs. Assuming most drug costs are recovered, a rough estimate might be about $1 million per province annually or perhaps $20 million nationally. This includes a limited agency administrative and monitoring capacity; transport and distribution (including vehicles); paying perhaps 500 Ministry of Health staff responsibility allowances for distribution, training, monitoring, plus preparation and publication of visual materials.

An expanded programme of immunisation under Somalia - Italy - UNICEF auspices is in preparation (and is funded). As a one-off initial effort, it can make use of phc/community links where they exist and be free standing elsewhere. However, annual followup for infants and pregnant women can - except in cities - neither be comprehensive nor cost efficient without phc links to educate demand and to facilitate the logistics of bringing immunisation personnel (including chw's and tba's) to communities and (less optimally) communities to immunisation posts. It is worth stressing that immunisation - like literacy - can be started as a one-off, free standing campaign but to reap the benefits of that campaign requires an ongoing institutional followup.

The situation in respect to tuberculosis is relatively similar. The diagnostic and referral levels for five provinces (perhaps 2.5 million population) are adequately provided by the Finnish programme. It is - except in Mogadishu - linked to chw identification of suspect cases for diagnosis; for delivery of drugs in the majority of cases in which hospitalisation is not indicated and for reporting on their progress as well as post discharge monitoring of those hospitalised. Its expansion to national coverage is not practicable without a national phc/chw system.

Two additional basic health care programmes are desirable: district clinics (not full fledged hospitals) for referral of cases beyond chw or tba competence and a mobile eye clinic service led to its clients by chw's. Neither is impracticable - as demonstrated by experience in Kenya and Tanzania. But in Somalia both probably should follow - not be substitutes for - firm phc foundations. Thus in provinces - e.g. West Galbeed/Audal the

Shabelle's - with fairly well established phc/chw networks the phc sponsors might well seek to establish what form cost efficient district clinics could take and to collaborate with some of the international agencies/voluntary bodies providing quick primary eye care.

The total expenditure implied is of the order of $30-35 million ($20 million phc, $7.5 million tuberculosis, $2.5-7.5 million clinics/eye care). As donors are now providing up to $25-35 million for capital projects and direct programmes, an increase of 20% plus some reallocation from capital projects whose use the Ministry of Health cannot finance should allow meeting the cost. This cost level depends on community selection and payment (on whatever basis is acceptable to the communities and health workers) of the community level personnel and on community/user payment for drugs (again on any basis the community desires that covers the drug cost). Meeting those costs centrally would add say $20-25 million or more per year ($1,500 times 10,000 community workers and $5-10 million for drugs) to the cost and render financing well nigh non-feasible.

Over time, greater responsibility can and should be shifted to the Ministry of Health. But at present all it can do is take a full role in planning and "second" selected staff members to help handle delivery, training, supervision and monitoring. As - when - its real resources revive, its logical first priorities would probably be to revive district clinics (of which not over 20% are functioning) and to raise its pay scales toward the level necessary to live (a 10 fold increase in the face of it and at least 5 fold even allowing for allowances and private practice on the side if tied to phasing out decentralised, privatised user fees). Until that can be accomplished - realistically a goal for 1995 not 1990 - the basic primary health care - immunisation - birth attendance - tuberculosis link should probably remain donor/community. Premature return to the government (as demonstrated in the two provinces in which it has been tried) is likely to cause a relapse not accelerated convalescence for the Ministry of Health's provision of health services.

And Primary Veterinary Care?

Animal health is not usually grouped with human. In Somalia there may be good reasons to make an exception to this rule in respect to community health worker based approaches. Certainly Somali nomads and agro-pastoralists think community health services should provide basic drugs for their flocks as well as their families because they see no other channel (public or private) likely to do so.

A limited range of known basic livestock drugs could sharply reduce livestock mortality. This is especially true during and at the end of a drought. Limited water and forage weaken but kill more often by reducing disease resistance than by literal starvation (a situation comparable to human drought deaths). With rains - and lower temperatures - respiratory diseases and diarrhoea (whose treatment for livestock is directly analagous to that for children and apparently was developed rather earlier) carry off large numbers of animals whom a limited rage of drugs and injections plus salt cakes could save.

Pastoralists can diagnose many of the diseases and have accurate ideas as to what drugs, injections and/or salt they need. They are willing - and on the whole able - to pay. But neither the public nor the private (legalised in 1985) sector has the drugs to sell as brutally demonstrated during the 1987 drought.

Readily avoidable livestock losses lead directly to lower nutritional standards (loss of milk and meat), lower incomes (loss of animal and products sales), more illness (from weakened resistance) and more work for women (to tend the ill). Evidently there is a clear human and social as well as economic imperative to act.

In part of the northwest a few districts still have a community veterinary worker system (apparently a survival from the protectorate). The cvw collects (and pays for) drugs from a district headquarters; distributes to (and collects payment from) nomadic households; reports back with the cash and empty tins for a new lot.

TABLE 27

Livestock Population and Losses Drought-Affected Regions, 1987
(000 beasts)

	TODGHER	SANAG	NUGAL	BARI	SOOL	MUDUG	GALKAYO	HIRAN	MIDDLE SHABELLE	LOWER SHABELLE	BAKOOL	GEDO	TOTALS
Camels													
1975 Census	320	137	103	160	200	751	359	461	205	293	192	784	
1987: + 13%	362	155	116	181	226	849	446	521	232	311	217	784	
Drought losses	54	23	17	27	34	127	67	78	35	50	33	133	
1987 Stock	308	132	99	154	192	721	379	443	197	281	184	753	3,843
Cattle													
1975 Census	44	49	8	10	34	340	218	170	382	419	100	528	
1987: + 14%	50	56	9	11	39	388	249	194	435	478	114	602	
Drought losses	18	20	3	4	14	136	87	68	152	167	40	211	
1987 Stock	33	36	6	7	25	252	162	126	283	310	74	391	1,795
Sheep													
1975 Census	917	1,014	149	925	1,044	1,136	588	287	325	90	79	500	
1987: + 20%	1,100	1.217	179	1,110	1,253	1,363	706	344	390	108	95	600	
Drought losses	605	669	98	611	689	750	388	189	216	59	52	330	
1987 Stock	495	648	80	500	564	613	318	155	176	49	43	270	3,811
Goats													
1975 Census	852	443	407	1,397	1,123	2,744	1,734	1,159	720	200	274	725	
1987: + 28%	1,891	567	521	1,788	1,437	3,512	2,220	1,484	922	256	329	928	
Drought losses	600	312	287	983	791	1,932	1,221	816	507	141	181	510	
1987 Stock	491	255	234	805	647	1,581	999	668	417	115	148	418	6,778
Total Stock	1,327	971	419	1,466	1,428	3,167	1,858	1,392	1,071	755	449	1,832	16,137

Drug Requirements

Acaracides(gl)	1,327	971	419	1,466	1,428	3,167	1,858	1,392	1,071	755	499	1,832	16,137
Anthelmintics (tabl)	4m	2.9m	1.3m	4.4m	4.3m	9.5m	6.5m	4.1m	3.2m	2.3m	1.3m	5.5m	50.000.000
Antibiotics (ltrs)	7,962	5,826	2,514	8,796	8,568	19,002	11,148	8,352	6,426	4,530	2,694	10,992	97,000
Salt licks(T)	66	49	21	73	71	158	93	70	54	38	22	92	800
MULTIVIT(ltrs)	13,270	9,710	4,910	13,660	14,280	31,670	18,580	13,920	10,710	7,550	4,490	18,320	160,000

Average Drug Distribution Key

Consumption of Acaracides: 1 gallon for 1,000 animals
Consumption of Anthelmintics: 3 tablets per animal
Consumption of Salt licks: 0.05 kg per animal
Consumption of Antibiotics: 6 ml per animal
Consumption of MULTIVIT (oral): 10 ml per animal

Animal losses (officially announced): Camels: 15%; Cattle: 35%; Small Ruminants: 55%

Source: Donors' Drought Action Committee, "Report On Drought Situation" based on data from the Ministry of Livestock, Forestry and Range, Mogadishu, May 1987 (mimeo).

Primary health care systems based on chw's should be able to add on basic veterinary drug distribution at low cost. This would involve:

a. a national veterinary drug revolving fund and purchasing channel analagous to the basic human drug one operated by WHO/UNICEF. The initial cost might be $3 to $5 million with sales of drugs covering replenishment;

b. an additional two weeks training of chw's to be cvw's - partly in diagnosis but also in relating drug packets/markings to diseases. This should have a relatively low cost - i.e. two weeks per newly trained worker board plus fees to veterinary personnel to prepare and give lectures;

c. preparation of simple visual (not written as most cvw's will be illiterate) materials to assist in diagnosis and selection of the appropriate drug. Probably up to $50,000 preparation and $10,000 a year printing;

d. channelling the veterinary drugs through the phc drug transport and distribution system and the drug cost collection payments back via the same route. As most of the costs are fixed the additional volume should not raise them - paying up to 100 veterinary officers $1,000 a year veterinary allowance (about 1 per province plus 1 per district) for a total of $100,000 to monitor and supervise might be prudent both in its own right and to gain ministry blessing for the programme.

The cvw's would be the same persons as the chw's and would therefore be village or mobile community selected and remunerated. So long as they do their job, have a low wastage rate and enjoy community backing, standardisation of (or central intervention in) the local selection or remuneration processes would be counter-productive, especially since payment would probably be largely in kind varying in makeup and amount geographically and seasonally.

The total operating cost of this programme - if integrally linked with primary health care and providing for drug cost recovery (except perhaps during drought crises in severely affected districts) - should not exceed $2 million

a year. As livestock and rural (primarily livestock) water capital support for 1987 is estimated at over $50 million (and historically has a very poor cost/benefit ratio not unrelated to high animal mortality), the economic case for additional (or reallocated) expenditure of this order of magnitude would appear very hard to refute.

Water: Access, Quality, Reliability

The estimated access to safe water is 33%: 58% for urban residents and 22% for rural resident. It is not at all clear what these figures are to be interpreted as meaning.

In most urban areas perhaps 10% of households have piped water connections, 40 to 60% collect directly from public taps and 20 to 40% buy from water carriers collecting from public taps. Use (or buying from) private wells or - a fortiori - open bodies of water (which most of the year are non-existent) is not common except in some small towns.

Therefore, arguably 80 to 90% of urban Somalis have access to safe water. The problem is lack of nearby public taps/standpipes. Their absence either increases the workload on women and girls to collect and carry water or weighs heavily on budgets of poor people who - almost by definition - are usually those not near standpipes. As 40 gallons of piped water cost 1 Shilling but in outlying unorganised areas 1 gallon from a water carrier costs Sh 40 (which for what it is worth is a day's wage for a clerk) the cost issue is not trivial. In either case the cost in time or money holds down water consumption with negative implications for cleansing, washing and bathing and therefore for environmental sanitation and health.

The rural total is presumptively an average of very different district totals (not necessarily divided on nomadic/settled lines as some rangelands have fairly extensive borehole networks and some riverine districts have few protected sources). It almost certainly excludes community built wells and commercially built birkets and improved ponds in nomadic areas. Further, it is not clear what is meant by safe - wells and boreholes as well as birkets, ponds and rivers can be polluted.

Yet further complexities arise seasonally and operationally. Nomadic access to water (pure or otherwise) varies seasonally both for availability reasons in any place and because nomads - by definition - are in different places at different times of year. Dryland agricultural area (e.g. Bay) access is very seasonal. The 21% is apparently based on installed capacity. A - probably conservative - estimate is that 20% of boreholes and pumps are out of operation at any time because of lack of spares and/or fuel.

TABLE 28

Time Spent In Water Provision In The Bay Region

Village	Wet Season Roundtrip	Dry Season Roundtrip
Sarman Dheere	½ hour	6 hours
Hareero Jiifo	1½ hour	6 hours
Shabelle Dugsilo	½ hour	8 hours
Warta Jaffay	½ hour	4 hours
Buulo Hawo	½ hour	8 hours
Bootis	½ hour	up to 6 hours
Robay Gaduud	½ hour	3-6 hours
Gaduudo Dhunte	1 hour	6 hours
Buulo Fur	½ hour	1½ hours
Durei Ali Galle	½ hour	5 hours
Buulo Gaduud	1 hour	3 hours
Kurman	1 hour	trucked from Diinsoor
Dodole	10 minutes	10 minutes
Shiidalow	½ hour	½ hour

Source: Bay Region Exploratory Report; Socio-Economic Section, Water Development Agency, (Mogadishu, 1983), pp.6-51.

Purity is not the only relevant consideration. More water is of itself desirable even without safety improvement. Cleansing, washing and bathing are related to availability of water and have a positive impact even if the water is not optimally pure. Water used in cooking is (more or less by definition) boiled and drinking water can be. Thus the first priority in most of rural Somalia is probably reliable access to adequate quantities of water with absolute safety (beyond steps to avoid pollution by livestock or by runoff into potentially safe sources) a subsequent consideration. This may not be so true in riverine areas where river or shallow well water is frequently available in adequate quantity but is also not infrequently polluted.

The fiscal position of the public water sector is unsound. The apparent recurrent budget for 1986 and 1987 is of the order of $750,000 to $1,000,000. In practice perhaps $1,500,000 described as local development expenditure is in fact recurrent. Even so, the total can hardly exceed $2.5 million.

The capital stock of the water sector is at least $200 million. Using a standard SSA recurrent to capital ratio the minimum adequate recurrent budget would appear to be of the order of $10 million. With $175 million (excluding sewage) capital works slated for 1987-1991 by 1992 the recurrent budget should rise to the order of $20 million (a calculation broadly in accord with Government of Somalia planning estimates).

The results of an inadequate recurrent budget are clear and costly. Normal maintenance is not done; spares are not to hand; fuel supply is undependable. Therefore water supplies are not reliable and expensive facilities frequently reach a condition requiring total rehabilitation or replacement in 5 to 10 years. Then it is frequent to replace (e.g. drill new deep boreholes) rather than rehabilitate even when the latter would be technically feasible, cheaper and faster. That criticism is not captious, it has been made by USAID, the largest source of borehole programme design and management.

Clearly a reordering of total public sector resources from new capital projects to rehabilitation and - a fortiori - operation and maintenance would increase economic efficiency and actual availability of water. To do this donors/lenders will need either to build five year maintenance components into all water projects or to provide direct support to the ministry for its operational and maintenance budget.

Water - especially urban and rangeland deep borehole water - is not a sector in which do-it-yourself, small is beautiful approaches have universal applicability. However, even in these sub-sectors certain community/user contributions could help:

a. nomadic community simple maintenance of boreholes and construction/management of access and drainage to avoid pollution by mixed livestock and human use of the same point and/or reflow of drainage water into the borehole;

b. urban community contribution (in labour or hiring it) to building trenches for secondary distribution pipes to provide a properly articulated standpipe system in low income urban areas.

Shallow well, birket, pond and spring based water supply is within the range of activities communities can undertake with limited external training, technical advice, design and equipment/spares support. The cost of shallow wells with hand pumps tends to be around $500 or less if the community provides labour inputs. Once appropriate designs are developed, community selected personnel (including women) could be trained in 3 to 6 week courses to lead construction and maintenance. The case for involving women is very strong:

a. women and girls are the water carriers. In dryland provinces in the dry seasons they may spend up to 8 hours a roundtrip (and often spend 3 to 6) collecting water;

b. women and girls are responsible for cleansing, cooking, washing, bathing children - i.e. they are the main users of water for human (as opposed to livestock watering) purposes;

c. maintenance - as opposed to construction - tends to fall on the female side of the gender division of labour albeit there is more gender overlap in tasks performed in rural Somalia than in many other SSA rural areas.

Two types of shallow wells are relevant:

a. standard ones especially in riverine areas or ones with relatively high water tables;

b. underground check dams in "dry" seasonal watercourse beds with perforated plastic pipes behind the dam to lead water to a pump on the bank.

Birkets (runoff catchment basins) and improved natural or artificial ponds are also relevant to many rangeland areas. Indeed large numbers have been constructed by nomads and - interestingly - by traders both to water animals they have purchased and to induce nomads to concentrate herds in areas convenient for merchant procurement. However, there do appear to be gaps in coverage, deterioration of ponds and avoidable pollution by livestock of human water supply. A simple set of spot studies should allow firmer identification of what agency/community cooperation on which of these topics in what districts deserve priority attention.

One innovation which may be worth testing is the use of sand filled ponds with offtake pipes instead of open ones. This - the analogue to the underground dam fed wells - is a technique used in parts of Namibia and Botswana apparently comparable to Somalia's central rangelands to reduce evaporation loss. A review of their experience and - if it appears promising - a pair of pilot sandfill ponds plus two comparable open ponds to test (and if successful demonstrate) potential greater water recovery by this technique would be worth undertaking.

Small scale community oriented water work could well be organised on a basis analagous to primary health care. Again one agency per province (ideally the same one as for phc) should take responsibility for coordinated planning together with communities and the Somali government. Its inputs would include pumps and spares, perhaps cement and hand tools if they are not readily commercially available, transport, liaison and monitoring (ideally by Ministry personnel paid responsibility allowances) and training community selected water workers. The latter would need to be trained in: well or pond or dam design and construction, maintenance (including simple pump and borehole maintenance), pollution protection (both techniques and reasons).

It appears likely on the basis of small scale community water project support experience that communities would raise labour and some cash for spares, tools, materials and would be interested in selecting trainees for 4 to 12 weeks basic skills and approaches courses. Nationally a prepositioned revolving stock of spares would be needed analagous to the WHO/UNICEF one for basic drugs.

Sanitation: Sewers, Latrines and Environmental Health

Sanitation is an increasing problem in urban areas (especially Mogadishu) and in some settled agricultural areas. Even with the proposed $50 million 1984-1991 central Mogadishu sewer system, over half the capital's population will have no access to piped sewerage systems. There is virtually no municipal (and surprisingly little private) refuse collection with rotting piles even in middle and upper income areas. The situation in other towns is less severe - not because there are more services but because the towns are smaller.

Even in urban areas pit latrines are apparently less than common; in settled agricultural areas they are rare and in nomadic ones virtually unknown. The stated reasons are inappropriateness because of lack of water and non-adaptability to the needs of shifting household groups.

If improved sanitation - which is important to environmental sanitation and health especially in a hot climate and in a clinical context of high incidence of diarrhoea and parasitic infestation - is to be achieved, the basic means for the foreseeable future must be some variant on the pit latrine. Action is particularly urgent in urban and riverine areas because of denser population and the pollution of ground and river water sources flowing from random defecation.

The lack of water claim is perplexing. Pit latrines are widely used in dry areas of, e.g., Botswana, Zimbabwe, Tanzania and Ghana. A first step would be to contrast extant Somalia designs with those used in these countries to identify possible modifications. Then pilot (and if successful full scale) skills training/adult education programmes possibly linked both to radio programmes (dealing concretely with why and how) and to community health

workers' educational efforts could be mounted.

Full scale pit latrines do represent too large a labour investment for too brief a use period for nomadic communities except in respect to "base camps" occupied at least six months a year and returned to annually or virtually annually. For small nomadic groups with stays in one location of two weeks or less, formal latrines may not be necessary (and almost certainly will not be accepted). For larger groups with longer stays, experiments toward developing a less elaborate, short use oriented, less labour intensive analogue might be desirable.

Refuse collection in urban areas will in practice need to be largely private or community sector. The most municipalities can realistically hope (and find resources) to do is to have strategically placed skips collected once a week into which private dustmen (for middle and upper class areas) and community financed small scale rubbish collectors (poor and unorganised areas) can dump their collections.

Fuel - Questions But What Answers?

Somalia does face growing household fuel supply problems. First, in urban areas charcoal prices are rising and do strain low income household budgets. Second, in settled agricultural and nomadic areas a substantial proportion of women and girls' work overload represents gathering branches, twigs, shrubs and dead trees for fuel (probably up to 6 hours a day in extreme cases and quite possibly 2 to 3 average). As population increases and nearby woods are cleared/bush cut down, this workload rises. Third, forests are being cut more rapidly than they grow primarily to meet the Mogadishu demand for charcoal. Fourth, there is some evidence of spot degradation of savannah and bushland environment from over-trimming or cutting out of live tress and bushes because the supply of dead limbs and/or whole dead trees and bushes is no longer adequate to meet household needs.

Posing the problems is relatively straightforward. Even tentative answers are much more difficult to identify. Mogadishu (as well as Kisamayo and Hargeisa) are virtually certain to remain dependent on commercially produced and transported charcoal. No substitute is likely to prove technically feasible

and economically competitive. Increasing supply/lowering cost/avoiding deforestation requires a transition to forest plantations of some appropriate tree (which may or may not be one of the 200 odd species of eucalyptus or arid zone pine) and, perhaps, their location nearer to the major markets (e.g. in the Afgoi area) than present natural woodland sources. However, tree cutting rules and fees to encourage transition are likely to raise, not lower, charcoal prices even if largely ploughed back into plantation development.

In settled agricultural areas, encouragement of selective village and/or household woodlots, windbreak and multi-purpose (fruit, fodder, fuel from trimmings) orchards could be included in adult education (not least its radio broadcasts). This would require prior research and testing as well as nurseries for and stocks of seedlings. On the rangelands it is not evident what if anything can be done to raise supply except around base camps (such as those in West Galbeed/Audal and Bay) where approaches similar to those in crop areas may be practical.

Use reduction turns on efficiency of fuel combustion. In respect to charcoal it may be that simple study and extension would yield a more efficient burning kiln or rick which could increase charcoal per cubic metre of wood and lower unit cost of charcoal. For cooking the basic routes are improved three stone fires and improved stoves/braziers. The former - if tested, demonstrated and included in rural adult education - are likely to be popular if they really do reduce fuel (and thus fuel collection time) required.

On stoves it is necessary first that they reduce fuel use enough to pay for themselves in a few months - at least that is Sahelian experience. Second they must produce the kind of heat/flame appropriate to Somali cooking. It is not clear that the improved meerschaum stove developed in Somalia does meet these criteria. It tends to produce a high/hot flame whereas a low/cooler one is more commonly sought for Somali cooking. There do not seem to be reliable tests on fuel savings under actual household operating conditions.

CHAPTER 4

EDUCATION: HOW TO REVERSE COLLAPSE

The Trend 1979-87

In 1975 Somalia mounted the first full scale national literacy drive in SSA and in 1975 began a serious programme to move to universal primary education. By 1977 it was believed male literacy was approaching 60% and female 45% with the national level above 50%. In that year initial enrollment in primary school was about 70% of the age group. With modest further growth from that level and a moderate dropout rate, total enrollment should by 1984 have reached 500,000 or 40% of the age cohort.

In fact, by 1987, nominal first year primary school enrollment had fallen from 68,256 to about 40,000 or at most 25% of the age group and total primary enrollment to barely over 200,000 or barely 15% of those of primary school age, under 20% for boys and under 11% for girls. 40% of primary schools were officially closed; books and writing materials were nearly non-existent in most schools; primary teacher salaries were at or under $6 a month at the free market exchange rate.

Similarly literacy had probably fallen to 20-25% of the adult population - perhaps slightly over 50% urban (60-67% male and 30-33% female); 15-20% settled agricultural (25-30% male, 5-7.5% female); 5-10% nomadic (10-15% male, 1-3% female). With not more than 25% of children ever receiving any primary education and a least one third of them completing four years or less and probably failing to acquire permanent literacy, the proportion of functionally literate can only be expected to fall if present trends continue. Many of these who became literate in the 1975 campaign - some sample surveys suggest up to two thirds - have relapsed into illiteracy because of lack of follow-on continuing education or anything to read.

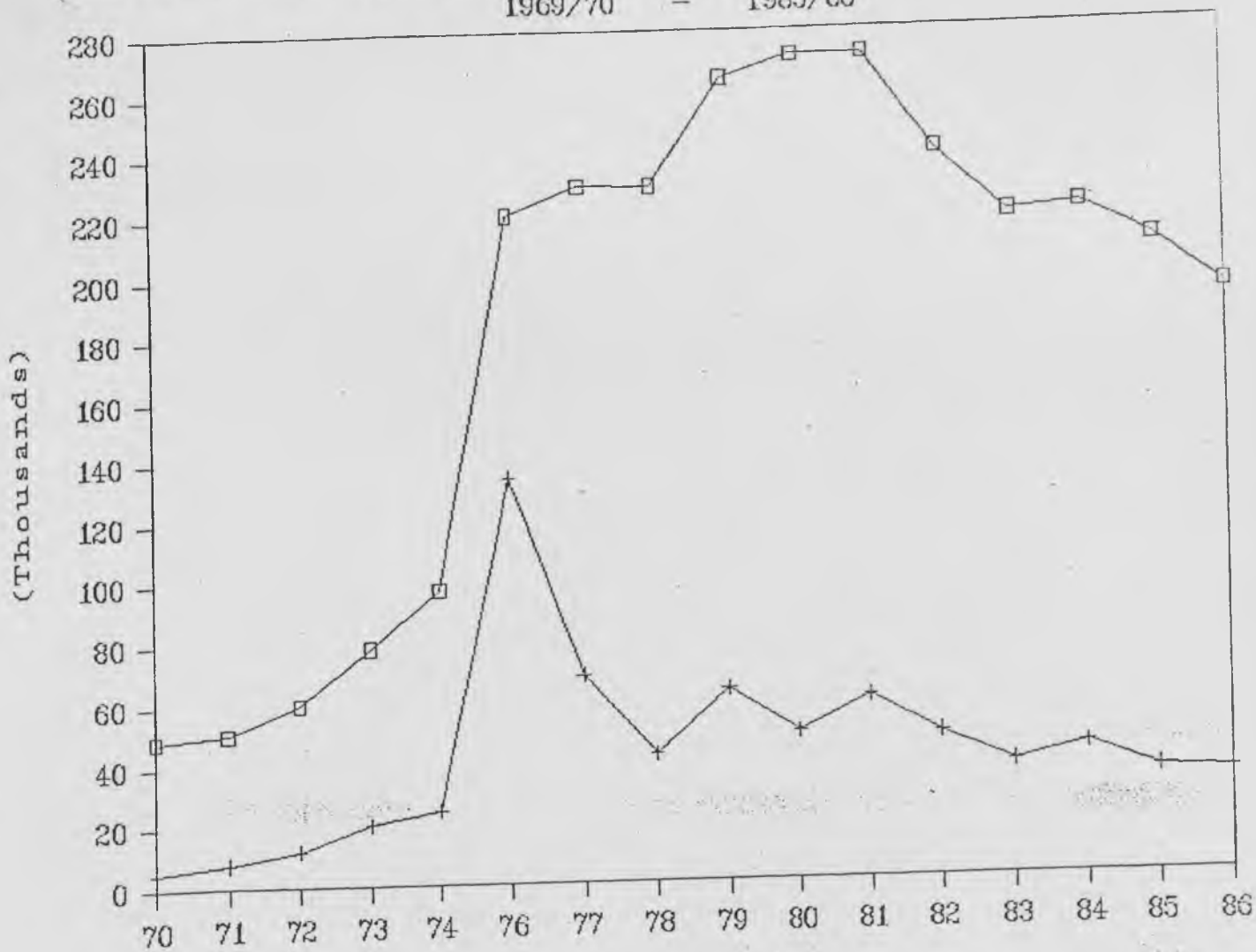
These primary education and literacy trends are the worst in the world and are particularly devastating after the high hopes and good start of 1975-1979. They relate directly to the collapse in real government revenue and especially

Table 29

First Year [illegible] Primary School Enrolment [illegible]

(ARDAYDA ISQORTAY & QAADASHADA Ka)

1969/70 – 1985/86



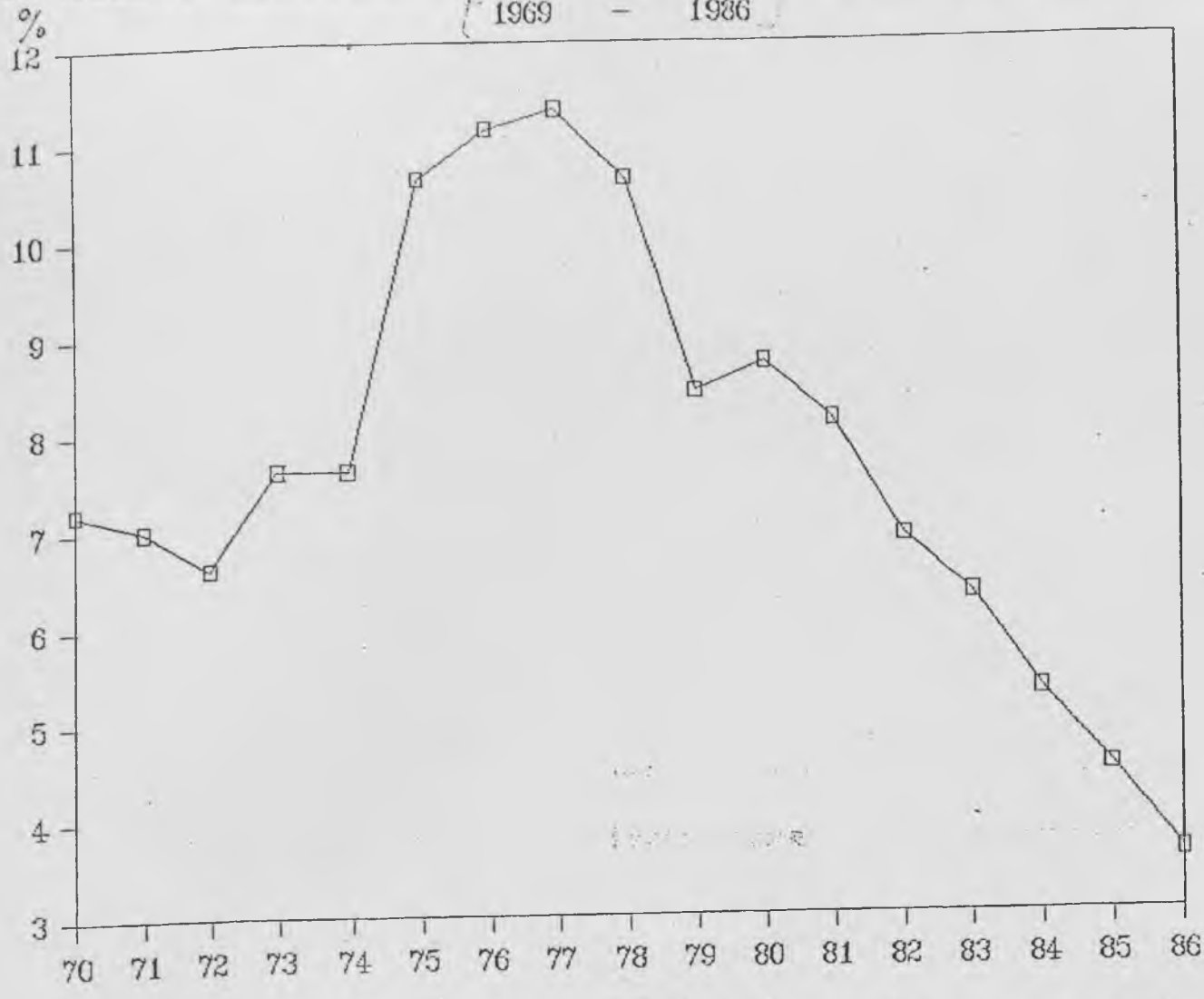
Source: Ministry of Education, Planning Department

7.2.30

Ratio Of School Enrolment To population, 1969-1986

NISBADA MIISAAN. WAXB. KA TAHAY D.DHEX

1969 - 1986



Source: Ministry of Education, Planning Department

Table 31

SOMALI DEMOCRATIC REPUBLIC
MINISTRY OF EDUCATION

Primary School Enrolment, 1975/76 - 1984/85

	1975/76	1976/77	1977/78	1978/79	1979/80	1980/81	1981/82	1982/83	1983/84	1984/85	1985/86
1. Classes	5148	5640	5955	6856	7219	7430	6890	6660	6716	6353	6037
2. Intake	133605	68256	41631	62963	48272	59809	47507	37415	42840	32636	31077
3. Enrolment (I-VIII)	219517	229030	228544	263751	271129	271704	239916	218726	220680	204048	193137
4. Female	75525	81119	83109	95200	98943	98053	85856	76711	78997	71612	67783
5. Teachers	4281	5640	8392	8141	8695	8122	8391	10065	9460	9863	9676
6. Dropout		51413	34480	20605	26903	23404	44843	32519	18360	32416	na

Source: Ministry of Education, Planning Department

Table 32

Primary School Data by Province, 1985/86

Get these translated!

[ARDAYDA ISQORTAY, FASALLADA, QOLALKA IYO MACALLIMIINTA GOBOLLADA 1985/86]

[DUGSIYADA H/DHEXE]

NAME OF Province / SCHOOL	ENROLLMET																												TEACHERS								CLAASSROOMS			
	Grade I			Grade II			Grade III			Grade IV			Grade V			Grade VI			Grade VII			Grade VIII			TOTAL			Joogto		Sh/Qaran		Ajnabi		TOTAL					
	CL	MF	F	CL	MF	F	CL	MF	F	CL	MF	F	CL	MF	F	CL	MF	F	CL	MF	F	CL	MF	F	CL	MF	F	MF	F	MF	F	MF	F	MF	F	X	Y	X	Y
1. Awdal	51	1664	450	30	924	223	31	945	231	32	993	165	30	812	150	19	387	69	25	622	155	12	332	81	230	6679	1524	56	3	117	3	56	15	229	21	180	8	4	
2. W/Galbeed	103	4266	1583	99	3721	1121	78	3673	914	86	3373	741	75	3183	598	70	3025	630	56	2146	549	52	1996	515	619	25383	6651	133	29	394	176	68	2	595	207	382	44	23	1
3. Togdheer	15	540	171	15	487	161	15	524	157	16	429	107	10	330	88	11	349	95	8	263	77	7	241	67	97	3163	923	91	19	44	34	-	-	135	53	56	15	-	-
4. Sanaag	21	404	137	15	440	107	16	287	83	14	209	36	13	216	38	15	222	39	12	265	65	17	317	91	123	2360	596	74	10	45	17	-	-	119	27	83	12	-	-
5. Bari	23	416	122	24	362	97	21	294	86	22	324	106	27	380	91	23	354	95	23	335	103	24	413	125	187	2878	825	140	47	43	33	5	-	188	80	82	61	8	6
6. Scol	10	233	90	8	127	39	3	54	15	6	96	19	4	86	26	3	91	14	5	122	29	3	115	45	42	924	277	41	12	14	4	-	-	55	16	31	15	-	-
7. Nugaal	9	186	64	9	182	67	10	159	44	7	137	50	7	114	37	3	66	20	5	94	30	7	172	68	57	1110	380	53	14	22	17	-	-	75	31	43	13	-	-
8. Nuqug	14	288	125	15	229	102	12	220	84	13	203	98	9	174	68	8	129	56	11	205	106	8	228	107	90	1676	746	49	26	30	10	-	-	78	36	68	20	9	-
9. Galgaduud	13	375	143	11	163	68	7	124	62	9	155	74	8	115	49	7	113	57	13	179	84	9	190	94	77	1414	631	50	22	33	29	-	-	83	51	53	21	11	5
10. Hiiran	81	2504	769	61	1787	545	74	2082	650	57	2075	591	62	1651	355	45	1221	236	50	1318	276	53	1530	312	483	14168	3734	356	107	125	123	367	51	848	281	329	38	50	5
11. SH/Dhexe	55	1345	450	50	909	310	52	909	319	48	809	249	50	841	271	47	772	227	46	696	211	44	829	270	392	7110	2307	414	185	5	5	9	-	428	190	115	36	103	17
12. Banaadir	151	6926	3354	125	6340	3042	138	6903	3223	166	7097	3187	172	8121	3648	171	7985	3621	175	8091	3643	189	9444	4564	1287	60907	28282	12310	1487	1239	791	63	-	3612	2278	843	58	-	-
13. SH/Hoose	132	5169	1493	141	3734	1181	140	3639	1173	112	2860	808	103	2617	921	95	2295	647	97	2250	665	92	2517	811	912	25081	7699	907	249	121	117	163	66	1191	432	318	86	281	47
14. Bay	43	1275	419	32	995	322	32	936	304	31	812	292	26	795	259	29	811	271	26	728	231	33	902	302	252	7254	2400	369	160	48	48	8	-	425	208	132	7	50	2
15. Bakool	16	466	157	10	167	58	7	108	46	10	127	43	7	138	56	9	143	39	6	112	33	7	118	40	72	1379	472	112	43	8	7	-	-	120	50	30	2	21	-
16. Gedo	86	4130	1206	90	3661	1105	74	2912	764	51	1795	289	47	1732	216	37	1141	184	24	691	138	19	560	115	428	16622	4017	196	32	50	6	325	78	571	116	164	35	54	7
17. J/Dhexe	52	1291	349	38	840	251	36	669	198	35	637	186	28	441	98	29	437	97	26	347	65	21	326	62	265	4988	1306	176	48	119	18	-	-	295	66	58	7	154	2
18. J/Hoose	53	1599	472	55	1341	390	58	1341	367	55	1171	350	49	1094	338	52	1090	339	49	1040	306	53	1365	451	424	10041	3013	479	153	138	71	12	-	629	224	140	42	127	15
ISUGEYN	928	33077	11554	828	26409	9189	804	25779	8720	770	23302	7391	727	22840	7307	673	20631	6736	657	19504	6766	650	21595	8120	6037	193137	65783	16005	2646	2595	1509	1076	212	9676	4367	13107	520	895	107

MF = Total F = Female SH/Dhexe = Middle Shabelle, SH/Hoose = Lower Shabelle J = Jubba

Source: Ministry of Education, Planning Department

TABLE 33

Per Cent Literate By Age Group And Sex, Settled Population In Three Regions, 1980

Age	10+	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50+
Total	46	64	60	51	43	35	36	33	32	32
Males	63	72	73	70	65	57	61	55	54	42
Females	29	55	49	35	25	15	13	10	10	3

Note: This population is not representative because it excludes nomads (very low literacy) and has an urban (high literacy) bias.

Source: Census Study for Benadir (Mogadishu), Lower Shabelle, and Bay Regions, Ministry of National Planning and North Carolina University, (1981), Table 11.11.

in real social service spending. In 1979 the recurrent education budget (which excludes the university) was of the order of $20 million. By 1985 it was of the order of $2.5 million and has declined further since then.

The official figures, horrifying as they are, understate the desperateness of the situation. Official spot checks indicate that up to 50% of teachers and pupils on the books are not, in fact, normally present (admittedly at a peak agricultural labour demand period) while one unofficial study in a riverine province found 25 of 25 nominally operating schools effectively closed and silent. The quality of primary education is very low with a disastrous knock-on effect. Secondary education (and lower level teacher training) must spend much of its efforts doing what should have been achieved in primary. Despite a pre-university makeup year, the National University in many departments must operate at higher secondary school level.

The adult education picture is even bleaker. There is - despite official endorsement and desire - no mass literacy programme. Main line adult education consists largely of a few thousand part time students doing what amounts to a substitute primary course. A similar - smaller - women's education programme concentrates in its first year on household skills and only later on income enhancing subjects. Nominally seven adult technical/artisanal education centres exist but only two have buildings, of these only one is equipped. Six short residential course nomadic education centres exist physically but appear to be largely unstaffed and even more largely unpupilled. A well done adult literacy newspaper oriented to settled farmers exists - but with only 1,000 to 1,500 copies an issue. So does a radio programme directed to the same audience. Pilot on the ground programmes to which these are linked exist in parts of two riverine provinces.

The problems of adult education can be summed up concisely:

a. in most cases there is no curriculum related to and tested against potential student needs and wishes;

b. even if there were, neither specialised, trained teaching cadres nor appropriate materials (books, equipment, inputs into artisanal or craft training) exist; and

c. even were the first two problems overcome there is no money. The mainline government adult education budget is Sh 1,000,000 (say $6,000 to 7,000) and even counting other national and donor contributions the recurrent funds available are apparently not over $100,000.

Efforts To Reverse Decline

Donor efforts first to consolidate or expand and later to rebuild Somalia's primary and adult education system have to date been piecemeal and - as can be seen plainly in retrospect - not only inadequate but so structurally flawed as to be foredoomed. Capital spending has risen from $3.5 million in 1984 to $8.3 million in 1986 despite the patent inability to maintain, staff or operate existing facilities. Capacity development support (e.g. to the curriculum development, educational planning, adult education and textbook units) has kept innovation and ideas flowing and produced some pilot results. But with a negligible recurrent budget these cannot be generalised, e.g. even the new texts developed remain largely unprinted (paper and press capacity), undistributed (transport bottlenecks) and/or ill conserved (lack of cupboards and monitoring). Similarly without improved salaries the strengthened lower level teacher education programme (especially as it stresses both Arabic and English) is more likely to improve the quality of teachers in the Gulf countries than in Somalia.

Parents are deeply concerned at the decline in educational access and quality. In an increasing number of cases (documented in particular in West Galbeed/Audal and Middle Shabelle but known to be wider spread) they have raised money to supplement teachers' salaries, repair buildings, restore furniture, acquire writing materials. Over 1986-87 the government has moved to full backing of this community support approach which may be a key to halting and reversing decline.

Three Special Problems

Somali primary school terms are ill adapted to the seasonal patterns of agricultural labour requirements. For example in early 1987 only about 5% of the pupils of a riverine province primary school refurbished and largely

financed by its community were present despite there being teachers, some furniture and materials and self-evident ($1,500-2,000 recent community finance) support. They were needed for ground preparation and planting.

This problem appears to be general. It used to exist in Europe and North America too. There as recently as the 1930s many rural schools set their terms and term breaks so that children could augment family labour in peak demand periods without missing classes. There is tentative interest in pursuing a similar approach in Somalia, i.e. allowing provincial education officers in consultation with parents to revise the timing of terms and breaks. This might result in two to three different regional academic years and a certain discontinuity with secondary school years. Its potential benefits in enhancing attendance, reducing the opportunity cost of education to rural households and increasing parent/community support for primary education greatly outweigh these real but manageable bureaucratic considerations.

Education for nomads by definition must either be nomadic or residential; i.e. it must either follow the pastoral communities as they migrate or provide places in which nomadic pupils/students can live throughout the school year outside their households. The former approach has not proven practicable in Somalia. The latter exists but on a private sector or intra extended family basis. Nomadic household children are placed with town or city relatives to attend school. However, while much larger than the perhaps 1% of nomadic children enrolled in rural schools (largely in the northwest where a more permanent base location for women and young children is common), the % of nomadic children enrolled in urban schools is probably under 5%.

What can be done is not clear. Large scale residential education at state expense is not feasible. Whether an expanded and higher quality primary system would significantly raise the proportion of nomadic household children (and especially of girls, under 1% of whom are likely to receive any primary education) placed with sedentary household members to attend school is problematic.

Two lines of inquiry are worth pursuing. What are the experiences of other SSA countries with substantial pastoral populations, e.g. Botswana, Mali, Sudan, Niger? How many children of Somalian nomadic households do attend

school while residing with relatives and what are the constraints on expansion of their numbers?

Somalia is seeking to advance education in four languages: Somali, Arabic, English and Italian. Somali is central as the national language. Arabic is the language of Islam, of the Gulf countries and of the Arab League. English is a regional as well as global lingua franca. Italian has a role because of former colonial and present financial and technical links.

However, the problems of seeking to achieve literacy and operate education in up to four languages are severe. For example, primary school systems seeking to achieve reasonable fluency and literacy in two languages often fail in one (e.g. Botswana and Tanzania where Tsetswana and Swahili competence is adequate but that in the second language, English, usually is not) or both (Puerto Rico where primary leaving standards in both Spanish and English are too low).

A possible approach in Somalia would be along the lines of:

a. developing Somali as the main medium of instruction at all levels including the basically Somali staffed departments at the University;

b. encouraging and assisting Koranic schools to teach Arabic (in addition to memorising the Holy Koran) and introducing Arabic as an optional subject in secondary, adult, teacher training and university education (as well as the language of instruction in appropriate university faculties) and subsequently perhaps in the final two years of primary school;

c. introducing English as an optional subject in secondary, teacher training, adult and university education as well as a secondary language of instruction (with stress on reading ability) at university level and subsequently perhaps in the final two years of primary school. In secondary and teacher training schools students should be required to study either Arabic or English.

While evidently difficult to implement fully, this approach would at the least provide a coherent framework and access to Arabic and English to those who need/wish to learn them while preserving and building up the primacy of the national language.

Koranic Education - Success and Limitations

About half of Somalia's children receive some Koranic education - i.e. twice as many as receive any primary education. Total enrollments are now probably approaching 400,000 of whom about 35% are girls (the same proportion interestingly as in formal primary education).

Koranic education appears to encompass most formal primary school students, i.e. they attend one in the morning and the other in the afternoon. However, it encompasses more students in all population groups and especially among nomads. Koranic teachers load up their camels and follow their pupils.

Because it uses locally made materials - erasable wood slates, writing sticks and ink made from milk and soot - Koranic education is better equipped than formal primary. Similarly because parents pay Koranic teachers (in cash or - especially in nomadic and settled agricultural communities - kind) teachers can afford to, and do, appear regularly for classes. Whether most of the 10,000 odd teachers (of whom perhaps 2%, concentrated in one area, are women) are full time is unclear. A survey suggests that they are, but casual evidence suggests that at least a large number do have herds, crops or a wide variety of jobs (e.g. night watchmen and other domestic occupations in Mogadishu).

Koranic education fills a very clear religious and social role in Somalia. The overwhelming majority of Somalis are practising Moslems. Knowing and being able to recite the Holy Koran (or at least key texts from it) and to comprehend its basic teachings is of great importance to them.

Unfortunately Koranic education in Somalia has distinct limitations. First, the overwhelming majority of classes teach memorisation and reproduction of Koranic texts, not actual ability to read or write them in Arabic. Second, only a minority include Koranic study in the sense of explanation and reflection on the meaning of passages. Third, there is very little inter-penetration of the Koranic, the formal and the adult education systems. For example, the latter do not identify, reflect on and use relevant Koranic texts (although curriculum development is now taking initial steps in this direction). Fourth, instruction in literacy and numeracy in Arabic is very unusual (significantly under 5% of all schools).

The reasons for this pattern are complex but the main barrier to altering it is the level of education of the teachers. A majority are illiterate in any language. Only a small minority have pursued formal Koranic studies themselves (other than memorisation). They are in the main not able to deepen or broaden their teaching unless they are able to deepen and broaden their own linguistic and theological education.

To approach this challenge requires both sensitivity and the integral involvement both of Somali Islamic scholars and leaders and of Islamic educational experts with experience in more fully developed Koranic education systems.

It appears likely that after dialogue the Islamic leadership of Somalia would wish to see deeper and fuller Koranic studies grounded on a knowledge of Arabic and training in Koranic thought developed. If this proves to be the case, technical assistance of Islamic scholars - from other Islamic educational systems and/or relevant Pan-Arab professional bodies - will be needed.

The optimal primary source of technical assistance may be the Arab Republic of Egypt. Egypt has a fully developed Islamic education system from primary through postgraduate (at the intellectually rigorous, ancient and internationally renowned Al Hazar University) levels. Its Islamic scholars could advise on curriculum development and teacher training and provide help in building up teacher training capacity in Somalia as well as making places available for more Somali Koranic scholars to pursue advanced studies in Egypt.

Primary Education - Toward Revival

Revival of primary education requires six elements:

a. community support;
b. external funding of some recurrent as well as of capital costs;

c. completion, printing and distribution of new textbooks;
d. primary school rehabilitation and re-equipping;
e. substantially - say 10 fold - higher teacher pay;
f. a distribution (of texts and materials) and monitoring/inspectorate system with adequately paid and mobile staff.

Broad agreement on this approach has been reached among the Somalia Ministries of Education and of Planning, potential external supporting agencies (including UNICEF) and - in the sense that micro examples exist - Somali communities.

The World Bank has drawn most of the threads of this discussion together in its paper "Action Programme for Primary Education". The broad parameters of that paper seem sound - especially in contrast to past pumping of funds into buildings that stood idle and supporting service units which had little ongoing programme to support.

The key - and novel - elements are community involvement (including payment of up to 40% of teachers' pay) and a near ten-fold increase in teachers' monthly salaries to the Sh 7,600-8,550 range. The latter are to be financed: 10% present wage, 50% additional food aid, 25 to 40% community (or parents in World Bank version), 25% special donor grant to rural teachers only. Presumably the pay levels (which are in 1987 prices) are first approximations and the question of whether the (lower) urban one is indeed high enough to secure full time, motivated teachers will be explored in greater depth.

The programme is conceptualised to last seven years (with review and decisions on possible extension in year six). This is to provide continuity, accepting that Somalia government takeover of primary funding responsibility is not possible before year eight and, indeed, may need to be phased in over a period beginning in year eight.

The enrollment goals of the programme is 20% of the age group by year four and 25% by year seven. Even the latter is low by SSA standards, but it is a marked increase on the present nominal 14-15% and up to three times the probable actual present functional enrollments defined as regular attendance of pupils and teachers.

Most of the World Bank paper's formulations are unexceptionable - at least at this stage. Some, however, require elaboration or comment.

Organisation needs to be designed with some care to preserve both coherence and flexibility. Centrally the Ministry of Education (including planning, primary education, curriculum development and - if there is to be a link to continuing education - adult and women's education), all supporting agencies and representatives of provincial/district education teams and supporting communities need to have a forward planning, strategic coordination and monitoring team backed by a small specialist monitoring and bottleneck breaking unit.

Provincially there should be one lead agency to work with Ministry and community representatives. If primary health and water work is also characterised by agency specialisation by province, it could usefully be the same agency as is active in health and water in all or most provinces. That agency would report back to the central coordinating unit on the provincial sub-programme's progress. As rapidly as possible there should be some involved primary schools in each province and district. Pedagogical, equity and political reasons point in that direction as does the need to see this programme as a first step toward reviving primary education and reintegrating it into the core Somali government education system. Evidently the number of schools per province will vary widely, but some communities in each will wish to participate and should not be turned away indefinitely in the name of some province by province phased bureaucratic model.

As noted elsewhere, nomadic children's participation - except in areas in which nomads have base camps where women and children remain most of the year - is likely to be largely by placing children with urban relatives. However, once the programme is established, discussions with nomadic communities on how/whether mobile schools (portable on 2 or 3 camels) would be feasible and desired, might usefully be pursued.

Specialised, dedicated printing capacity in the ministry - as opposed to a nominal share in a unitary government press - is desirable. Since there apparently is an ongoing project to supply women's and/or adult education with

separate printing capacity a review to coordinate is needed. Possible programmatic components would include:

a. printing capacity linked to curriculum development (including layout, graphic and decision capacity) for all primary texts and teaching materials;

b. a parallel capacity for adult and women's education linked to those two departments and to curriculum development for texts, booklets, posters, teaching materials and the literacy newspaper;

c. commodity aid programmes with appropriate countries (perhaps Canada, Finland, Sweden, Norway and/or Hungary) to provide paper and printing ink over five years to underwrite the books/teaching materials availability side of the programme;

d. a transport unit (of modest size) to handle distribution from Mogadishu to district centres breaking the present bottleneck which causes texts once printed to pile up in Mogadishu warehouses.

The provincial level aspects require further thought. To use Ministry of Education personnel to underline that this is Somalian primary education and is to be phased back into the government education system is sound. In general competent inspectors and administrators exist.

The problem is the assumption that these personnel can be expected to play a key role in the revived, decentralised primary education system without providing them with additional emoluments and transport. That assumption is pretty clearly wrong. What appears to be needed includes:

a. a responsibility allowance equal to 125% to 150% of the additional emoluments paid to teachers;

b. a form of mobility - perhaps one motorcycle per provincial and district education officer participating which he (she) is to maintain but which he (she) may buy at the end of three years for - say - Sh 2,000;

c. 6 to 8 week special courses for officers involved focussing on their work in relation to the new primary programme.

Payment to teachers from food aid poses no problems at the programme level if it is in the form of money from monetised food aid. It does pose a macro problem as maize food aid should be phased down or out now that Somalia is probably self-sufficient. Replacing that source of government revenue and adding finance for primary education does require identifying additional food aid levels or items that really will be saleable and will substitute for commercial imports. The obvious choice is sugar. There are sugar mountains. Triangular food aid (sourcing in Zimbabwe, Malawi, Swaziland, Mauritius or Kenya) could be envisaged. Somalia does import up to 100,000 tonnes a year commercially and is unlikely to reach self-sufficiency in less than a decade. Sugar (most of which in Somalia as elsewhere in SSA is drunk in tea and coffee) does provide quick energy and for that purpose is a perfectly nutritionally respectable component in a nutritionally balanced (grain, milk, meat, beans, oil, etc.) diet. Another possibility is cooking oil (vegetable or butter, albeit the latter might depress the price of domestically produced ghee).

What should not be done is to put the primary education project in the wholesale/retail grocery business. Putting up and distributing thousands of boxes of mixed foods for teachers all over Somalia would be a nightmare and a folly. There is a perfectly good private commercial sector food distribution system. Money is much easier to distribute than food. Teachers can readily convert money to food (and the wholesale sector can convert - e.g. - sugar aid into money). To propose to distribute food literally is in this case either commodity fetishism or that ultra rigid, fossilised form of material balances central planning usually referred to perjoratively as "Stalin planning".

A compromise would be monthly "payments" in rice. This would preserve the form of direct food aid distribution and greatly simplify logistics of oversight and delivery. In practice teachers could and would sell much of the rice to buy the food they wanted to achieve a preferred dietary pattern.

Community payment to teachers is an area for community/teacher agreement not centralised bureaucratic rules:

a. if a community and a teacher agree on payment in sheep, goats, milk, grain plus providing - repairing - furnishing a house this is (should be) acceptable and outside quibbling over form or valuation of payment is inappropriate;

b. if (as is likely) a community agrees among itself that poor households will pay less - or in goods and labour - this is neither helpfully regulated from outside nor a bad idea. Cross subsidisation from richer to poorer family or community members is firmly based in Somali culture and should be supported not hampered by a rigid fee per pupil structure.

Community resource mobilisation toward school and furniture provision and maintenance deserves attention. Communities can - and both in some cases in Somalia and more broadly in, e.g. Kenya, Ghana, Tanzania do - repair and build classrooms and teachers houses and do build or repair cupboards, desks and chairs. This approach should be explored on a case by case level among communities, the Ministry of Education's provincial personnel and lead external agencies. In some cases it will need inputs of, e.g., cement and wood so the community can put in work.

Given the extreme shortage of writing materials the idea of switching to wooden blackboards and slates plus writing sticks and local milk/soot ink should be considered seriously. These serve well in Koranic schools, are locally provideable and have cost advantages. On the face of it they offer an appropriate indigenous technology solution to a serious problem.

Taking these items into account and filling in blanks in the World Bank paper's costings a rough external funding requirement might be (in $000,000):

TABLE 34

Costings - Community Linked Primary Education

Recurrent	Year 1	Year 7
Food Aid	2.5	5.0
Rural Salary Uplift	0.6	1.2
Teacher Training	0.5	1.0
Provincial/District Officers and Inspectors Salaries	0.2	0.4
Printing Materials	0.2	1.8
Mobility (Vehicle Operating)	0.2	0.4
Total	4.2	9.8

(Plus any technical assistance personnel required)

Capital	
Printing Plant	1.5 - 2.5
Vehicles for Distribution and Mobility*	1.5 - 2.0
Classroom Rehabilitation and Re-equipment**	1.2
New Classrooms***	16.8
Total Over Seven Years	21 - 22.5

* 25-40 small four-wheel drive vehicles plus up to 100 motorcycles, all replaced in year 4 or 5.

** Possibly overestimated. Community contribution - especially to re-equipment - can and should be sought.

*** Probably seriously overestimated. Unclear as many new classrooms are needed as projected and with community labour and materials input cost per classroom should be reduced substantially.

Primary education revival can usefully be pursued parallel to and interacting with some aspects of adult - women's - continuing education reconstruction. While not central to the primary programme - especially in its initial year or two - this potential should be kept in mind. One evident spinoff is that

evening use of primary schools and (with an allowance for extra work) primary school teachers is usually a cost and personnel efficient means to operating continuing literacy and selected further education (e.g. numeracy, Arabic, English) work.

Adult Education: Notes Toward Strategic Components

Because Somalia has perhaps 20% effective literacy and under 20% effective (four complete years minimum) primary education, adult and continuing education will need to be central to overall educational strategy for several decades. Formally this is government policy and, indeed, a wide range of approaches and programmes do exist on paper. Unfortunately the gravest of doubts exist - by Somalis as much as by outsiders - of their user friendliness or even user interest and at present resources to operate them are totally inadequate.

Four operational principles can be set out:

1. Finding out what programmes are wanted by which adults where and involving the potential user communities in ongoing programme design, support and monitoring;

2. articulating and testing new programmes and delivery systems with built-in feedback and monitoring;

3. coordinating adult/continuing education with primary education, primary health care and water work to achieve pedagogic spread and resource economies of scale or complementarity gains;

4. identifying and programming a package of potentially sustainable sources of finance before launching major new or extended programmes.

Because most Somalians are illiterate and those outside cities live in contexts in which there is little to read and few occasions to write, the standard assumption that literacy is the basic skill and starting point may not be valid for all cases. For example, nomads, small scale settled farmers and self-employed urban women may place higher priority on specific income

raising and/or health education than on literacy. The acquisition of these forms of education is - in some Somalian contexts - more likely to create a demand and foundation for literacy than the other way round.

There is already evidence in support of this contention from what adults have said and done (e.g. relapsed into illiteracy, set up their own adult education courses for women with income raising skills up front, not responded to nomadic education residential short courses). However, systematic study of what specific (by occupation, location, gender) groups of Somalis wish and would support (by enrollment and by community or individual supply of resources) what types of courses both as to content and form is a priority. Adult and women's education divisional research in this area does have a good case for support.

Problems with delivery systems are very real and will remain so. For example, poor urban residents (especially women) find it hard to make time available; nomadic life styles pose considerable access (or continuity) problems; hi- or even middle- tech adult education workshops may not be very relevant to the artisanal rural or informal urban sectors of Somalia; literacy programmes need both ongoing backup with relevant materials to read and a continuing education programme to enhance the perceived value of knowing how to read and write.

Coordination has two aspects. Primary health care (including primary veterinary care) and water programmes have both direct (community worker) and indirect (education in community by community worker) adult education aspects. These should be seen both as integral to those programmes and as an integral part of adult education. For example health, sanitation, nutrition and water production/use education can be advanced by focused radio programmes linked to discussion groups led by community workers.

The other aspect is financial. Some coordination - e.g. in use of nomadic training centres, in development and use of radio programmes and video-tapes, in broadening coverage and widening distribution of the adult education newspaper - should save money. Most crucially the lowest cost way to mount a broad front adult education process is to use primary school facilities in the evening and to utilise primary school teachers and other relevant public servants as instructors who receive an initial course in how to teach adults and whose work is regarded by an honorarium which tops up their basic

earnings. The proposed rehabilitation of Somalian primary education set out above would lay the groundwork for such coordination in Somalia.

Finance will be a problem. The need for a general approach of external donor plus user (or user community) provision of the bulk of resources seems to apply even more strongly to adult education than to primary education, health and water. Nor - even assuming a successful process of government revenue restoration - can an early phaseout be envisaged. Secondary, teacher training, advanced technical and tertiary education rehabilitation and development will need all or almost all the additional state resources likely to be won for education over the next several years.

The main topical areas under adult education are:

a. specifically desired applicable skills;
b. technical and artisanal;
c. literacy linked to continuing education;
d. women's (listed separately as now a separate division);
e. agricultural;
f. nomadic;
g. supporting media (radio, books, newspaper).

The first group should include community workers but also more general access classes if demand for specific skills courses - either for evening, day or (in the cases of nomads or isolated farmers) short residential courses - can be identified. One test of demand is willingness to pay some fee (not full cost or low income households will be excluded). Pilot schemes will be needed to test topics and approaches.

Nominally there are six or seven adult education technical/artisanal schools. All have some equipment but only two actually have buildings. Assuming the Kisamayo one proves to meet a real demand, funds should be sought to complete those without buildings and activate all of them. Different courses are likely to be appropriate for urban workers and rural artisans. The latter in particular need a basic tool kit as their 'diploma' to be able to put what they have learned to use.

While Somalia is committed - as it has been since 1974 - to a mass literacy

campaign there is no ongoing programme. Over the next two years a strategy needs to be devised and materials (including teacher training and course guide elements) prepared. On the face of it, linking the literacy work to the primary education rehabilitation programme using primary classrooms in the afternoon or evening and - for an honorarium of (say) Sh 2,000 a month - employing primary teachers as its base level cadres.

Successful literacy education - in any lasting sense - needs followup. What this should be depends on user wants and needs which should be determined by asking present and potential students. Possible examples include arithmetic/bookkeeping, Arabic, English, tailoring as well as technical/artisanal topics and agriculture. Successful pursuit of new courses will require preparation of books and visual materials since few, if any, currently exist in simple Somali suitable for the newly literate.

The one clear exception to that generalisation is agriculture which has a pilot programme of literacy and applied skills in the Shabelle Valley. This programme - which is backed up by adult education radio programmes and a specially designed newspaper - can usefully be evaluated for insights into what does and does not work (including interviews with continuing, potential and dropped out students).

Women's education is logically - if not currently institutionally - part of adult education. Here two issues arise: Should literacy come first? Is a highly structured two year programme with income generating skills in the second year appropriate? There is some evidence to suggest both questions can be answered in the negative:

a. the low enrollment - including in all three main cities;

b. the statements by low income women heads of household that they need courses taking up less hours a week and immediately relevant to augmenting incomes;

c. the emergence of a number of shorter, less structured, skill oriented courses with teachers paid by students - courses clearly modelled from, but also diverging significantly from, the official format and syllabus.

This evidence suggests a need to evaluate (in conjunction with present potential and former students of both official and unofficial classes), redesign and then to run a pilot series of new courses.

Nomadic education has reached a dead end. A full evaluation of why present approaches do not attract students and an exploration of what - if any - adult education courses would be effective is needed before a restart. In the meantime the existing centres and (to the extent they are both present and suitably trained) staff could usefully be redeployed to other sub-sectors of adult education.

Supporting media - preparation and printing of texts and other materials, newspapers for the newly literate and production of specialised radio programmes is (admittedly on a small scale) one of adult education's strengths. This capacity should be built up. For example, if - as is believed - a second printing unit is to be given by a major donor to women's education it should, at the least, be shared and preferably the supporting media functions of adult and women's education merged.

In addition primary health care, water and - probably - primary education could benefit from specialised radio (or recorded cassette or video-tape) programmes and all but primary education from a variety of posters, illustrations and check sheets which are basically adult education in form whatever their specific content. Given the scarcity of both specialist personnel and funds, coordination of this work and its joint carrying out by adult education would appear desirable.

At present no serious cost estimates for revival and expansion of adult/women's education can be given. Too many sub-sectors require restudy and reformulation before startup of even new pilot programmes. A possible first year level would be $1 to $1.5 million largely on technical/artisanal, agricultural, supporting media and evaluation/design. However, if the two functioning sub-sectors went well, a basic literacy tied to primary education was shown to be feasible and one or more other sub-sectors defined user sought programmes an increase (excluding capital projects) to $5 million a year by year 5 might well be justified. As it is hard to see how more than $1 million can be raised at that date from the government and users (who pay perhaps $10,000 together now) substantial funding from external adult education bodies

(e.g. in the Federal Republic of Germany) or bilateral agencies with a record of adult education support (e.g. especially Sweden but also Canada, Germany, Holland) would be needed.

However, the combined primary and adult education projection for annual external resources needed, looks manageable at perhaps $15 - $17.5 million (recurrent and capital) maximum in year 5. That is well under 10% of present annual concessional finance flows to Somalia (or, indeed, less than capital project funding and less evidently useful technical assistance to the education sector in several recent past years). At least part therefore could be sought via reallocation and the rest from marginal increases in total support whether from present or new external funding sources.

CHAPTER 5

VULNERABILITY REDUCTION - THE CASES OF DROUGHT AND WOMEN

Volatility, Nutrition, Income, Poverty

Vulnerability has many aspects. In Somalia two stand out - drought and women's incomes and work loads especially in female headed households. The latter is partially comprehended in the former as the nutritional and health consequences and the water collection as well as the extra migration and herd or crop preservation (or failed attempts at preservation) labour consequential on droughts fall particularly heavily on women and their children.

Drought is an ever present threat and a frequently recurring reality in Somalia. With its low basic rainfall, uncertain riverine runoff - largely from across the border - and great annual and intra-year variations in rainfall levels and distribution both spatially and by month, that is inevitable. What is not inevitable - indeed is humanly and economically unacceptable - is that the costs of droughts should remain as high as they are now.

Women's vulnerability - other than to drought and disease - relates primarily to their limited access to skills and resources needed to earn incomes/produce household inputs and their very heavy combined economic and domestic workloads. Neither can be removed overnight, but both could be alleviated.

Drought - Institutional Response/Human Disaster

Private sector (household and kinship) structures for limiting drought damage, mitigating its consequences and providing means to rehabilitate livelihoods are well developed but in the absence of public sector complementary measures are necessarily inadequate.

Public sector - and especially external cooperating partner - response to drought in Somalia (indeed in SSA more generally) could be viewed as a comedy of the absurd were its consequences not writ large in deprivation,

pauperisation, exhaustion, misery, illness and death. The problem is not one of lack of goodwill but of astounding institutional inability to perceive, conceptualise and act on the nature of reality despite its repetitive nature.

In Somalia reasonably good early warning of drought danger by district exists - serious drought damage requires at least two consecutive failed or seriously delayed rains. (There are two a year roughly in April/May and September/October.) Damage reduction requires ensuring that hand pumps, boreholes and water tankers are in working order, that additional spares and tankers are positioned in Somalia, that food reserves including supplementary feeding items are in the country, that veterinary drugs (especially for the diseases which inevitably follow the onset of rains when stocks are debilitated) are positioned in both centrally and also in at-risk districts, and that the same is done for human health drugs and vaccines. Similarly it requires that institutions and networks are in existence long before the drought to channel resources speedily to human beings in need. Rehabilitation requires followup attention to continuing human and animal health and human income and nutritional recovery problems (rain will not - as a mournful nomad in the Bay region said in 1987 - bring dead camels back to life nor restore the milk they would have provided for nomads' staple diets) and to means of rebuilding herds for those households wiped out.

All these observations seem fairly self-evident. None is new (either generally or to the present authors, one of whom said much the same thing in the Tanzanian context in 1974). Unfortunately none is part of present operational conventional wisdom. Most disaster coordination committees are episodic even though the disasters are repetitive - Somalia's was not reconstituted until March 1987, although the probability of a severe drought had been clear six months earlier. Action is regularly begun too late. The May 1987 UNDP report on the on-going drought and response is in large part a litany of needs which could and should have been met months earlier and by May could not be met in time. Drought related action ends too soon. Even as emergency missions flocked to Mogadishu (and in fairness, to drought stricken districts) the sense of an immediate crisis was dissipating with no parallel commitment to systematic rehabilitation nor to ensuring that the same mistakes were not repeated in 1989 or 1990 or 1991 (when the next drought is likely on historic patterns) and so on until the end of time.

Bureaucratic patterns play a large part in this tragedy. The leader of one well intentioned and observant mission explained that disasters and immediate relief were its bread and butter. Therefore it could not really do much about prevention, institutional channel development, or rehabilitation. That is often the nature of bureaucratic reality; but unfortunately it does not address the nature of the human needs and costs resulting from disasters. It is past time bureaucratic reality conformed to human needs as the latter cannot be conveniently reprocessed to fit bureaucratic habit or structure. In all candour while UNICEF perceives the totality of disasters and conceptualises how to face them better than many institutions, the speed and effectiveness of its responses is by no means always fully reflective of those perceptions or concepts, and so it was in Somalia in 1987. Equally, however, the WHO/UNICEF primary health care essential drug revolving store was the only case of pre-positioning of stocks needed for drought relief well in advance of the crisis.

As suggested, the basic requirements for future vulnerability reduction and drought cost containment/alleviation are fairly straightforward:

a. a permanent government based disaster coordinating group associated with external cooperating agencies;

b. receiving and acting in good time on Early Warning System reports;

c. acting in normal periods to pre-position stocks of basic and supplementary foods; human and veterinary drugs; pump, borehole and water tanker spares and standby transport;

d. ensuring that existing water facilities and health and veterinary transport are in full working order;

e. building up the community based operational and delivery systems necessary if state and external responses and resources are to be delivered promptly to those most in need when disaster strikes;

f. as a drought develops, pinpointing the location, nature and evolution of needs and putting resource flows in gear in time to avert - not react to - the worst consequences;

g. issuing requests for additional, specified resources to replace those used - on an emergency basis, when extent, duration or severity of drought causes real risk of stocks running out and in any event promptly so that the reality of the drought is still remembered when the request is processed;

h. identifying rehabilitation (of, e.g. nutrition, herds, seeds and water supplies) needs to be met through the same or related channels after the immediate drought crisis is passed.

These points would need to be articulated and programmed concretely, but that should pose few conceptual or technical problems once the approach can be agreed. Until that happens, all drought vulnerability reduction responses in Somalia will remain (as more generally in SSA) too little, too late, too narrowly curative and too little preventative, and at least partially inappropriate and badly targetted. In short they will remain case studies of institutional and economic inefficiency whose costs fall primarily on poor and vulnerable human beings, especially children and women.

Women's Overworking and Underearning

Women's income is according to fragmentary observational and survey evidence significant in a third to a half or more of all households and dominant in the up to a fifth which are female headed. Even within complete households women usually retain all or the bulk of their earnings (the commonest pattern in SSA and some other Islamic societies - indeed perhaps everywhere except in the stylised European bourgeoisie or proletarian household of 1850-1950). These incomes are likely to be used in large part for the benefit of children and of household nutrition.

Major income sources include sale of small stock, meat, eggs, produce, fish and home produced items (e.g. reed mats, containers). In settled agricultural and urban communities they include trade in these products (and less commonly in pavement, stall or barrow retail trade in imported goods) as well as home food processing, casual and agricultural seasonal labour and - for the educated - wage employment. A further 25-30,000 women are migrant workers -

dominantly in Saudi Arabia, North Yemen and Italy.

In addition to inadequate income levels, women - perhaps especially in female headed households - are overworked by the combined burden of self-provisioning and cash income producing and household labour. This double weight very rarely falls on male heads of households.

TABLE 35

Female Levels Of Market Participation

Marketing Item	Male H/H N=86	Wife N=86	Female H/H N=10
Large Livestock	38 (44%)	8 (9%)	5 (50%)
Small Livestock	21 (24%)	30 (35%)	7 (70%)
Milk Products	- -	21 (24%)	3 (30%)
Meat and Eggs	1 (1%)	35 (41%)	6 (60%)

Source: WED/FAO, Rural Household Survey, (1983)

TABLE 36

Division Of Agricultural Task Labour By Sex

	Male Head of Household N=85	Women in Household N=84	Female Head of Household N=10
Land Clearance	53 (62.5)	49 (57.7)	7 (70.0)
Land Preparation	47 (55.2)	48 (56.4)	7 (70.0)
Planting	63 (74.1)	66 (77.6)	9 (90.0)
Fertilizing	9 (10.5)	10 (11.7)	1 (10.0)
Weeding	59 (69.4)	60 (70.5)	8 (80.0)
Irrigation	32 (37.6)	11 (12.9)	5 (50.0)
Bird Scaring	33 (38.8)	30 (35.2)	4 (40.0)
Harvesting	58 (68.2)	67 (78.8)	8 (80.0)
Transport	20 (23.5)	36 (37.8)	5 (50.0)
Threshing	9 (10.5)	64 (75.0)	8 (80.0)
Digging pits/ storing	56 (65.8)	34 (40.0)	7 (70.0)
Marketing large quantities	42 (49.4)	26 (23.5)	6 (60.0)
Marketing small quantities	13 (15.2)	50 (58.8)	5 (50.0)

Number in ( ) is a percentage.

Source: WED/FAO, Rural Household Survey, (1983).

To act to help Somali women reduce their vulnerability and/or poverty requires defining specific constraints and specific means to overcome them in specific contexts. These will vary among nomadic, settled agricultural, fisher community, small town and Mogadishu women. The first step in identifying them in operational detail is to learn from the women directly affected. However, a number of the constraints can be identified now pretty clearly even if only roughly:

a. lack of relevant education (with initial priority probably to income earning skills rather than literacy or health education however important these may be);

b. inadequate access to inputs needed to complement their own knowledge, skills and labour, e.g. to land, to water, to seasonal drought power or labour or implements and/or to the capital needed to acquire seeds and tools or kids and calves or a sewing machine or a stock of goods to trade or of materials for home production;

c. unmanageable time demands from watering in the absence of nearby public water sources; from caring for the sick in the absence of primary health care and health education (or indeed of being sick herself); from cooking, washing and cleansing especially in the absence of adequate water supply or (in urban areas) public sanitation services.

Certain measures can be identified in respect to all of these which can be pursued in Somalia today. Most are touched on in the chapters on health, water, sanitation and education. The main exception is access to complementary assets which may be approachable through acting through and strengthening existing women's co-operatives and saving and credit societies. More detailed programmatic suggestions in respect to helping poor urban women raise their incomes are expected to be set out in the final version of the CIIR-UNICEF-OXFAM study on urban poverty in Mogadishu.

CHAPTER 6

SOME KEY POLICY PARAMETERS

An Approach

In addressing a set of key, inter-related policy issues UNICEF is not asserting unique competence at analysis, let alone implying any direct capacity to tackle them. It is well aware that the government of Somalia is cognisant of - and has sought to act to loosen - certain of the constraints identified. However, this presentation is seen as appropriate for three reasons:

a. the constraints and parameters addressed here have rarely been presented and analysed as related parts of an overall strategy/policy approach;

b. a number of co-operating governments and agencies, including the Fund and the Bank, appear at times overly complacent in respect to, or even unaware of, certain of the issues raised;

c. the mechanics and magnitudes of the paradox of public sector pauperisation contrasted with modest private prosperity and the probable minimum time frame for resolving them strengthen the general case for community personnel and voluntary user linked approaches to restoring and expanding basic public services. This is particularly valid in respect to human and veterinary health care, water and basic education. They also imply the need for a more complex and directly community base linked role for co-operating partners than would be needed (or even appropriate) in most other contexts.

Fiscal Austerity and Retreating Revenue

The conventional wisdom that Somalia faces a fiscal crisis is true enough. The debate is on what type of crisis. Fairly clearly it is not a crisis of runaway real public sector recurrent consumption. Over 1975-1979 recurrent expenditure (excluding debt service) rose from 12½% to about 20% of Gross

Domestic Product. But thereafter it oscillated from 13% to 16% until 1984, when it collapsed to 8% falling further to 7% in 1985 and slightly recovering to 9% in 1986. Especially as GDP was rising (and remittance fuelled GNP rising faster), this is not a record of runaway spending but one of overall austerity over 1980-83 and disastrously large real cutbacks over 1984-86. Even the 1978-79 rise clearly relates to the events of 1977-78 and their consequences which would have forced any government anywhere to raise spending. What is unusual is the post-1980 cutback.

Nor has domestic credit creation via government borrowing of the central bank been huge. It did rise to somewhat over 20% a year in the post 1977 period arguably explaining about half of the high trend rate of inflation. The other half of the inflation relates to a semi-boom allowing trade margins to be raised and to expectations of regular high price increases which were self-fulfilling when they bid up the Gulf market price of foreign exchange. Subsequently they have the same impact on inter-bank account or "free market" and auction markets. This has directly inflated the costs/prices of imported goods (including government recurrent imports other than fuel since these are purchased through the private sector - a rather unusual example of full privatisation pre-dating 1980). Even the 1984 leap in domestic bank borrowing either is not what it seems or is mysterious. According to the accounts, it relates almost exclusively to foreign debt service (not, perhaps, a category the Fund opposes the government seeking to pay!). However, as actual transfers on that head were very small, it is not clear whether the borrowing was an unreal book transaction or the funds were partly used for other purposes.

The real bottom line problem has been the decline in real tax revenue collected. Prior to 1978 this averaged perhaps 12.5% of GDP. By 1979 it had been pushed up to virtually 20% paralleling the rise in non-debt service expenditure. But it then fell abruptly to fluctuate between 10 and 12% over 1980-83, before plummeting to 4% in 1984. This is the lowest known modern ratio of taxation to GDP breaking the Ghana record of 1983 (in a drought crisis year at the end of prolonged economic decline) and falling under half the SSA average. Even with the efforts of the Ministry of Revenue since mid-1985, it has only recovered to about 6½% of GDP in 1986 and is now expected barely to regain the 10% level in the near to medium term.

The reasons for the slump and collapse are not clear. Sharp changes in the trade regime (certainly encouraging making imports of goods 'invisible' and perhaps actually deterring them), problems of valuation and an archaic customs nomenclature played their part. But, even together, these factors cannot explain fully the pre-1984 fall, let alone the 1984 collapse. Whatever the causes, the performance is almost uniquely disastrous and dominates the recurrent budget constraints leading to public sector penury and social and economic service pauperisation.

Allocation of the meagre resources available has moved steadily against social and economic services for the past decade. Before 1978 they normally received about 40 to 42½% of recurrent budget non-debt service funds (about 20-25% social and 17-18% economic, including water). During 1978-79 this fell to 27½% odd and thereafter declined to 16½% (9% social, 7½% economic) in 1983, and barely 10% (4% social 6% economic) in 1986. In short, constant price per capita spending on social and economic services in the recurrent budget has fallen about 75% since 1977. The reason for their apparent and real decline, and the concomitant loss of morale, energy or even physical presence of many of their staff whose emoluments have been a declining share of the already plummeting total spending, is only too apparent. So is the reason for the rise of the present ubiquitous decentralised, privatised user fee sytem.

Why the shift in allocational priorities? At one level, the answer presumably lies in the events of 1977-78 and their aftermath. The Somalia government clearly believed it faced a heightened external security risk. UNICEF is not competent to second guess that judgement and, in any event, any non-partial observer would be likely to agree that objective grounds for that belief did exist. Furthermore, neither absolutely nor relative to GDP has Somalia gone on a military spending spree.

In fact, after 1979, it is not at all evident that constant price expenditure on security rose nor that the emoluments of the uniformed services kept pace with inflation (over 1984-85 they certainly did not), even if they fell less in real terms than those of the civil servants. 1984 saw radical real falls in security (as in other) spending only partially restored over 1985-86. No reasonable observer can suppose that Somalia has engaged in lavish expenditure on its armed forces. The problem is that some minimum real level of security spending has been and is perceived as essential out of a declining total of

recurrent budget resources (also squeezed by rising external debt service). This was not an unreasonable perception - states do see survival as vital and a military capacity related to external threats as vital to survival. But it left less resources for all other state purposes. Of these, debt service - despite growing arrears - grew rapidly and general administration while falling in real terms grew as a proportion of the recurrent budget. It was economic, and social services which were squeezed after 1979 and were squeezed increasingly hard from 1984 onwards. There is no real reason to believe this represents actual government preferences; it is a response to quite brutal constraints on recurrent spending in a context of relatively orthodox fiscal austerity and plummeting real tax revenues.

Somalia has attempted to make good the decline in domestic resources by securing additional transfers from abroad. The results, primarily because of the nature of external response and non-response, have been relatively to radically unsatisfactory. According to UNDP figures, roughly adjusted for world import price and Somalia trend population growth, from 1975 through 1985 concessional finance was on average stagnant in total real terms and declined one third at the annual real per capita gross transfer level. Further, the share of grants fell and as a result net concessional resource transfers (after debt service) declined even more sharply. Attempts to use non-concessional bank, supplier credit and IMF finance to plug the gap have only exacerbated the skyrocketing external debt service burden on the recurrent budget and on export earnings.

Further, the form and conditions on external finance have clearly resulted in a massive misallocation of overall public sector resource use. (Aid is hardly an appropriate term for this finance when, especially since 1980, most of it has been lent and has created an internal fiscal and an external forex millstone around the budget's and the economy's neck.) The conditional transfer have created a remarkable imbalance between public sector new fixed capital formation projects (the Priority Investment Programme) and the recurrent budget which presumably is supposed to operate and maintain them. The Somalia government has arguably been slow to see the full implications of this pattern, albeit its 1987-1989 National Development Strategy and Programme poses them squarely. But the basic cause is external - the project tying of the bulk of external finance and the failure to build initial period operation and maintenance into project packages. A secondary external cause has been

advice to Somalia to regain fiscal balance by cutting recurrent spending, sometimes on the quite preposterous basis that Somalians were in general over-taxed.

The nature and magnitude of this discrepancy is made very clear in the 1987-89 National Development Strategy and Programme. Using standard recurrent cost estimates (which seem to overstate on most items but understate on basic education and health) on projects recently completed or about to be completed, a 1988 recurrent cost consequential on PIP estimate of Sh 6,882 million at 1988 prices (Sh 5,500 million odd at 1987 prices) is made. This contrasts with total 1987 recurrent spending authorised on economic and social services of Sh 1,346 million!

The government has secured substantial technical assistance and commodity assistance for resale from donors (an appropriate term for the grant component albeit not the commodity lenders, e.g. PL 480). This does finance some recurrent social and economic costs under the rubric "local development budget expenditure". Of the Sh 2,900 million odd under this head in 1986 and in 1987 perhaps Sh 1,450 million is somewhat thinly disguised recurrent budget operations. As most are economic and a few social (notably the university) this does somewhat alleviate the recurrent budget spending decline noted above for economic services but does very little to bolster basic social services. But what it does is at a cost:

a. technical assistance is provided in kind (including personnel) to suit donor preferences even when Somali sources (especially personnel) are available;

b. except for Saudi oil aid and the World Bank currency auction support loan's shilling proceeds, most commodity aid shilling counterpart funds are subject to complicated provisions which deter their use and hamper efficiency more than they secure specific programmatic goals;

c. the entire budgetary process loses coherence and transparency, making it very hard for anyone to untangle what is really happening as opposed to what one set of a series of interlocked transactions seem to imply is happening.

This dynamic reached a dead end in 1984. Revenue was too low; the minimum priority claims on it too high; debt service unhandleable; social and economic recurrent spending hopelessly too low; the PIP too high to use the projects when completed; foreign net resource transfers falling. What has been achieved since is to buy time with initial recoveries of revenue, the World Bank's $1 million a week general import/budget support auction credit, a partial debt rescheduling and additional commodity aid. Unless more basic solutions can be found by 1990, the time bought will have run out.

The easy solution of much more foreign grant aid in the form of freely useable cash - i.e. untied budget/import support - is unlikely to happen. The name of the game today - at least on the resource transferor side - is "policy conditionality" not "higher transfers". Further, even at present levels Somalia's per capita concessional finance inflows exceed those of other major SSA structural adjustment programme operating countries such as Ghana and Tanzania.

Restoring The Tax Base

Two key instruments in restoring the public sector revenue base are taxation and exchange rate policy. Significant starts have been made on both, e.g. by the initial actions of the new Ministry of Revenue created in 1985 and by 1986-87 moves toward a unified exchange rate at near the Gulf market rate.

Especially on taxation, more remains to be done if the 12 to 15% of GDP collected in tax revenue typical until the 1980s is to be regained. The key - especially over the next few years - is import duty (plus excise and sales tax on imports). Rate modernisation for items not specifically covered in the 1960 nomenclature and taxable only at low general or even nil rates and imposition of 20-30% duties on amenity goods (notably petroleum, wheat and rice) even when imported as commodity aid are needed. But the most crucial reform required is to broaden coverage and fullness of rate collection on all imports including those directly financed from abroad by remittances. For this purpose a de facto open general licence approach (excluding only goods financed by external credit) should be taken by customs. 1986 collection levels suggest customs may already be beginning to do just that. The potential gain from modernisation of nomenclature and new duties is (at a

Sh 150 = $1 rate) of the order of Sh 6,000 million and that from fuller coverage and valuation up to Sh 10,000 million - as contrasted with total anticipated 1987 tax receipts from all sources of Sh 9,425 million.

Wealth tax (in the form of property rates) and rental and business income taxation can make useful but secondary contributions. The first two are in hand; the third poses problems because even initial claims are now often risible (in one case Sh 100,000 on a net business income of the order of Sh 7.5 million a year) and are usually negotiated downward. Expertise in assessment will take time to build up. Taxes on domestic production will remain low unless and until production other than of foodstuffs can be substantially expanded. These three sources together could yield perhaps Sh 3,000-5,000 million by 1990.

Export taxes are derisory in amount, tend to drive exports (or a portion of their proceeds) into invisible channels, may have disincentive effects and distract customs' attention from the true priority of import taxes. They should probably be abolished. Similarly the melange of official service charges, quasi-official fees and ad hoc user charges now imposed on livestock exports (including excessive public sector quarantine and shipping charges) do deter legal, visible channeling of these exports, may reduce their volume and need to be regularised and reduced.

Even allowing for these offsets, additional tax revenue at 1987 prices reasonably attainable by 1990 comes to over Sh 15,000 million, i.e. 167% odd of projected 1987 collections in real terms. That would provide the expanded public sector revenue base to restore and expand basic service (social and economic) provision even if restoration of real wage and salary levels in general administration and security did require a significant share of the increase. This is particularly true because unifying the exchange rate - initially at or around Sh 150 to the $ - can raise government counterpart revenue from commodity aid sales by up to Sh 6,000 million.

Devaluation in Somalia - because of the porosity of borders and the omnipresence of remittances - is most unlikely to stimulate exports or reduce private sector imports more than marginally. What it can do is optimise government revenue from sale of commodity aid imports. Compared to that the nominal gains from a partially split rate covering 50% of officially

channelled visible exports are almost trivial (see Annex to this Chapter on Devaluation in the Somali context).

These measures on the part of Somalia - which are in a substantial degree begun - both need and deserve complementary action by external sources of finance to be fully effective. One cluster of such responses involves permanently removing and preventing the re-emergence of the present potentially crushing burden of external debt service which hangs over Somalia. Others include:

a. increasing budget and import support aid by including additional or enhanced levels of items now financed from export earnings and officially channelled remittances - e.g. petroleum, sugar, vegetable oils, cement, cotton (for textile production);

b. building maintenance capacity creation, initial period maintenance and initial period operating expenses (say for 3 to 5 years) into all or almost all fixed investment projects;

c. increasing multi-year grants in support of agreed priority social and economic service capacity creation and operation recurrent costs at least over 1988-1992 with a joint review of possible 1993-1997 phasing down held in 1991-92;

d. seeking to create more stable patterns of annual commitments and disbursements than have characterised 1980-1986 to reduce uncertainty, shock and stop go costs to the Somalia fiscal and economic systems.

Even within existing or slowly growing levels of real disbursement of concessional resource, these steps could greatly increase their effectiveness in terms of infrastructure and production gains to Somalia and especially of restoring and expanding social and economic service levels. Economic efficiency and especially efficiency in meeting the needs of the poor and vulnerable, criteria point in the same direction (as they usually do in SSA).

A certain realism is needed. The total tax and commodity resale gains of Sh 20,000 million odd posited for 1990 are not unattainable. But even with maximum Somalian effort, some slippages are likely. Further, without interim

enhanced external cooperating body transfers to support recurrent and maintenance expenditure, restoration of basic service levels plus the operating (recurrent) costs of fixed investment projects now under construction or recently completed cannot be fully met as of 1990. Prompt response by resource transferrors is needed urgently to reinforce, complement and make possible the continuation of 1985-87 Somalia government actions.

External Debt - How Not To Pay

Somalia's external debt burden is intractable. In fact Somalia cannot pay any substantial portion out of its own resources now or in the foreseeable future. However, how that reality is faced and programmed will greatly affect the future of the Somali economy and especially of public services.

Debt service on already incurred obligations (including IMF) will be over $100 million a year through 1989. With reasonable export projections and assumptions as to IMF redrawings plus continuation of the present loan/grant ratio on new resource transfers and of the recent history of Paris Club rescheduling pattern of rollforwards of accrued arrears and one or two years future payments, the ratio of debt service to exports (even ignoring substantial present arrears) will remain at or over 100% for the foreseeable future.

All of Somalia's public sector investment (including its domestic resource component), a substantial portion of recurrent social and economic services and a major share of imports for production and consumption (commodity aid, World Bank auction market funding) come from public sector resource transfers. To divert these resources to external debt service would in large part be impossible and even if it were it would result in the near collapse of public investment and services and very severe constraints on domestic private consumption and production.

The World Bank's not very veiled indication in its 1986 Financing Adjustment with Growth in Sub-Saharan Africa that several SSA economies cannot on any conceivable assumptions generate the domestic savings, let alone the external currency earnings, to service all or even a substantial proportion of their external debt applies - as the Bank's own published data show - to Somalia.

(Other relatively large SSA economies in this category include Madagascar, Mali, Mozambique, Niger, Sudan, Tanzania, Zambia and probably Zaire.)

To date no real strategy has been adopted or even articulated. For bilateral debt the most realistic would be:

a. 100% writeoff of present claims (including arrears) and at least 80 to 90% grant to total future resource transfer ratios; or

b. 80% writeoff (including all arrears), 80 to 90% grant/transfer ratios plus annual grants to cover servicing of the 20% not written off unless and until on reasonable criteria Somalia was able to service it out of its own resources.

A third best option would be rescheduling all arrears plus all principal payments for ten years and all interest payments for five to ten with repayment of the rescheduled amount over the 11th through 25th years - roughly analagous to the recent Mozambique rescheduling. It is exceedingly doubtful that full servicing could be resumed at the end of the grace period, but a decade of time for achieving structural adjustment free from the overhanging sword of an external debt crisis would be achieved. At the same time, the principle of massive debt write-offs could be put aside for the present and time given to see whether payment might become possible at a future date at a price which would be bearable by and acceptable to Somalia.

For multilateral debt (principally IMF, World Bank, African Development Bank and certain Arab or OPEC funds) greater problems arise. Here a strong argument against even rescheduling - let alone writeoff - has been and continues to be made on the grounds both of precedent and of access to financial markets. The latter argument is much less strong in respect to IDA, Afdev Fund and Arab or OPEC Funds which are not market financed.

IMF drawings can in practice be wholly or largely rolled over as to principal (and with quota increases even as to interest) by redrawing. However, they are relatively expensive and rolling over is a complicated, uncertain process and one involving both the Fund and Somalia in negotiating broad reaching policy agreements indefinitely. Further, so long as Somalia's drawings are in the upper credit tranches, it lacks access to quick first line resources to

meet the genuinely short term external balance shocks (e.g. drought, export market access limitations) which are from time to time superimposed on its basic external balance (imbalance) structural problem. As providing such resources is the prime purpose of the Fund and of membership in it, permanent rolling over locking Somalia into the higher credit tranches is deeply unsatisfactory for the Fund and for Somalia.

World Bank lending cannot literally be rolled over. In some cases import support credits can free export proceeds to service external payments on prior Bank lending rather than to raise overall import levels (albeit that type of juggling bears a distinct family resemblance in nature though not in intent, to the classic South Sea Bubble and Ponzi schemes). Somalia is not such a case - the auction support funding is needed for enhanced imports.

If the Bank (and the ADB and the Arab and OPEC funds) are in fact to be paid on time and in full, this can be done in one way and only one way. Their member governments will have to supply cash or cash equivalent (e.g. sugar, petroleum, cement, cotton or other imports substituting for present commercial imports) funding in excess of basic Somali public sector investment, budget support and import support needs specifically to repay the multilateral agencies. Saudi Arabia on at least one occasion has provided resources to repay certain debts to Arab agencies. The World Bank, understandably, has fairly openly proposed precisely such bilateral funding of Somalian service of IDA credits. The bilaterals have, equally understandably, been less than forthcoming. The urgent need is to avoid Somalia becoming the chicken in the Swahili proverb who is crushed underfoot when the bull elephants battle for power and prestige using the unfortunate chicken's home pasture as their battlefield.

Inefficiences In Investment

The allocational efficiency (inefficiency) problems arising from the imbalance of public sector fixed investment and recurrent resources (even including those included in the local development budget) have already been noted. However two further problems in respect to public sector fixed investment reduce its real value to Somalia even more. These are a tendency to view fixed investment projects almost as ends in themselves without much evaluation

of their construction or operational period impact on the Somalian economy and to treat capital projects (including vehicles, machinery, civil works and buildings) as if they were semi-durable consumer goods to be used up and discarded rather than maintained or improved. Neither is unique to Somalia (nor for that matter to SSA) but each is both more prevalent and more deeply rooted than in many other SSA countries.

During construction a fixed investment project's contribution to the Somalian economy (loosely speaking to GDP) is its local procurement component. In practice this is limited to a few construction materials, unskilled labour and secondary construction or consultancy contracts plus counterpart funds approved to bolster the cooperating services of related ministries. These are unlikely to exceed 10 to 15% of the gross fixed investment projects (say $20-30 million a year). Further items such as expatriate personnel's local purchases and project fuel purchases are problematic as they have a very high import content. Doubtless there may be certain other transfer payments, but these are unlikely either to appear openly in official data nor to end in public or directly productive private sector purses.

During operation the value of a public fixed investment project is either the net revenues and local economy purchases it generates or the value (not the cost) of the social or economic services it provides. In many cases these appear to be abnormally low in Somalia (e.g. for quickly closed industrial plants, little used roads, non-operational educational establishments) and indeed not to have been seriously estimated either ex ante or ex post.

Maintenance is clearly a weak point in public sector performance as illustrated by such varied examples as the repeated resalination of irrigation schemes, the breakdown and abandonment of deep boreholes and the 1986-87 accidental disabling of the main Mogadishu power generator. On the basis of past road and highway expenditure and climatic conditions (even including torrential, though brief, rains and flooding in some areas) one would expect Somalia to have one of the best road sytems in SSA. Unfortunately that is very far from being the case.

Weak (or non-existent) maintenance rapidly reduces the operating period value of fixed assets and leads to repeated needs for reconstruction and replacement as new capital (fixed investment) projects. Like lack of evaluation of

project contribution to the Somali economy, it is inefficient not merely on the basis of some particular theory of development but on the basis of almost any set of economic and social criteria.

It is certainly valid to assert that project financers have contributed to this situation. Promotion of exports - or of some currently fashionable development fad requiring specific types of fixed investment - has often seemed to outweigh reasoned contextual analysis of project contribution to Somalia carried out together with the relevant agencies of the government of Somalia. Initial operation and medium term maintenance requirements have rarely been built into fixed capital projects. As a result - assuming grant or indefinitely rescheduled loan finance - building a road, letting it wear out and getting funds to build it again may often have been cheaper and more fiscally practicable to Somalia in terms of own resource costs than building once and maintaining.

In part this relates to a neo-Calvinist attitude on the part of external sources of finance that grants or loans for capital projects were inherently defensible but that similar support for recurrent social and economic services were improper pandering to recipient laziness. Further in the late 1960s many sources of consessional finance - not excluding the World Bank - justified low capital cost approaches even when their higher maintenance cost and shorter life made them less economically efficient than approaches which had higher initial capital costs but lower maintenance costs and longer lives. They did so on the grounds that present capital costs were their concern while maintenance and rebuilding were solely the concern of the recipient. Both the bias against recurrent cost finance and against maintenance and rehabilitation have diminished, at least in respect to SSA, since 1980. However, remnants of both remain. Further the past biases clearly condition the way Somalia frames requests to external resource providers and - ironically - the choice of a Priority Investment Programme as the centrepiece not only of the Somalia but of most World Bank backed SSA Structural Adjustment Programmes and Consultative Group Meetings. If, as the Bank has been at some pains to argue, foreign exchange to utilise existing capacity is as key a constraint as foreign exchange to rehabilitate existing or build new capacity, the central exercise should not be constructing a PIP but a foreign exchange sources and uses matrix with new (and rehabilitation) investment among the uses - the approach of the Tanzania 1986 and 1987 Consultative Group presentations. The

concept of an economic programme as primarily a job lot of investment projects may be intellectually exploded and is wildly inconsistent with macro policy conditionality of structural adjustment. Nonetheless, under its new guise of Priority Investment Programme it appears to be alive and well in the actual resource allocation process. This can hardly be viewed as primarily the reponsibility of Somalia nor - so long as the context remains PIP biased - can Somalia afford to be too blunt in pointing out that fixed investment fetishism, however dressed up, really has no clothes.

However, political economic efficiency requires greater attention to these two problems by the Somali government as well as by cooperating governments and agencies. This is especially true in a context in which large increases of real concessional resource transfer increases are unlikely and the need to allocate a larger proportion of them to operating input import and to recurrent budget support widely perceived by the Somali government and some cooperating partners.

In particular, more pre-investment analysis of plausible gains to the economy during construction and operation (and how these could be increased) and of how the projects would or would not fit into and complement or support ongoing private productive and public recurrent service sector activity could have a very high payoff. Not simply would it help to eliminate products of low or negative domestic value (and those likely to remain or rapidly to become non-operational in particular) but it could probably substantially enhance gains from those carried out.

A related exercise is needed as to adequate levels and costs of maintenance and their potential for increasing operating benefits and reducing repetitive fixed investment requirements for premature replacement. Both are likely to be significant for as diverse items as vehicles, electricity generation equipment, boreholes and roads. To be useful, such studies need to result in reprioritisation and reallocation of resources not only by Somalia but equally - perhaps even more so - by external cooperating partners. To know that the marginal shilling spent on road maintenance generates several times the domestic benefits of one on a new road and also reduces future road capital project finance needs by several shillings is not operationally meaningful if external finance is available for road building but not for maintenance (and in particular for its import content which cannot be met from shilling

counterpart funds resulting from the sale of food or vital inputs into other sectors).

Volatile, Multiple Vulnerability

Somalia's economy is highly vulnerable and its decade of modest buoyancy at GDP, GNP and private consumption levels is highly insecure. Indeed it would be most imprudent to assume that either the recent 5-7% GNP growth rate or even the maintenance of present real remittance levels which underpin Somalia's modest private prosperity are assured. The most evident vulnerability is to drought. Major droughts do recur at three to four year intervals and do wreak havoc with herds - the basic source of the nomadic population's diet and the national economy's visible exports. Cost and vulnerability reduction approaches are only very partially developed to date as set out in the previous Chapter.

A second vulnerability concerns exports - both visible and also invisible (i.e. remittances). They are highly concentrated by product - goats, sheep, cattle, bananas, frankincense and myrrh in the first case and labour in the second. They are also heavily concentrated as to markets - the Gulf States and especially Saudi Arabia in both cases. Alterations in Saudi demand and market access have radically raised visible and invisible export levels. Equally, however, Saudi 1983 restrictions radically damaged all livestock exports for about 18 months and continue to hold down those of cattle. Alternative major markets - like alternative substantial exportable commodities - have proven difficult to build up. For bananas a somewhat analagous situation pertains but with Italy virtually the sole buyer and sectoral viability dependent on access on terms which in effect subsidise Somalia's banana industry.

The employment of Somalis in Saudi may already have peaked. Both post 1984 cutbacks in that economy (particularly in construction) and the growth of Saudi professional/artisanal cadres as a result of Saudi educational development are likely to have the result of reducing both demand and effective access over the next decade even if they do not appear to have done so significantly to date.

Somalia's terms of trade in existing markets are perhaps not very vulnerable. Minor declines in real livestock and banana prices since 1984 do not reduce terms of trade significantly below late 1970s and early 1980s levels - a very unusual result for SSA. Similarly there is little sign that real wages in Saudi are or are likely to fall, although their 1974-84 real rise can hardly be expected to continue unabated. The vulnerability, however, will be severe if visible or invisible exports must be redirected to new markets almost certainly with significantly lower prices as well as more difficult access - e.g. Egypt and/or Kenya for cattle.

Somalia is also intensely vulnerable to volatility in flows of external resources (aid if one prefers). While real per capita levels have tended to fall, total gross resource transfers per capita are very high by SSA standards (e.g. about 3 times Tanzania or Ghana in respect to concessional transfers). They too are highly concentrated - USA, Italy, World Bank, Saudi. Should any, let alone all four, of that quartet decide - for whatever reasons - to reduce transfer levels significantly, the public sector investment programme and the counterpart revenues from commodity aid and auction market funding would be crippled and the adequacy of food and fuel supplies placed in jeopardy.

Another related vulnerability relates to Somalia's totally unsustainable present levels of external debt service obligations - levels which are still rising. Stop gap, short term reschedulings and semi-agreed moratoria (leading to arrears buildups) have averted major problems to date. They cannot prove adequate forever, perhaps not for even so long as five years.

A final source of vulnerability is the low and declining access to public services and the low, and, at the most optimistic estimate, stagnant level of public economic infrastructure. These reduce levels of productive incentives, productive investment and exports, as well as of human welfare. To paraphrase Adam Smith: no nation can be great and prosperous the majority of whose people are illiterate and lack access to basic education, many of whom are sick and lack access to basic health services, many of whose women and girls are worn out gathering water and fuel to which most people still have inadequate quantitative and qualitative access.

This list of policy issues and challenges is in no way intended to suggest that Somalia's economy faces imminent collapse. Rather it is presented to

highlight the areas in which improvements in analysis, policy and practice are needed to sustain and to reduce the vulnerability of the past decade's modest boom in Somali private incomes and to extend it to domestic production and - even more urgent - to the very much poorer public economic and social services sector.

ANNEX - CHAPTER 6

DEVALUATION BY SOMALIA: MIRACLE, MARE'S NEST OR MODUS VIVENDI ?

In Somalia, as elsewhere in SSA, devaluation has been a hotly debated issue both as to desirability and results. Both proponents and opponents appear to have mis-stated their cases and/or mis-perceived Somalian economy and economic realities. In the actual 1980-87 Somali context devaluation was inevitable. It could have been, and as of 1986-7 may actually have become, marginally useful but not for the reasons usually advanced. Especially in conjunction with more general relaxation of certain aspects of external transactions plus a more inclusive and effective customs system and service, a unified floating (or auction) rate approximating the Gulf remittance market rate could be a significant building block toward raising real government revenue collection. As that is the sine qua non for escaping from the decade long pauperisation of public social and economic services, it is somewhat illogical to maintain that devaluation is either antithetical to - or even that it is irrelevant to - the interests of Somali women and children or poor and vulnerable groups more generally.

However, that positive conclusion is based on the special, particular 1970-1987 economic context of Somalia - not on standard devaluation model analysis. Equally some of the instrumentalities employed are indeed hallmarks of liberalisation and privatisation. However, the end result if they succeed will be to make the potential import tax base more transparent and thus to make possible (not by itself to achieve) raising the share of Somalia's relative prosperity which can be collected for public purposes, thus reducing or reversing the penury increasingly afflicting basic social and economic public services. Thus their purpose arguably is more, not less, state intervention to support more adequate levels of public consumption or human investment.

Before 1980 Somalia's currency had not usually been significantly overvalued and exchange rate questions were not central. The rising tide of remittances sustained import levels and, via franco valuta (a form of no licence required importation for goods not financed by Somali Government/Central Bank allocated foreign exchange) made a modest, but not insignificant, contribution to

government revenue. The debt service problem was then largely potential or future because many grace periods had not expired and absolute external debt levels were much lower than today.

By 1980 the buildup of external debt service, the growing recurrent budget deficit financed through domestic credit creation and the (partly though not wholly consequential) high domestic inflation rate had created severe overvaluation problems. Overvaluation did not seriously affect remittances (which were and are dominantly through unofficial channels), consumer imports (for the same reason), or - probably - exports (whose problems could be solved by smuggling or under-invoicing and conversion of the balance on the Gulf free market to finance imports). However, overvaluation did reduce officially allocable resources to pay for intermediate goods (including petroleum) and the visible, taxable import base. It also meant that commodity aid was sold at artificially low prices, reducing government revenue and probably the real incomes of Somalian grain growers.

The initial IMF/World Bank programme measures as carried out by Somalia in respect to the exchange rate and external trade over 1980-85 can hardly be described as successful but nor - with one possible exception - did they do much harm. They consisted of devaluing the official rate (but to nothing like the Gulf market rate), seeking to force full invoicing of exports (with 50% odd retainable for exporter use or resale to importers), promoting institutional channelling of remittances (through accounts similar to the retention ones) and suppressing the franco valuta trade. The results and non-results were:

a. little impact on inflation as the Gulf market rate already dominated (and continued to dominate) consumer goods import prices and incomes from remittances;

b. relatively limited shifting of remittances to officially recorded channels;

c. little impact on exports since probable supply response to higher prices is low and uncertain and volume and price are much more responsive to Gulf market conditions and drought than to price (which given the old mix of official and Gulf rates and the new official and retention account

rates probably changed little anyhow);

d. reducing recorded consumer goods imports and driving the (growing) balance into the uncustomed (parallel or smuggled) channel, reducing real government revenue;

e. continuing the existing undervaluation (in Shillings) of commodity aid and thus the revenue achieved from its sale;

f. doing nothing in respect to external debt service which was denominated in external currencies so was unchanged by devaluation (and made no easier to transfer as official export and remittance receipts rose little and harder to finance as the real Shilling revenue base was eroded).

To the extent that the fourth and fifth elements resulted from the actual devaluation/external trade formulas adopted, these did significant harm. However, in both cases there were other contributory factors. Otherwise the measures amounted to sound and fury, changing appearances and causing inconveniences but signifying little.

1986-87 instruments and results have been rather more promising:

a. the retention account rates have moved (mid-May 1987) to about Sh 160 = $1 with the Gulf market rate perhaps Sh 165 and the local parallel rate (apparently on a thin market) Sh 165-180;

b. a World Bank financed auction rate has moved to Sh 145 = $1 (approximately mid-May) and has brought about $1 million per week into the market;

c. customs coverage and collection has been radically improved;

d. unification of the official rate with the retention account (termed "free market") and auction rates is envisaged.

The potential results are:

a. to remove incentives to keep export earnings and - to a lesser extent - remittances out of official channels;

b. for that reason, plus the Bank finance, to increase access of importers in general - and intermediate production goods users in particular - to foreign exchange;

c. to increase government revenue from the sale of commodity aid by upto Shillings 6,000 million (40% of projected 1987 recurrent spending and 4 times social and economic service projected spending);

d. to facilitate import duty collection - especially if customs concerns itself purely with valuation and collection and not with how the goods were financed.

Devaluation - if accompanied by removal of export taxes and unnecessary administrative charges and mode of transport restrictions - has some potential for increasing the transparency of the export trade. However, that potential is limited as illustrated by goat exports.

Official goat exports (largely to Saudi) are paid for by letter of credit at $32 odd per beast (mid-1987) less $6 shipping by government owned line vessel and perhaps $4 quarantine/feeding fees. Of the $32, $16 is retainable in a foreign currency account (Sh 160 odd per $) and $6 (after paying for quarantine and (shipping) at the official rate (Sh 90 per $) for a total of Sh3,100. Parallel exports by dhow to the Yemens fetch about $28 per beast less $2 to $3 shipping costs. (This route is not practicable to Saudi Arabia because of its quarantine regulations.) The net is $25 to $26 at the Gulf rate (say Sh165 per $) or about Sh 4,125-4,290. The incentive to parallel market is clear enough.

If the exchange rate were unified at Sh 160 per $ the official transaction would net Sh 3,520, still leaving an incentive to evade unless the high shipping and quarantine charges could be cut by a third to a half. Even then if Yemeni importers find it inconvenient to pay by bank letters of credit or a nearby dhow port is much more convenient than Mogadishu or Kisamayo the

parallel trade will survive at a reduced level.

Cattle exports to Kenya pose a different problem. Basically it is that most are parallel on the Kenya end, i.e. import licenses would not be issued nor foreign exchange payment approved. Thus, whatever the official exchange rate, the Somali exporter has little option but to parallel market his exports into Kenya and his return flow of goods (e.g. tinned butter, fruit squash, milk powder, detergent, biscuits, coffee, tea) back to Somalia. The only apparent way to achieve transparency would be a quasi balanced trade agreement with cross accounts at the Central Banks, minimal import and export licenses and automatic clearing of balances (if any) for a designated range of goods under the umbrella of the Preferential Trade Area for Eastern and Southern Africa to which both Somalia and Kenya belong.

The negative price impact of devaluation to a unified official rate tracking the Gulf rate will be on petroleum product users, wheat and rice eaters, and consumers of newly customed consumer imports. Each of these groups is an above average income one and even they would clearly enjoy benefits were social and economic services to be restored.

Thus devaluation to a market rate, which will in any case dominate remittances and consumer imports, plus reversion to a de facto open general licence for imports (except those financed by foreign borrowing) is partly a matter of facing reality as to what can and cannot be controlled and partly a means to enhancing public sector mobilisation/acquisition of resources. These conclusions relate to the present and medium term contextual possibilities and constraints confronting Somalia, not to the more abstract general cases for and against altering exchange rate levels and determination nor to what would be appropriate in other SSA economies. In Somalia today devaluation and avoiding re-emergence of overvaluation remains a potentially valuable instrument and one without whose use restoration of basic services to the poor and vulnerable is hard to envisage. On the other hand, it is no panacea and is most unlikely to affect export or import levels, actual remittance transfer channels or domestic inflation rates more than marginally.

CHAPTER 7

PRIORITIES FOR THE POOR AND VULNERABLE: A REVIEW

Seven Areas

Priorities for meeting the needs of poor and vulnerable people in Somalia perceived and expressed by them centre on seven areas:

1. nutrition security;
2. income security;
3. health access and security;
4. water access and security;
5. sanitation access;
6. fuel access;
7. education access.

In each case, "and appropriateness" might usefully be added since some nominally practicable solutions - e.g. literacy as the initial stress in nomadic adult eduation, improved meerschaum stoves that give a type of flame and heat inappropriate to Somali cuisine - fail that test.

To list priorities is - as is sometimes forgotten - neither to provide answers to the question of how they can actually be met nor to specify the nature of appropriate institutional and delivery systems which may very well serve all or several priority needs rather than specialising in just one. Earlier chapters have indicated a number of possible programmes and approaches some of which are cited again here in less detail. No pretence should be made that these are by themselves adequate or fully articulated. They could represent a start, a foundation, the beginning of a dynamic leading out of the present pauperisation of basic services.

Nutrition Security

The nutrition security challenge is basically cyclical (drought), seasonal (dry season) and related to specific groups of poor and vulnerable people.

Except for pregnant and nursing mothers - where the prevailing pattern of anaemia would seem best approached via iron tablets - the poor group member's nutrition insecurity turns primarily on income insecurity (including loss of land use rights) and can only be tackled on that front.

Cyclical food security is an aspect of reduction of vulnerability to drought discussed in more detail earlier. Creation of structures from community to national coordinating committee level, ready and able to respond in good time is the base condition. Together with it go pre-positioning of stocks of food and of veterinary drugs (the latter to reduce herd losses and subsequent milk and meat consumption falls) as well as transport to move them as soon as the location and nature of needs begins to be known. Because droughts almost always involve the failure or severe lateness of two or more consecutive rains, adequate warning time for action exists if it is used, as it was not in time for the 1973, 1977, 1980, 1983 and 1987 droughts.

Seasonal food security problems are real but how to respond is less clear. Milk supplies are by their nature both seasonal and not readily storeable (unless a popular, home produceable cheese were to be developed). Trading for more grain during harvest/high milk output seasons would appear to be an answer but is so obvious one can only assume nomads would already have adopted it if there were not a catch (camel carrying capacity? Wet season milk demand levels? Inaccessibility of markets from outlying wet season pastures?) to it.

Nutrition work is bedevilled by lack of adequate baseline data. As suggested earlier, a systematic sample for different population groups during food plenty, seasonal food scarcity and drought months is needed and should be practicable to implement if finance can be secured.

Income Security

For 70% of the people of Somalia food security and income security are virtually synonymous. Their food production for self-provisioning and their commodity production for sale to raise cash income are the same or related products. For example, the nomad raises camels, cattle, sheep and/or goats from which he derives milk to drink and ghee and meat to eat (as well as trading these for grain) and sells animals and also hides, ghee and milk to

meet his cash income requirements. For the fisherfolk the interaction is very similar as is also the case for grain growers. For some agricultural and agro-pastoral households the interaction is more complex, but the same basic principle holds - if a set of measures do indeed assure food security they will, at least, go a long way toward providing income security.

At a national level, food security also provides a key component in urban income security. Nothing drives real urban incomes down more savagely than an acute food shortage leading to skyrocketing nominal and real urban food prices. To a degree the sharp Mogadishu milk and meat price increases of January-May 1987 illustrate this.

For specific poverty-prone groups, however, other aspects of income security arise, e.g. for street children, urban female headed households, unorganised quarter residents, nomads who have already lost their flocks. Specific cases require specific programmes but two elements are general: first, education which provides saleable skills or upgrades own employment productivity and second, access to complementary resources (e.g. working capital for trading or craft work, specific fixed capital items such as a sewing machine for a garment co-op or a tool kit for a carpenter).

Health

Most of Somalia's people - especially in rural areas and most especially nomads - have no effective access to either preventative or curative health care (or health education) from the standard, state medical system or its private parallel. They cannot hope to achieve such access in less than a decade, by which time most of the really poor and vulnerable among them will be dead.

Therefore the strategy for health access has to turn on community based primary health care. Its basic cadres will be trained traditional birth attendants, part time health workers selected and remunerated by the communities they serve or they will not exist. For them to be effective they need training, access to basic drugs and equipment, links to expanded programme of immunisation (including tetanus vaccination for pregnant women) and major disease (e.g. tuberculosis) programmes. Their provision in turn

requires delivery systems including district health teams and external agency coordinating/catalysing/planning staff. A start in providing these cadres has been made in most of the 12 provinces with PHC programmes but consolidating and building on it will be a long, hard slog in river basins, and a long, hot march in the rangelands - as well as a shorter but no easier trek through the unorganised and crumbling old quarters of Mogadishu and other towns.

A complement to these aspects of PHC would be re-establishment, as soon as possible, of the now virtually absent health post, clinic tier. Seeking to reactivate the silent majority of district hospitals is of much lower priority under present circumstances.

Water

Access to pure water in Somalia is low - nominally 60% in urban areas, 20% in settled agricultural areas, and 5-20% for nomads, depending on the season.

A number of community based approaches requiring limited capital assistance plus training work leaders chosen by their communities are available:

a. normal shallow wells and ones drawing on underground dams/percolation channels in dry river beds - both equipped with hand pumps;

b. simple spring and stream protection and offtake systems in settled agricultural areas in the riverine provinces;

c. community management and routine maintenance of boreholes (their construction is beyond community skills or resources);

d. improvement and protection of quality of water in birkets and ponds - e.g. by providing animal watering points that avoid their entering the water and separate offtake points for water for household use.

The benefits are numerous: more water means more frequent and thorough cleaning, bathing and washing, and in some contexts, more adequate cooking as well. Quantity as well as quality is important to human health and well-being. Purer water reduces incidence of several common diseases

including diarrhoea, as well as of parasite infestation. Nearer and easier to draw water reduces the workload on women and girls.

Sanitation

Access to sanitation is very low in Somalia even by SSA standards. The obvious instrument (pit latrines) and obvious means to promoting it (adult education and community participation perhaps tied to PHC) have sometimes been dismissed as inappropriate because of lack of water.

This is somewhat puzzling. Water is scarce in some - not all - settled agricultural areas, expensive in poor urban areas, unavailable in quantity (especially during the dry season) except at vast expense in female labour. But - except for the nomad case - these are not characteristics which set Somalia apart from certain other SSA countries (e.g. Tanzania, Ghana, Zimbabwe, Botswana) where pit latrines are widely accepted. More study - including improved 'dry', pit latrines developed elsewhere and the actual reasons for rejection in Somalia - is needed. The smaller community size and frequent moves of nomads do rule out conventional pit latrines, but smaller, simpler, less permanent, less labour intensive variants should be devisable.

Urban refuse collection has almost collapsed where once it existed in Mogadishu. (It presumably never reached unorganised areas.) The squalor and health hazards resulting are severe. Nobody likes living under such conditions - the question is how people can act to overcome them. Waiting for the City to restore and extend services is hopeless. In richer areas a straight private sector approach - individual households paying a dustman to set up a route - would seem practical. In unorganised areas a communal voluntary fund to raise money to hire a worker to haul rubbish from designated deposit points (and perhaps initially to help him hire or buy a cart, a donkey, a broom, a bucket and shovel) might work and deserves exploration.

Fuel

Access to fuel in rural areas is primarily an issue of the burden on the time and energy women and girls must devote to collecting it. However, for nomads

at some seasons/locations access is so limited that a problem in respect to cooking (and therefore nutrition) arises. The urban - especially Mogadishu - problem is rather different; the rising price of charcoal imposes a real burden on poor household budgets and the rising demand a real threat to natural woodland survival.

Unfortunately this is a case in which stating the problem does not lead directly to any answers clearly relevant to meeting it. For one thing its extent, specificities in different places (and at different seasons) and degree are not known. For another it is unclear how supply could readily be expanded. Village woodlots or household windbreaks may be relevant in some cases, but on the rangelands it is hard to see how to increase tree or woody bush availability. Improved three stone fires (rural) and meerschaum or metal stoves (urban) might play a role by reducing need if they could be tested for actual achievement of fuel use reduction, popularised (or extended) through adult education and added to the bread and butter lines of artisanal blacksmiths and metal workers (stoves that is, not stones!).

Education

Educational access in Somalia has been declining for a decade since its 1975-77 high point. In the past few years quality and actual attendance of teachers as well as students has declined even more rapidly, particularly in primary, adult and women's education. As a Somali educator put the problem:

a. it is quite impossible to operate any strategy on present resources;

b. in any case competent and motivated teachers to do so are not now available; and

c. the present package is probably not what the people need or want.

In that context concentrating on capacity building bodies - e.g. curriculum development and adult education radio - will probably not lead very far since it can do nothing much to overcome the first two obstacles. Even improved teacher training - especially if including more Arabic and English - is

unlikely to enhance the teacher cadres of Somalia much (as opposed to those "over the water" in Gulf countries).

What is essential to get results on a broad front is community support. The present approach to raising community support for primary school teachers is sound albeit its recent promotion by decree may not be the best way to generalise it. State resources do not and will not for years exist to pay living wages; teachers need to eat too and parents will pay if they are assured their children will be taught.

Nomadic and other adult education programmes pose more complex challenges. In neither case is literacy self-evidently the basic building block. Desired, relevant skills (which may or may not include reading and writing) are. If community based workers are to be trained in large numbers, the dormant nomadic training centres could usefully be reopened for that purpose. If a desired skills package or packages could be identified by dialogue with nomads they should also train part time nomad adult education workers. The vocational adult education could be built up to train urban artisans at one centre and rural craftsmen at the other (including in the latter case providing successful completers with initial tool kits). In addition, the adult education radio broadcasting could be broadened to provide an input into community worker related human health, water, veterinary and sanitary education.

Women's education has become relatively moribund formally. Interestingly, there has been a parallel evolution of a number of community based and supported groups with rather different foci and curriculi. This strongly suggests a need to explore the nature of the latter. There is reason to believe that while literacy is a desired skill - at least in urban areas - it is by no means the only nor always the most desired one. Similarly, topics such as nutrition and child care while viewed as desirable and enjoyable are also seen as less crucial than learning skills which would help the women raise their incomes. (What these may be will vary - food preparation and nutrition courses in the North are pursued as a step to preparation for jobs as cooks in North Yemen.) It is on insights such as these, discussed with women would-be students, that curriculum reconstruction should be built. In this case community/student support of teachers may prove unusually difficult in poor urban quarters. Many female household heads have no shillings at all

to use on anything but immediate necessities. Therefore, some cooperating agency wage funding may be needed.

Koranic education is an area in which strengthening and broadening is desirable. Fifty per cent of Somalia's children (65% of boys, 35% of girls) do receive at least some Koranic education versus perhaps 25% (32% of boys, 18% of girls) who ever attend primary school. Teachers are supported by parents. Locally produced writing materials are available, while chalk, paper and pencils for the formal education sector are not.

But distinct limitations exist. Most teachers have limited training, not including literacy in Arabic nor Koranic studies beyond textual memorisation. Topics beyond Koramic memorisation, e.g. explanation of texts, literacy in Arabic, numeracy, while not unknown, are rare. These are weaknesses from the perspective of the system's specific religious and value system educational goals as well as from its broader ones. Therefore, there is no inherent reason Islamic leaders should oppose help in overcoming them. Nonetheless to do so will take time, patience and experimentation. These must be conducted in full dialogue and cooperation with and guidance/initiative from Somalia's Islamic scholars and leaders. On the part of external agencies they should be carried on as far as possible by personnel who are Arabic speaking and Muslim. In the reverse direction other educators - including basic service extenders - should study the Koran to identify its teachings in respect to issues of concern to them. For example, verses on breast-feeding and child spacing are highly apposite to PHC and education. The CDC is interested in, and beginning to pursue, this approach.

Population Policy?

A rather different priority often advanced - usually, perhaps exclusively in the Somalia context, by external bodies - is reduction of population growth by reduction of birth rates. This topic is peculiarly prone to lead to polemics (pro and con) which generate heat and sound but not light nor discourse. A few common sense points may be worth making.

A continued 3% population growth rate implies a doubling of Somalia's population around the year 2010. That rate would make rapid movement toward

universal access to basic education, health, water and food security significantly harder to achieve. With known techniques, it is hard to see how Somalia's agricultural or pastoral bases could support doubled populations at current levels of household output/income. Environmental degradation - overgrazing, overdrawing on water resources, erosion and salination, tree and bush denudation would be very real dangers. Nor can it be seen clearly how the urban employment/meaningful self-employment levels can readily be doubled to absorb more workers and meet the needs of present poverty groups. Still less can one count on doubling numbers of migrant workers and levels of remittances.

But to sketch the drawbacks of rapid population growth - in a somewhat abstract fashion - is not, as sometimes seems to be supposed, either to devise a population policy or to win actual support by actual people in favour of their having fewer children. Without that support no policy can work in the absence of levels and types of coercion that raise very grave moral issues and are, in any event, patently impracticable in Somalia. Kenya for example, has what is usually regarded as the most well defined, articulated and resource backed population policy in SSA. It also has the highest and most rapidly rising (not falling) birth rate in the continent.

Historic experience shows that support is likely when four conditions are met:

a. infant and under five mortality is declining significantly and steadily;

b. education level of mothers is rising;

c. old age security is decreasingly seen as dependent on having a large number of living children by the time one reaches retirement;

d. basic living standards of the broad majority of households are steadily rising.

Somalia clearly does not meet the first two conditions. Probably it does not meet the third, although arguably it may just about have achieved the fourth. In such a context an elaborate population policy - whatever one may think of its inherent merits or demerits - is likely to be a total waste of time and misallocation of scarce resources.

However, one major exception exists - even if it might better be viewed under the rubrics of health and child and mother welfare than of population policy as such. That is child spacing. Too frequent pregnancies exhaust mothers, tend to increase the proportion of underweight and illness-prone children and are causally related to high infant and child as well as high maternal mortality.

Advocacy of extended breast feeding (justifiable quite independently of child spacing) and adult (as well as more specific women's) education on the importance of spacing children at least three years apart for their own and their mothers' health is justified and will increase the health and welfare of infants, young children and mothers. It will tend to reduce maternal, infant and under five mortality significantly. These are important gains. If they lay the basis for a change in attitudes resulting in smaller families, then an actual population policy will become appropriate.

Community Participation and External Support

The three pillars on which action now to benefit the poor and vulnerable of Somalia can be built are:

a. community participation and support including community involvement in programme design, personnel provision and financial (or relevant commodity) support. The last amounts to a programme of self-imposed, voluntary (except for social pressure) user fees;

b. cooperating partner supply of complementary inputs including technical knowledge, training, delivery systems, imported inputs (e.g. drugs, paper for texts) and supplementary financial resources;

c. government participation in programme design, authorisation, coordination and operation, including building up facilitating institutions (e.g. in curriculum development, educational radio, medical survey and research) and personnel capacity (e.g. district health teams) if necessary using cooperating partner finance for most of the additional costs until its own revenue position can be significantly improved.

As a basic strategy approach, this is highly unconventional. However, it has a reasonable chance of success in Somalia, whereas neither a government centred and financed nor an outside agency dominated, centralised, top down, neo-colonial approach has any chance of success for financial reasons, quite apart from any others which may be adduced.

What is proposed is not an easy approach. If communities are to choose and to pay basic level workers in health, water and education, they must be sure that they want the programmes on offer and/or see those initially offered adapted to meet their needs. Paternalism and coercion will simply not work - the support in terms of personnel and finance will evaporate like a birket in a drought.

Nor is great speed of programme buildup possible. This is partly a matter of cooperating agency resources - not least constraints on numbers competent, experienced personnel and the amount of contextually relevant, locally tested knowledge. Ultimately however, it is a matter of the numbers of community workers needed, the time for communities to decide they want to nominate and to support them and the time to train them. It is quite reasonable to set a goal of perhaps 15,000 community workers (say 2,000 trained traditional birth attendants, 7,500 community health and veterinary workers, 5,000 community adult education workers (including water and women's education). The largest, longest running, most successful PHC provincial programme - West Galbeed - has about 120 CHW's now (of whom 30 are nomads).

There will always be tensions in this approach. Outside agencies will face severe strains in being responsible and accountable at one and the same time to their own structures, to Somalian communities and to the Government of Somalia. The need to coordinate multiple external bodies with each other and with the Government of Somalia will place strains on all concerned. These tensions can be healthy or they can tear the efforts apart, but there is no way of avoiding them.

In the medium to long term the precondition for this strategy's success is that it works itself out of a job (or at any rate its initial job). The nearly unique high profile operational role down (or up!) to community level for outside agencies is neither inherently desirable nor permanently

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In the medium to long term the precondition for this strategy's success is that it works itself out of a job (or at any rate its initial job). The nearly unique high profile operational role down (or up!) to community level for outside agencies is neither inherently desirable nor permanently

sustainable, necessary as it is now. Most of it should, over time, be absorbed by the communities and by the Government of Somalia. Similarly while voluntary community support for schools is a good thing - especially when it enhances community participation and professional accountability to users - government finance should expand its role, e.g. with respect to teacher salaries.

For this to happen the Government of Somalia will need to succeed in its present efforts to restore its domestic tax base. In addition external cooperating governments and agencies will need to accept the necessity of writing off the unsustainable debt burden hanging over Somalia and of re-orienting their resource flows to meet the actual needs of Somalia and its people rather than either capital and commodity or pre-cooked economic policy export goals. However, the payoffs from meeting these requirements lie some years down the road. The present potential lies in the three legged strategy sketched as a means to beginning to meet the priority needs of poor and vulnerable Somalis set out above.

Can It Be Financed?: A Preliminary Costimate

TABLE 37

($000,000) Programme Costs

Programme Area	Gross Cost	Present Support	Reallocable Support To Same Sector	Net New Responses Needed
Health	30*	15	5	10
Education	15	2	8	5
Veterinary	2**	-	?	2
Water/Sanitation	5	1	2	2
Fuel	2***	negl	?	2
	54	18	15	21

* Includes tuberculosis programme.

** Initial year cost higher to establish basic veterinary drug revolving stock.

*** Pure guesstimate as to possible small scale forestry (including bush) and fuel efficiency promotion programmes which might be developed.

The programmatic approach sketched in Chapters 3 to 5 and above is low cost in two crucial senses. It could provide basic services at a low annual capital and operating cost; less than alternative methods of providing the same services. That said its absolute costs are very substantial - possibly $55 million a year by the fifth year. A rough breakdown appears at Table 37.

The gross cost is about $10 per resident of Somalia. The net additional cost should be very substantially lower. In the first place up to $18 million is already being provided in support of partial programmes in the areas and of the types advocated. On a fairly cautious estimation another $15 million of resources devoted to lower benefit projects in the same sectors could be reallocated. That would reduce the net or new resource cost to $21 million a year or perhaps 10% of present gross annual concessional transfers to Somalia.

Of that appropriate commodity aid to be monetised to meet shilling costs could provide up to $10 million in the form of paper (for educational printing), rice, wheat, vegetable oil, cotton and sugar. Except in the case of paper the commodities should be sold to produce shillings not used directly in the programmes. This approach would have the useful by-product of increasing foreign exchange resources available for intermediate goods imports - including those needed to improve the levels and quality of economic infrastructure maintenance.

An additional aid requirement (on grant or IDA terms) of about $11 million a year would remain. That does not appear to be an impossibly high target. Some existing sources of external resources have evinced potential interest in raising support levels if these enhanced resource transfers would lead directly to halting and reversing the decline in basic service quantity and quality. Some additional bilateral donors might be recruited to support certain of the proposed programmes. $11 million a year is not a small amount but even over five years it comes to $55 million or less than several single PIP capital projects which are proving financeable.

To Summarise

The challenge in Somalia with respect to personal poverty is not its prevalence but rather the need to ensure that those trapped in pockets of poverty are helped to win their way out of them. With respect to vulnerability - especially to drought - the challenge is to identify and implement more timely and effective means to reduce losses, both nationally, and for poor nomadic and peasant households in particular.

Only with respect to basic public services is the present situation both desperate and worsening. This calamitous situation is largely the result of the state's inadequate revenue base and of the pattern of assistance provided by cooperating governments and agencies. The need to rethink, to utilise and to build up low cost community-linked channels and as well as to augment the resources which the state can and does allocate to basic social and economic services is both acute and urgent. Until this is done, poor households and in particular their mothers and children will be severely deprived (of access to health, water and education) and overworked (in part to collect water). To that challenge the poignant warning of Omar Khayyam from The Rubaiyat does apply:

> The bird of time has but a little way to fly -
> and, lo, the bird is on the wing.

STATISTICAL ANNEX

All Tables from Somalia Democratic Republic, Ministry of National Planning, National Development Strategy And Programme 1987-1989, Mogadishu, February 1987

NOTE ON INFLATION AND EXCHANGE RATES

Some of the items comprising the economic framework are normally stated in current Somali shillings (e.g. the budget and Government development expenditures) while some other are normally stated in current dollars (e.g. the public investment programme and the balance of payments). Therefore a methodology has been adopted for nominally converting figures from one currency to another.

Shilling/dollar exchange rates of 70 for 1986 and 100 for 1987 have been established in official Government budgetary presentations.

A domestic inflation rate of 35.77 per cent occurred in 1986. Our official estimate for 1987 is 25 per cent, taking account of the greater stability manifested since the advent of foreign exchange auctions. Inflation rates of 20 per cent for 1988 and 20 per cent for 1989 are projected.

Assuming world inflation of 3 per cent per annum, the exchange rates implied by the difference between domestic inflation and world inflation would be as follows:

	1987	1988	1989
Domestic inflation index	100.00	120.00	144.00
World inflation index	100.00	103.00	106.09
Shilling/dollar rate	100.00	116.50	135.73

These projected figures are intended only for present analytical purposes and do not represent any policy of the Government regarding exchange rates.

Table 1 MACROECONOMIC FRAMEWORK

	In millions of current shillings					In millions of current dollars		
	1985	1986	1987	1988	1989	1987	1988	1989
GDP at market prices	90913	130700	169600	213700	269300	1696	1834	1984
Consumption	87459	131424	172798	212565	265127	1728	1824	1953
Investment	12374	23356	37302	49949	63351	373	429	467
Net imports goods & n-f svcs	-8920	-24080	-40500	-48814	-59178	-405	-419	-436
GDP at market prices	90913	130700	169600	213700	269300	1696	1834	1984
Consumption	87459	131424	172798	212565	265127	1728	1824	1953
Domestic savings	3454	-724	-3198	1135	4173	-32	10	31
Investment	12374	23356	37302	49949	63351	373	429	467
Gross fixed capital formatn	11101	21526	34928	46957	59581	349	403	439
Change in stocks	1273	1830	2374	2992	3770	24	26	28
Gross fixed capital formation	11101	21526	34928	46957	59581	349	403	439
Public	7010	14991	25600	34135	42076	256	293	310
Private	4091	6535	9328	12822	17505	93	110	129
Resource gap	-8920	-24080	-40500	-48814	-59178	-405	-419	-436
Investment	-12374	-23356	-37302	-49949	-63351	-373	-429	-467
Domestic savings	3454	-724	-3198	1135	4173	-32	10	31
Resource gap	-8920	-24080	-40500	-48814	-59178	-405	-419	-436
Exports	3720	6580	10700	15495	20088	107	133	148
Imports	-11200	-26740	-45700	-57435	-70715	-457	-493	-521
Non-factor services	-1440	-3920	-5500	-6874	-8551	-55	-59	-63
Public investment programme	8090	18061	29700	43921	53070	297	377	391
Core PIP	7010	14911	25600	34135	42076	256	293	310
Technical assistance	1080	3150	4100	9786	10994	41	84	81
Core PIP	7010	14911	25600	34135	42076	256	293	310
Foreign component	5640	12110	23800	29824	36511	238	256	269
Domestic component	1370	2801	1800	4311	5565	18	37	41
Gross national product	89833	128880	168700	213817	271200	1687	1835	1998
GDP at market prices	90913	130700	169600	213700	269300	1696	1834	1984
Factor income	-1080	-1820	-900	117	1900	-9	1	14
Population (thousands)	8244	8500	8764	9036	9316	8764	9036	9316
GDP per capita (000 sh or $)	10997	15162	19249	23663	29111	192	203	214
Exchange rate shilling/dollar	40.00	70.00	100.00	116.50	135.73	100.00	116.50	135.73

Table 2 MACROECONOMIC FRAMEWORK

In percentages of GDP

	70-84	80-84	1985	1986	1987	1988	1989
GDP at market prices	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Consumption	96.9	96.2	96.2	100.5	101.9	99.4	98.5
Investment	16.1	15.1	13.6	17.9	22.0	23.4	23.5
Net imports goods & n-f svcs	-13.0	-11.3	-9.8	-18.4	-23.9	-22.8	-22.0
GDP at market prices	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Consumption	96.9	96.2	96.2	100.5	101.9	99.4	98.5
Domestic savings	3.1	3.8	3.8	-0.5	-1.9	0.6	1.5
Investment	16.1	15.1	13.6	17.9	22.0	23.4	23.5
Gross fixed capital formatn	14.7	14.2	12.2	16.5	20.6	22.0	22.1
Change in stocks	1.4	0.9	1.4	1.4	1.4	1.4	1.4
Gross fixed capital formation	14.7	14.2	12.2	16.5	20.6	22.0	22.1
Public	10.8	7.1	7.7	11.5	15.1	16.0	15.6
Private	3.9	7.1	4.5	5.0	5.5	6.0	6.5
Resource gap	-13.0	-11.3	-9.8	-18.4	-23.9	-22.8	-22.0
Investment	-16.1	-15.1	-13.6	-17.9	-22.0	-23.4	-23.5
Domestic savings	3.1	3.8	3.8	-0.5	-1.9	0.6	1.5
Resource gap	-13.0	-11.3	-9.8	-18.4	-23.9	-22.8	-22.0
Exports	9.1	5.0	4.1	5.0	6.3	7.3	7.5
Imports	-20.9	-16.5	-12.3	-20.5	-26.9	-26.9	-26.3
Non-factor services	-1.2	0.2	-1.6	-2.9	-3.3	-3.2	-3.2
Public investment programme	12.4	8.1	8.9	13.9	17.5	20.6	19.7
Core PIP	10.8	7.1	7.7	11.5	15.1	16.0	15.6
Technical assistance	1.6	1.0	1.2	2.4	2.4	4.6	4.1
Core PIP	10.8	7.1	7.7	11.4	15.1	16.0	15.6
Foreign component	8.5	5.4	6.2	9.3	14.0	14.0	13.5
Domestic component	2.3	1.6	1.5	2.1	1.1	2.0	2.1
Gross national product	101.8	102.5	98.8	98.6	99.5	100.1	100.7
GDP at market prices	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Factor income	1.8	2.5	-1.2	-1.4	-0.5	0.1	0.7

Table 3 Gross domestic product by industrial origin
(in millions of shillings at 1977 prices)

	1985	1986	1987	1988	1989
Livestock	2406	2502	2577	2654	2734
Crop production	1376	1404	1474	1548	1625
Forestry	385	397	417	430	443
Fisheries	35	36	37	41	46
Mining and quarrying	21	21	21	21	21
Manufacturing	348	376	406	438	473
Electricity and water	8	9	9	10	11
Construction	233	256	276	293	311
Trade/hotels/restaurants	674	741	800	824	849
Transport & communicatns	472	496	521	552	585
Finance/insur/real estate	409	450	486	496	506
Government services	474	479	484	532	585
Other services	189	191	193	197	201
Adjustmt for finan svcs	-80	-88	-89	-59	-30
GDP at factor cost	6950	7270	7612	7977	8360
Indirect taxes	353	464	416	452	490
GDP at market prices	7303	7734	8028	8429	8850

Table 4 Gross domestic product by industrial origin

Per cent growth per annum

	77-80	81-85	1986	1987	1988	1989
Livestock	0.2	10.2	4.0	3.0	3.0	3.0
Crop production	6.5	17.3	2.0	5.0	5.0	5.0
Forestry	7.8	4.1	3.0	5.0	3.0	3.0
Fisheries	29.6	9.2	2.0	3.0	10.8	12.0
Mining and quarrying	-12.5	1.2	-	-	-	-
Manufacturing	2.0	2.4	8.0	8.0	8.0	8.0
Electricity and water	-15.8	8.7	10.0	10.0	11.0	11.0
Construction	13.4	-2.7	10.0	8.0	6.0	6.0
Trade/hotels/restaurants	13.9	1.4	10.0	8.0	3.0	3.0
Transport & communicatns	6.1	7.9	5.0	5.0	6.0	6.0
Finance/insur/real estate	8.1	2.0	10.0	8.0	2.0	2.0
Government services	1.1	2.0	1.0	1.0	10.0	10.0
Other services	5.1	3.0	1.0	1.0	2.0	2.0
Adjustmt for finan svcs	18.7	6.5	-	-	-	-
GDP at factor cost	3.3	6.2	4.6	4.7	4.8	4.8
Indirect taxes	3.6	0.7	31.4	-10.3	8.7	8.4
GDP at market prices	3.4	5.3	5.9	3.8	5.0	5.0

Gross domestic product by industrial origin

Per cent of total

	77-80	81-85	1986	1987	1988	1989
Livestock	36.3	34.3	34.4	33.9	33.3	32.7
Crop production	12.6	15.9	19.3	19.4	19.4	19.4
Forestry	5.4	6.2	5.5	5.5	5.4	5.3
Fisheries	0.4	0.5	0.5	0.5	0.5	0.6
Mining and quarrying	0.5	0.4	0.3	0.3	0.3	0.3
Manufacturing	6.3	5.6	5.2	5.3	5.5	5.7
Electricity and water	0.5	0.4	0.1	0.1	0.1	0.1
Construction	5.3	4.4	3.5	3.6	3.7	3.7
Trade/hotels/restaurants	11.1	10.1	10.2	10.5	10.3	10.2
Transport & communicatns	6.5	6.2	6.8	6.8	6.9	7.0
Finance/insur/real estate	6.9	6.5	6.2	6.4	6.2	6.1
Government services	7.9	7.8	6.6	6.4	6.7	7.0
Other services	3.0	3.0	2.6	2.5	2.5	2.4
Adjustmt for finan svcs	-2.7	-1.3	-1.2	-1.2	-0.7	-0.4
GDP at factor cost	100.0	100.0	100.0	100.0	100.0	100.0

Table 5 CENTRAL GOVERNMENT BUDGET RESULTS AND PROJECTIONS, 1985-1989
(in millions of shillings)

	At current prices					At constant 1986 prices				
	1985	1986	1987	1988	1989	1985	1986	1987	1988	1989
Total revenues	10348	16658	17919	24221	32658	14049	16658	14335	16148	18143
Ordinary budget revenues	5222	9506	10200	14959	21544	7090	9506	8160	9973	11968
Tax revenues	4577	8389	9425	13815	19888	6214	8389	7540	9210	11048
Goods and services	1626	1974	2095	3056	4369	2208	1974	1676	2037	2427
Imports	2520	5450	6250	9029	12804	3421	5450	5000	6019	7113
Exports	120	150	100	151	223	163	150	80	101	124
Direct taxes	311	815	980	1579	2492	422	815	784	1053	1384
Non-tax revenues	645	1117	775	1144	1656	876	1117	620	763	920
Extraordinary revenues from shilling-generating aid	5126	7152	7719	9262	11114	6960	7152	6175	6175	6175
Total expenditures	10483	16437	17919	37873	48001	14233	16437	14335	25248	26665
Ordinary budget expenditures	9041	13496	15017	33516	43101	12275	13496	12014	22343	23943
Debt service	2527	1949	4300	13048	13980	3431	1949	3440	8699	7766
General services	5425	10441	9371	11244	13493	7366	10441	7497	7495	7495
Economic services	433	675	810	973	1167	588	675	648	649	648
Social services	656	431	536	644	772	891	431	429	429	429
Recurring costs	-	-	-	6882	12007	-	-	-	4588	6671
Wage bill adjustments	-	(226)	(424)	725	1682	-	(226)	(339)	483	934
Developmt budget expenditures	1442	2941	2902	4357	4900	1958	2941	2322	2905	2722
Investment	1370	2801	2411	3180	3733	1860	2801	1929	2120	2074
Technical assistance	72	140	491	1177	1167	98	140	393	785	648
Overall balance	-135	221	0	-13652	-15343	-183	221	-	-9100	-8522
Current deficit	-3819	-3990	-4817	-18557	-21557	-5185	-3990	-3854	-12370	-11975
Development expenditure	-1442	-2941	-2902	-4357	-4900	-1958	-2941	-2322	-2905	-2722
Shilling-generating aid	5126	7152	7719	9262	11114	6960	7152	6175	6175	6175

Table 6

BALANCE OF PAYMENTS
(in millions of dollars)

Current account	1985	1986	1987	1988	1989
Exports f.o.b.	93	94	107	133	148
Livestock	66	65	75	93	103
Bananas	13	15	17	20	22
Other	14	14	15	20	23
Imports c.i.f.	-280	-382	-457	-493	-521
Foreign exchange	-73	-103	-104	-120	-133
Food	-18	-25	-20	-10	-5
Petroleum	-38	-18	-37	-40	-45
Other	-17	-60	-47	-70	-83
Commodity aid	-94	-140	-163	-168	-173
Food	-47	-55	-50	-51	-53
Petroleum	-24	-27	-18	-22	-24
Other	-23	-58	-95	-95	-96
PIP	-113	-139	-190	-205	-215
Non-factor services	-36	-56	-55	-59	-63
PIP	-28	-34	-48	-51	-54
Other	-8	-22	-7	-8	-9
Balance goods/non-factor svcs	-223	-344	-405	-419	-436
Interest payments due	-49	-63	-51	-46	-38
Multilateral	-	-7	-6	-6	-7
Bilateral	-	-3	-3	-3	-3
OECD	-	-19	-19	-18	-16
Other countries	-	-8	-5	-3	-3
Debt relief	-	-10	-5	-5	-4
IMF charges	-	-13	-10	-8	-5
AMF charges	-	-3	-3	-3	-
Special	-	(-2)	(-2)	(-2)	(-2)
Other factor income	22	37	42	47	52
Private transfers	20	35	40	45	50
Other investment income	2	2	2	2	2
Balance on current account (excluding grant aid)	-250	-370	-414	-418	-422

Capital account and financing	1985	1986	1987	1988	1989
Loan repayments due	-45	-63	-65	-66	-65
Multilateral		-9	-11	-13	-12
Bilateral		-7	-10	-10	-10
OECD		-22	-21	-22	-25
Other countries		-18	-16	-14	-14
Debt relief		-7	-7	-7	-4
Special		(-14	(-19	(-22	(-22)
Private capital movements	-37	-	15	20	25
Overall balance (excl aid)	-332	-433	-464	-464	-462
Aid grants in kind	149	201	282	282	277
Food	22	35	39	41	43
Other commodities	45	62	61	62	64
PIP reasonably assured	82	104	182	129	107
PIP to be funded	-	-	-	50	63
Aid grants in cash	41	39	-	-	-
Aid loans in kind	86	112	119	142	165
Food	25	20	11	10	10
Other commodities	2	23	52	55	56
PIP reasonably assured	59	69	56	55	72
PIP to be funded	-	-	-	22	27
Aid loans in cash	6	-	-	-	-
Other financing, items	50	81	-72	-79	-57
IMF purchases	35	5	-	-	-
IMF repurchases	-2	-29	-30	-38	-38
AMF purchases	-	-	-	-	-
AMF repurchases	-1	-3	-23	-22	-
Other Central Bank	-4	15	-	-	-
Commercial Bank	-32	-8	-	-	-
Arrears	-98	101	-19	-19	-19
Paris Club	152	-	-	-	-
Financing gap	0	0	135	119	77

Table 7

CASH FLOW BALANCE OF PAYMENTS ESTIMATES
(in millions of dollars)

	1985	1986	1987	1988	1989
Current account	-15	-57	-13	6	20
Exports	93	94	107	133	148
Foreign exchange imports	-73	-103	-104	-120	-133
Non-factor services	-8	-22	-7	-8	-9
Interest payments due	-49	-63	-51	-46	-38
Other factor income	22	37	42	47	52
Capital account	-35	-24	-50	-46	-40
Loan repayments due	-45	-63	-65	-66	-65
Private capital movements	-37	-	15	20	25
Cash grants	41	39	-	-	-
Cash loans	6	-	-	-	-
Financing	50	81	-72	-79	-57
IMF	33	-24	-30	-38	-38
AMF	-1	-3	-23	-22	-
Other Central Bank	-4	15	-	-	-
Commercial Bank	-32	-8	-	-	-
Arrears	-98	101	-19	-19	-19
Paris Club	152	-	-	-	-
Gap	0	0	135	119	77

Table 8 DEBT SERVICE PAYMENTS DUE 1986-1989
(in millions of dollars)

	Interest				Principal			
	1986	1987	1988	1989	1986	1987	1988	1989
Multilateral agencies	6.8	5.9	6.4	6.8	9.0	11.5	12.7	12.4
African Devmt Bank	0.4	0.6	0.5	0.4	0.4	0.7	0.7	0.7
African Devmt Fund	0.3	0.3	0.4	0.4	0.1	0.1	0.1	0.2
Arab Fund	3.9	2.7	3.3	3.7	3.8	5.6	6.5	5.8
EEC/EIB	-	-	-	-	-	-	0.2	0.2
IDA	1.6	1.7	1.7	1.8	0.9	1.1	1.3	1.4
IFAD	0.2	0.2	0.2	0.3	-	-	-	0.1
IDB	0.2	0.2	0.2	0.2	0.4	0.4	0.4	0.4
OPEC Fund	0.1	0.1	0.1	0.1	3.5	3.5	3.5	3.5
Bilateral agencies	2.8	2.9	2.9	2.8	7.2	9.6	9.6	9.6
Kuwait Fund	1.2	1.4	1.4	1.3	1.3	3.7	3.7	3.7
Saudi Fund	1.6	1.5	1.5	1.4	5.9	5.9	5.9	5.9
OECD countries	19.6	18.9	17.7	16.4	22.0	20.8	22.1	24.6
France	3.5	3.5	3.0	2.7	2.3	2.8	3.5	3.6
Italy	6.4	6.0	5.4	4.7	16.7	15.0	14.9	17.4
United States	9.6	9.2	9.0	8.6	3.0	3.0	3.6	3.6
Japan	-	0.2	0.3	0.4	-	-	-	-
Other countries *	8.2	4.6	3.4	2.8	18.4	15.6	14.4	14.1
Abu Dhabi	2.9	2.5	2.0	1.6	10.1	10.1	10.1	10.1
Algeria	-	-	-	-	0.1	0.1	0.1	0.1
Iraq	3.3	1.0	0.8	0.7	2.4	2.1	2.1	2.1
Romania	1.8	0.9	0.5	0.4	4.8	2.2	1.1	0.8
Yugoslavia	0.2	0.2	0.1	0.1	1.0	1.0	1.0	1.0
Debt relief	9.9	5.2	4.6	4.1	7.1	7.1	7.1	4.2
France	0.8	0.6	0.5	0.5	0.1	0.1	0.1	0.1
Italy	2.5	1.7	1.7	1.6	1.1	1.1	1.1	1.1
United States	2.1	1.8	1.8	1.8	0.2	0.2	0.2	0.2
United Kingdom	4.5	1.1	0.6	0.1	5.7	5.7	5.7	2.9
IMF/AMF charges	15.8	13.3	11.4	5.4				
IMF	12.9	10.4	8.4	5.4				
AMF	2.9	2.9	3.0	-				
Total	63.1	50.8	46.3	38.2	63.7	64.6	65.9	64.9

* Primarily Bulgaria, China, USSR

Table 9 SUMMARY OF CORE INVESTMENT PROGRAMME BY SECTORS
(in millions of dollars)

	1987	1988	1989	Total
Productive sectors	371.3	385.1	377.9	1134.3
Bardhere dam	3.7	4.8	97.5	106.0
Livestock	31.5	34.9	22.5	88.9
Agriculture	48.6	67.7	56.1	172.4
Forestry/wildlife	3.3	3.9	3.9	11.1
Fisheries	14.7	39.6	33.9	88.2
Mineral resources	2.0	2.7	1.0	5.7
Manufacturing	40.4	28.6	15.0	84.0
Energy	23.3	32.1	26.1	81.5
Water resources	37.7	49.3	52.5	139.5
Transcoms	166.1	121.5	69.4	357.0
Social/admin sectors	21.7	32.7	35.2	89.6
Education	5.0	5.5	4.9	15.4
Health	11.9	15.1	13.2	40.2
Govt services	0.1	-	-	0.1
Reg/rur/urb devmt	4.7	12.1	17.1	33.9
Total	393.0	417.8	413.1	1223.9

	1987	1988	1989	Total
Total	393.7	417.8	413.1	1224.6
Italian emerg prog	160.1	51.4	5.0	216.5
Bardhere dam	3.7	4.8	97.5	106.0
Other	229.9	361.6	310.6	902.1
Total	393.0	417.8	413.1	1223.9
Foreign loans	86.0	78.2	96.2	260.4
Foreign grants	279.6	184.0	142.5	606.1
To be funded	0.0	102.8	119.3	222.1
Somali dev budget *	19.4	38.9	36.7	95.0
Other domestic	8.0	13.9	18.4	40.3
Estimated % slippage	35.0	30.0	25.0	30.0
Total after slippage	255.4	292.6	309.8	857.7
Foreign loans	55.9	54.7	72.2	182.8
Foreign grants	181.7	128.9	106.8	417.4
To be funded	0.0	72.0	89.5	161.5
Som devmt budget	12.6	27.3	27.5	67.3
Other domestic	5.2	9.7	13.8	28.7
Exchange rate, sh/$	100.00	116.50	135.73	
Domestic component after slippage, Sh m	1780	4310	5606	11696
Som devmt budget for core PIP projs	1260	3180	3733	8173
Other domestic	520	1130	1873	3523

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* This would come to So sh 1940 million in 1987 at So sh 100 to the dollar. The actual development budget for 1987 is So sh 2902 million, of which So sh 2411 million for core PIP projects and So sh 491 million for technical assistance. This presentation excludes So sh 471 million of GDS disbursements programmed in the development budget to meet recurring costs of completed PIP projects.

Table 10

SUMMARY OF CORE INVESTMENT PROGRAMME BY SECTORS
(in percentages of total)

	72-76	77-81	82-86	1987	1988	1989	87-89
Productive sectors	89.2	85.4	87.9	94.5	92.2	91.5	92.7
Bardhere dam	-	-	0.5	0.9	1.1	23.7	8.7
Livestock	5.2	5.9	8.3	8.0	8.4	5.4	7.3
Agriculture	12.8	17.6	21.9	12.4	16.2	13.6	14.0
Forestry/wildlife	0.8	0.3	2.5	0.8	0.9	0.9	0.9
Fisheries	1.3	4.8	5.0	3.7	9.5	8.2	7.2
Mineral resources	2.4	0.9	2.8	0.5	0.7	0.2	0.5
Manufacturing	19.9	24.2	9.4	10.4	6.8	3.6	6.9
Energy	6.0	1.6	4.2	5.9	7.7	6.3	6.7
Water resources	4.9	4.0	13.1	9.6	11.8	12.7	11.4
Transp & communic	32.5	26.1	20.2	42.3	29.1	16.9	29.1
Tourism	2.1	0.2	-	-	-	-	-
Trade & commerce	1.3	2.1	1.8	-	-	-	-
Social/admin sectors	10.8	11.4	10.3	5.5	7.8	8.5	7.3
Education	6.8	5.7	3.9	1.3	1.3	1.2	1.2
Health	2.0	0.5	2.8	3.0	3.6	3.2	3.3
Govt services	2.0	2.8	0.6	-	-	-	-
Reg/rur/urb devnt	-	2.4	3.0	1.2	2.9	4.1	2.7
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Table 11

ESTIMATED LOAN DISBURSEMENTS FOR CORE PIP PROJECTS
(in millions of dollars)

	Before 1984	1984	1985	1986	1987	1988	1989	1990	1991	After 1991	Total	Total 87-89	Total 87-91
Abu Dhabi Fund	**96.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**96.0**	**0.0**	**0.0**
06FB01 Juba sugar	96.0	-	-	-	-	-	-	-	-	-	96.0	0.0	0.0
ADB	**0.3**	**0.5**	**4.9**	**4.5**	**3.8**	**2.2**	**2.9**	**0.0**	**0.0**	**0.0**	**19.1**	**8.9**	**8.9**
02IR02 Gem-Bulo H-Dory	0.3	0.5	3.7	2.5	0.6	-	-	-	-	-	7.6	0.6	0.6
09TL11 Panaftel Kenya	-	-	1.2	1.5	2.2	2.2	2.9	-	-	-	10.0	7.3	7.3
13HC07 Jilib hospital	-	-	-	0.5	1.0	-	-	-	-	-	1.5	1.0	1.0
ADF	**15.9**	**7.8**	**6.1**	**6.1**	**3.6**	**2.6**	**3.1**	**0.0**	**0.0**	**0.0**	**45.2**	**9.3**	**9.3**
02AD02 Bay region agric	6.9	-	1.7	1.0	-	-	-	-	-	-	9.6	0.0	0.0
02IT04 Afgoi-Mordinle	0.7	0.7	3.5	3.5	3.6	2.6	3.1	-	-	-	17.7	9.3	9.3
02ID02 Ag extension	8.2	5.8	0.3	-	-	-	-	-	-	-	14.3	0.0	0.0
08UN02 Mog severage	0.1	1.3	0.6	1.6	-	-	-	-	-	-	3.6	0.0	0.0
ADF/ADB	**4.1**	**0.3**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**4.4**	**0.0**	**0.0**
09RD01 Nabadid-Borama rd	4.1	0.3	-	-	-	-	-	-	-	-	4.4	0.0	0.0
Arab Fund	**19.7**	**3.9**	**5.4**	**1.7**	**0.2**	**4.7**	**16.4**	**10.6**	**0.0**	**0.0**	**62.6**	**21.3**	**31.9**
00JV01 Bardhere dam	-	-	-	-	-	-	10.0	10.0	-	-	20.0	10.0	20.0
01AH07 Tsetse eradicatn	4.6	1.7	-	-	-	-	-	-	-	-	6.3	0.0	0.0
07EP08 Jesira power III	-	-	-	1.7	-	4.7	6.4	0.6	-	-	13.4	11.1	11.7
08UN01 Mogadishu water	9.3	1.7	2.7	-	-	-	-	-	-	-	13.7	0.0	0.0
09TL07 Arabsat	-	-	0.1	-	0.1	-	-	-	-	-	0.2	0.1	0.1
09TL09 Medarabtel	0.8	0.5	2.6	-	0.1	-	-	-	-	-	4.0	0.1	0.1
09RD01 Nabadid-Borama rd	5.0	-	-	-	-	-	-	-	-	-	5.0	0.0	0.0
China	**42.9**	**2.0**	**1.6**	**3.8**	**6.0**	**12.6**	**4.0**	**2.8**	**0.0**	**0.0**	**75.7**	**22.6**	**25.4**
02JV04 Fanole irrig	41.9	0.1	-	2.5	2.7	5.6	-	-	-	-	52.8	8.3	8.3
08RW01 Deep borewells	1.0	0.5	0.5	-	-	-	-	-	-	-	2.0	0.0	0.0
08UN04 Hargeisa water	-	1.4	1.1	1.0	2.8	7.0	4.0	2.8	-	-	20.1	13.8	16.6
08UN10 Water Gabiley	-	-	-	0.3	0.5	-	-	-	-	-	0.8	0.5	0.5
Denmark	**0.0**	**0.0**	**0.0**	**1.0**	**3.2**	**4.6**	**1.4**	**1.3**	**0.0**	**0.0**	**11.5**	**9.2**	**10.5**
04ID08 Fish dev NE coast	-	-	-	-	2.0	3.2	-	-	-	-	5.2	5.2	5.2
07EP06 Regl ctrs elec	-	-	-	1.0	1.2	1.1	1.1	1.3	-	-	5.7	3.4	4.7
09PO24 Small ports study	-	-	-	-	-	0.3	0.3	-	-	-	0.6	0.6	0.6
France	**17.0**	**1.5**	**5.2**	**9.0**	**13.0**	**8.3**	**10.0**	**10.0**	**5.0**	**0.0**	**79.0**	**31.3**	**46.3**
00JV01 Bardhere dam	-	-	-	-	-	-	10.0	10.0	5.0	-	25.0	10.0	25.0
06BM01 Berbera cement	17.0	1.5	5.0	8.0	4.9	-	-	-	-	-	36.4	4.9	4.9
09TL23 Intl exch/domsat	-	-	0.2	1.0	8.1	8.3	-	-	-	-	17.6	16.4	16.4
IDA	**23.6**	**9.4**	**12.1**	**17.8**	**23.2**	**22.3**	**14.6**	**13.3**	**8.3**	**6.1**	**150.7**	**60.1**	**81.7**
00JV01 Bardhere dam	-	-	-	0.3	3.0	3.0	-	-	-	-	6.3	6.0	6.0
01AH09 Vet field svcs	-	-	-	-	1.0	2.0	0.1	0.4	0.4	0.6	4.5	3.1	3.9
02ID02 Ag extension	3.6	-	1.7	1.9	-	-	-	-	-	-	7.2	0.0	0.0
02AD02 Bay region	2.4	3.3	1.7	1.5	3.0	0.6	-	-	-	-	12.5	3.6	3.6
02AD01 NW ag II	1.0	0.6	0.2	1.5	3.0	3.0	3.0	1.4	-	-	13.7	9.0	10.4
02JV08 Juba val studies	-	-	0.4	-	-	-	-	-	-	-	0.4	0.0	0.0
02IR11 Irrig rehabil	-	-	0.2	0.8	-	3.0	5.0	5.0	5.0	-	19.0	8.0	18.0
04ID08 Fish dev NE coast	-	0.4	3.0	4.9	2.5	3.7	-	-	-	-	14.5	6.2	6.2

Table 11 continued

	Before 1984	1984	1985	1986	1987	1988	1989	1990	1991	After 1991	Total	Total 87-89	Total 87-91
07AS08 Geothermal	-	-	-	0.9	1.0	-	-	-	-	-	1.9	1.0	1.0
07AS09 Oil promotion	-	-	-	-	-	0.5	0.5	0.5	0.4	-	1.9	1.0	1.9
07EP13 Trans/distr rehab	-	-	-	-	1.0	2.0	2.0	2.0	2.0	1.0	10.0	5.0	9.0
07EP11 Power rehabil	-	-	-	-	2.0	-	-	-	-	-	2.0	2.0	2.0
08UW01 Mog water extensn	9.8	1.5	2.4	0.9	1.2	-	-	-	-	-	15.8	1.2	1.2
09P030 Port improvement	-	-	-	-	1.5	4.0	4.0	4.0	0.5	4.5	18.5	9.5	14.0
09RD01 Nabadid-Borama rd	6.4	2.3	0.3	-	-	-	-	-	-	-	9.0	0.0	0.0
12FE06 Fourth education	-	-	-	1.6	2.0	0.5	-	-	-	-	4.1	2.5	2.5
12FE02 General sec educ	0.4	1.3	0.3	0.4	-	-	-	-	-	-	2.4	0.0	0.0
12EP07 Multipurpose ed	-	-	1.9	3.1	2.0	-	-	-	-	-	7.0	2.0	2.0
IDA/IFAD	8.7	1.9	1.2	0.5	0.6	0.0	0.0	0.0	0.0	0.0	12.9	0.6	0.6
01RD02 Central range	8.7	1.9	1.2	0.5	0.6	-	-	-	-	-	12.9	0.6	0.6
IDB	5.4	1.0	0.1	1.0	17.0	4.1	0.0	0.0	0.0	0.0	28.6	21.1	21.1
06FB07 Pasta factory	-	-	-	-	2.0	2.0	-	-	-	-	4.0	4.0	4.0
08UW02 Mog sewerage	-	1.0	0.1	1.0	-	-	-	-	-	-	2.1	0.0	0.0
09RD01 Nabadid-Borama rd	5.4	-	-	-	-	-	-	-	-	-	5.4	0.0	0.0
09RD47 Afgoi-Genale rd	-	-	-	-	-	2.1	-	-	-	-	2.1	2.1	2.1
09P032 Reefer, lvsk ves	-	-	-	-	15.0	-	-	-	-	-	15.0	15.0	15.0
IFAD	1.5	0.9	2.6	3.0	3.4	2.0	2.8	4.8	2.6	3.3	26.9	8.2	15.6
01AH09 Vet field svcs	-	-	-	-	1.4	0.2	-	1.5	1.6	1.6	6.3	1.6	4.7
02AD02 Bay region	1.5	0.9	2.5	2.0	0.6	0.3	1.3	1.3	1.0	1.7	13.1	2.2	4.5
02AD01 NW ag dev II	-	-	0.1	1.0	1.4	1.5	1.5	2.0	-	-	7.5	4.4	6.4
Japan	0.0	0.4	5.3	13.5	9.8	10.8	0.0	0.0	0.0	0.0	39.8	20.6	20.6
08UW09 Balad rd wellfld	-	-	-	1.5	2.6	-	-	-	-	-	4.1	2.6	2.6
08RW16 Groundwat Boryole	-	-	-	2.0	3.9	4.6	-	-	-	-	10.5	8.5	8.5
09TL03 Mog tel/tel	-	0.4	5.3	10.0	3.3	6.2	-	-	-	-	25.2	9.5	9.5
Kuwait Fund	2.1	5.0	3.9	2.0	0.2	1.3	20.0	20.0	20.0	0.0	74.5	21.5	61.5
00JV01 Bardhere dam	0.2	0.1	-	-	0.2	0.2	20.0	20.0	20.0	-	60.7	20.4	60.4
02JV05 Mogambo irrig	1.9	4.9	3.9	2.0	-	1.1	-	-	-	-	13.8	1.1	1.1
Libya (share capital)	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.0
02IR04 Afgoi-Nord irg	-	-	-	0.6	-	-	-	-	-	-	0.6	0.0	0.0
North Korea	26.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	26.0	0.0	0.0
06BM01 Berbera cement	26.0	-	-	-	-	-	-	-	-	-	26.0	0.0	0.0
OPEC	10.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.5	0.0	0.0
06FB01 Juba sugar	10.5	-	-	-	-	-	-	-	-	-	10.5	0.0	0.0
Saudi Arabia	0.0	0.0	5.0	5.0	0.0	0.0	0.0	0.0	0.0	0.0	10.0	0.0	0.0
08RW11 Rur wat Gedo	-	-	5.0	5.0	-	-	-	-	-	-	10.0	0.0	0.0
Saudi Fund	84.0	0.0	0.0	0.0	2.0	2.7	21.0	20.0	20.0	0.0	149.7	25.7	65.7
00JV01 Bardhere dam	-	-	-	-	-	-	20.0	20.0	20.0	-	60.0	20.0	60.0
05SU04 Surv mins/grdwat	-	-	-	-	2.0	2.7	1.0	-	-	-	5.7	5.7	5.7
06FB01 Juba sugar	84.0	-	-	-	-	-	-	-	-	-	84.0	0.0	0.0
Total	357.7	34.6	53.4	69.5	86.0	78.2	96.2	82.8	55.9	9.4	923.7	260.4	399.1

Table 12

ESTIMATED GRANT DISBURSEMENTS FOR CORE PIP PROJECTS
(in millions of dollars)

	Before 1984	1984	1985	1986	1987	1988	1989	1990	1991	After 1991	Total	Total 87-89	Total 87-91
Belgium	0.0	0.0	0.0	1.0	1.0	3.0	3.5	0.0	0.0	0.0	8.5	7.5	7.5
17IR01 Integ rur dev	-	-	-	1.0	1.0	3.0	3.5	-	-	-	8.5	7.5	7.5
EEC	7.9	2.0	3.5	6.2	5.5	9.0	21.4	19.9	10.5	0.0	85.9	35.9	66.3
00JV01 Bardhere dam	2.0	0.7	1.0	0.3	0.4	-	10.0	10.0	10.0	-	34.4	10.4	30.4
01AH06 Panafr rinderpest	-	-	-	0.2	-	0.4	0.5	0.5	0.5	-	2.1	0.9	1.9
02JV07 Bard exp farm	0.2	-	0.1	1.5	1.2	1.2	-	-	-	-	4.2	2.4	2.4
02AD01 NW ag dev II	-	-	-	1.0	0.7	1.0	1.0	1.4	-	-	5.1	2.7	4.1
02CP03 Grapefruit plant	4.5	0.1	0.1	0.8	0.9	0.9	1.1	-	-	-	8.4	2.9	2.9
02ID02 Ag extension	0.2	-	0.3	-	-	-	-	-	-	-	0.5	0.0	0.0
08UW01 Mog wat extensn	1.0	1.2	1.3	1.8	0.3	-	-	-	-	-	5.6	0.3	0.3
09RD13 Jilib-Bard design	-	-	0.6	0.6	-	-	-	-	-	-	1.2	0.0	0.0
09RD30 Juba-Sheb bridges	-	-	-	-	2.0	2.4	-	-	-	-	4.4	4.4	4.4
09RD35 Road maint/rehab	-	-	0.1	-	-	2.8	8.8	8.0	-	-	19.7	11.6	19.6
09PD28 Mog old port	-	-	-	-	-	0.3	-	-	-	-	0.3	0.3	0.3
	-	-	-	-	-	-	-	-	-	-	0.0	0.0	0.0
EEC/Italy	0.0	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	0.0	0.0
06DP03 Pharmaceut indust	-	1.4	-	-	-	-	-	-	-	-	1.4	0.0	0.0
Finland	0.0	0.0	1.1	2.0	6.4	2.9	6.1	1.2	0.0	0.0	19.7	15.4	16.6
02ID15 Grain storage	-	-	-	-	1.0	1.4	1.0	-	-	-	3.4	3.4	3.4
07EP06 Regl ctrs electr	-	-	1.1	2.0	5.4	1.5	5.1	1.2	-	-	16.3	12.0	13.2
Germany	24.0	5.6	8.8	14.8	26.6	27.0	32.1	15.2	10.7	13.0	177.8	85.7	111.6
00JV01 Bardhere dam	-	-	-	-	-	-	10.0	12.0	10.0	13.0	45.0	10.0	32.0
01AH01 Vet lab svcs	3.6	-	-	-	-	-	-	-	-	-	3.6	0.0	0.0
01AH08 Trypanosomiasis	-	-	-	-	-	1.0	0.7	0.7	0.7	-	3.1	1.7	3.1
01RD02 Cent range dev	0.7	0.8	2.0	0.8	1.5	1.5	1.5	1.7	-	-	10.5	4.5	6.2
02JV05 Mogambo irg	0.5	2.8	4.2	1.0	2.6	0.5	-	-	-	-	11.6	3.1	3.1
02JV07 Bard exp farm	-	-	-	-	0.5	-	-	-	-	-	0.5	0.5	0.5
02JV08 Juba val studies	-	-	0.7	0.7	1.6	2.2	0.6	0.3	-	-	6.1	4.4	4.7
02IR13 Duduble offstream	-	-	-	0.5	8.0	8.0	9.0	-	-	-	25.5	25.0	25.0
02CP13 Mid Shebelle ag	-	-	-	0.1	2.1	0.9	1.0	-	-	-	4.1	4.0	4.0
02CP14 Smallhldr L Sheb	-	-	-	-	0.3	0.4	0.4	0.5	-	-	1.6	1.1	1.6
04FP19 Lower Juba fish	14.2	1.2	1.1	3.0	3.8	-	-	-	-	-	23.3	3.8	3.8
08RW01 Deep borewells	1.4	-	-	-	-	-	-	-	-	-	1.4	0.0	0.0
08RW10 Pumps, renew en	-	-	-	-	0.2	0.1	-	-	-	-	0.3	0.3	0.3
08UW03 Urb wat sup II	-	0.1	-	1.5	1.8	3.5	2.2	-	-	-	9.1	7.5	7.5
08UW06 Urb wat sup III	3.6	0.6	-	-	-	-	-	-	-	-	4.2	0.0	0.0
08UW08 Storm wat drain	-	0.1	0.8	0.2	0.3	-	-	-	-	-	1.4	0.3	0.3
09TR01 Trans master plan	-	-	-	-	0.4	-	-	-	-	-	0.4	0.4	0.4
09RD35 Rd maint/rehab	-	-	-	-	-	8.9	6.7	-	-	-	15.6	15.6	15.6
09PD33 Gen cargo vessel	-	-	-	7.0	3.5	-	-	-	-	-	10.5	3.5	3.5

Table 13

SUMMARY OF TECHNICAL ASSISTANCE PROGRAMME BY SECTORS

	In millions of dollars				In per cent of total			
	1987	1988	1989	Total	1987	1988	1989	Total
Productive sectors	15.2	40.1	41.2	96.5	37.4	48.0	50.6	46.9
Livestock	0.8	1.6	1.0	3.4	2.0	1.9	1.2	1.7
Agriculture	7.7	24.1	27.1	58.9	18.9	28.9	33.3	28.6
Forestry	0.6	4.2	3.9	8.7	1.5	5.0	4.8	4.2
Mineral resources	0.2	0.5	0.5	1.2	0.5	0.6	0.6	0.6
Manufacturing	3.6	3.2	2.1	8.9	8.8	3.8	2.6	4.3
Energy	0.8	1.3	1.4	3.5	2.0	1.6	1.7	1.7
Water resources	0.7	2.1	1.7	4.5	1.7	2.5	2.1	2.2
Transport & communications	0.8	3.1	3.5	7.4	2.0	3.7	4.3	3.6
Social/admin sectors	25.5	43.4	40.2	109.1	62.6	52.0	49.4	53.1
Education	6.8	15.1	14.9	36.8	16.7	18.1	18.3	17.9
Health	7.4	10.1	8.9	26.4	18.2	12.1	10.9	12.8
Manpower and employment	2.6	9.3	8.6	20.5	6.4	11.1	10.6	10.0
Planning and statistics	8.6	7.7	7.3	23.6	21.1	9.2	9.0	11.5
Regional/rural/urban devmt	0.1	1.2	0.5	1.8	0.2	1.4	0.6	0.9
Total	40.7	83.5	81.4	205.6	100.0	100.0	100.0	100.0
	Sources of funding							
Foreign loans	4.9	8.0	8.9	21.8	12.0	9.6	10.9	10.6
Foreign grants	30.8	33.0	25.4	89.2	75.7	39.5	31.2	43.4
To be funded	-	32.2	38.2	70.4	-	38.6	46.9	34.2
Somali development budget	4.9	10.1	8.6	23.6	12.0	12.1	10.6	11.5
Other domestic	0.1	0.2	0.3	0.6	0.3	0.2	0.4	0.3
Total	40.7	83.5	81.4	205.6	100.0	100.0	100.0	100.0

Table 14

ESTIMATED DISBURSEMENTS OF COMMODITY AID AND CASH GRANTS, 1985-1987 AND AFTER 1987
(in millions of dollars)

	Total	1985	1986	1987	After 1987
Food aid	151.6	47.1	54.5	50.0	0.0
United States loan	56.3	25.3	20.0	11.0	-
United States grant	24.0	-	12.0	12.0	-
Italy	18.0	5.0	8.0	5.0	-
WFP	31.2	8.9	10.9	11.4	-
EEC	10.6	7.9	-	2.7	-
Japan	3.6	-	3.6	-	-
Australia	0.3	-	-	0.3	-
To be funded	7.6	-	-	7.6	-
Petroleum	69.6	24.0	27.2	18.4	0.0
IDA AIP I	3.9	-	3.9	-	-
IDA ISAC I	13.4	-	-	13.4	-
Italian reg prog 1985	9.0	-	9.0	-	-
Italian reg prog 1986	3.7	-	-	3.7	-
Italian emergency prog	7.4	-	6.1	1.3	-
Saudi Arabia	15.0	15.0	-	-	-
United States 1985 CIP	17.2	9.0	8.2	-	-
Other commodities	185.3	23.1	58.5	94.5	9.2
IDA AIP I	5.7	2.1	3.6	-	-
IDA ISAC I	55.0	-	16.0	39.0	-
Italian reg prog 1985	25.0	9.0	16.0	-	-
Italian reg prog 1986	12.6	-	-	7.9	4.7
Italian emergency prog	18.5	-	14.9	3.6	-
German AIP	14.0	-	8.0	6.0	-
German 1985 CIP	2.2	2.2	-	-	-
German 1987 CIP	3.0	-	-	2.0	1.0
EEC	3.5	-	-	-	3.5
United States 1985 CIP	9.8	9.8	-	-	-
United States 1986 CIP	11.0	-	-	11.0	-
United States 1987 CIP	20.0	-	-	20.0	-
Italian auction 1987	5.0	-	-	5.0	-
Total commodities	406.5	94.2	140.2	162.9	9.2
Cash grants	79.5	41.0	38.5	0.0	0.0
Saudi Arabia	40.0	40.0	-	-	-
Qatar	1.0	1.0	-	-	-
Italian emerg prog	28.5	-	28.5	-	-
United States	10.0	-	10.0	-	-
TA component of CIPs	3.7	0.7	1.5	1.2	0.3
IDA AIP I	0.4	0.2	0.2	-	-
IDA ISAC I	1.6	-	0.8	0.8	-
Italian reg prog 1985	1.0	0.5	0.5	-	-
Italian reg prog 1986	0.7	-	-	0.4	0.3
GRAND TOTAL	489.7	135.9	180.2	164.1	9.5

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