deaths, reconstruction across the country shows that far more Somalis are literally rebuilding their homes and their communities.

Somalia's biggest advantage is its lack of a costly, unproductive, divisive and corrupt national government, and thus the absence of enterprise-choking taxation to finance yet another army or repay Somalia's \$1.9 billion debts. This may explain some of the difficulties of UN efforts to reestablish a single governing authority. It is also worth asking the question: in a post-cold war world, why should external donors or Somalis themselves hark back to older concepts of government, and wish to recreate Somalia's state-mismanaged enterprises in water, power, communications, ports, roads and airports, when privatised, Somali-owned and Somali-run companies could do the job from the start?

Many humanitarian agencies are slowly learning the real lessons of Somalia's crisis: that in trying to reach and support the most vulnerable in any disaster, it is the people and the reality of the systems they create and respect that matter, not the theory of governmental structures as seen from the capital city. The supposed "vacuum" of Somalia is filled with people trying to make a living and secure some stability in their lives.

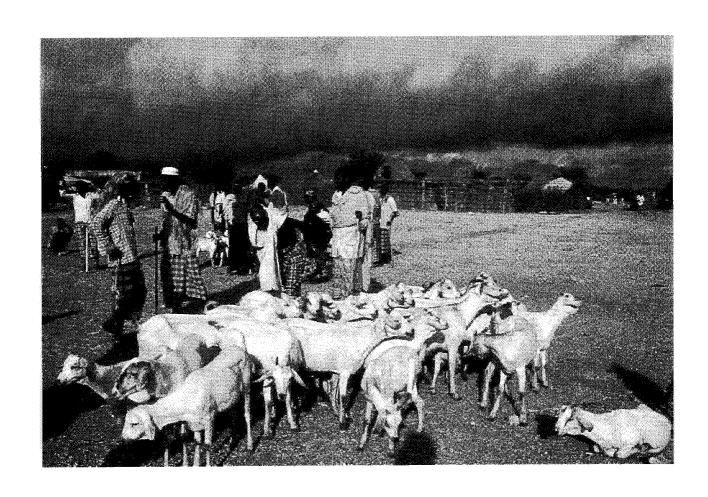
For example, even without a ministry of education, national curriculum or state-paid teachers, community-financed Koranic schools are operating throughout Somalia and teaching hundreds of thousands of children, even among nomadic groups. Given the cost and complexity of starting any education system from scratch, several agencies are trying to work with these community structures to rebuild primary education, emphasising basic literacy and numeracy.

There may be no medical system or ministry of health, but in addition to traditional healers and birth attendants, commercial drug shops in every town offer consulting, prescription and sales of a very wide range of modern medicines, some no doubt looted from aid supplies, others imported from Kenya and elsewhere

The challenge is thus not the vain hope of creating universal free health care, but improving the quality of care and targeting of the most vulnerable through such existing systems as drug shops, and integrating agency-backed primary health care programmes with the community-supported, self-financing enterprises that are already in place.

There may even be militia levies on food shipments and fees to the groups controlling ports and airports, but the lack of taxation or exchange controls means that for humanitarian agencies some aspects of Somalia's emergency operations have been far cheaper and bureaucracy-free, when compared to previous disasters elsewhere in the Horn of Africa.

Somalia is obviously a country where humanitarian agencies have had and will have major problems in working effectively, and attacks and kidnappings specifically directed at foreign aid workers in early 1994 were again forcing some agencies to reduce or suspend expatriate-managed operations. But rather than military protection or private armed guards, the experience of Somalia makes it clear that for agencies to be secure in the vacuum of a shattered country, the best solution is always to have the confidence, support and protection of the community being assisted.



Despite the civil war and the lack of government, many aspects of Somalia's economy are buoyant: markets are bustling, and the Somali Shilling - backed only by the confidence of Somalis - maintained reasonably stable exchange rates with the US dollar. Goat and sheep exports to Gulf states saw a dramatic increase in 1993 back towards pre-war levels, with reports of a million head of livestock going abroad. Somalia, 1993 Chris Steele-Perkins/Magnum

## Focus 6 Bringing water to Hargeisa

In a drought-prone desert country where water is scarce and expensive, supplies that are reliable and cheap can make a big difference to family incomes and prospects. In a region where water-borne disease is a major cause of child deaths, ensuring good clean supplies of water is crucial to improving health. In a devastated city where lack of water is hampering reconstruction and is a potential source of conflict, a guaranteed flow close to homes has a multiple role: it improves small-scale agriculture and livestock production, supports business activity, allows women more time for their families and themselves, and assists social, political and economic security.

In north-west Somalia, Hargeisa is slowly recovering from enormous destruction during its bombing by the then government's airforce in 1988 and the subsequent civil war until 1991, which forced the city's entire population of 600,000 people to leave. The city's water system was almost totally destroyed. The only remaining source of water for

300,000 people who returned was the Tug river - which is also used for washing and watering animals, and is contaminated by sewage as well as 170 shallow wells dug alongside the river.

With a grant of US\$1 million from the US Agency for International Development, Somali commercial contractors, supported by the UN Children's Fund, began rehabilitating the city's water system in 1991. With a total of US\$1.4 million already spent, the work continues in 1994, but the programme already claims significant success, providing clean and reliable water supplies for many thousands of people. If maintained and developed, the programme will demonstrate what can be achieved even in the immediate aftermath of war by concentrating on basic services to meet people's priority needs.

Water is pumped from wells in an area called Ged Deble, about 25kms north-east of Hargeisa, and sold through five water points at a flat-rate of Somali shillings 2,150 per 200-litre barrel. The revenue would be insufficient to repay the capital invested, had it been a commercial loan, but it does pay for 159 administrative, technical, financial and security staff, as well as other operating costs and maintenance work, leaving a small surplus.

The newly-created Hargeisa Water Agency is attached to the city mayor's office and operates under the Municipality of Hargeisa, with a board of directors comprising the Mayor, heads of council departments and the agency's chairman. This parastatalstyle structure, where real control lies with the agency's manager, was created in December 1992 after two failed attempts to hand over programme management to the Ministry of Minerals and Water Resources of the would-be independent republic of Somaliland. Clan disputes and corruption were blamed for interruptions in supply, but water flow has been reliable since the agency took control.

The original water system was installed by Chinese government engineers in the 1970s and 1980s at a cost then of around US\$80 million. At Ged Deble, 12 wells, each capable of producing an average of 60 cubic metres of water an hour, fed a reservoir, from where water was pumped to a half-way reservoir at Biyo Khadar, 12kms from Hargeisa, and then pumped to the city. The pumping stations ed in the servoirs d, new led, and 00-1,500 lay. This e water

	were damaged or destroyed in the
-	war. Six wells and both reservoirs
	have been rehabilitated, new
ĺ	pumps and turbines installed, and
	the system produces 1,000-1,500
4	cubic metres of water a day. This
	is distributed through five water
-	
_	With water selling at around 10
J	Somali shillings per litre, over 50%
	of the households surveyed were able
	to buy more than 120 litres of water
•••	per day.
_	per man

Water sales in Hargeisa			
Expenditure range	Number of households	Percentage share	
< 800 shillings	50	28	
900-1,200	41	23	
1,300-1,500	11	6	
1,600-1,800	12	7	
1,900-2,100	8	5	
2,200-2,400	· 14	8	
2,500-2,700	3	2	
2,800-3,000	2	1	
3,000-5,000	14	8	
6,000-10,000	7	4	
> 10,000	7	4	
Others	2	1	
Total	171	100	

Source: UNICEF-Somalia, 1993

points or kiosks on a north-south line through the city, where it is sold directly to consumers and bought by businesses operating tankers and donkey carts for retailing water to more distant customers. Half of Hargeisa's population now has access to potable water, and some water is distributed free to institutions, such as hospitals and orphanages.

The water is chemically and biologically pure, and a survey of 176 water users representing all ages and both sexes found 77% felt better with the new supply, while 75% reported a positive impact on the health of children. The kiosks meant 38% had increased their use of water, and 58% were spending less time collecting it. One-third used the extra time on business,

another third to look after their families, and almost one-fifth for leisure, mainly chewing the common Somali narcotic plant "chat".

Although a third of the water users surveyed lived within 500 metres of a water point and almost half now had a supply closer to their homes than before, just five kiosks in Hargeisa's 170 sq km meant 40% lived between 2km and 4km from a kiosk and a quarter had to travel over 4km to get water Extension of pipes and building a further 20 kiosks has begun and is expected to cost another \$300,000, bringing clean supplies within reasonable reach of the entire population.

Apart from more kiosks to improve convenience, users wanted cheaper water. At present prices, 28% spend less than 800 Somali shillings (around US\$0.25) a day on water and another 23% spend 900-1,200 shillings; most said they would double their consumption if prices were halved. Of those surveyed, just over half were buying less than 10 litres a day, and 85% bought less than 15 litres, well below the World Health Organization- recommended 20 litre-a-day minimum. If the system's peak output of 804 cubic metres of water a day was divided among all 300,000 people, it would give each one less than three litres a day.

Older Hargeisa residents say that the city has suffered chronic water shortages since it was founded 120 years ago. Apart from the river and privately-owned shallow wells, the other main source of supply is rain water, which usually falls during five months of the year, and is collected by most families in cement block tanks and barrels Hargeisa Water Authority sales fell by about a third during rains in April, May and June 1993.

For many families in the city or in surrounding villages, water sellers using tankers and barrels on donkey carts have long been the main "retail" suppliers. Todav, a barrel bought by a tanker driver can be resold for 7,000-9,000 shillings, depending on demand and distance. Making up to four trips a day, tanker drivers can make up to 50,000 shillings (US\$13) a day, one of the region's most consistently profitable businesses. Donkey carts, carrying water in two barrels welded together, make four to seven trips a day.

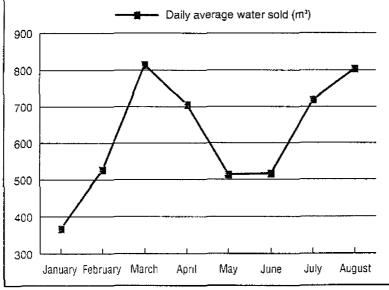
Despite complaints of interruptions in supply and the cost of

Sales show a seasonal trend, with sales declining in the rainy season when water is available from other sources.

Source Evaluation of Hargeisa town water supply. UNICEF-Somalia. 1993

## Hargeisa water sales

Month	Daily Average water sold (m³)
January	368
February	527
March	815
April	706
May	514
June	517
July	719
August	804



spares and fuel, 160 tankers and 500 donkey carts are operating in the city. During one month of peak output in August 1993, tankers bought 44% of the water and together earned 257-363 million shillings net, depending on their retail prices; donkey carts took 26% and made 152-215 million shillings; a total private sale of 409-578 million shillings, against Hargeisa Water Authority's income for the month of 259 million shillings. While more water points will cut the income of such retailers and their families - affecting 5,000 people directly - it will reduce the costs to almost everyone in the city, raise usage, and greatly increase waterauthority turnover.

Increasing production will not only mean more capital investment, but also improving Somali management of an expanded programme and many more staff, including security. Early in the project, illegal tapping of supplies and intimidation by armed militias forced the water authority to spend 55 million shillings to hire 300 additional security staff for four months, until the situation improved. There are other potential costs, in broader environmental terms, since the aquifer supplying the water is also expected to be tapped by more water users given licences by the region's ministry of agriculture, a policy which conflicts with the long-term sustainability of the source, as originally planned by the ministry of water. Irrigation and other uses could shorten the overall life of the aquifer and lower the water table.

Since the programme was, at its start, capital rather than labour intensive and involved outside contractors, there is an acknowledged need to improve community participation. Elders interviewed during the programme's initial evaluation welcomed the new water system but all were keen to see more water points and lower prices. Women's involvement is crucial, with suggestions that they should have a role in choosing kiosk sites and designing the system, which could cut vandalism and reduce the inevitable land ownership disputes over water point construction.

Water is a key part of the sustainable development of northwestern Somalia, where the economy is thriving, despite the lack of any official banking system, internationally-recognised government or major overseas aid. Livestock exports and cash from Somalis working overseas has

meant a stable exchange rate, food in the markets from expanding agriculture, and a thriving informal sector employing many women who are de facto heads of household.

Many problems remain, including more than 200,000 refugees from the area living in Ethiopia and hundreds of thousands still vulnerable to drought or renewed conflict. But the one million people of self-proclaimed "Somaliland" have created community councils and regional-development committees in an effort to solve their own problems. In Hargeisa, demonstrating the social sustainability of programmes that meet the most basic of needs, the kiosks work from dawn to dusk, people fill their jerry cans in safety, and donkey carts and tankers move freely around the city delivering the clean water supplies that are a vital part of recovery from disaster.

Based on "Evaluation of Hargeisa Town Water Supply", a report to Unicef Somalia, by Petros Gebeto, consultant.