

Effects of political neglect on urban people's access to water

Ian Cordery and Kamran Asghar
School of Civil and Environmental Engineering
The University of New South Wales
Sydney, Australia

Quetta - NW Pakistan

Altitude 1800m

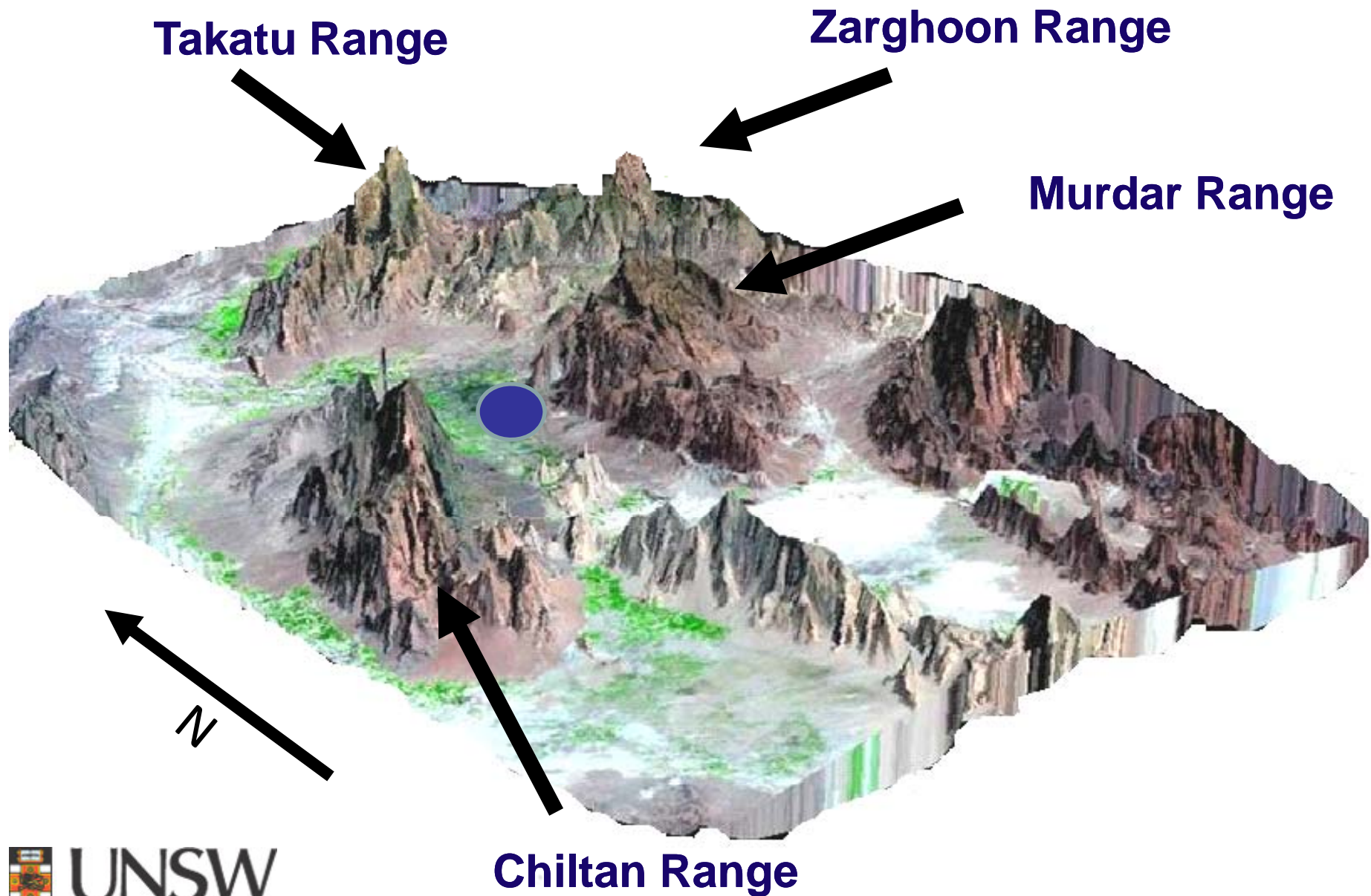
Population 1,500,000+

Annual precipitation 180mm

Water supply - entirely groundwater (untreated)

Some re-use of disposed/leakage water for
minor local irrigation

3D Satellite View OF Quetta



Geographical location of Quetta



Quetta water supply regarded as quite unsatisfactory by residents

Spoken opinions of water problems

- Supply of insufficient volume
- Supply unreliable - piped water only available few hours/week
- Cost of water too high - many do not pay water charges because “cannot afford” - (but do pay for electricity)

Study undertaken to attempt to determine real situation - is it really as bad as anecdotal evidence suggests?

To do this, survey of residents undertaken

Survey of residents conducted December 2008 – January 2009 to determine :-

- household water sources

- population attitudes to water and water use

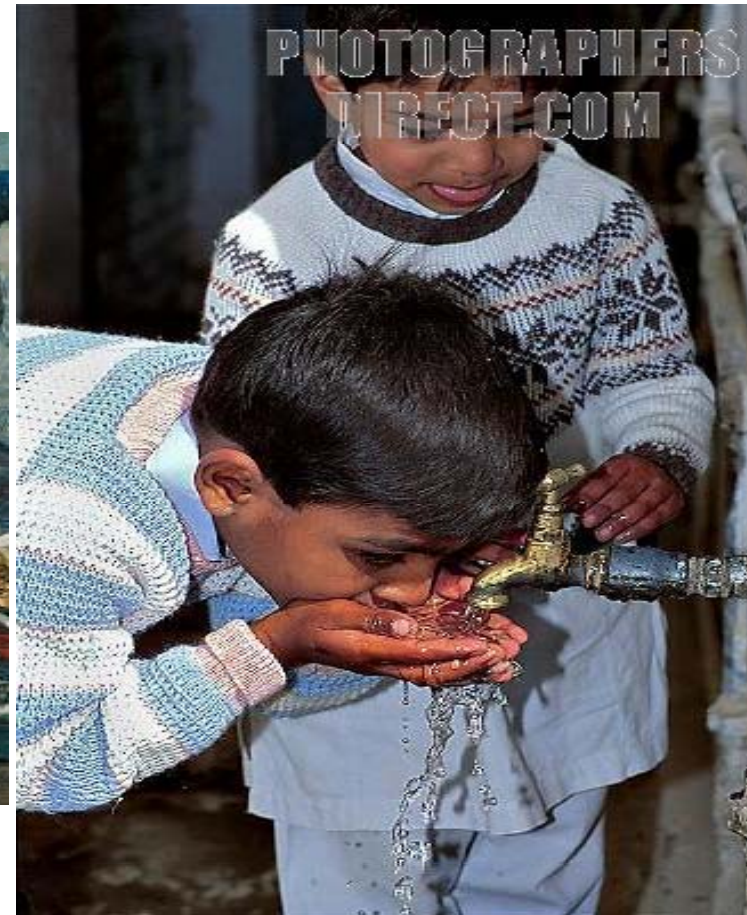
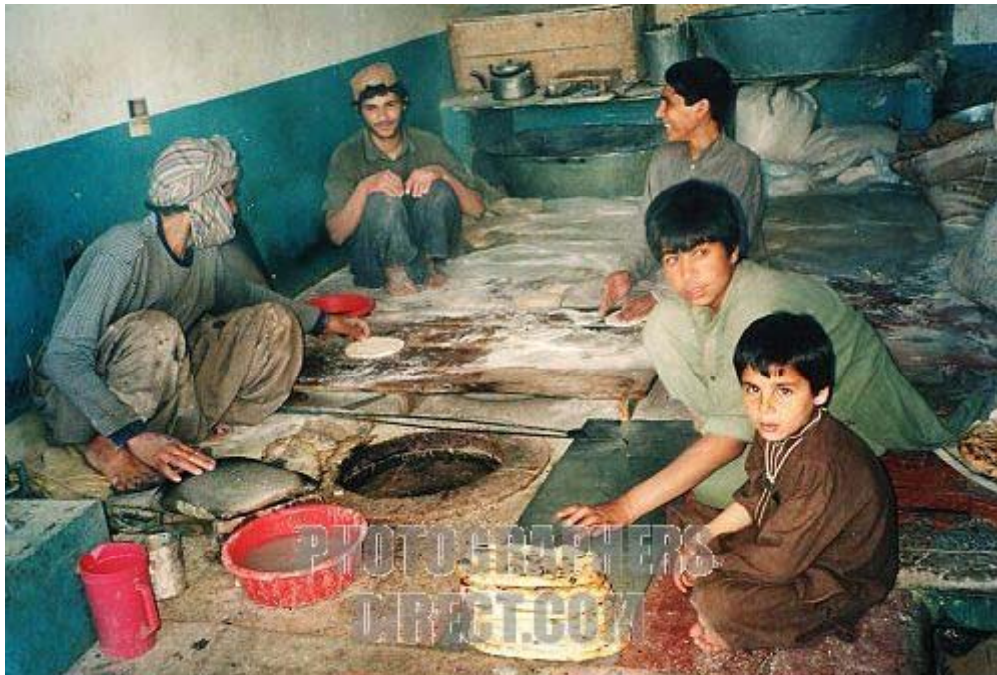
- population opinions on water providers and water gathering

- population attitudes to water charges - hopefully to gain overview of water financing

Over 600 people interviewed -545 useable results.

Survey conducted in Brahvi by 4 men and 3 women –
in street and at entrances to markets

Water usage , Quetta , Pakistan



Sources of household water (545households)

Municipal water connection (QWASA) 233 (43%)

Buy from water tankers 202 (37%)

Many of these also obtain water from
neighbours and street stand pipes and wells

Water Financing

QWASA Expenditure in 2008 Rs 315 million

QWASA Income in 2008 Rs 38 million

H'hold payments to tankers Rs 328 million

H'hold payments to vendors Rs 2750 million

Total payment/city dweller Rs 2000 /person pa

- more than 3% of per capita income

Volumes of water delivered

By QWASA	11.3 MI/day	}	
		}	14 litres/c/day
Road tankers	10.6 MI/day	}	

Private wells (pumps)	Unknown
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Delivery is at bare survival volume, so large volume must be sourced from private pumps

- Maybe increases delivery to 20 litres/c/day

Monthly charge by QWASA for connection
per household Rs 125 – most don't pay

Mean of household payments to QWASA
(by those who claim to pay) Rs 285/mth

Unit cost of QWASA water Rs 0.03/litre

Unit cost of tanker water Rs 0.1 to 0.3/litre

Unit cost paid by tanker drivers Rs 0.03/litre

Labor involved in water collection

38% of households collect water externally

- Average 49 minutes/household/day
- Perhaps raises consumption to 20 l/day
- Total for city 50,000 person hours/day
- Full time (hard) labour for 5-8000 people

Amounts paid by households for water (about Rs 3000 million pa) is enough to construct, operate and maintain an excellent water supply system

This is -: 10 times current expenditure by QWASA

-: 70 times current revenue collected by QWASA

- to operate a very inferior, unsatisfactory infrastructure

Solutions for Quetta Water?

Political stability, will and leadership

Official leadership and corruption free action

Metering with imaginative tariffs

Means to enforce payment of water
accounts - electricity accounts are paid!

Willing investors - excellent water supply
could be funded from current payments for
water, with all capital repaid in few years

Infrastructure, environment and foreign
exchange would be saved by removal of
350 heavy tanker trucks from city's roads
– hence large National benefit