

Earth Day 2015



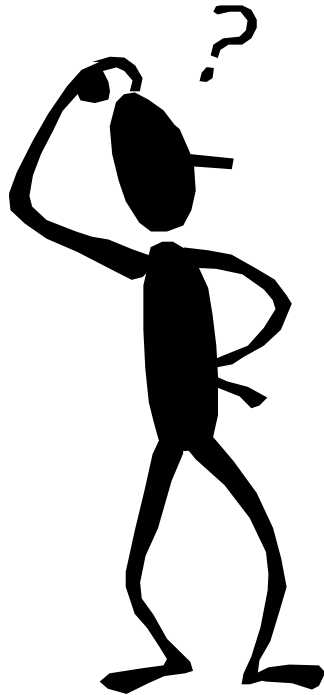
Changing Lifestyles

- Your Turn to Lead

Roland deSouza

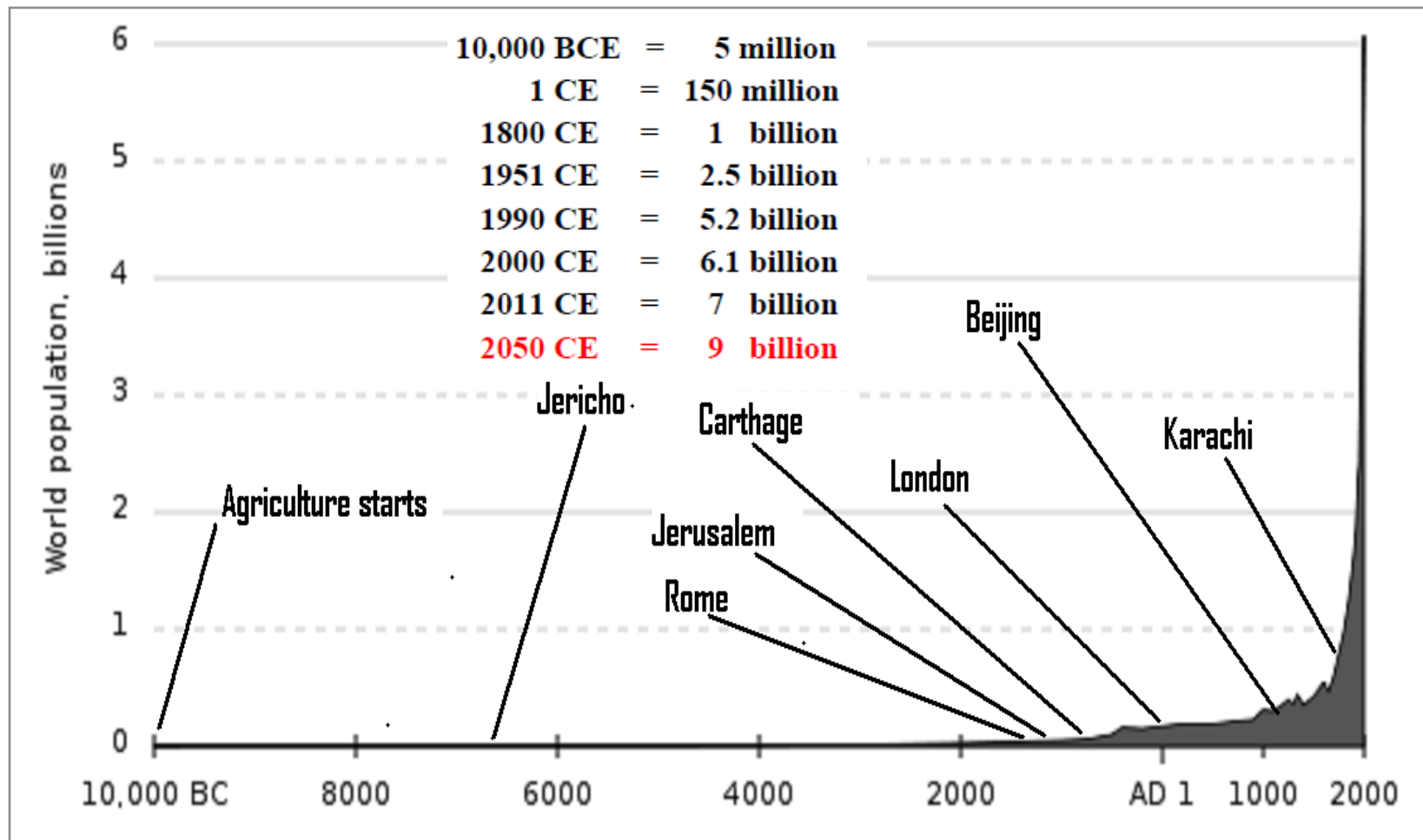
Shehri: Citizens for a Better Environment

Most of us agree that our country is in deep trouble



Can women engineers actually do something about it?

World population history



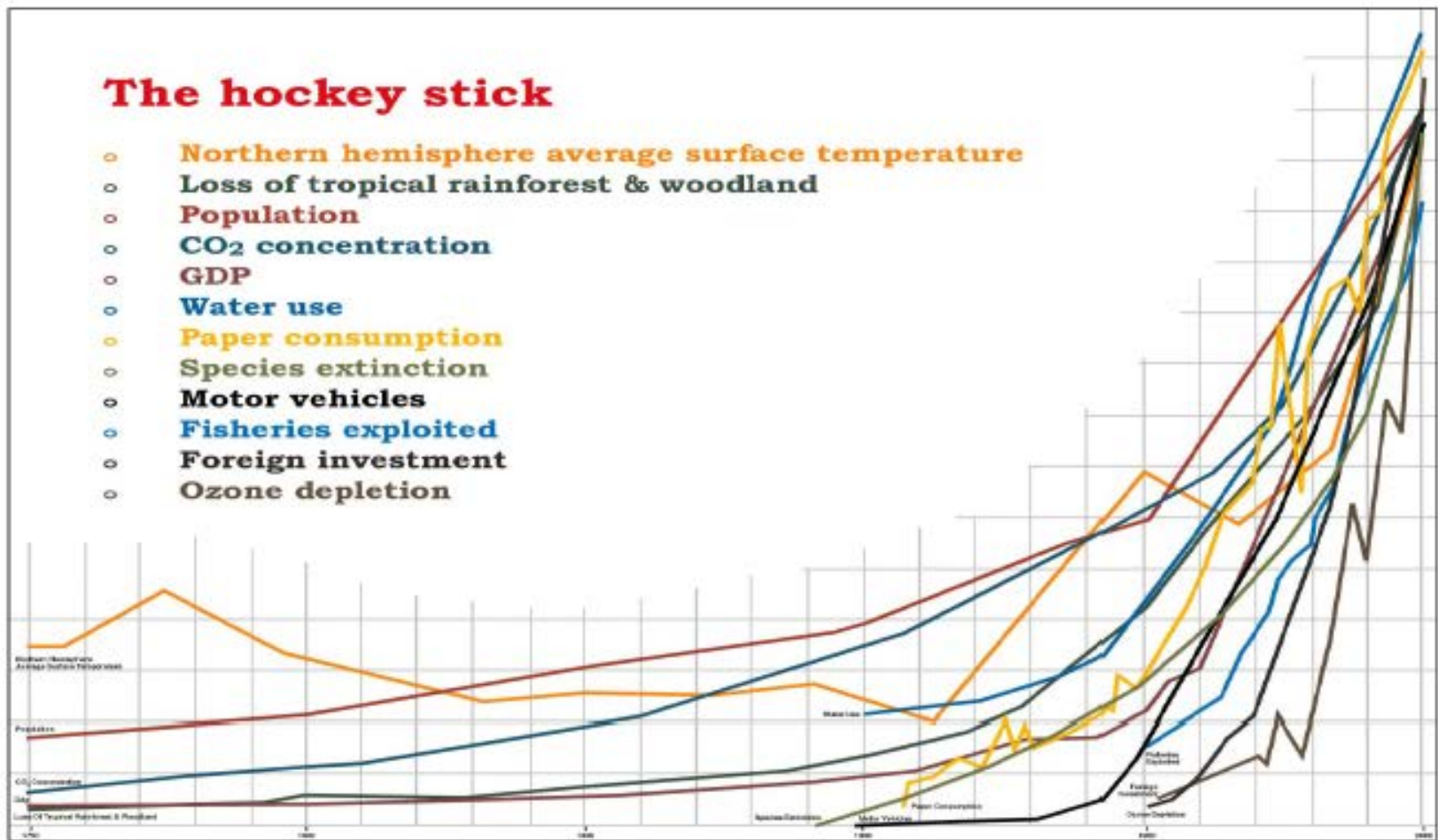
Pakistan vs Europe

Population increases in Germany (69 - 85m), France (40 - 61m) & UK (39 - 60m) over the period 1947 - 2015 are less than 50%

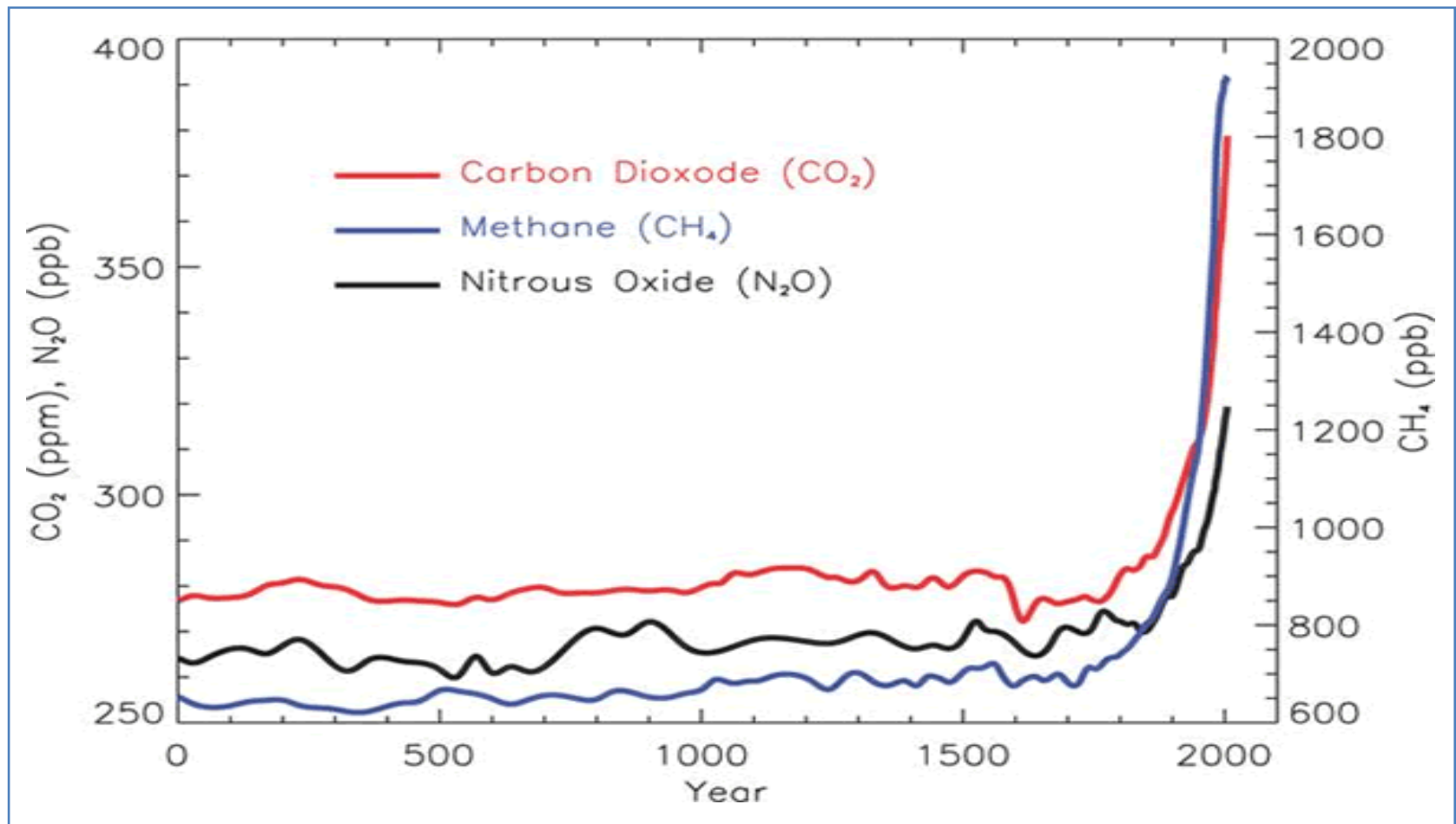
Over the same period, Pakistan's population has ballooned from 32 to 200 million --- a 625% increase!



Industrial revolution



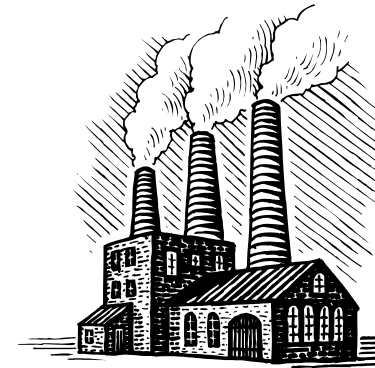
Mankind's pollution



Environmental issues

Over-consumption from

- ✓ Exploding populations
- ✓ Ever-rising lifestyles



leading to . . .

- ✓ Pollution (land, sea, air)
- ✓ Biodiversity decimation
- ✓ Exhaustion of resources

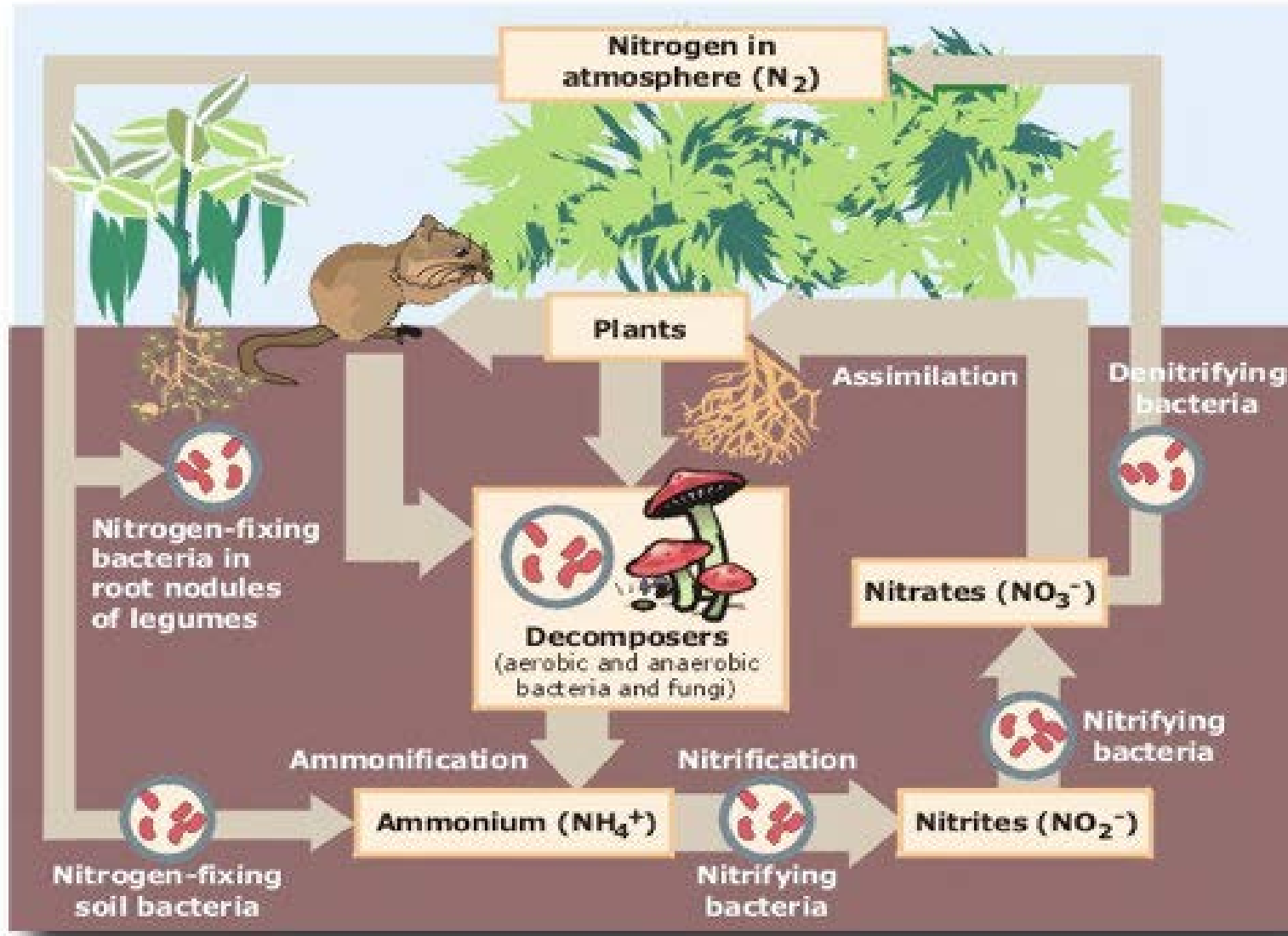
Water crisis in Pakistan

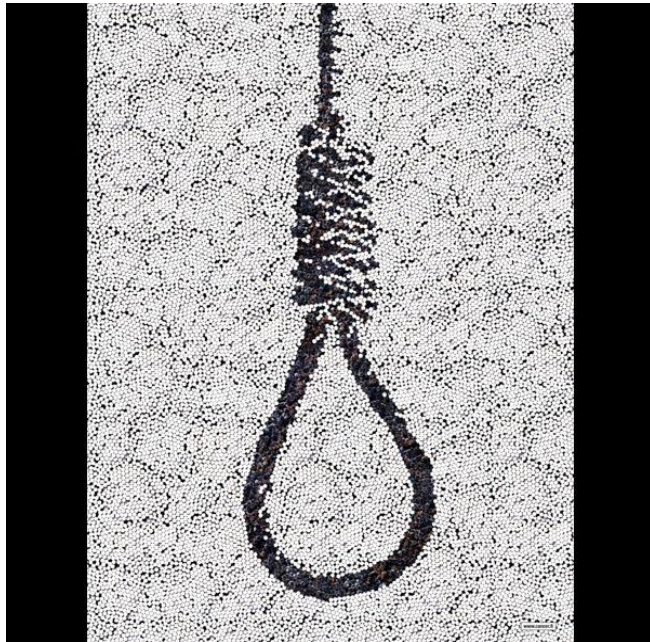
- ✓ Water-scarce: $<1,000 \text{ m}^3/\text{capita}$
- ✓ 30 (not 1,000) day storage
- ✓ By 2050, this will have halved



- ✓ Groundwater:
contaminated by
industries, fertilizers,
pesticides

Nitrogen cycle





Some scientists
see man naively
committing
**'Ecological
Suicide'**

They predict global population
will drop from 7 to 1 billion
by 2100!

Climate change costs

Pakistan (& the world) experiences

- *Reduced agricultural outputs*
- *Escalating health problems*
- *Extreme weather changes*
- *Food scarcities*
- *Sea-level rise*
- *Energy shortages*
- *Migrations of peoples*
- *Increasing pollution*
- *Water shortages*

Peace vs Environment

2007 Nobel Peace Prize awarded
to two environmentalists?

(Al Gore & UN Inter-governmental Panel on Climate Change)

- ✓ WWF's '*Living Planet Report 2008*'
- ✓ Al-Gore's prize-winning
'*An Inconvenient Truth*'
- ✓ CNA's '*National Security
& the Threat of Climate Change*'



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A step forward, step back . . .

World Bank* 2006 found
Pakistan's ecological degradation
equivalent to 6% of GDP



But economic
growth in 2006 was
also around
6% of GDP !!



a

**Pakistan: Strategic Country Environmental Assessment*

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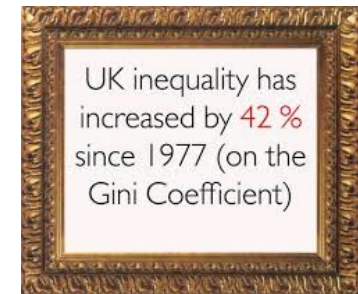
Increasing gap

ENVIRONMENTAL DEGRADATION

falls dis-proportionately on the poor,
while

ECONOMIC GROWTH

benefits mainly the richer classes



Thus, gulf between
'*haves*' & '*have-nots*'
is widening ---

worsening crime & terrorism !!

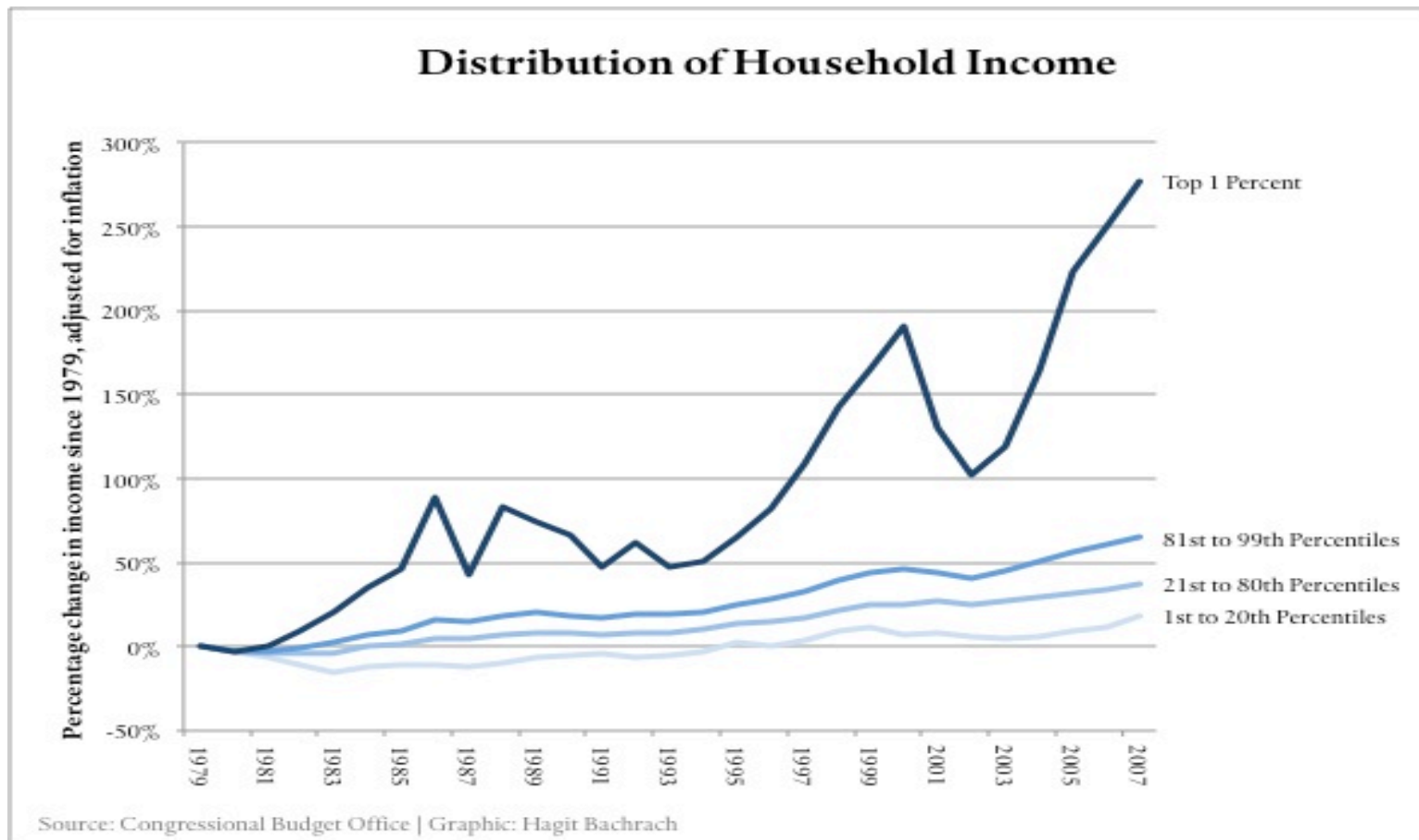
Pakistani's 'real' incomes 2002 – 11

- ✓ Top 20% urbanites' income continues to rise, while bottom 20% rural Pakistanis' income continues to fall
- ✓ For poorest, 1999 -2008's rapid economic growth meant nothing
- ✓ Rich refuse to pay income taxes: collection is below 9% of GDP!

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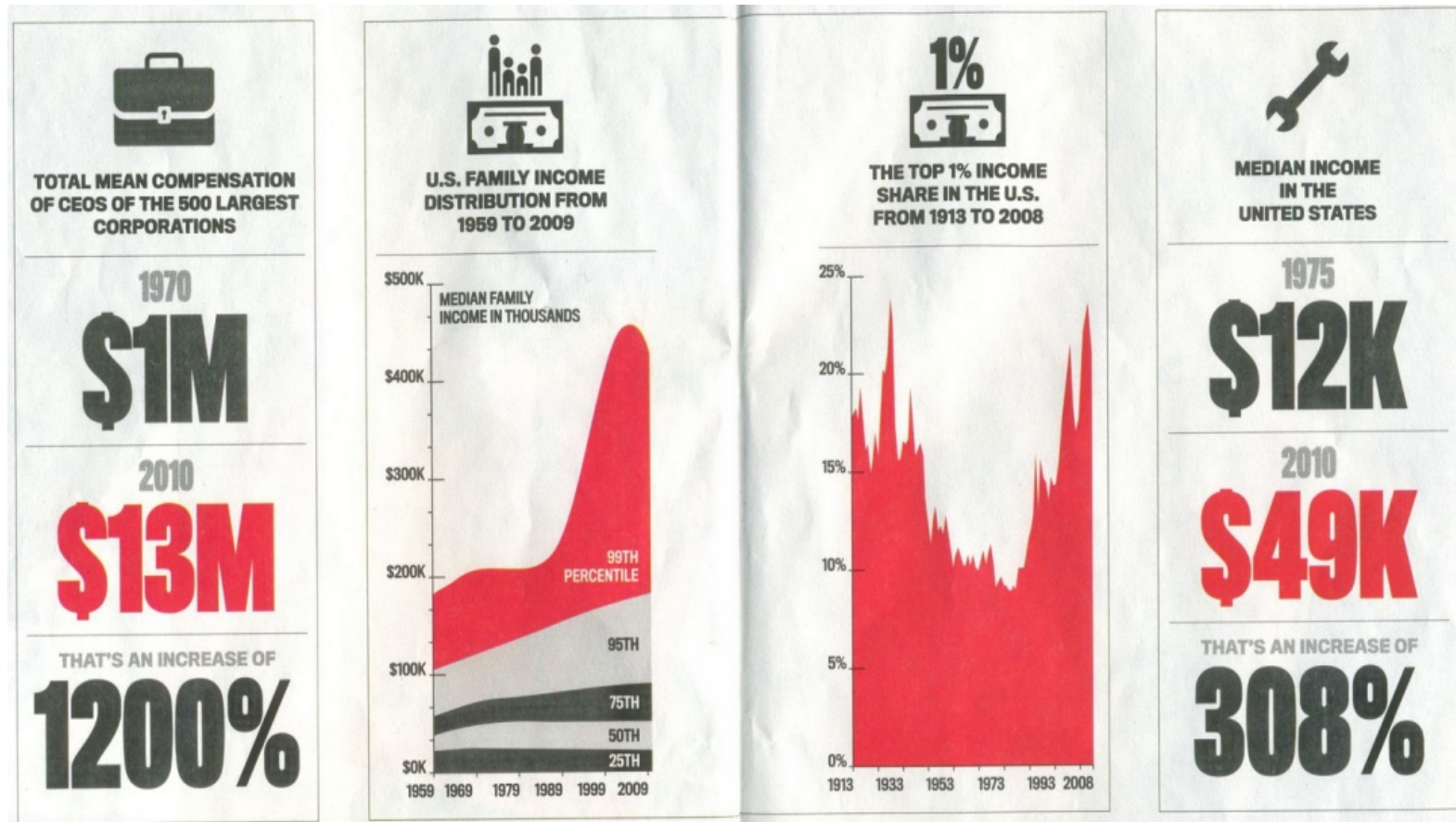
Even 'middle-class America' is declining



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Rich America, Poor America



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Can one build castles on dung-heaps?



WWF's Analysis, 2008

(gha/person)	<i>Bio- capacity</i>	<i>Eco- footprint</i>	<i>Over- shoot</i>
World	2.1	2.7	29%
Pakistan	0.4	0.8	100%
India	0.4	0.9	125%
U.S.A.	5.0	9.4	188%
U.A.E.	1.1	9.5	864%

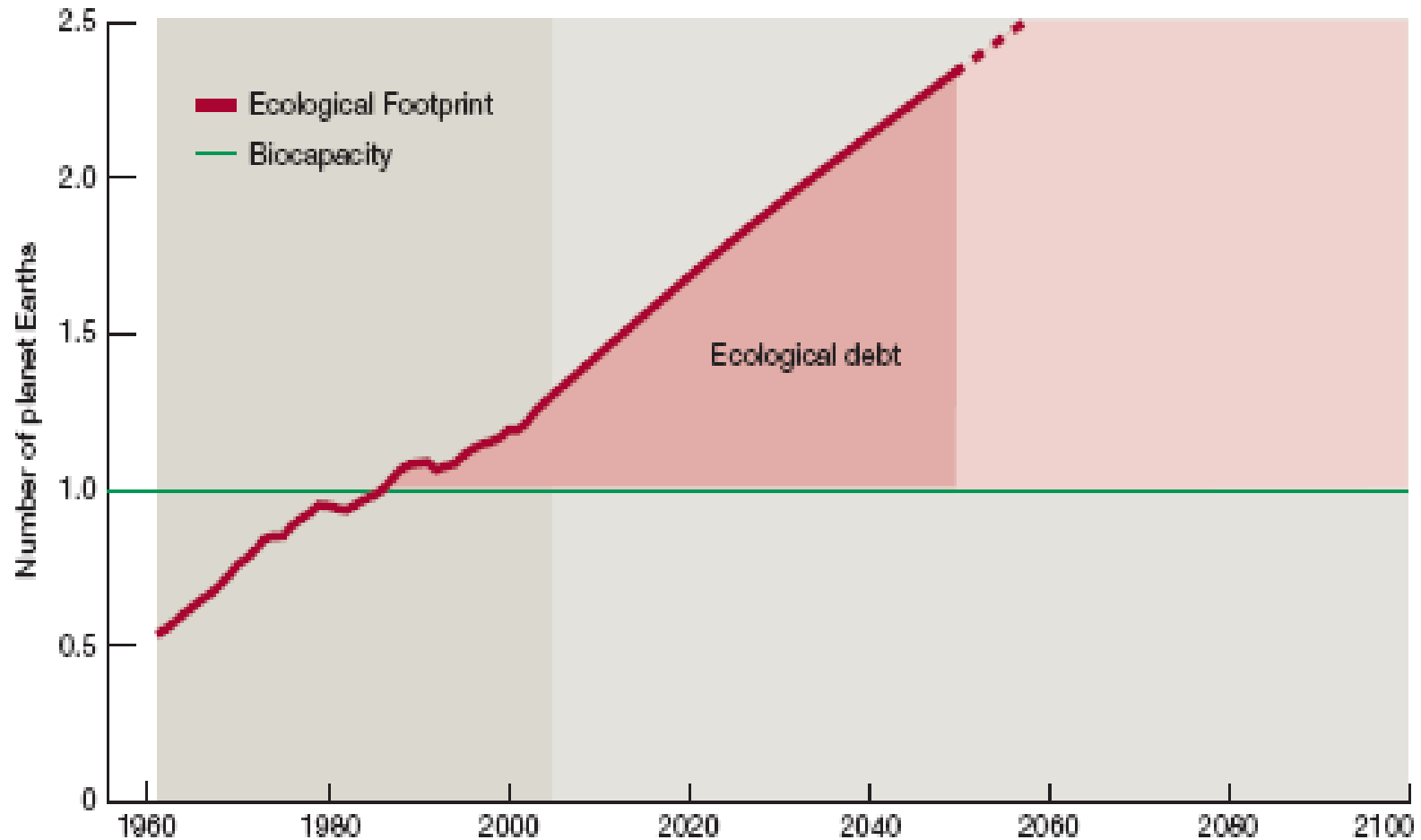
So, we need to

- ✓ Stop & reverse the process
- ✓ Balance consumption (*expenditure*) with natural world's capacity to regenerate & absorb wastes (*income*)

CHOICES MADE TODAY CAN CAUSE OVER-
CONSUMPTION BEYOND OUR LIFETIMES, OR
PROPEL US AND FUTURE GENERATIONS TO
'SUSTAINABLE LIVING'

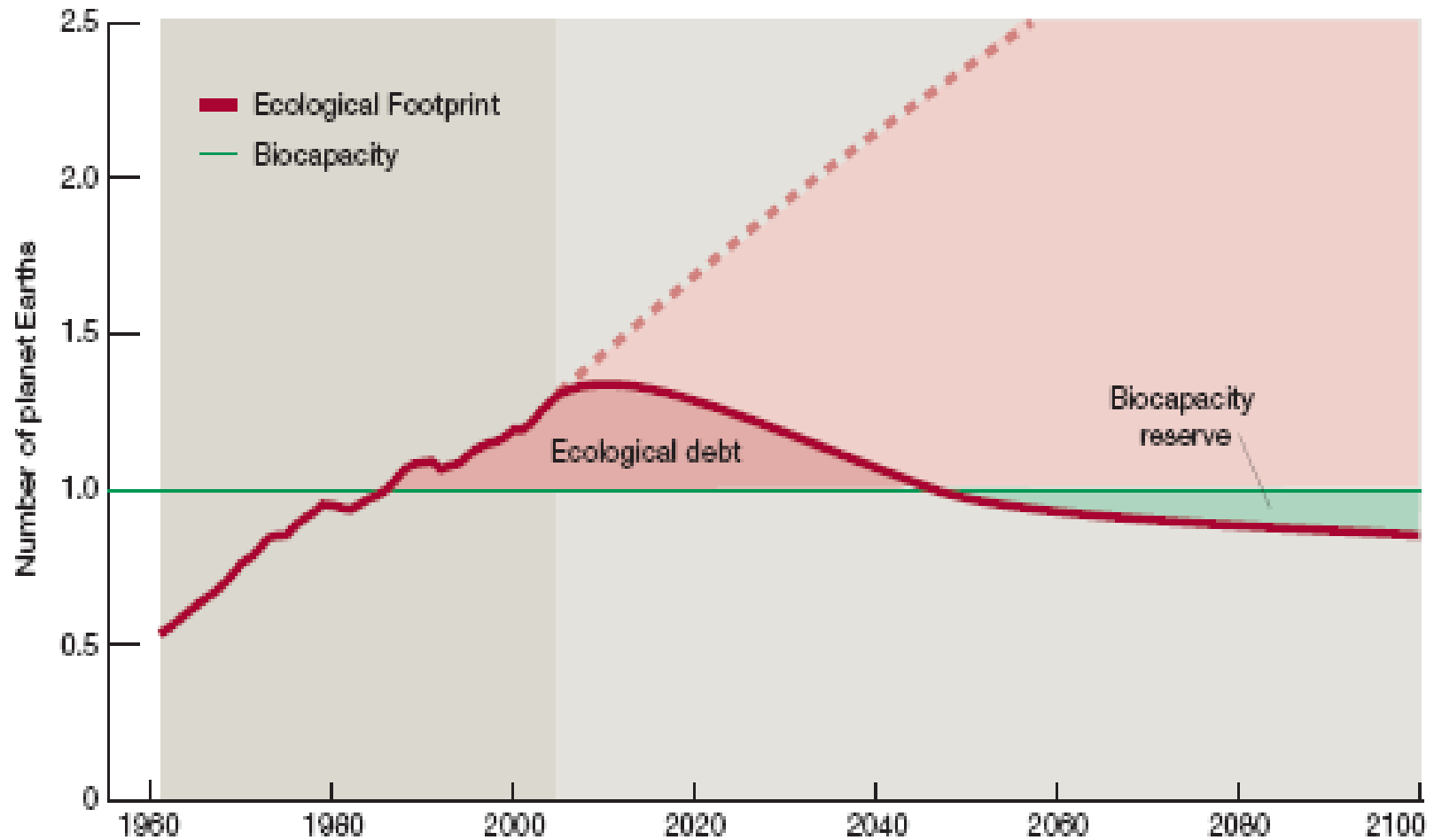
Global overshoot

Fig. 31: BUSINESS-AS-USUAL SCENARIO AND ECOLOGICAL DEBT



Return to sustainability

Fig. 32: RETURN TO SUSTAINABILITY



Projections for the future

**Escalating environmental distress,
deprivation, and inequalities ---**



**will lead to disasters,
violence & bloodshed
everywhere**

**Urgent action needed, not from
idealism, but from a cold-blooded
perception of self-interest**

Tackling 'ultimate' causes

Unless we sort out **ultimate reasons** for the escalating problems of Pakistan (& the world), normal steps to deal with **proximate causes & symptoms** are doomed to failure . . .



Policies & strategies

We must understand that

- ✓ All problems are of the 'stomach'
- ✓ Over-consumption (NEED, NOT GREED) of resources must be stopped
- ✓ Aping the West's unsustainable living standards is OUT
- ✓ Self-reliance is IN,
foreign-aid is OUT

- ✓ Development plans must be simple & realistic, within our means & culture
- ✓ Over-population must be addressed
- ✓ We must build up the **poor** (EDUCATION, HOUSING, HEALTH, EMPLOYMENT) & **reduce inequalities**



- ✓ We have to preserve the environment & protect the earth
- ✓ We must set an example for the world

These principles must be incorporated in all planning, projects & actions in Pakistan



UN's Ban Ki-Moon

After witnessing melting Arctic ice in 2009, he stated

"Our foot is stuck on the accelerator --- and we are heading towards an abyss."



Mangroves @ DHA



1972



1992

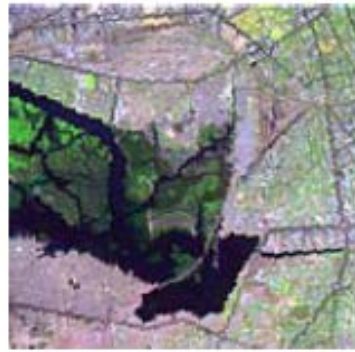


2005

Mangroves @ Mai Kolachi



1989 Landsat 5
Lush mangrove growth all over
the backwaters



1992 Landsat 5
Lush mangrove growth all over
the backwaters



2001 Landsat 7
Mai Kolachi Road constructed in
1994
KPT-OCHS reclamation shows



2003 Aster
Mangroves eliminated in KPT-
OCHS reclaimed area



2005 Google
Reclamation works proceeds

Invasion of Gutter Baghicha

May 23, 2009



Jan 19, 2010



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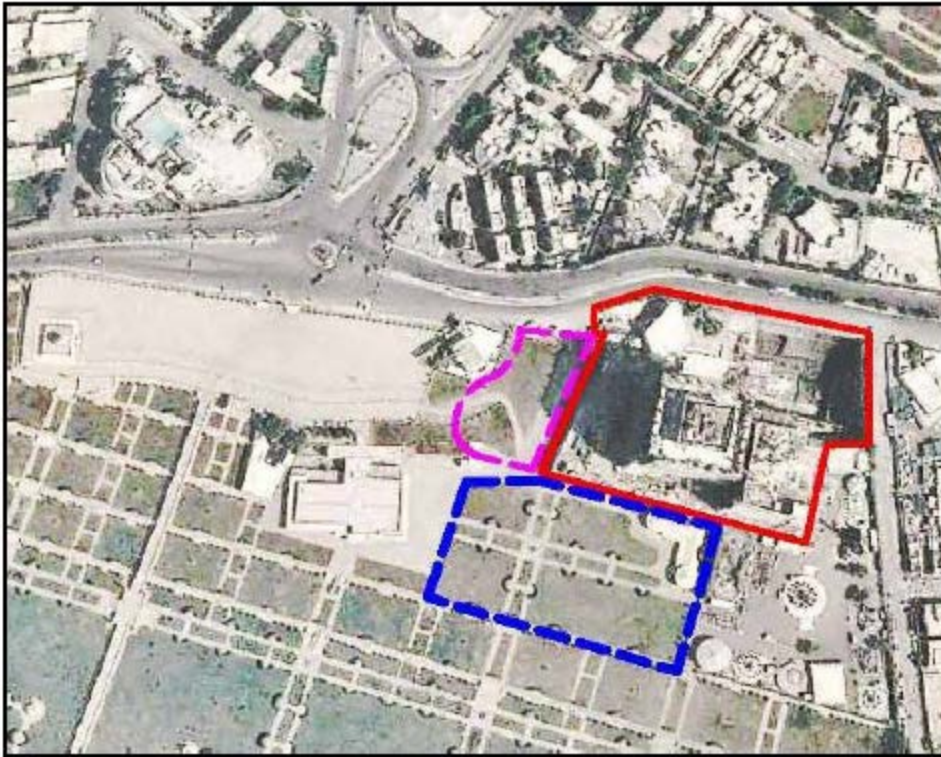


Land grab in Bagh-e-Ibn-e-Qasim

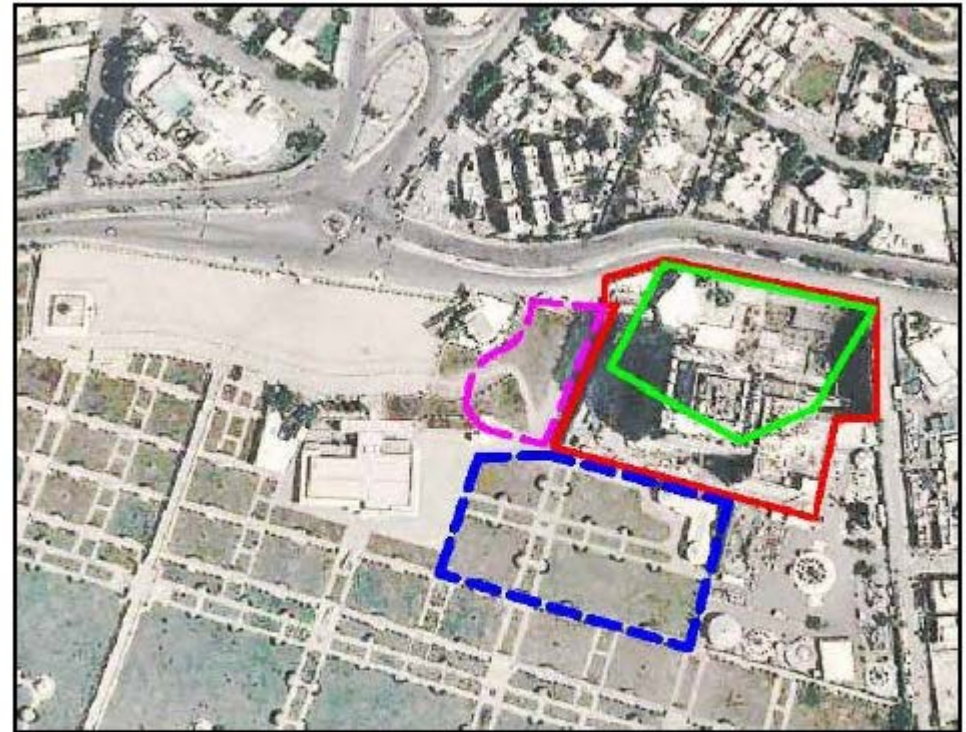


**Original Plot 5 & 6/CF-5, Clifton Quarter
(9,436 sq yds) (GREEN), 2005
as per KDA Scheme No.5 of 1972**

Comparative



Expanded Plot 5 & 6/CF-5, Clifton Quarter (17,336+ sq yds) (RED), 2013 as occupied by Bahria Town Icon Tower, along with proposed underground parking (BLUE) and entry ramps/roads (MAGENTA) into the building



**Comparative of the areas.
The extra area has been "acquired" from the amenity Bagh-e-Ibn-e-Oasim**



**No longer
true !!!**

**Our planet has been,
and is being, progressively destroyed
by mankind**

**Unless women can take the lead in
changing lifestyles, the future of
humanity is bleak!**

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Thank You!!