



# - Your Turn to Lead

## Roland deSouza

Shehri: Citizens for a Better Environment

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# Most of us agree that our country is in deep trouble



Can women engineers actually do something about it?



# World population history



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# 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 balooned from 32 to 200 million ---- a 625% increase!



## Industrial revolution



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## Mankind's pollution



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# **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 m³/capita
- ✓ 30 (not 1,000) day storage
- ✓ By 2050, this will have halved



✓ Groundwater:
 contaminated by
 industries, fertilizers,
 pesticides



## Nitrogen cycle



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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
- Food
  Sea-level
  scarcities
  rise
- weather s changes
  - Energy shortages

o Extreme

- Migrations of o Increasing peoples
  pollution
- Water shortages



## Peace vs Environment

# 2007 Nobel <u>Peace</u> Prize awarded to two <u>environmentalists</u>?

(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



THE NEWS 19-03-2009

#### Environment degradation causing Rs 365 bn losses

By our correspondent	resources and the environment.
The Determination of the second secon	The coviocumentalists have werned that rimstric charge is alively to es- accharate this trend, he said. Serious concern in many parts of the country, would decline dramat- ically, affecting food graduation will also be affected, while counts mer with being runndated, flooding the beness of millions of people have been aligned to full the said the flooding that the said of the method of the said of the said of the the beness of millions of people have been aligned to the said of the the beness of millions will also be affected as iter/hood disease speciation with hoods and draught
leading to over exploitation and en- vironmental degradation. He said that the country was also facing negative consequences of climate	ing raral poverty is likely to in- crease internal migration as well as migration to other countries, he said.
change such as glacial retreat, glacial lake outburst, droughts, flash floods and other associated natural husards, adding the envi- roemental degradation is estimated to cause economics loss to the time of Its 365 billion per autum, which	The minister said that the gov- emement had declared 2009 as the National Year of Environment to streamline the efforts for raising awareness and mitigzing the ef- fects of environmental degradation and climate change.
	A construction of the local data and the

Pakistan's ecological degradation equivalent to 6% of GDP



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

\*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!



# 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?



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## WWF's Analysis, 2008

(gha/person)	Bio- capacity	Eco- footprint	Over- shoot
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

- $\checkmark$  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



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## **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

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## 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 . . .

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# **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 & ac



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."

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## Mangroves @ DHA







1992



2005

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## Mangroves @ Mai Kolachi



<u>1989 Landsat 5</u> Lush mangrove growth all over the backwaters <u>1992 Landsat 5</u> Lush mangrove growth all over the backwaters



<u>2001 Landsat 7</u> Mai Kolachi Road constructed in 1994 KPT-OCHS reclamation shows



<u>2003 Aster</u> Mangroves eliminated in KPT-OCHS reclaimed area 2005 Google Reclamation works proceeds

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## **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

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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



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

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and is being, progressively destroyed by mankind

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



## Thank You!!

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