



Global Challenges and The University of Edinburgh

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Global challenges



↑ Urbanisation



↑ Population



Alleviating poverty



↑ Energy demand



Climate Change



↑ Water demand



↑ Food demand



Biodiversity




Infectious diseases

Another set of Challenges

Millennium Development Goals

“We will spare no effort to free our fellow men, women, and children from the abject and dehumanizing conditions of extreme poverty, to which more than a billion of them are currently subjected.”

United Nations Millennium Declaration - September 2000

- 
- 1 Eradicate extreme poverty and hunger
 - 2 Achieve universal primary education
 - 3 Promote gender equality and empower women
 - 4 Reduce child mortality
 - 5 Improve maternal health
 - 6 Combat HIV/AIDS, malaria, and other diseases
 - 7 Ensure environmental sustainability
 - 8 Develop a global partnership for development

A Perfect Storm?

Averting a perfect storm of shortages

Overview

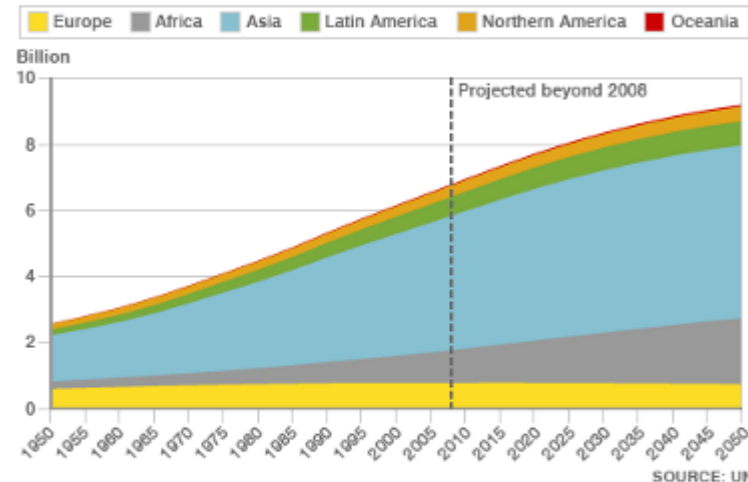
Science's role

Mega-cities

Lifestyles

By Stephen Mulvey
BBC News

The world's rising population, 1950-2050



As the world's population grows, competition for food, water and energy will increase. Food prices will rise, more people will go hungry, and migrants will flee the worst-affected regions.

That's the simple idea at the heart of the warning from John Beddington, the UK government's chief scientific adviser, of a possible crisis in 2030.

PERFECT STORM 2030

BBC correspondents explore the forecast by UK chief scientist John Beddington, of a "perfect storm" of food, water and energy shortages in 2030. They also consider what

PERFECT STORM 2030

THE PROBLEM



A grim forecast for 2030

There will be two billion more people, and not enough food



Cities drain resources

Migrants swell cities that suck in water, food and energy



China's energy hunger

China is investing in wind - but coal remains king



California's 'dust bowl'

Farms in California's Central Valley are steadily drying out



Leasing Ukraine

Foreigners are taking over tracts of the ex-breadbasket

SOLUTIONS



How to grow more food

Scientists say new crops can help - and GM would be useful



Will we change our ways?

Some will - but many remain climate-change sceptics



Viewpoint: EU 'not helping'

Advances in agriculture risk being 'hampered by regulators'



Wednesday September 30th 2009

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Middle East & Africa

East Africa's drought

A catastrophe is looming

Sep 24th 2009 | NAIROBI

From *The Economist* print edition

Governments are at their wits' end to keep their hungry people alive

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Hijacked by climate change?

By Richard Black

Environment correspondent, BBC News website



Have China's population curbs helped the global environment

As the UN climate summit in Copenhagen approaches, exhortations that "we must get a deal" and warnings that climate change is "the greatest challenge we face as a species" are to be heard in virtually every political forum.

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We need to change!

Business

Schumpeter

The pedagogy of the privileged

Sep 24th 2009

From *The Economist* print edition

Business schools have done too little to reform themselves in the light of the credit crunch

Illustration by Brett Ryder



THIS has been a year of sackcloth and ashes for the world's business schools. Critics have accused them of churning out jargon-spewing economic vandals. Many professors have accepted at least some of the blame for the global catastrophe. Deans have drawn up blueprints for reform.

The result? Precious little. Business schools have introduced a few new courses. Students at Harvard Business School (HBS) have introduced a voluntary pledge "to serve the greater good" among other worthy goals, which about half of this year's graduates embraced. But for the most part it is business schooling as usual. The

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Global Challenges

**Water
Availability**

**Climate
Change**

**Poverty
Reduction**

**Infectious
Diseases**

**Population
Increase**

**Food
Security**

**Biodiversity
Loss**

Urbanisation

**Energy
Demand**



Challenges for Global Development

People & Society

Population ↑

Poverty Alleviation

Demographic Change

Health

Urbanisation

Emerging & Neglected Diseases

Political Economy

Economic Growth

Conflict

Finance

Terrorism

Globalisation

Migration & Refugees

Resources & Environment

Food Security

Climate Change

Energy Security

Environmental Degradation

Water Security

Loss of Biodiversity



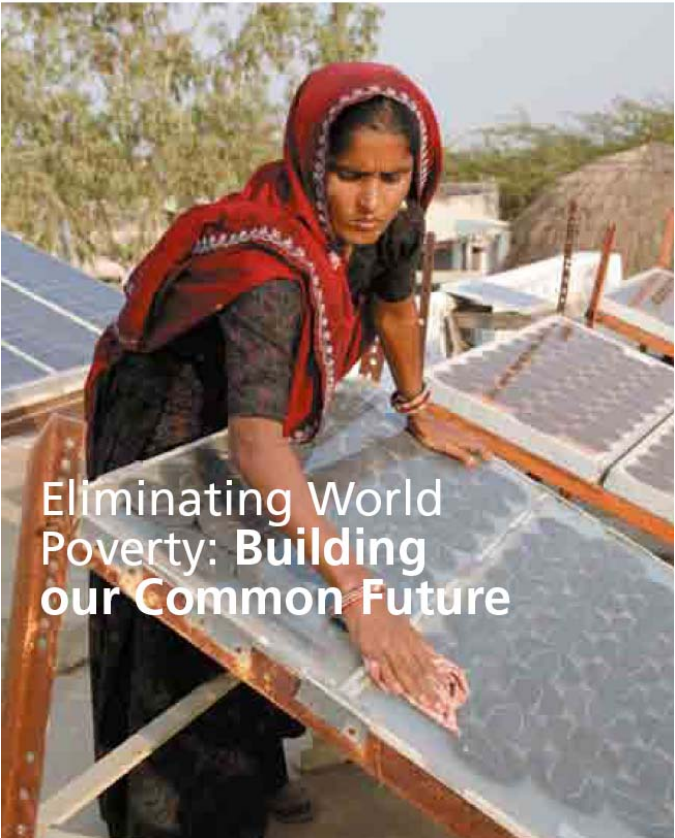
Time for Reflection

***Business As Usual* will probably lead to the heart of the perfect storm**

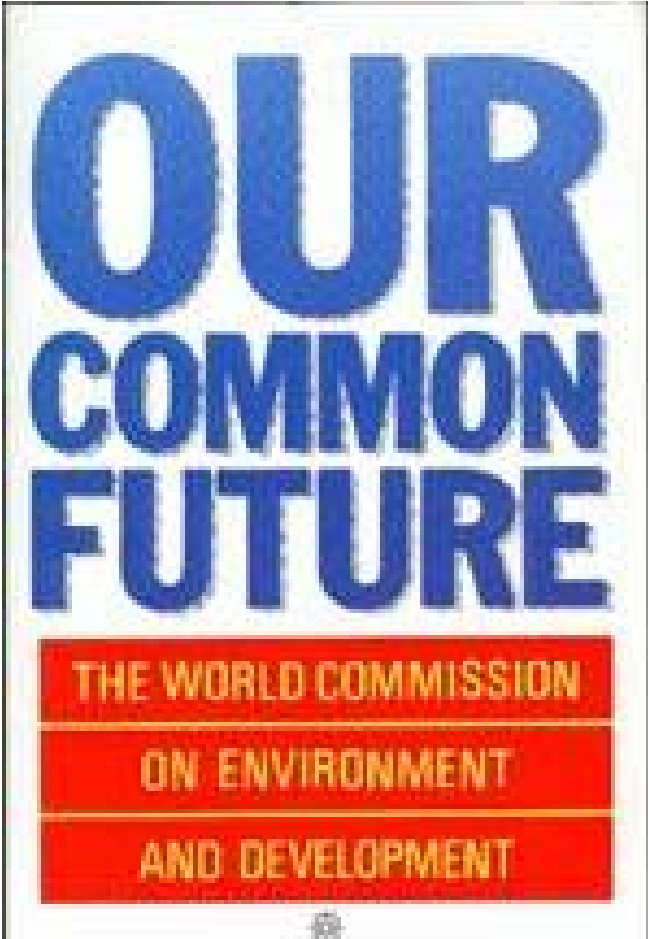


What is “Our Common Future”

DFID Department for International Development



Eliminating World Poverty: Building our Common Future

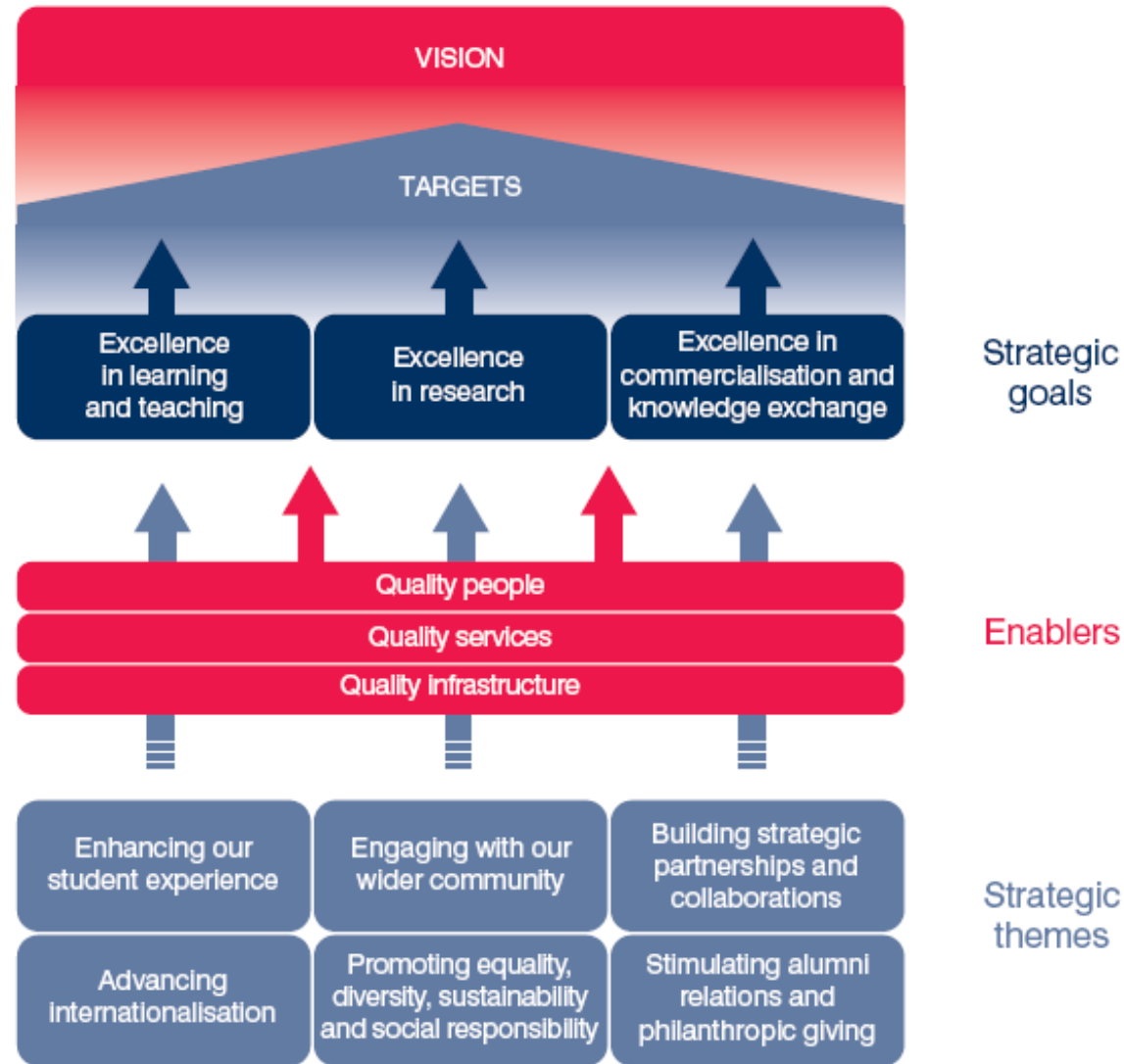


Three Starting Points

- Global Challenges are about people.
 - Consider their impacts on people.
 - Treat people as the solution rather than a problem.
- Our future (to 2030 & beyond) will be radically different from the past.
 - *Business As Usual* will not be sustainable.
- We need scenarios for the world's future.
 - To inform global debate.
 - To empower society.



Global Challenges and UoE



UoE's Responses

- Start with our own staff and students.
 - How will they be affected?
 - How can they contribute?
- Teaching (Building Capacity)
 - Needs to change to meet the needs of a rapidly changing world
 - Needs to *Empower People* to act to improve our common future.
- *Research & Knowledge Transfer*
 - *Our responsibility to serve & empower society*
 - *Building scenarios for the future*
 - *Providing knowledge, technology & skills to contribute to the future.*



Needs & Opportunities for UoE

- Edinburgh *needs* to continue changing to adapt to global challenges in order to maintain and enhance its position as a leading university in the world.
- Edinburgh has the *opportunity* to lead the world in responding to global challenges.
 - Through our research.
 - In the way that we interact with our own community.
 - In the way that we conduct our core business to meet the needs of global society.

