

OeAD AlumniTalks

OeAD - Centre for International Cooperation and Mobility

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The Outcome of Rio+20: Is “The Future We Want” Achievable?

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RIO+20

United Nations
Conference on
Sustainable
Development

At the Rio+20, world leaders, along with thousands of participants from the private sector, NGOs and other groups (192 UN member states – including 57 Heads of State and 31 Heads of Government)

- 10 day mega-summit, culminated in 3 day high-level UN conference
- to shape how poverty can be reduced, advance social equity and ensure environmental protection on an ever more crowded planet
- building a green economy and improving international coordination
- **“The Future We Want”** - primary result of the conference

.....a non-binding document renewing political commitment to **sustainable development**



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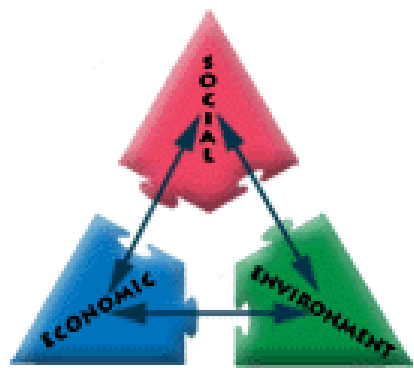
What is “the future we want”?.....

- **Helping people out of poverty and getting good jobs, while protecting the environment**
- **Providing access to clean energy for everyone, and making sure that the energy we produce doesn't contribute to climate change**
- **Making sure that everyone gets water, food and nutrition they need**
- **Building our cities such that everyone enjoys a decent quality of life.....better transportation systems without congestion and pollution**
- **Making sure that our oceans are healthy and that marine life is not threatened by pollution and climate change**
- **Making sure communities are resilient in the face of natural disasters**

.....Responding to these challenges leads to “the future we want”

Sustainable Development.....

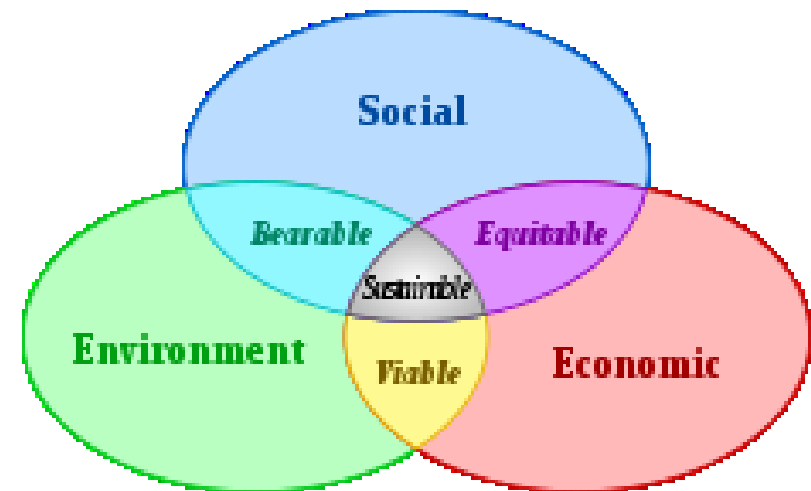
- a pattern of growth in which resource use aims to meet human needs while preserving the environment so that these needs can be met not only in the present, but also for generations to come
-“development that meets the needs of the present without compromising the ability of future generations to meet their own needs.”*Brundtland Commission (1987)*



<p>Services Household Needs Industrial Growth Agricultural Growth Efficient Use of Labor</p>	<p>Equity Participation Empowerment Social Mobility Cultural Preservation</p>	<p>Biodiversity Natural Resources Carrying Capacity Ecosystem Integrity Clean Air and Water</p>
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The dilemma of Sustainable Development.....

- Meeting future needs depends on how well economic, social, and environmental needs are balanced - when making decisions today.
- But many of these needs may conflict with each other in the short term.....**the dilemma of sustainable development**
- Responsible use of natural resources now will ensure that there are resources available for sustained industrial growth in the future.
- But some economic activities, are simply unsustainable even though they are important for economic growth and wellbeing















MOUNTAIN TOP REMOVAL



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Our dilemma ... economic vs. environmental objectives



Alluvial diamond mining at Kenema, Sierra Leone
Photos by Bavaria-Verlag







Our dilemma ...

- **Biofuel demand is increasing because of a combination of growing energy needs; rising oil costs; the pursuit of clean, renewable sources of energy;**
 - **Also the desire to boost farm incomes in developing countries;**
 - **The need for food crops—such as maize and sugarcane—to be used as feedstocks for biofuels has increased dramatically. That demand has had a significant impact on global food systems;**
 - **Effects of growing biofuel demand are interwoven with tightening grain markets, which reflect demographic shifts and improved diets;**
-increasing pressures on global agricultural markets and higher food costs**



Our dilemma ...

- **Forced eviction - involuntary land requisitions is widespread in China as local governments make way for private real estate developers**
- **Annually, local governments appropriate land from 4 million rural Chinese.**
- **A recent study: steady increase since 2005 in the number of "land takings" or compulsory state acquisitions; about 43% of the villages surveyed**



- **65% of the 180,000 annual "mass incidents" in China stem from grievances over forced evictions**
- **Local government paid farmers approx. \$17,850/acre;**
- **Resold to property developers at \$740,000/acre**

Our dilemma ...

- Rural farmers are relocated or “urbanized”
- < 20% gained an urban hukou or registration;
- 14% received urban social security coverage;
- 9.4% received medical insurance;
- Only 21.4% had access to schools for their children.



A farmer stands in front of his house, surrounded by newly constructed residential buildings in Gushi, Henan Province in March 2010. (David Gray/Reuters)

Our dilemma ...



- **Mega dams versus people**
- **From 1995 - 2005, an average 86,754 people were evicted annually**
- **In total 1.4 million people evicted since 1995**
- **Water and electricity turned off for Chongqing residents**

The Three Gorges Dam is the world's largest power station in terms of installed capacity (22,500 MW)



....a number of difficult questions!

- **Can the long term economic objective of sustained agricultural growth be met if the ecological objective of preserving biodiversity is not?**
- **What happens to the environment in the long term if a large number of people cannot afford to meet their basic household needs today?**
- **If you did not have access to safe water, and therefore needed wood to boil drinking water so that you and your children would not get sick, would you worry about causing deforestation?**
- **If you had to drive a long distance to get to work each day, would you be willing to move or get a new job to avoid polluting the air with your car exhaust?**



.... our needs conflict with one another!

- For example, **clean air to breathe** might conflict with our **desire to own a car**. Which would you choose, and how would you make your decision?
- Just within ourselves, we have conflicting needs, how much is that multiplied when we look at a whole **community, city, country, world**?
- For example, what happens when a company's need for **cheap labor** conflicts with workers' needs for **liveable wages**?
- Or when individual families' needs for **firewood** conflict with the need to prevent **erosion and conserve topsoil**?
- Or when one country's **need for electricity** results in an increased risk of **nuclear accident** for its neighbours?



.... and how do we decide whose needs are met?

- **Poor or rich people?**
- **Citizens or immigrants?**
- **People living in cities or in the countryside?**
- **The environment or the corporation/business sector?**
- **This generation or the next generation?**
- **People in one country or another? Downstream or upstream users**



.....when there has to be a trade off, whose needs should go first?

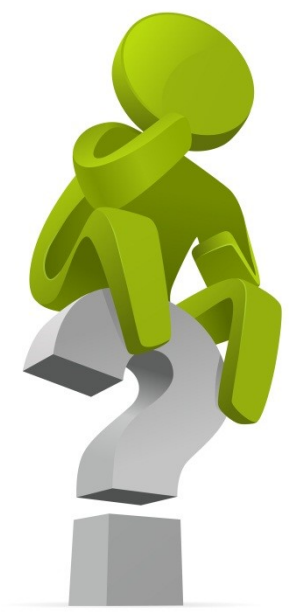


.....the art of balancing

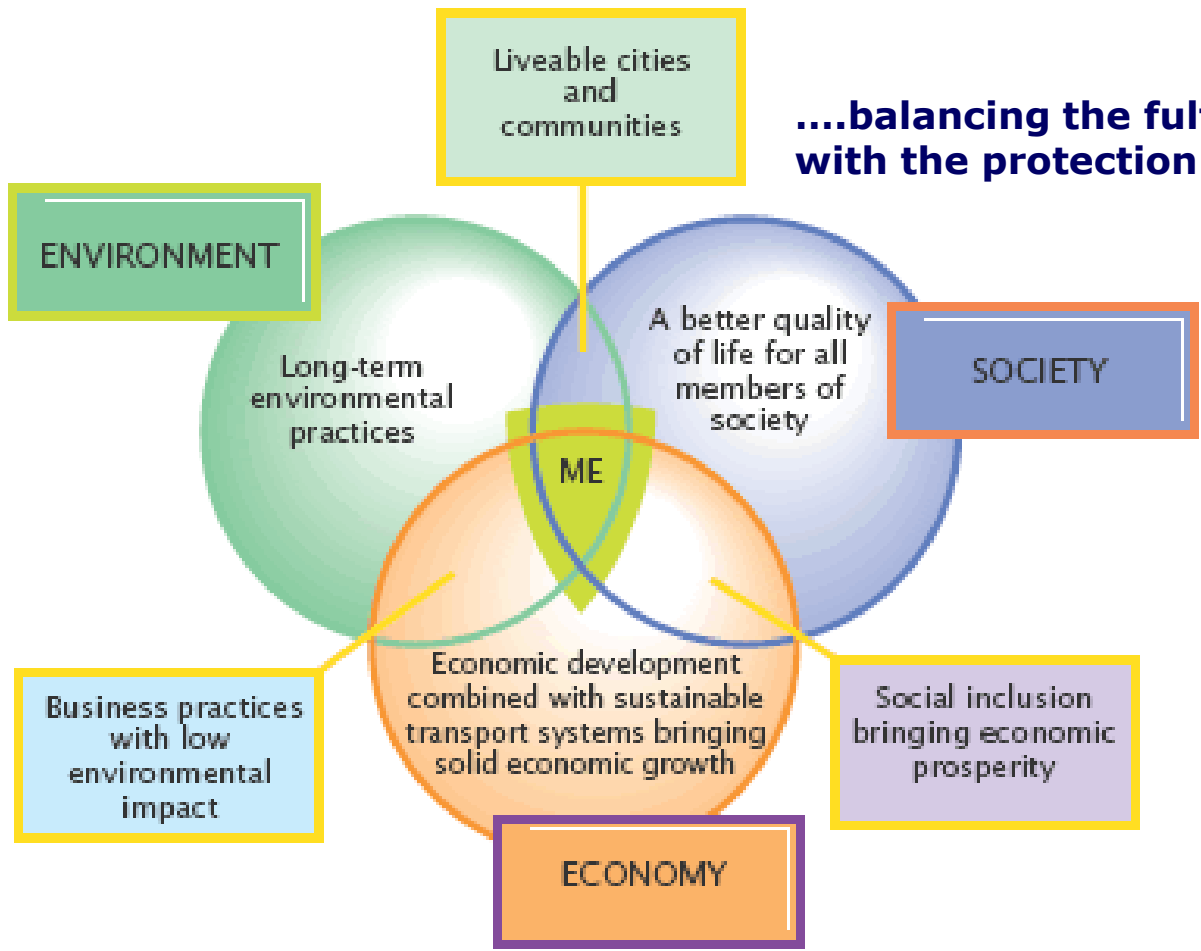
.....the issues that people around the world strive to balance when making often difficult and important decisions about development.



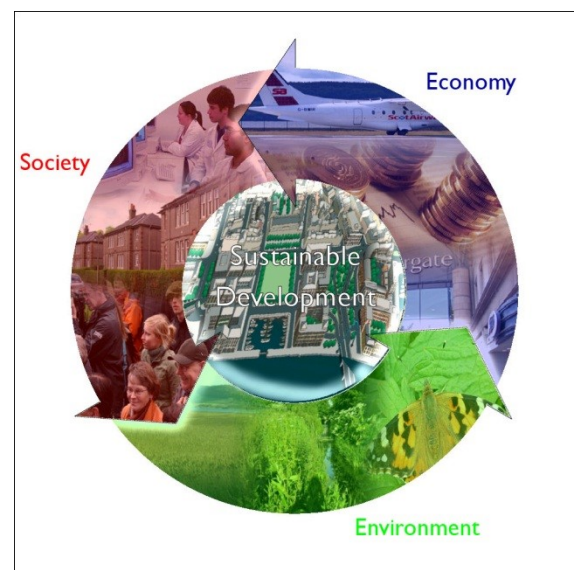
.....if we cannot balance our social, economic, and environmental objectives in the short term, we cannot expect to sustain our development in the long term.....



.....the art of balancing



....balancing the fulfillment of human needs with the protection of the natural environment



.....tying together concern for the carrying capacity of natural systems with the social and economic challenges facing humanity

.... the challenge exceeds the dilemma

..... there are many **global problems** that urgently require solutions by nations working together:

- poverty, hunger, water scarcity, energy security, climate change, land use changes, biodiversity loss, economic crises, environmental degradation, international conflicts, and terrorism.

.....other **problems are universal** in that they are common to many countries and require national solutions:

- aging populations, education, traffic congestion, crime, pollution, health care.

.....Still other **problems relate to the inequities** in the world:

- the gap between rich and poor, gender and educational inequality, conflicts over resources, and racial and ethnic differences.

.... leaving a liveable world for our children

.....leaving a livieable, viable and fair world for our children and their children means current challenges (widespread poverty, inequity and environmental destruction) need to be tackled now.....

.....and the challenge is huge...

- **1/5 people (1.4 billion) live on \$1.25/day or less.**
- **1.5 billion people don't have access to electricity.**
- **2.5 billion people don't have a toilet.**
- **Close to 1 billion lack safe drinking water**
- **1 billion people go hungry every day.**
- **Tackle unemployment and recent economic woes; address serious social and threatening security issues, including terrorism**
- **Address climate change, land degradation and loss in biodiversity**



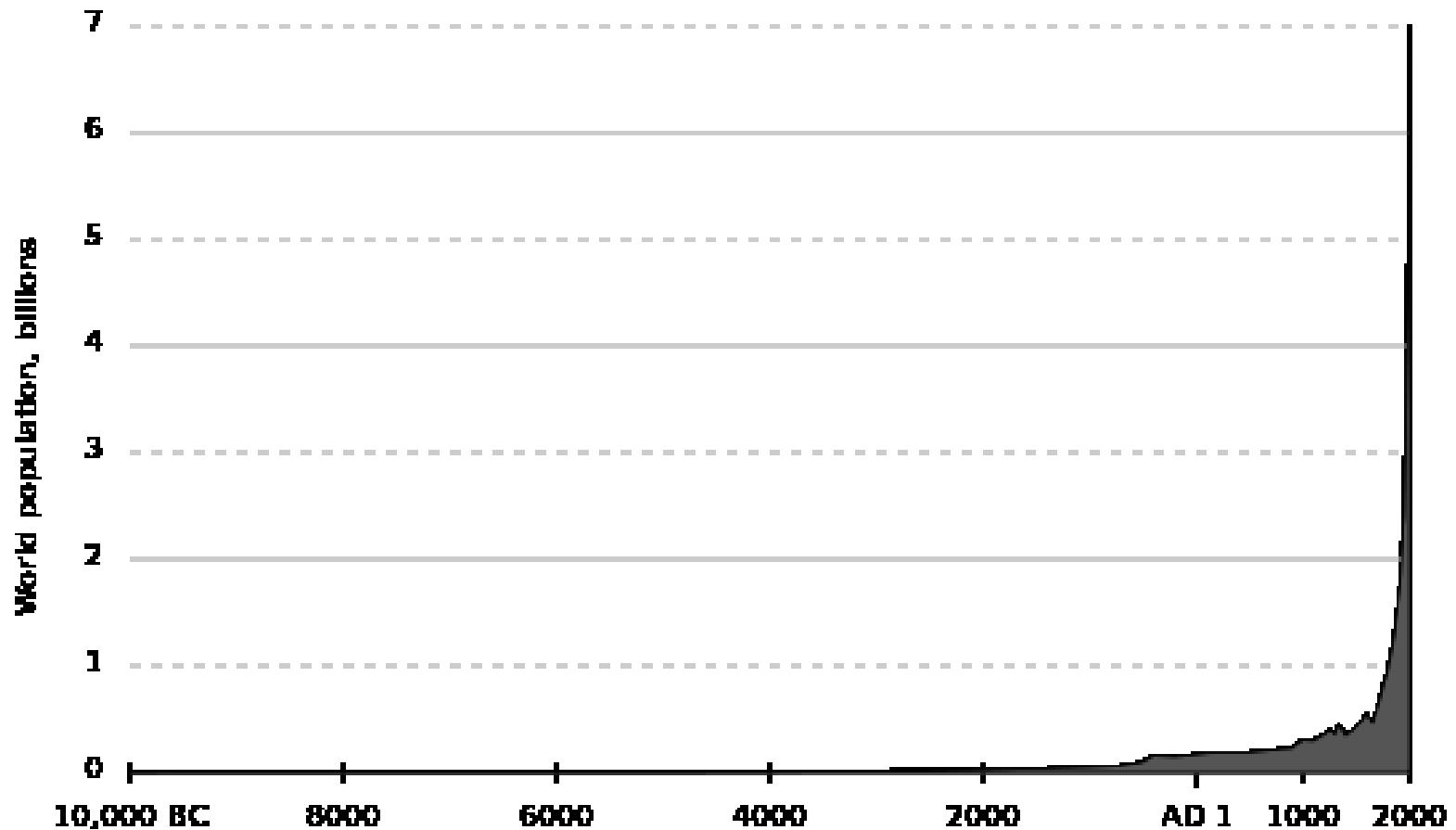
.... leaving a liveable world in a changing world

Population continues to growth (today 7 billion; 9 billion by 2050)



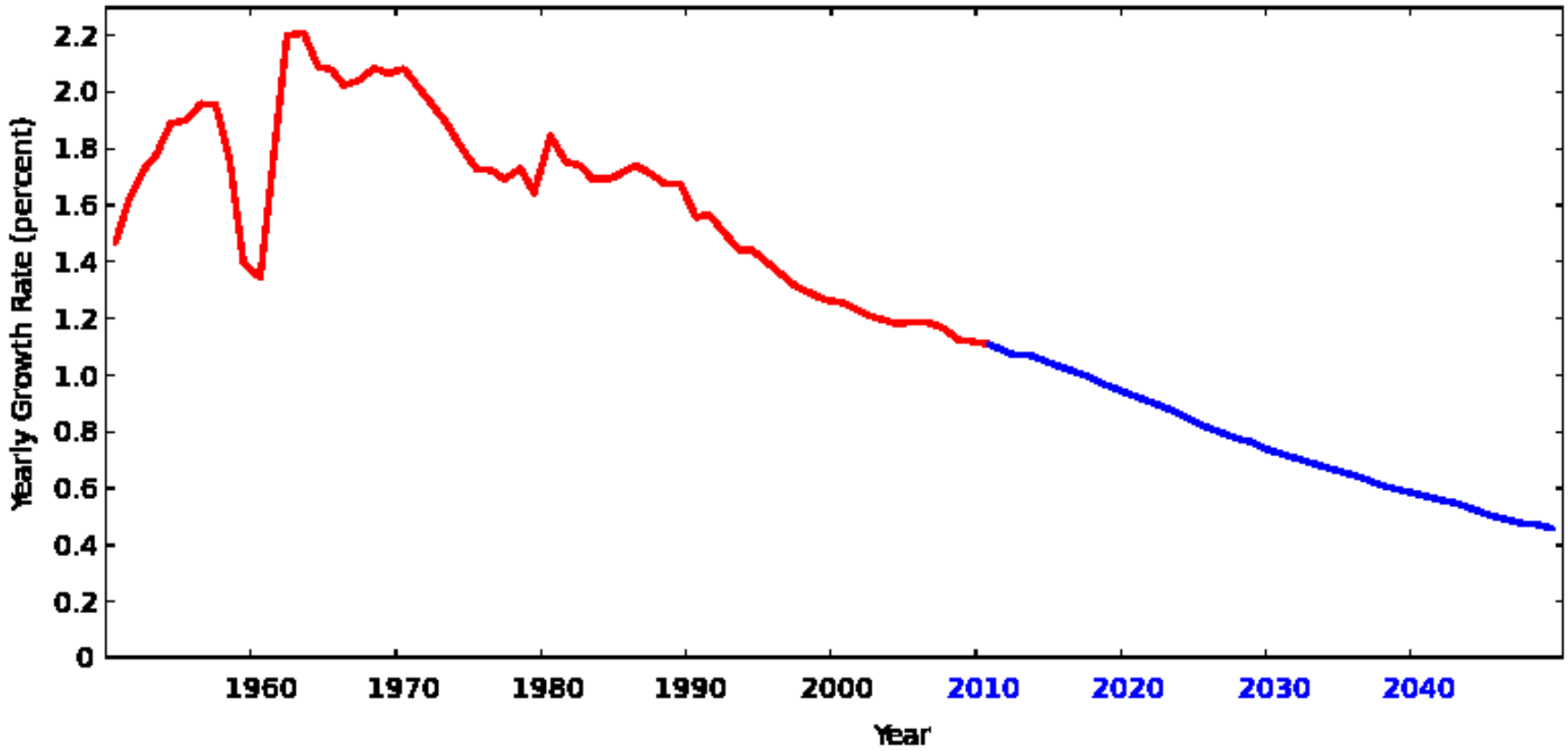
.... leaving a liveable world in a changing world

Estimated size of human population from 10,000 BC – 2000 AD



.... leaving a liveable world in a changing world

Growth rate of world population (1950-2050)

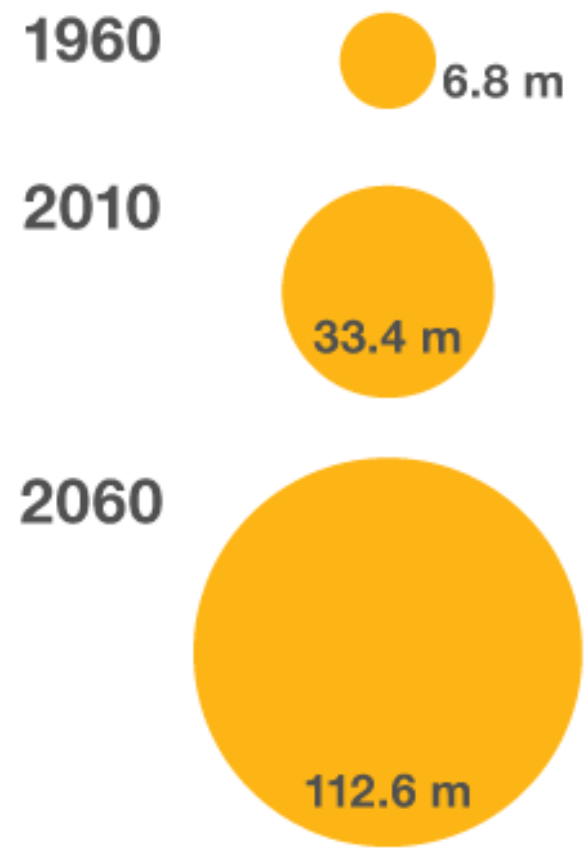


.... leaving a liveable world in a changing world

Population growth 1990-2008 (%)^[16]

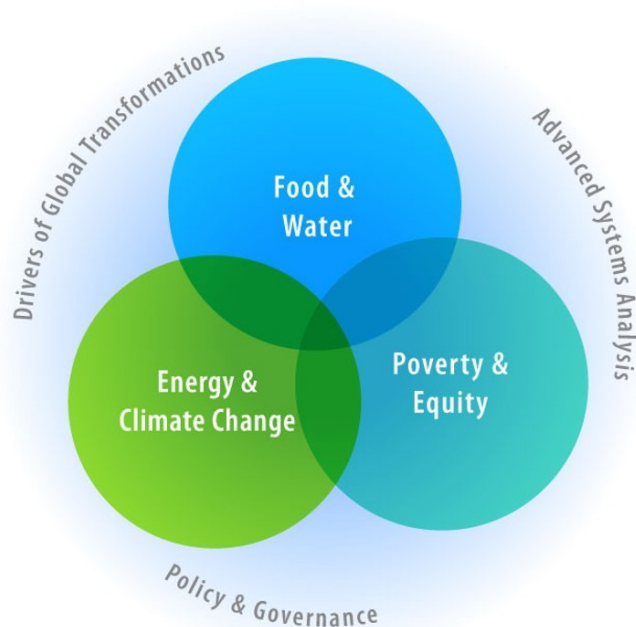
<u>Africa</u>	55%
<u>Middle East</u>	51%
<u>Asia</u>	35%
<u>Latin America</u>	30%
<u>OECD North America</u>	24%
OECD <u>Europe</u>	9%
OECD <u>Pacific</u>	8%
<u>Former Soviet Union</u>	-1 %
Non-OECD Europe	-11 %

Uganda's booming population



Source: United Nations Population Division

.... leaving a liveable world in a changing world



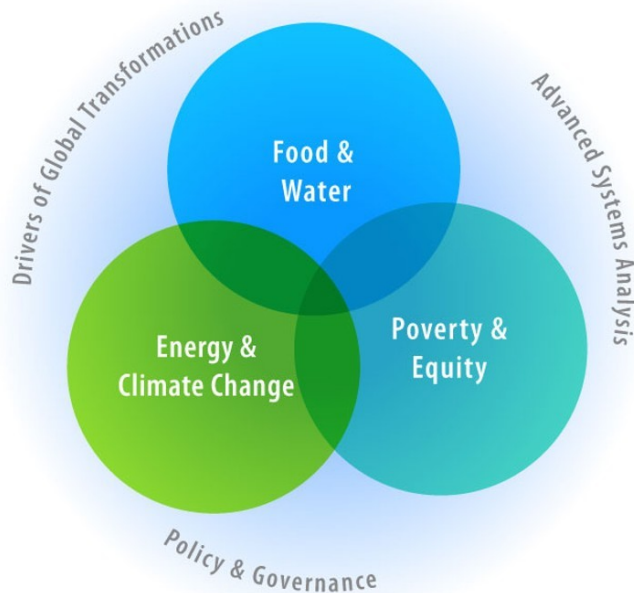
..... Today's world is undergoing major transformation, characterized by;

- Increased **globalization**,
- Fundamental **shifts in economic and political power**,
- Improvements in living standards but....
- Growing **global environmental problems**,
- potentially explosive **social conflicts**

.....we may argue that **science and technology** are helping policymakers worldwide to identify and follow sustainable pathways through this transformation.



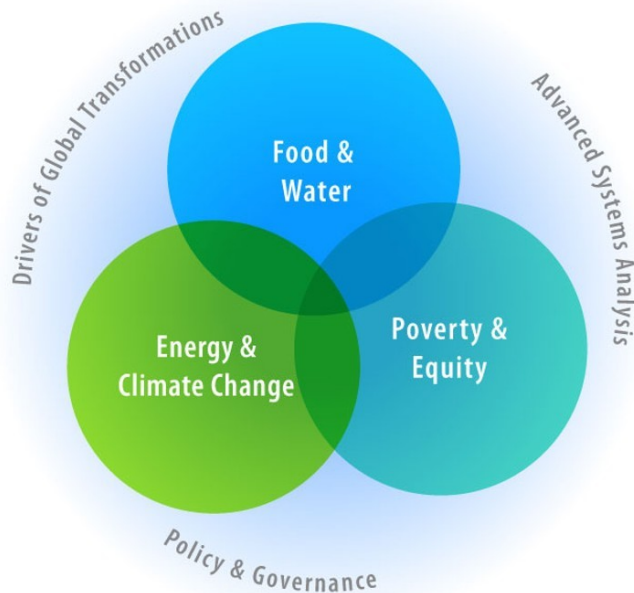
.... leaving a liveable world in a changing world



- Global economic development of the past 50 years has substantially improved human wellbeing;
 - World economic product increased: **US\$7,000** per person; high enough to allow for the fulfillment of basic human needs if equally distributed;
 - But gap between the rich and the poor has widened; **10 million millionaires** but one billion survive on less than a dollar a day.
-
- Regional environmental impacts are increasing, and climate change and biodiversity loss have become global problems;
 - Interdependencies among nations and economies have created **new risks and vulnerabilities**, as demonstrated by the recent global financial crisis and the pandemic influenza threat..



.... leaving a liveable world in a changing world



- **Economic, social, technological, and environmental systems are highly interconnected and interdependent.**
 - **Decision makers are increasingly asking for the improved understanding of complex problems**
 - **They demand comprehensive solutions that can only be obtained through interdisciplinary research and analysis.**
-
- **Solutions needed for short- and long-term horizons, for interconnected sectors, and multiple spatial scales - local, national, and global.**
 - **Policy makers may not know it, but they are asking for solutions based on systems analysis.**



A collective responsibility.....

.....International development targets in the past have shown that when there are objectives to guide the collective goal of the international community towards sustainable development, it becomes easier for governments and international organizations to work together to reach them.

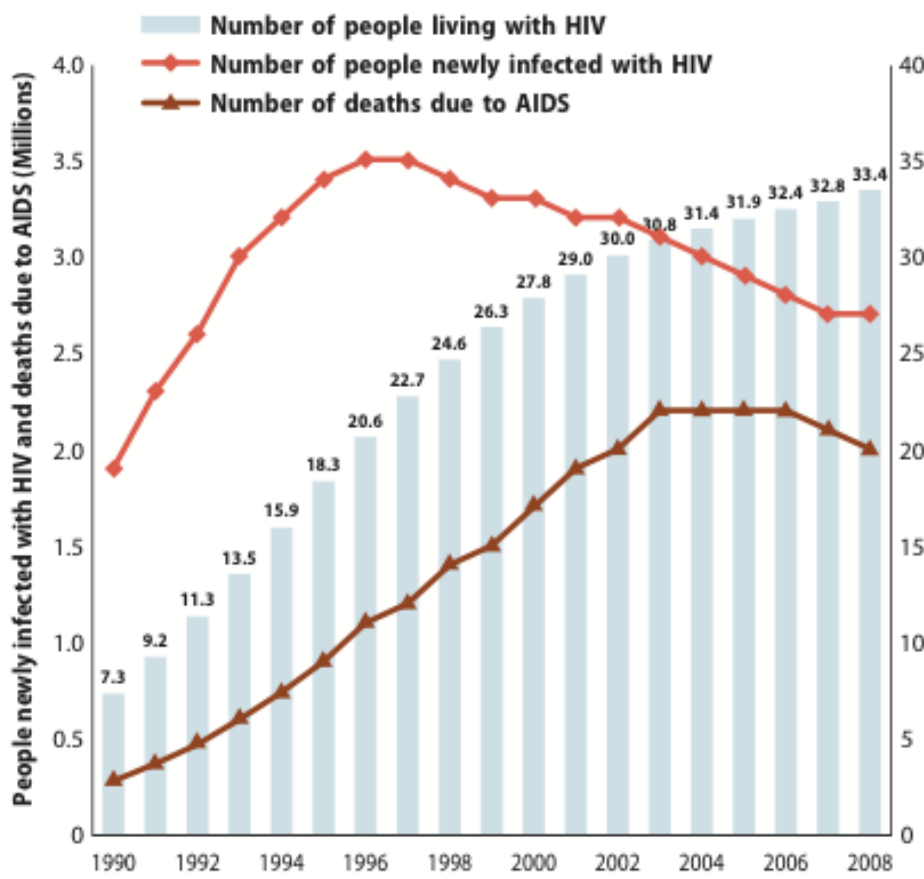
.....**MDGs** are addressing extreme poverty and hunger, universal primary education, gender equality and empowering women, reducing child mortality rates, improving maternal health,



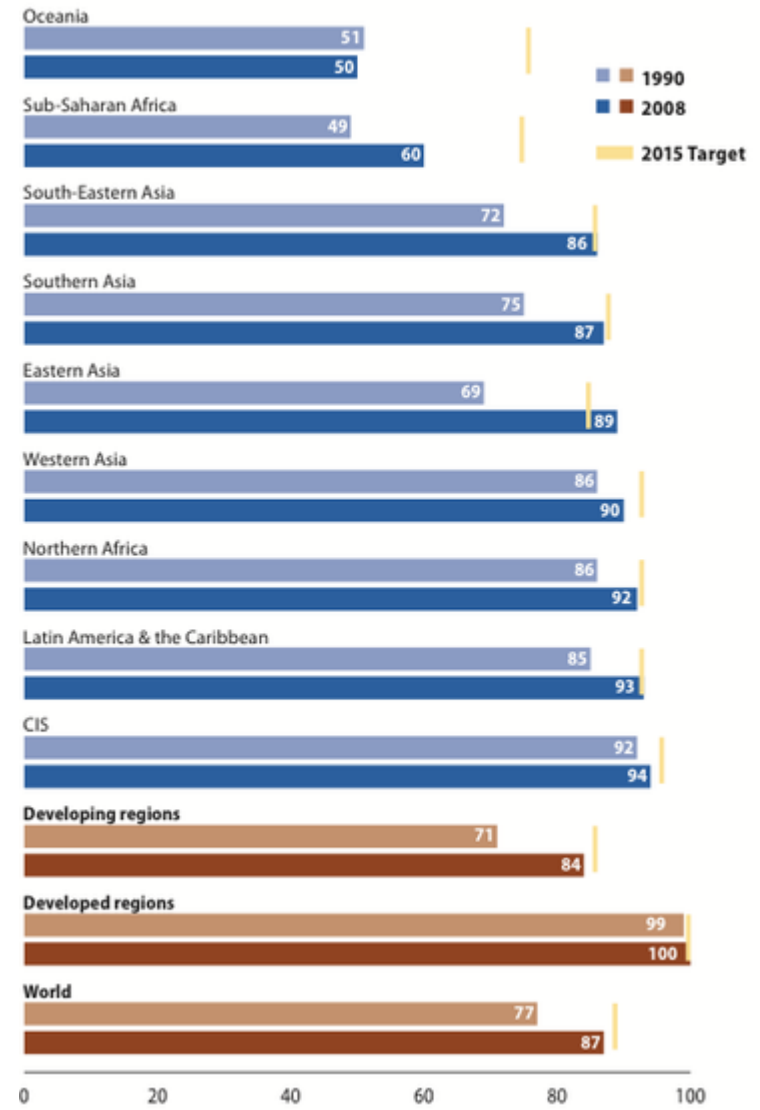
.....combating HIV/AIDS, malaria, and other diseases, ensuring environmental sustainability, and developing a global partnership for development



Number of people living with HIV, number of people newly infected with HIV and number of AIDS deaths worldwide, 1990-2008 (Millions)

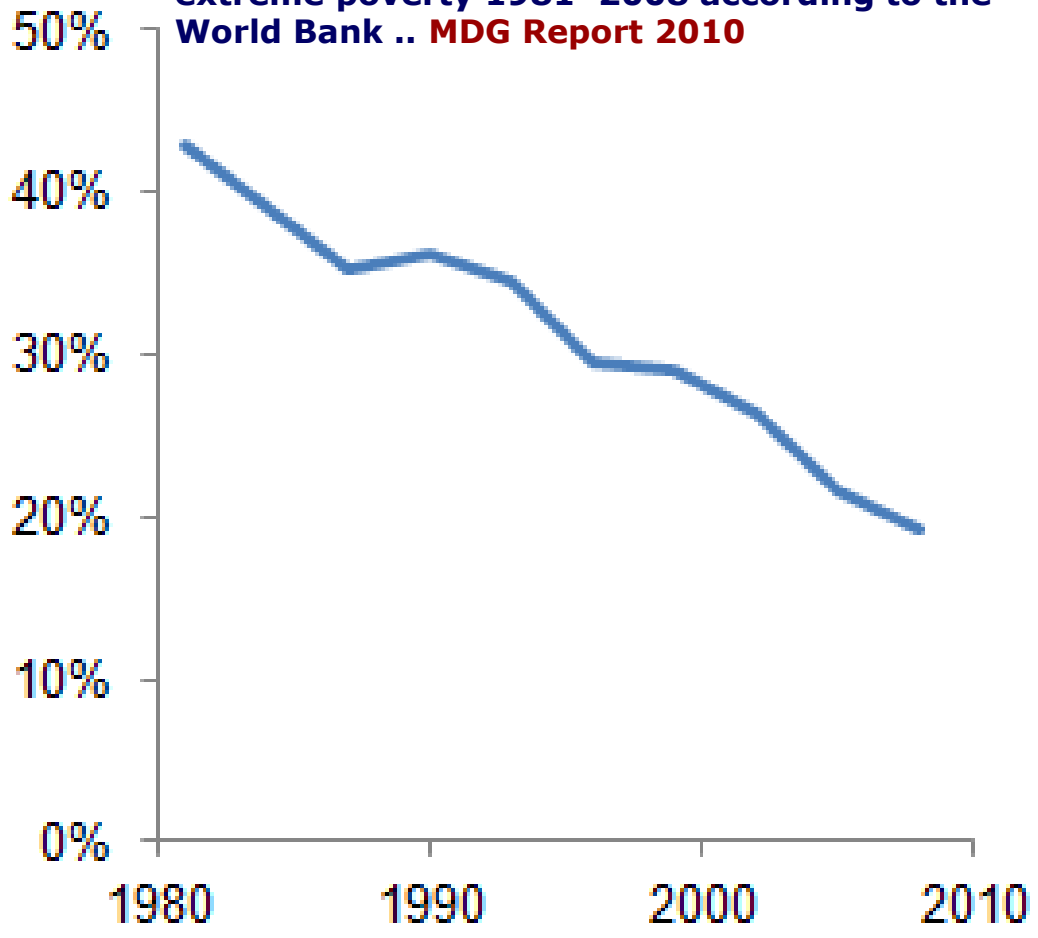


Proportion of population using an improved water source, 1990 and 2008 (Percentage)

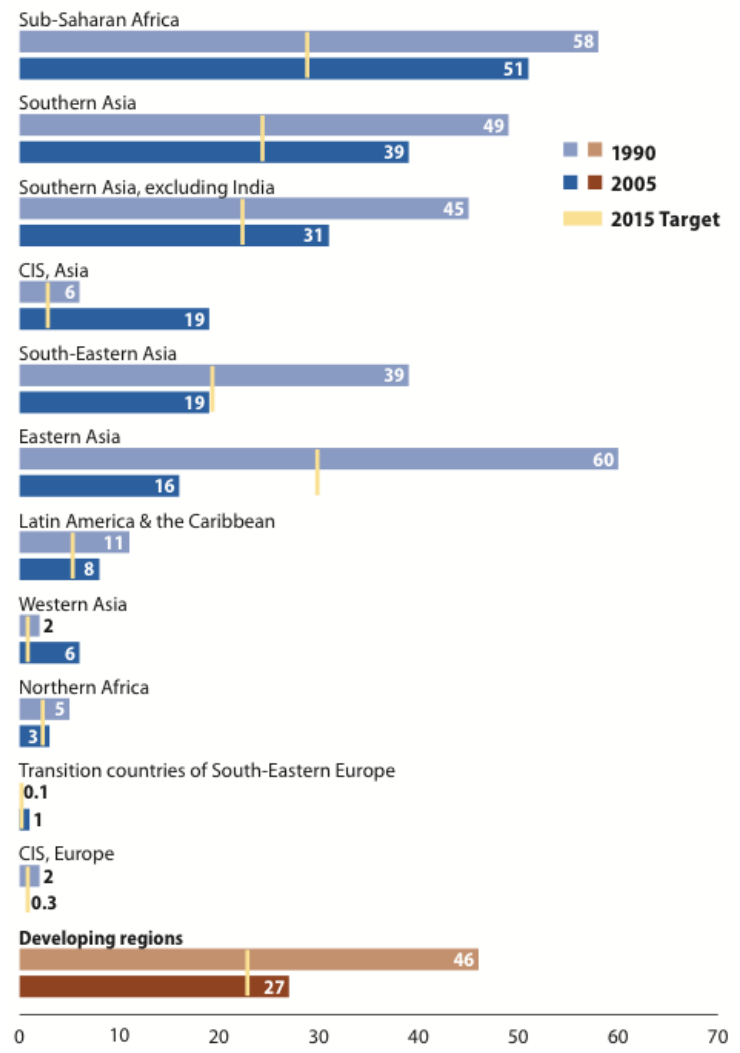


A collective responsibility.....

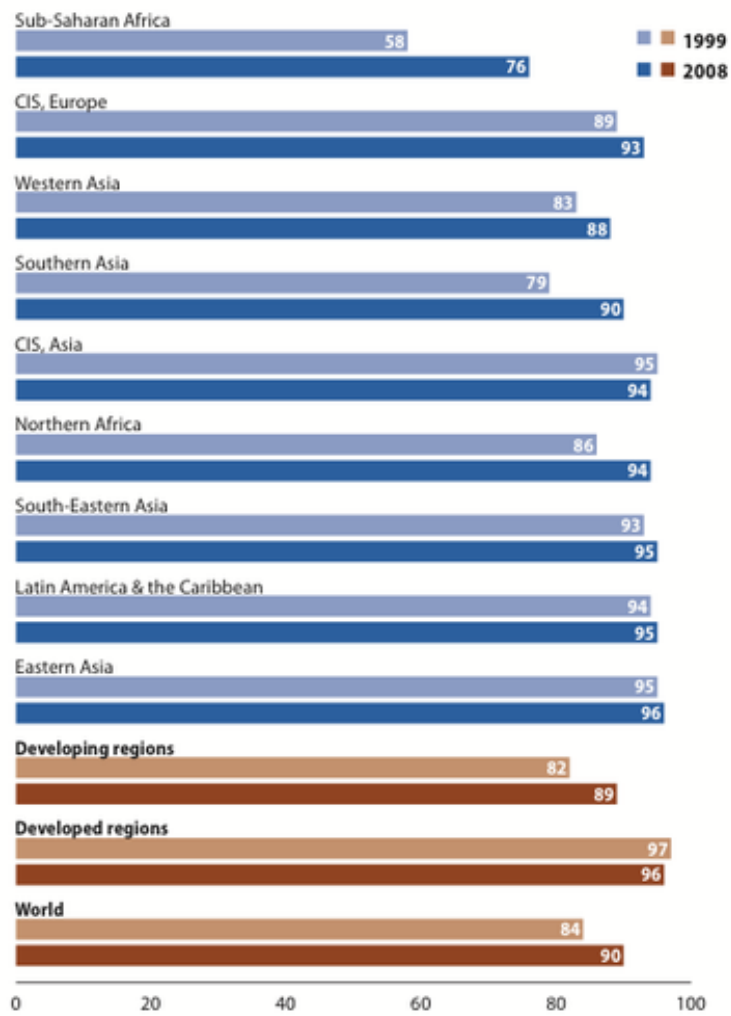
..... The proportion of world population in extreme poverty 1981–2008 according to the World Bank .. MDG Report 2010



Proportion of people living on less than \$1.25 a day, 1990 and 2005 (Percentage)



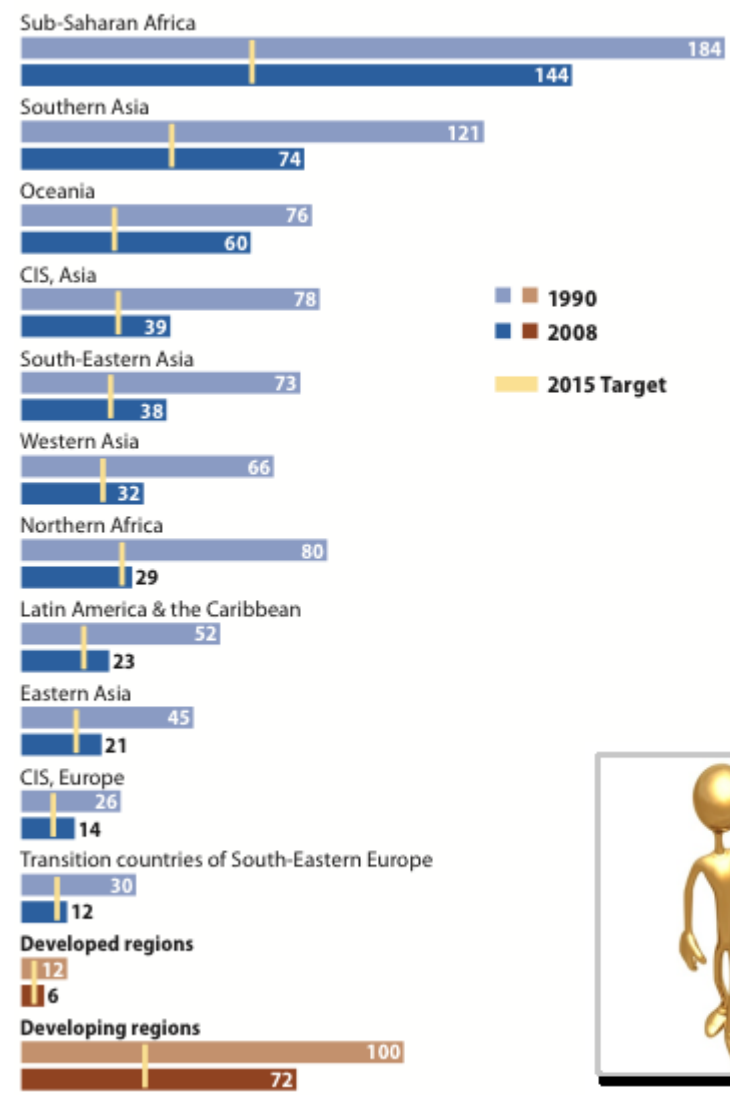
Adjusted net enrolment ratio in primary education,* 1998/1999 and 2007/2008 (Percentage)



* Defined as the number of pupils of the theoretical school age for primary education enrolled in either primary or secondary school, expressed as a percentage of the total population in that age group.

Note: Data for Oceania are not available.

Under-five mortality rate per 1,000 live births, 1990 and 2008



0 50 100 150 200

A systems approach is needed.....

- **Systems analysis requires the exploration of the main drivers of, and inter-linkages among systems.....,**
- **.....a consideration of a broad range of impacts, and awareness of risks and uncertainties.**
- **To marshal the full capabilities and strengths, a consideration of the major drivers of global transformations is needed:**
 - **Development and urbanization;**
 - **Economic growth and globalization;**
 - **Population growth and demographic changes;**
 - **Technological innovations and their diffusion.**



A systems approach is needed.....

.....Problems, drivers, and their impacts are closely related elements.

- For example, economic growth and environmental quality are intimately linked.

- Therefore, analyses of solutions in the three problem areas will need to consider the impacts on:
 - **Human wellbeing** (health and wealth);
 - **Societal wellbeing** (peace, stability & sustainable development);
 - **Environmental wellbeing** (reduction of pollution, protection of species and biodiversity).

.....At Rio+20, more than \$513 billion was pledged to build a sustainable future. Rio+20 signaled a major step forward in achieving **“the future we want”**.



Solutions are well known.....

.....Solutions for many sustainable development problems – including challenges related to cities, energy, water, food and ecosystems – are known.

- **Making the transition to greener economies while focusing on poverty eradication**
- **Protecting our oceans from overfishing, the destruction of marine ecosystems and the adverse effects of climate change**
- **Making our cities more liveable and more efficient in resource use**
- **Broadening the use of renewable energy sources that can significantly lower carbon emissions while promoting economic growth**



Many examples in the last 20 years.....

- **In Kenya, innovative finance mechanisms stimulated new investments in renewable energy sources, including solar, wind, small hydro, biogas and municipal waste energy, generating income and employment.**
- **In China, steps to shift to a low-carbon growth strategy based on the development of renewable energy sources have created jobs, income and revenue streams for promising low-carbon industries.**
- **In Uganda, a transition to organic agriculture has generated revenue and income for smallholder farmers and benefited the economy, society and environment.**
- **In Nepal, community forestry — led by local forest user groups — contributed to restoring forest resources after a steady decline in the 1990s.**
- **In France, an estimated 90,000 jobs were created in green sectors between 2006 and 2008, mostly in the fields of energy conservation and the development of renewable energy.**

Many examples in the last 20 years.....

- **In Brazil, a project in Sao Paulo transformed two of the city's biggest waste dumpsites into sustainable landfills. The landfills stopped releasing 352,000 tons of methane.....used instead to produce over one million megawatts of electricity.**
- **In Canada, EcoLogo – one of North America's most respected environmental certification marks – has promoted thousands of products that meet rigorous environmental standards.**
- **In Haiti, the Côte Sud Initiative is expected to benefit an estimated 205,000 people through the recovery and sustainable development of a severely degraded area.**

.....this is “the future we want” to achieve and pass on to our children

.....“around the world, sustainable peace must be built on sustainable development.....sustainable development agenda is the agenda for the 21st century” – UN Secretary-General

What we risk if we don't act enough.....

If we fail to adequately address the critical challenges of our time, we risk "the future we want"

**.....and incur far greater costs in the future
— including;**

- **more poverty and instability,**
- **and a degraded planet**





RIO+20

United Nations Conference on Sustainable Development





Thank you....