<u>Impacts on humans - the Social Consequences of Climate Change</u> and who should pay for the costs

This is the *start* of a collation of evidence of a sample of such impacts - especially those that have happened already and are happening right now. There are much more comprehensive collations elsewhere on the internet.

Impacts are via drought, desertification, rising sea-levels, extreme weather events e.g. cyclones, flooding etc.

"The Stern Review highlighted that 'the impacts of climate change are not evenly distributed – the poorest countries and people will suffer earliest and most'. Evidence shows that not only are the poorest people often more exposed to specific climate change impacts, they are also more vulnerable to those impacts, and find it harder to recover when they occur. Climate change will widen existing inequalities, globally and locally, unless social impacts are actively addressed across the range of adaptation¹ and mitigation² measures."

- 1 Adaptation to climate change refers to adjustment in natural or human systems in response to actual or expected changes in the climate or their effects, which moderates harm or exploits beneficial opportunities (IPCC, 2007).
- 2 Mitigation is an anthropogenic intervention to reduce the sources or enhance the sinks of greenhouse gases (IPCC, 2007).

Some relevant websites

http://climatesignals.org/ @ClimateSignals Curator for ClimateSignals, an on-line database of climate change impact reports crowd-sourced through social bookmarking

http://www.campaigncc.org/aggregator/sources/19 Campaign against Climate Change website. This page collects info from e.g. ClimateSignals.org If it doesn't load try the home-page.

Examples of impacts

- 1. Happening right now or happened already.
- 2. Future predictions.

1. Happening right now or happened already

[many more examples to add - but the just the Bangladesh example shows that at the very least many tens of thousands of people every year are badly impacted by Climate Change]

Islands

Low islands (e.g. coral islands, Maldives) are becoming flooded by rising sea-levels.

Bangladesh

Two threat factors; now: re melting of glacier-ice upstream at source, and increasingly into the future - rising sea level.....

From BBC web-page "Bangladesh country profile" Bangladesh is one of the world's most densely populated countries, with its people crammed into a delta of rivers that empties into the Bay of Bengal.

Poverty is deep and widespread; almost half of the population live on less than one dollar a day.

The low-lying country is vulnerable to flooding and cyclones and it stands to be badly affected by predicted rises in sea levels.

I noted the following after watching Simon Reeve's BBC "Tropic of Cancer" 5/6 "Bangladesh to Burma" on Sunday 18 April 2010. (Simon Reeve is presenter & co-writer.). And also taking notes from the related BBC web-pages.

"In Bangladesh Simon sails down the mighty Padma River and ... sees the river banks crumbling before his eyes - increased river erosion is thought to be caused by global climate change."

"In Bangladesh water is everywhere and flooding regularly submerges more than half the country."

"Experts believe rising sea levels will inundate vast areas of Bangladesh, a catastrophe in the most densely-populated large country in the world."

Hard hit are people suffering extreme poverty on fragile low-lying flat land just a few feet/metres above river-level. Substrate is of dried mud (no rock) that rapidly erodes by crumbling/collapsing into the river.

<u>http://www.bbc.co.uk/programmes/b00s5wzp</u> - NB short film on effect of CC on Bangladesh on this web-page http://www.bbc.co.uk/programmes/p007bc7x</u> - film clip "Bangladeshis losing homes to climate change" from which I transcribed:

"Over the past fortnight the river has eaten 500 yards into their village"

- "In the past 4 years it has taken 2,000 homes in this community alone."
- devastated crops, livestock (cows, goats), trees, homes
- lose sleep at night due to .. & thumping sounds ("boom, boom") as segments of bank collapse into the river.

"Scientists are absolutely convinced that what is happening in Bangladesh is an increased rate of river erosion, partly or wholly caused by an increasing melt in the Himalayas in which this river has its source. Scenes like this are now happening on a daily basis across Bangladesh. Increased erosion makes 100,000 people homeless every year, turning them into environmental refugees. But this could be just the beginning of a climate catastrophe on a biblical scale. Even a small rise in sea levels would devastate millions here."

BBC web-page on the series states: The tropical conditions of the Tropics have expanded towards the poles, with scientists estimating the change between 140 - 330 miles due to global climate change. Scientists expected this, but only under an "extreme" climate change scenario, and only by 2100.

BANGLADESH From Tory web-site: Greg Clarke (Tory Party) visited Bangladesh pre-COP15 traveling with Christian Aid. He reported on e.g. bank erosion, salt-water getting into water supplies, locals reporting on increased floods and increased cyclones. He briefly discussed matter of adaptation to *effects* of CC - "combating" [the effects of] CC. But did not discuss need for tackling *causes* of CC.

2. Future predictions

NB: in contrast to analysis of past and present climate changes (such as the majority acceptance of recent global warming phases e.g. 1980's/'90s+), the prediction of the climate of the future is much less certain due to its high complexity – which is only partially understood, and thus care should be taken in interpreting predictions. But despite such uncertainty a precautionary approach should be made to be resilient to possible climate conditions.

UK

News - Health - Climate change 'could kill thousands' . Last updated: 9 Feb 2001

Experts even warn that malaria could return to large parts of the UK. They say the *climate change* could cause an extra 5,000 deaths from skin *cancer* every year - and 2,000 from heat-waves. news.bbc.co.uk/hi/english/health/newsid_1161000/1161895.stm

Money from rich countries/organizations to poor countries to fund adaptation to Climate Change

It would be unacceptable to subtract CC adaptation money from money allocated to Aid ("target" for latter is at least 0.7% of GNI [Gross National Income]); it should be in addition. We should check to ensure that subtraction is not the policy nor practice of any new UK government.

Also such money would be better supplied via the UN fund for this rather than via the World bank as loans to poor countries (unfortunately the latter is favoured by the UK government), as why should poorer countries (with a lower carbon footprint per person) have to borrow money to adapt to climate change brought about by the richer countries.

Adaptation money should ideally come from those organizations contributing to CC (on a "polluter pays" principle) and their dirty actions should not result in decreased aid. To facilitate this it would obviously be helpful to get better scientific evidence (than just the outcome of models described by the IPCC) showing just what proportion of the recent global warming phase is due to the big increases in atmospheric carbon dioxide as opposed to e.g. natural cycles. Although it is clear that the recent increases in CO2 are highly likely to be due to man, there is less of a big scientific consensus on just how relatively powerful the known GHG-effect of CO2 is as a CC-driver – though it appears to be the main recent driver according to e.g. IPCC, The Royal Society, Met.Office etc – an apparent majority of relevant scientists. Nonetheless – for precautionary reasons it is crazy for man to continue to increase atmospheric CO2 levels unheeded until the evidence for the power of its GHG-effect is indisputable rather than just ahigh likelihood.

It should be the organizations producing or causing the highest emissions e.g. the oil companies, coal power stations - who should pay compensation to the poor communities who suffer the likely consequences of their emissions, and such carbon costs should be realistically large enough. Potential social impacts must be accounted for in e.g. oil company budgets, and be considered at the time new industrial projects are being considered.