

DISCUSSION PAPER: OPTIONS FOR INTEGRATING CLIMATE CHANGE CONSIDERATIONS INTO THE POST-2015 DEVELOPMENT FRAMEWORK

December 2013; Author: Bernadette Fischler, CAFOD. With contributions from: Rachel Garthwaite, Save the Children, Ruth Fuller and Dominic White, WWF UK, Sven Harmeling and Kit Vaughan, CARE, Sarah Wykes, Graham Gordon and Neva Frecheville, CAFOD, Lis Wallace, Progressio.

INTRODUCTION

At the 2012 Rio+20 conference all countries agreed that climate change is a major obstacle to sustainable development and poverty eradication.¹ This is supported by the experience of people living in poverty and vulnerability² and major UN reports feeding into post-2015.³ Science further underlines the immediate need for action in all areas, including international development.⁴ The urgency for action is underpinned by climate science and the window of opportunity for avoiding dangerous climate change is rapidly closing.⁵⁶ Even a 2°C world will undermine development gains and make attaining post-2015 objectives more difficult. The post-2015 framework must help to make climate action in all countries happen without further delay and must support poor people to respond to climate impacts they are experiencing already.

The purpose of this paper is to describe different options for including climate change in the post-2015 framework, and to facilitate a more informed and constructive debate by providing suggestions for possible target areas. A series of approaches to addressing climate change are discussed, including a 'light touch' or **narrative-only** approach in option 0; **mainstreaming** climate change targets to make all relevant goals 'climate-smart' in option 1; and three potential options for a 'stand-alone' **climate goal** in options 2-4.

None of these approaches are mutually exclusive. A truly committed post-2015 development framework would do all of these things. However, recognising the political nature of this process, we highlight the benefits and trade-offs associated with each to help informed decision-making.

This paper builds on two papers presented during a workshop in October in London and the Open Working Group on Sustainable Development Goals (OWG on SDGs) meeting in November 2013.* They have been put together by a group of development and environment organisations with the support of Beyond 2015 and CAN-International, two major global NGO networks involved in this agenda.

CONTENTS

Option 0: Climate change highlighted in the narrative only	3
Option 1: Climate-smart goals (mainstreaming)	4
Option 2: Including a 'climate plus' goal	6
Option 3: Including a climate change goal based on agreed commitments.....	7
Option 4: Including a climate change goal based on science	8
Reflections on the risks and opportunities of the different options	9

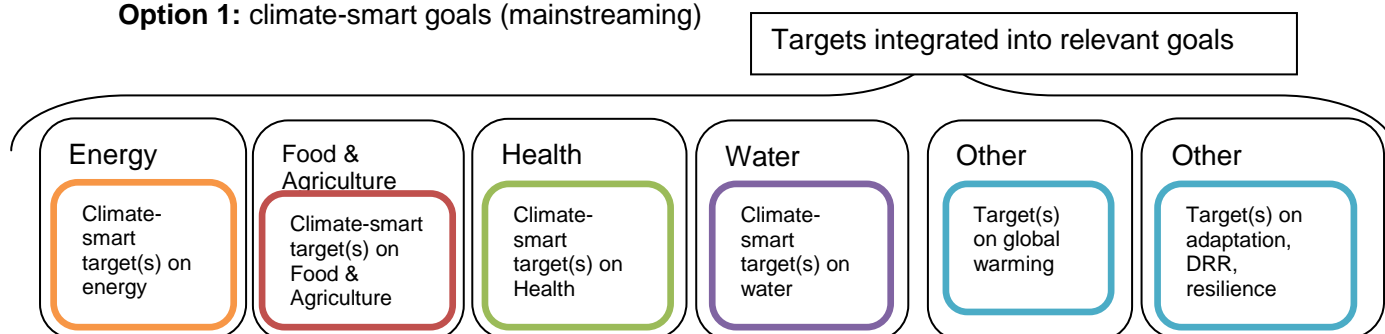
* Accessible at <http://sustainabledevelopment.un.org/getWSDoc.php?id=1384> and <http://sustainabledevelopment.un.org/getWSDoc.php?id=1374>

OVERVIEW OF DIFFERENT OPTIONS

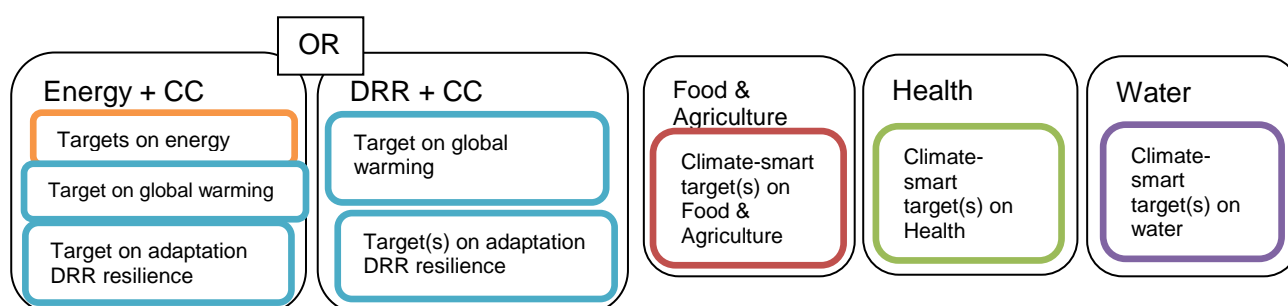
**Climate-smart Goal = includes targets that achieve a triple win:
ending poverty + mitigation + adaptation/DRR/resilience**

NB: the climate related targets (light blue) in options 1-3 are identical in this paper but would require further fine tuning depending on the option chosen to ensure a coherent framework.

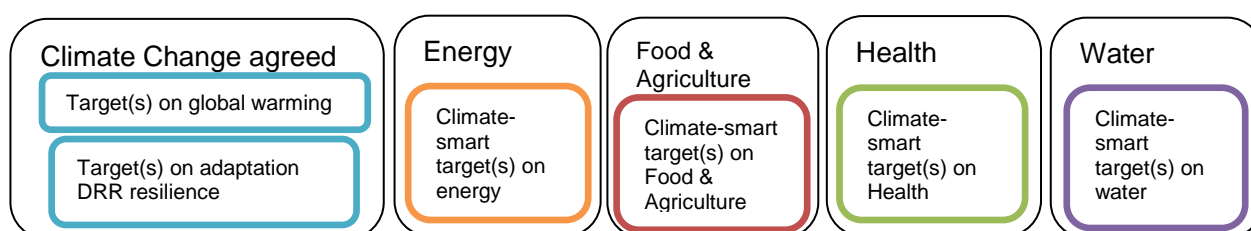
Option 1: climate-smart goals (mainstreaming)



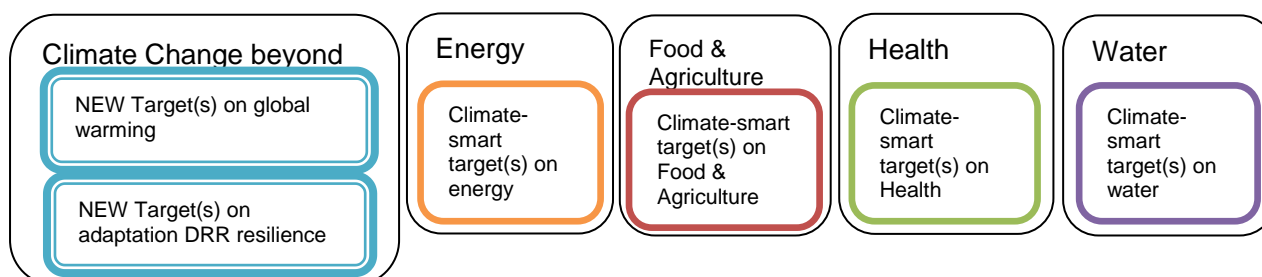
Option 2: mainstreaming while including a 'plus climate goal'



Option 3: mainstreaming with a climate change goal based on agreed commitments



Option 4: mainstreaming with a climate change goal based on science



OPTION 0: CLIMATE HIGHLIGHTED IN THE NARRATIVE ONLY

The narrative-only approach is sometimes presented as sufficiently highlighting the importance of climate change. In our view, this is not a valid option for the post-2015 framework because it only provides context but not concrete targets.

A common argument against including climate change targets or even goals in the post-2015 framework is interference with (or from) the climate change negotiations under the UNFCCC. However, sustainable development is not possible without concerted action on climate change and action on climate change needs to be addressed also in other processes than the UNFCCC. But one does not automatically lead to another, since not all development interventions are environmentally sustainable and not all efforts to address climate change are pro-poor. Synchronization between both agendas and processes will be necessary to ensure that they are mutually beneficial and promote policy coherence. A post-2015 framework that includes action to address both the underlying causes and the impacts of climate change will send a strong message and act as springboard for ambition on a strong and legally binding climate deal under the UNFCCC in 2015.

Another argument used to avoid climate change targets in post-2015 is the wish to avoid difficult conversations around the principle of common but differentiated responsibility (CBDR). While CBDR (with the added respective capacities) is a foundation of the UNFCCC, it is also one of the original Rio Principles and will feature in the post-Rio+20 process on the SDGs, regardless of whether climate change is discussed or not. This is not a valid reason for excluding climate change from the post-2015 discussions.

Only concrete targets and indicators on addressing different aspects of climate change can bring the concrete action required. Not including them would mean that the global framework tasked with ending poverty and driving sustainable development policy and action fails to address the most critical challenge to poverty eradication and sustainable development the world currently faces.

The science is clear that climate change is real and happening right now⁷, that greenhouse gas emissions released by human activities are the primary cause, and that the world is on a pathway towards global warming of 4 degrees C or more this century.⁸ On current trends, the world may enter the realm of dangerous climate change by the middle of this century⁹ unless urgent action is taken. Avoiding this future requires that global emissions peak in the 2015-2020 period and are significantly reduced thereafter. This can only be achieved if all countries adopt low-emission development pathways before 2030.¹⁰ The need for action to reduce emissions has been agreed in the UNFCCC and some of the world's largest financial institutions, including the IMF, World Bank and OECD, recently championed the benefits of early climate action.

Further, climate change threatens everyone's economic security and hinders inclusive and equitable growth and development. Delaying action further only increases the costs of responding. In 2000 climate change caused economic losses estimated at close to 1% of global GDP¹¹. By 2030, the costs of climate change and air pollution combined are predicted to reach 4.2% of global GDP with the world's least developed countries suffering losses of up to 11% of their GDP. New research warns that 31% of global economic output (around 44 trillion USD) is likely to face 'high' or 'extreme' risks by 2025 due to global warming. Major economies will also take the hit, as extremes of weather and the associated damage could wipe 2% of the GDP of the US by 2030, while similar effects could cost China 1.2 trillion USD by the same date.¹² On the other hand, the benefits of early action are many, including economically. Recent studies show that carbon reduction activities generate positive return on investment¹³ and can drive profit¹⁴.

Despite this, progress has been too slow. The post-2015 development framework has the potential to play a role in guiding global efforts to eradicate poverty and to shift to sustainable, low-emission and climate-resilient development pathways within the coming 15 years by ensuring that all relevant post-2015 development goals include targets that lead to climate action.

OPTION 1: CLIMATE-SMART GOALS (MAINSTREAMING)

Climate change is a cross-cutting issue. It affects all sectors, all economies and all countries and is already impacting on many of the priority human development issues covered by the Millennium Development Goals.¹⁵ Impacts are expected to get worse as global warming increases, making attainment of any goals or targets more difficult.¹⁶ Throughout options 1-4 outlined in this paper, all relevant goals need to be climate-smart, i.e. include targets designed to deliver a triple win of ending poverty, shifting to low/zero carbon development, and enabling adaptation, disaster risk management and resilience to environmental shocks and stresses.

Climate-smart targets are universal but differentiated by country context and have to be implemented through participatory development. We consider technology development and transfer, and finance also to be important but suggest that they be addressed under the means of implementation and have not proposed targets on these in this paper.

The climate specific targets listed below are relevant to several areas. No matter what the final wording of the goal headings will be, what is important is that these targets are included in the framework.

Targets on addressing global warming

These climate-related targets are essential for both poverty eradication and sustainable development. They are good examples of targets that could fit well under a number of different goal headings, for example global partnerships or poverty eradication:

Target: Global emissions peak within this decade and rapidly decline thereafter in line with the UNFCCC agreement to keep global warming below 2°C*

*The UNFCCC will review the 2°C target and progress towards its achievement, including the consideration of 1.5°C, and there should be the possibility for appropriate adjustment of this target, for example during five yearly reviews. The need to adjust targets based on emerging commitments and scientific facts (as seen in the MDGs) applies also to some other targets.

Target: All countries have developed and implemented low-carbon development strategies or plans

Targets on adaptation, disaster risk management and resilience

Action to reduce disaster risk, build resilience to climate shocks and to adapt to the consequences of climate change are essential for supporting vulnerable and marginalised communities. Given that all sectors are affected in different and complex ways by climate change it is important to note that all goal areas require targets along these lines (but adapted as appropriate), particularly those that are natural resource dependent.

Ideally, plans for low-carbon development mentioned above should be integrated with plans for adaptation and resilience outlined below. Depending on the final set-up of the framework these two targets could be merged but for the purpose of this paper we list them separately.

Target: All countries to have national planning processes and instruments in place which build resilience to, and reduce impacts from, climate related impacts and disasters by 2020 (based on a baseline of 2010[†])

Target: 50% of all public climate related finance provided by developed countries to developing countries is allocated to adaptation

Target: Reduce the number of people killed due to climate-related disasters and climate change impacts year on year and overall by at least 50% by 2030

[†] In this paper we suggest 2010 as illustrative example for a baseline, in line with many suggestions on the post-2015 framework

Target: Reduce the number of economic losses due to climate-related disasters and climate change impacts by at least 50% by 2030

Target: By 2030, eliminate increase in the proportion of people living in poverty following disasters (1, 3 and 5 year interval) and reduce economic losses from people living in the poorest quintile populations by at least 75% against a 2010 baseline

Targets for a climate-smart sustainable energy goal

In the previous discussion paper on cross-cutting climate change¹⁷ we selected a range of goal areas (water, energy, health, food and agriculture) that are likely to be included in the framework and outlined the climate specific targets that would need to be included to make them climate-smart. We are not recommending that these proposed goal areas are prioritised over others, nor that only these proposed goal areas need to be climate-smart, but use them as illustrative examples. Below we develop further targets for a climate-smart energy goal. Further recommendations on the other goal areas will follow.

The UN Sustainable Energy For All initiative (SE4All) goals are a good starting point for a goal on sustainable energy as they aim to address both poverty reduction and climate change through a sustainable energy transition. However, they need improvement in several aspects. For example, they do not do enough to promote inclusion of people living in energy poverty and civil society in the design and delivery of energy services.

We propose adding the following targets to help to fill these gaps:

Target: Ensure universal access to modern* energy services for all households by 2030

*sustainable, reliable, safe and affordable

As the SE4ALL goals stand, the proposed targets on renewable energy and energy efficiency alone will not drive the required greenhouse gas emission reductions to keep global warming below 2°C.¹⁸ Some argue they should be higher to drive effective action¹⁹.

Target: Increase the share of renewables in the global energy mix to 42% by 2030

Target: Increase the global rate of energy efficiency to X% by 2030

A target on phasing out fossil fuel subsidies, as suggested in the High Level Panel on post-2015 report²⁰, would support general phasing out of fossil fuels. The International Energy Agency (IEA) has called for an “energy sector revolution” from 2020, moving away from fossil fuels towards renewable and efficient energy production and use. According to the IEA, two thirds of current fossil fuel reserves must stay in the ground and further exploration must stop to prevent catastrophic climate disruption.²¹

Target: Phase out fossil fuel subsidies by 2030

Options 2 – 4 present three different versions of a climate change goal. Whichever option is chosen, the value of a goal that features climate change in its headline would be increased visibility and added focus of political attention and resources on the urgent task of addressing climate change within the broader context of ending poverty and sustainable development. Even if a climate goal was included, it would still be necessary to ensure that other goals are ‘climate-smart’ to guarantee policy coherence and consistency across the framework.

OPTION 2: INCLUDING A ‘PLUS CLIMATE’ GOAL

Under the ‘plus climate’ goal option, ‘climate change’ would be added in the title of a goal that already includes targets to address climate change: access to sustainable energy or disaster risk reduction, for example. The minimalist approach to this option is simply to change the title to show that tackling climate change is closely related to these issues. This would be useful to give a political message of the importance of climate change but without adding further targets on climate change, it risks being insufficient in really addressing climate change.

A more coherent approach to the ‘plus climate’ goals would be to add climate change to the goal title as well as adding relevant target that are not already covered in the goal, e.g. for energy this could mean including additional targets on global emissions, low-carbon development strategies and public financing for adaptation as outlined on page 4. Other combinations for ‘plus climate’ goals are possible but we have outlined these two versions below for illustrative purposes.

Goal on energy plus climate change

A climate-smart goal on energy, as outlined above, could add climate change in its title since addressing climate change is closely linked to securing universal access to sustainable energy. This, in turn, is a crucial enabler for development and essential to tackling climate change and environmental degradation, because the global energy system (power and transport) accounts for around 80% of greenhouse gas (GHG) emissions.²² Consequently we need to halt and reverse current energy trends within the lifespan of the post-2015 framework. Further, climate change is already impacting global energy security by disrupting production and transport systems. A more climate-resilient energy sector is the cornerstone of sustainable development.

Achieving universal energy access by 2030 can deliver on both poverty reduction and climate protection. It would not undermine action on climate change as it would only increase global energy demand by an estimated 1% and CO₂ emissions by 0.6%. In addition, to deliver universal access, at least 55% of new electricity generation will have to come from (mostly renewable) decentralized energy, which will build low carbon development. However there are important elements of climate change, e.g. adaptation and resilience, that would not necessarily be captured under an energy focused climate goal.

Goal on DRR plus climate change

Disaster Risk Reduction (DRR) would be another worthy candidate for a ‘plus climate’ goal. According to the UN task team, addressing the dual and inter-related challenges of climate change and disaster risk is one of the most critical necessities for post-2015. Climate change will lead to more frequent and more intense extreme weather events²³ which have the potential to further escalate humanitarian crises. While mortality rates from disasters are decreasing (due to DRR), the number of people affected by disasters is increasing and so are the related economic losses. Disaster risk management and building resilience against climate induced shocks and stresses would therefore be a candidate for a ‘plus climate’ goal in the post-2015 framework.

Over the last 30 years there has been an evolving recognition that action on climate change and disaster risk reduction are an integrated part of sustainable development. Following several UN agreements, such as the Hyogo framework, the UNFCCC and the Rio+20 conference, disaster risk reduction and climate change action, including mitigation and adaptation, are seen not only as an imperative to protecting investments in development but also as an opportunity for a transformative shift.²⁴ However, targets on addressing global warming would probably sit awkwardly under a DRR ‘plus climate’ goal.

OPTION 3: CLIMATE CHANGE GOAL BASED ON AGREED COMMITMENTS

The objective of a stand-alone climate change goal would be to raise the visibility of climate change as a crucial element of sustainable development, and to accelerate action on tackling climate change. Although progress has been slow under the UNFCCC, a number of important decisions have been taken and reflecting these in a climate change goal could help to accelerate political action on implementation. Basing the goal on commitments already agreed between governments would also avoid duplicating ongoing negotiations elsewhere. However, we should recognise that the current level of commitments will suffice not to deliver the scale of change needed to avoid dangerous climate change. Targets could be either process or outcome based, or a combination of both, but should address mitigation and adaptation, DRR and resilience.

Suggested targets for a climate change goal based on existing agreements

Target: Global emissions peak within this decade and rapidly decline thereafter in line with the UNFCCC agreement to keep global warming below 2°C*

* The UNFCCC will review the 2°C target and progress towards its achievement, including the consideration of 1.5°C, and there should be the possibility for appropriate adjustment of this target, for example during five yearly reviews. The need to adjust targets based on emerging commitments and scientific facts (as seen in the MDGs) applies also to some other targets.

Parties to the UNFCCC have already agreed that greenhouse gas concentrations in the atmosphere need to be stabilised at a level that will prevent dangerous climate change²⁵, currently defined as keeping global warming within 2°C of pre-industrial levels. They have also agreed that all Parties will urgently work towards deep emissions reductions, and to attain a global peaking of emissions, as soon as possible.²⁶

Target: All countries have developed and implemented low-carbon development strategies or plans

In 2010, Parties to the UNFCCC also agreed that developed countries should develop low-carbon development strategies or plans, and encouraged developing countries to do the same. An additional target along those lines is therefore suggested to support the first target. Because so little progress has been made on emission reduction to date,²⁷ climate impacts are inevitable. Even with the rise in temperature experienced to date climate change is having an impact: at least 50,000 people were killed during the 2011 East African Drought²⁸ and more than 35,000 people during the 2003 European Heat wave,²⁹ which were at least partially due to climate change.

Target: 50% of all public climate related finance provided by developed countries to developing countries is allocated to adaptation

In recognition of this Parties to the UNFCCC have agreed that adaptation should receive the same level of priority as mitigation and that enhanced action on adaptation is urgently needed.³⁰

Target: All countries to have national planning processes and instruments in place which build resilience to and reduce impacts from climate related impacts and disasters by 2020 (based on a baseline of 2010)

Target: Reduce the number of people killed due to climate-related disasters and climate change impacts by at least 50% year on year and overall by at least 50% by 2030

Target: Reduce the number of economic losses due to climate-related disasters and climate change impacts by at least 50% by 2030

Target: By 2030, eliminate increase in the proportion of people living in poverty following disasters (1, 3 and 5 year interval) and reduce economic losses from people living in the poorest quintile populations by at least 75% against a 2010 baseline

Countries have also recognised that some segments of the population are more vulnerable than others due to geography, gender, age or disability, for example.³¹ The above targets reflect this.

OPTION 4: CLIMATE CHANGE GOAL BASED ON SCIENCE

A different option would be to define targets in terms of what the science says is actually necessary and group them in a goal, in addition to mainstreaming. This option is most likely to achieve the actions required to efficiently tackle climate change, however it is also the politically most challenging. Technically it would be the right thing to do, because on current emission trends and taking into account policies that have already been implemented or are planned, there is a 40% chance that global warming will exceed 4°C by 2100, and a 10% chance of it exceeding 5°C.³² Emission cuts need to increase in both size and rate. UNEP, in their 2012 'Closing the Emissions Gap' report, concluded that to have a likely chance of staying within 2°C, global emissions must peak by 2020 and decline rapidly thereafter. The IPCC suggest that emissions need to peak as early as 2015.³³ However, CO₂ emissions reached an all-time high in 2011.³⁴

Suggested targets for a climate change goal based on science

The IPCC discussed the concept of a global carbon budget in its fifth assessment report. This resource-sharing concept emphasises the global commons nature of the climate change issue and is a different approach to the burden sharing of emission reduction commitments. It is not a new concept³⁵, however the inclusion of it in the IPCC report has given it increased scientific legitimacy.³⁶ The carbon budget describes the cumulative emissions allowed within a certain period of time. It clearly signals that there are limits within which countries must operate if staying within a global temperature rise of 2°C (or 1.5°C) is to be possible. We recognise that agreeing emission budgets is undoubtedly difficult, and is as much a political as a scientific decision. However, it seems a radical new approach is required to reduce emissions sufficiently and avoid dangerous climate change.

Target: Global cumulative emissions of greenhouse gases limited to x (GtCO₂ equivalents) between 2015 and 2030 to have a better than 50% probability of keeping global warming below 2°C (or 1.5°C)

It is important to take into account that the actions taken to reduce emissions between 2015 and 2030 will determine what is possible after 2030, and therefore recommend an additional target to support the large scale transformations to zero/low carbon development. Distributing the carbon budget in a fair and equitable manner for that period will of course have to take into account the common but differentiated responsibilities and respective capabilities (including emissions from before that period) and support provided to developing countries.

Target: By 2030 all countries have reduced the carbon intensity of their economies (CO₂/GDP-ppp) by at least x% (against x baseline).

As with the previous target, action to address the impacts of climate change over the lifetime of the framework will also be critical. The following target attempts to link the efforts needed for adaptation to the rate of progress in reducing greenhouse gas emissions. It recognises that adaptation need is tied to mitigation progress. For example the costs of adaptation to a 1°C increase in Sub-Saharan Africa by 2020 are estimated to be around 13 billion USD, rising to 24 billion USD under a 2°C increase by 2040.³⁷

Target: Global funding for adaptation scaled up by x% per x% increase in greenhouse gas atmospheric concentrations.

The risk associated with climate change is increasing particularly in low and middle income countries, but can be reduced through actions to reduce vulnerability to climate-related events:

Target: By 2020 all countries have science based and participatory national climate risk assessments developed, and disaster risk reduction is mainstreamed into development strategies and programmes.

Target: By 2030, x% (differentiated according to country context) of national annual budgets allocated to reducing climate change risk.

REFLECTIONS ON RISKS AND OPPORTUNITIES OF THE DIFFERENT OPTIONS

Option 0 – climate highlighted in the narrative only

Not including climate change specific targets in the post-2015 framework is not an option. Climate change is a driver of poverty, vulnerability and inequality, and cannot be ignored in a process designed to end poverty, reduce inequality and deliver sustainable development. Fundamentally, goals aiming to eradicate poverty will be ineffective and cannot succeed, even in the short term, if countries fail to accelerate their actions to address climate change.

We are already locked into a certain amount of global warming and any development from this point on needs to reflect that we are living in a climate constrained world. Furthermore, the costs of past inaction on climate change are mounting. As these economic, social and environmental costs increase over time it will become increasingly impossible to end poverty within our lifetime, and to 'leave no one behind'. Development gains to date will likely be lost as climate change impacts worsen, and prospects for future generations undermined. However, a 4°C or even 2°C world is not inevitable. The opportunity still exists to limit global warming to within 2°C but achieving this will require using all of the political tools at our disposal, including the post-2015 framework.

Option 1 – climate-smart goals (mainstreaming)

The enduring success of the post-2015 framework will ultimately depend upon how climate-smart it is. Whether a stand-alone goal on climate change is included or not, all goals must be climate-smart, i.e. include targets that deliver a triple win of ending poverty, shifting to low/zero carbon development, and enabling adaptation, disaster risk management and resilience to environmental shocks and stresses.

Only concrete targets and indicators deliver concrete action. Targets that are generic, unmeasurable or vague do not drive progress. Targets under MDG 7 on environmental sustainability and MDG 8 on global partnership were not specific, measurable or targeted, meaning that many developed countries were often able to evade any implied responsibilities and avoid being held accountable.

Under a universal framework in the post-2015 era, all countries must commit to deliverable actions. Post-2015 goals and targets that fail to do this are 'castles built of sand' that will ultimately fail the poor. Given that it is people in poverty who are most vulnerable to climate change³⁸, priority must be given to actions to help those most vulnerable to the impacts of climate change. Equity and environmental integrity must be at the heart of sustainable development goals, through pro-poor climate action that benefits the environment.

The risk of only using a mainstreaming approach is that targets are dotted across the framework, meaning important aspects of climate action may be inadvertently missed or given low prioritisation. More importantly, mainstreaming reduces the political and public profile of climate change by not acknowledging it as a major sustainable development issue in its own right.

Options 2 – 4– different versions of climate goals

Any climate goal approach treats tackling climate change as an end in its own right, bringing together targets on climate-specific policy interventions required to reduce the causes of climate change and address its impacts. This is distinct from an approach which mainstreams only, which would just recognise that climate change is relevant to a large range of different 'sectors', and that it has impacts on and is driven by activities within these sectors.

While including climate change targets across the goal framework will strengthen sectoral integration and drive action on the ground, which is crucial for achieving poverty eradication and sustainable development, the success of the climate change policy agenda depends on raised political ambition and public profile, and action to reduce carbon emissions across all sectors and in all countries. A climate goal would also send a strong signal to the UNFCCC that an

ambitious globally binding climate deal that avoids dangerous climate change and facilitates a rapid transition to low carbon development is essential for development and ending poverty.

In effect a climate goal takes a “top-down” approach to addressing climate change through post-2015, while mainstreaming takes a “bottom-up” approach. Both approaches carry with them difficulties that have been well-rehearsed in the UNFCCC discussions.³⁹

Option 2 – ‘plus climate’ goal

A ‘plus climate’ goal, such as ‘energy plus climate’ or ‘DRR plus climate’ would have the benefit of including climate change in the goal headline which raises its profile in the overall framework. The minimalist approach of changing the headline without changing the substance would, however, risk sidelining climate change and ignoring targets that are not an integral part of the goal issue. Another problem with this approach is that it risks climate change becoming conflated with the other issue in the goal, potentially reducing the political imperative for action.

A more coherent approach to ‘plus climate’ would be to add climate change to the goal title as well as adding the relevant targets that are not already covered in the goal, e.g. for energy this could mean including additional targets on global emissions, low-carbon development strategies and public financing for adaptation. This would include all of the targets necessary for climate action, but would pose a (not insurmountable) challenge on how to bring two issues together in a joined up way. It may also limit the number of possible targets as they have to be shared across two issues in one goal.

Option 3 – a climate goal based on agreed commitments

A stand-alone climate change goal, in addition to mainstreaming, would signal a high level of ambition to achieve sustainable development and could contribute to the delivery of climate action at the scale needed to avoid hazardous levels of global warming. However, it is potentially politically challenging to agree.

Basing the targets on already agreed commitments could reduce the risk of the UNFCCC politics interfering with the post-2015 negotiations but would not be sufficient to prevent catastrophic impacts on the poorest and most vulnerable. It is important to note that while this option avoids some of the concerns around duplicating the UNFCCC negotiations, it is unlikely to provide a set of targets that, if implemented, would be sufficient for avoiding dangerous climate change.

Option 4 – a climate change goal based on science

A stand-alone goal on climate change, based on actions deemed necessary by current science, would be technically and morally most appropriate, but also the politically most controversial option. Nevertheless, as an issue fundamental to sustainable development, it does seem appropriate and ultimately responsible, to address climate change ambitiously and concretely in the post-2015 framework.

After all, the post-2015 framework is meant to be a universal framework that drives actions in all countries to end poverty and achieve sustainable development. It is meant to address the critical global challenges that are preventing these objectives from being achieved. When considered in this context there is no doubt that addressing climate change – a challenge that affects all countries, regardless of their development status, but particularly those living in poverty and for future generations – must be central.

1 Rio+20, 2012: The future we want. Outcome document states: "climate change is a cross-cutting and persistent crisis and [we] express our concern that the scale and gravity of the negative impacts of climate change affect all countries and undermine the ability of all countries, in particular, developing countries, to achieve sustainable development and the MDGs and threaten the viability and survival of nations."
http://www.uncsd2012.org/content/documents/774futurewewant_english.

2 See IDS, 1013, Work with us and CAFOD 2013, Setting the post-2015 development compass: Voices from the ground

3 See UN HLP report, UN SDSN report and UN SG's report for Special Event in September 2013

4 See, for example, IPCC, 2013: Climate change 2013. The physical science basis. Summary for Policymakers.
http://www.climatechange2013.org/images/uploads/WGI_AR5_SPM_brochure.pdf

5 See World Bank, 2013: Turn down the heat. Why a 4°C Warmer World Must be Avoided.
http://climatechange.worldbank.org/sites/default/files/Turn_Down_the_Heat_Executive_Summary_English.pdf

6 UNEP 2013 The emissions gap report 2013. A UNEP synthesis report.

7 IPCC 2013, Climate Change 2013: The Physical Science Basis. Summary for Policy Makers

8 UNEP, 2013: The Emissions Gap Report. A UNEP Synthesis Report.
<http://www.unep.org/publications/ebooks/emissionsgapreport2013/>

9 *ibid*

10 IPCC, 2013 *ibid*

11 DARA and the Climate Vulnerable Forum, Climate Vulnerability Monitor 2nd Edition (2012) A Guide to the Cold Calculus of a Hot Planet.

12 *ibid*

13 <https://www.cdproject.net/CDPResults/CDP-Carbon-Action-Report-2012.pdf>

14 http://assets.worldwildlife.org/publications/575/files/original/The_3_Percent_Solution_-_June_10.pdf?1371151781

15 Bank 2013 Turn down the heat: climate extremes; regional impacts and the case for resilience. And. IPCC 2013 Climate Change 2013. The Physical Science Basis. Technical Summary.

16 IPCC, 2013 (see above)

17 CAFOD et al, 2013, Cross cutting climate change in post-2015

18 2013. Rogelj, J., McCollum, D.L., & Riahi, K., "The UN's 'Sustainable Energy for All' initiative is compatible with a warming limit of 2 °C", Nature Climate Change, Nature Climate Change 3, 545–551 (2013).

19 WWF, 2011. WWF states that to achieve a 100% renewable energy sector by 2050, 42% renewable energy is needed by 2030, with far more rapid renewable energy expansion from 2030 to 2050.

20 UN HLP, 2013. A New Global Partnership.

21 International Energy Agency, 2011.

22 CAFOD et al, 2013, Cross cutting climate change in post-2015

23 IPCC, 2012. Managing the Risk of Extreme Events and Disasters to Advance Climate Change Adaptation.

24 UNTST brief on DRR and Climate Change

25 See Article 2 of the Convention

26 Decision 1/CP.18(a)

27 See for example: Jiahua P., Ying, C Carbon Budget proposal: a framework for an equitable and sustainable international climate regime, Social Sciences in China. Vol XXXI, No 1. Feb 2010 5-34. And also the WBGU 2009 Solving the climate dilemma: the budget approach. German advisory council on global change

28 Marshall, M. 2013 Humanitarian Disaster blamed on climate change. New Scientist 1 March 2013.

29 IPCC 4AR, Chapter 8 Human health impacts

30 FCCC/CP/2010/7/Add.1

31 FCCC/CP/2010/7/Add.1

32 Climateactiontracker.org. Climate shuffle 12 June 2013

33 Fisher, B.S., N. Nakicenovic, K. Alfsen, J. Corfee Morlot, F. de la Chesnaye, J.-Ch. Hourcade, K. Jiang, M. Kainuma, E. La Rovere, A. Matysek, A. Rana, K. Riahi, R. Richels, S. Rose, D. van Vuuren, R. Warren, 2007: Issues related to mitigation in the long term context, In Climate Change 2007: Mitigation. Contribution of Working Group III to the Fourth Assessment Report of the Inter-governmental Panel on Climate Change [B. Metz, O.R. Davidson, P.R. Bosch, R. Dave, L.A. Meyer (eds)], Cambridge University Press, Cambridge.

34 Oliver, Jos et al. 2012. Trends in global CO₂ emissions: 2012 report. PBL Netherlands Environmental Assessment Agency. The Hague/Bilthoven, 2012. PBL publication number: 500114022

35 IPCC 2013. *ibid*

36 refer also the WBGU 2009 Solving the climate dilemma: the budget approach. German advisory council on global change.

37 UNEP 2013 Africa Adaptation Gap technical report: climate change impacts, adaptation challenges and costs for Africa.

38 UNHDP 2006 beyond scarcity: power, poverty and the global water crisis.

39 See for example: UNEP 2009 industry sectoral approaches and climate action: from global to local level in a post 2012 climate framework; The Climate Group 2008 Sectoral Agreements. http://www.theclimategroup.org/_assets/files/Sectoral-Agreements.pdf