



# Linking Climate Action and Poverty Alleviation

An Approach to Informed Decision Making

TERI Proposal



The Energy and Resources Institute

This proposal highlights the main ideas presented in the discussion paper *Linking Climate Action and Poverty Alleviation: An Approach to Informed Decision Making* prepared by The Energy and Resources Institute (TERI) with support from the Energy Environment Group (EEG) of the United Nations Development Programme (UNDP). The views expressed in this publication are those of the authors and do not necessarily represent those of the United Nations or UNDP.

# The Proposed Approach

## The Challenge ...

Alleviation of poverty is a global challenge given the scale of the problem, its multidimensional character and the complex interplay of multiple drivers that are highly context specific.

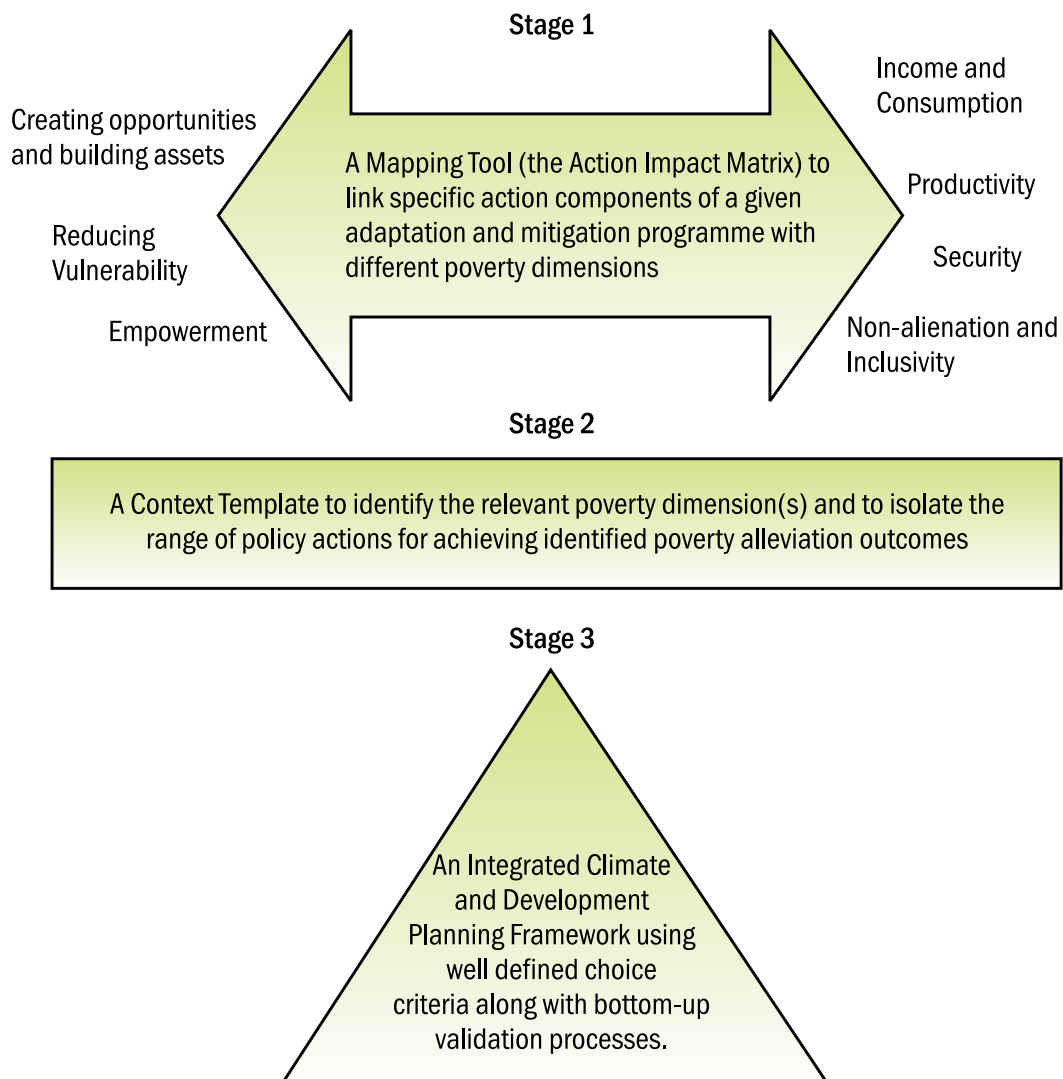
**Climate change adds to this challenge as an added stress**

## And the Opportunity!

Building resilience in poor communities is a key response strategy to counter the impacts of climate change. The substantial financial resources expected to be generated for both mitigation and adaptation must explicitly and meaningfully cater to the needs of the poor.

**Climate resources can also accelerate poverty alleviation**

Linking the challenge with the opportunity requires realignment of adaptation and mitigation programmes for poverty alleviation. We propose a structured approach to achieving this in 3 stages:



## The challenge

The negative impacts of climate change are felt more severely by the poor in underdeveloped countries given their vulnerability arising from a high dependence on natural resources, and their limited capacity to cope with climate variability and extremes.

### *Climate change aggravates poverty problem*

The magnitude of the poverty eradication challenge can be seen by the number of poor people worldwide. The poverty challenge becomes more severe when compounded with climate change. Across countries, millions of the world's poorest people are being forced to cope with the impacts of climate change through increased exposure to drought, more intense storms, floods and environmental stress. Climate change reduces access to drinking water, affects the health of the poor, and is posing a threat to food security in many countries in Africa, Asia, and Latin America. While climate change is a global phenomenon, its negative impacts are more severely felt by the poor in underdeveloped countries given their vulnerability arising from a high dependence on natural resources, and their limited capacity to cope with climate variability and extremes.

### *Addressing poverty beyond climate documents*

Several key climate texts negotiated over the years have recognized the two-way link between climate change and poverty alleviation, as brought out by following table. However, mechanisms for addressing the climate challenges arising out of poverty have not been defined as yet.

<i>UNFCCC Text Preamble</i>	The 'legitimate priority needs of developing countries for the achievement of sustained economic growth and the eradication of poverty' are recognized in the preambular section
<i>UNFCCC Text Article 4.7</i>	Emphasizes poverty eradication as the 'overriding priority' of developing countries
<i>Bali Action Plan (Decision 1/CP.13)</i>	Reaffirms that 'poverty eradication is not only developing countries' priorities but a global challenge for all Parties'
<i>Nairobi Work Programme (Decision 1/CP.12)</i>	Reiterated that 'activities to be funded should be country-driven, cost-effective and integrated into national sustainable development and poverty-reduction strategies'

### *Need to align climate action for poverty alleviation*

World leaders are converging to discuss the future of the international climate regime, post 2012. The scale of future international response to climate change adaptation and mitigation will certainly be unprecedented in terms of both finances and technology. Unfortunately, the attention that is being given to addressing climate change and its impacts in relation to the poor is still grossly inadequate.

There are clear synergies of adaptation and mitigation efforts with current as well as potential interventions for poverty alleviation. Recognizing these synergies, and acting on them should be of interest to policy makers, development planners, donor agencies and experts on climate change because of the following opportunities.

- Leverage additional resources for poverty reduction
- Address a key concern of the developing world
- Create avoided emissions while building adaptive capacities

## The call for action

This TERI proposal is a call to policy makers to start integrating climate and development planning, at both the national and international levels, for a strong and lasting impact on the problem of poverty and climate change — both threats to a sustainable future for mankind. An ethical solution to the climate change problem would require a global assault on poverty. Similarly, a lasting solution to poverty

and deprivation calls for global mobilization of financial resources and deployment of sustainable technologies, which can be leveraged significantly from the climate-linked financial resources.

**Summary of proposed approach: integrating climate action with poverty alleviation**

A structured approach to mapping climate related actions on poverty outcomes, and analysing the sensitivity of both climate and poverty outcomes to policy and resource allocation choices is the key to this proposal. The main elements of this structured approach are as follows.

**Mapping climate actions with poverty reduction: action impact matrix**

Climate actions take the form of adaptation and mitigation.

**KEY ISSUES**

- How do we understand poverty in its context?
- How do we weigh poverty alleviation outcomes vis-à-vis mitigation and adaptation outcomes?
- How do we measure poverty impacts in all its dimensions and over time?
- Can we identify appropriate entry points at the programme level to incorporate poverty concerns in climate change action?

ADAPTATION	MITIGATION
<p>‘the adjustment in natural or human systems in response to actual or expected climatic stimuli or their effects, which moderates harm or exploits beneficial opportunities’</p> <p><i>Types of adaptation</i></p> <ul style="list-style-type: none"> <li>• Autonomous adaptation is where individuals respond ‘naturally’ to climate change, such as farmers changing crop planting dates to ensure quality yields</li> <li>• Planned adaptation is where deliberate policy actions are undertaken to respond to climate change, such as building a sea-wall to protect against flooding</li> </ul>	<p>‘a human intervention to reduce the sources of, or enhance the sinks of greenhouse gases’</p> <p><i>Elements of mitigation</i></p> <ul style="list-style-type: none"> <li>• Avoiding adverse impacts as far as possible by use of preventative measures</li> <li>• Minimizing or reducing adverse impacts to ‘as low as practicable’ levels</li> <li>• Remedying or compensating for adverse residual impacts which are unavoidable and cannot be reduced further.</li> </ul>

Mitigation programmes comprise of structural measures, such as design or location changes and engineering modifications; and non-structural measures, such as economic incentives, legal, institutional and policy instruments, provision of community services and training and capacity building. Similarly, adaptation measures are behavioural and structural responses that help cope with the impacts of climate change by reducing vulnerability to climate change and building capacity and resilience to reduce the ill effects of climate change. It has been identified that for adaptation strategies to be successful, where possible, they must address social inequalities, such as differences in land tenure and lack of access to resources such as credit, education and decision-making that affect people’s ability to adapt. From a review of various poverty frameworks, broadly it can be asserted that the poor are so because they have few ‘assets’, such as, education, health, land, capital, access to energy and empowerment. The productivity of their assets is also low due to absence of the requirements of human productivity. Increasingly poverty is also being viewed as a loss of capability or a restriction of opportunity and choice while looking at deprivation in many areas other than income.

Looking at climate actions for poverty alleviation, a priori, it can be expected that there will be key coherences between certain climate actions and poverty alleviation interventions while there may be areas of conflict between other climate actions and poverty alleviation measures (or climate actions and poverty alleviation in other dimensions). It is also likely that some climate actions might not have any impact at all on (some dimensions of) poverty. Realignment of climate actions for poverty alleviation requires examining the impact of adaptation and mitigation actions on different poverty dimension(s). Further, it is important to determine as to how the gaps between these climate actions and poverty alleviation measures can be filled, conflicts addressed and synergies exploited. For this, a mapping tool, the action impact matrix, has been designed to link actions with specific poverty dimensions.

The policy actions considered (along the rows) in the Action Impact Matrix are: creating opportunities and building capabilities, reducing vulnerability and empowerment. These have been further classified as creating new/improved assets, providing/increasing access to assets, creating enabling conditions, providing affordable basic services; reducing exposure to risks, reducing impact of risks; and providing ownership rights and participatory and representative governance.

Different dimensions of poverty are considered (in the columns):

- Income and consumption – more real income: increase in income in kind, increase in real income and increase in savings.
- Productivity – capacity to do work or the efficiency in working. This includes health including nutrition and capacity to do work, and education that includes formal and vocational schooling and skills formation.
- Security – from vulnerability to the different kinds of risks and from security of income and consumption, safe environment and improved adaptive capacity.
- Non-alienation and inclusivity in decision-making and in the general growth.

Besides these, externalities, in the form of social costs and social benefits, not explicitly envisaged in the programme design and not incorporated in the programme objectives upfront, but important when considering a project, are also taken into account in the matrix.

The Action Impact Matrix maps various strategic interventions of climate change programmes (in the rows) to the dimension(s) of poverty that they affect (in the columns) (Table 1).

TABLE 1 ACTION IMPACT MATRIX							
		Income and Consumption	Productivity		Security	Non-alienation and inclusivity	
			Health	Education			
Creating opportunities and building capabilities	Creating new/improving assets						
	Providing increasing access to assets						
	Creating enabling conditions						
	Providing affordable basic services						
Reducing vulnerability	Reducing exposure to risks						
	Reducing impact of risks						
Empowerment	Providing Ownership rights						
	Participatory and representative governance						

The action impact matrix can be used to study both qualitative dimensions (such as income and consumption) and quantitative dimensions (such as security) of poverty as well as the direct and indirect poverty reduction impacts of various interventions. The matrix enables us to see the impact on different kinds of assets which affect the various poverty dimensions differentially. Moreover, it allows us to incorporate a scenario based approach in the mapping tool and to get a bound for feasible policy action. Once all the interventions are mapped out in the matrix, along with the direction of their (expected) impact on poverty, the dimensions of poverty programme it addresses can be easily seen, where it exacerbates poverty and where the focus on poverty is entirely missing.

However, the matrix also has its limitations: it cannot be used to see the feedback effects of reduction of poverty in one dimension leading to poverty reduction in another dimension; the matrix also does not deal with issues of measurement or evaluation and is only a mapping tool. But the greatest limitation of the action impact matrix is that while it can be used to see what dimensions of poverty a programme addresses, it does not give any sense of how important the different poverty dimensions are and the corresponding poverty alleviation measures.

Some of these limitations are addressed in the next step of the proposed approach.

### *Developing indicators and context template*

The next step is to place the action-impact matrix in its socio-economic and environmental context. For this, a set of context indicators such as occupational status, land use pattern and energy usage needs to be overlaid on the matrix. Poverty outcomes are ultimately determined through interplay of the programme actions and the context (Table 2).

Therefore, having established, with the use of the action impact matrix, how an adaptation or mitigation programme links to different poverty dimensions, the next step in linking climate action to poverty alleviation is identification of the relevant poverty dimensions and isolating the range of policy actions for achieving the identified poverty alleviation outcomes in these dimensions.

Identifying the most important poverty dimensions requires an understanding of the socio-economic, political and environmental context and appropriate indicators that can capture the poverty and poverty alleviation impacts in different dimensions. It is also important to engage the different levels of stakeholders involved in this process.

A meta-analysis of the benefits of different cross sectoral programmes along with the design features of these programmes can help in determination of the range of most potential poverty alleviation actions.

Poverty outcomes are ultimately determined through interplay of the programme actions and the context

<b>TABLE 2 TEMPLATE TO DETAIL OUT INFORMATION FOR INCOME AND CONSUMPTION POVERTY (FOR AGRICULTURE SECTOR)</b>		
<i>Design features</i> (Put budgetary allocations under different heads)	<i>Context</i> (Put indicators under relevant heads)	<i>Impact</i> (Put indicators under relevant heads)
Creating opportunities	Population and occupational status	Overall
Reducing vulnerability	Present land use pattern	Agricultural income from:
Empowering people and communities	Energy scenario	<i>Increased yield</i>
	Environmental status including vulnerability	<i>Increased land under cultivation</i>
		Livestock management
		Animal husbandry developed
		Techno-economic analysis

We have designed a context template that builds upon the action impact matrix and allows a three-way mapping of context, programme design features and poverty outcomes (Table 2). This template when used for the different sectors also helps in arriving at the different cross sectoral poverty indicators.

The context template as well as the analysis of past programmes that helps link programme input features with (possible) outcomes can be used to see how actions map into outcomes and how the same action in different contexts will have different impacts due to different vulnerabilities of people in varying conditions. It can be used to understand that even in the same context, different dimensions of poverty may be important and this is critical since poverty is multidimensional and can be approached from different sectors.

### Designing an integrated climate and development planning framework

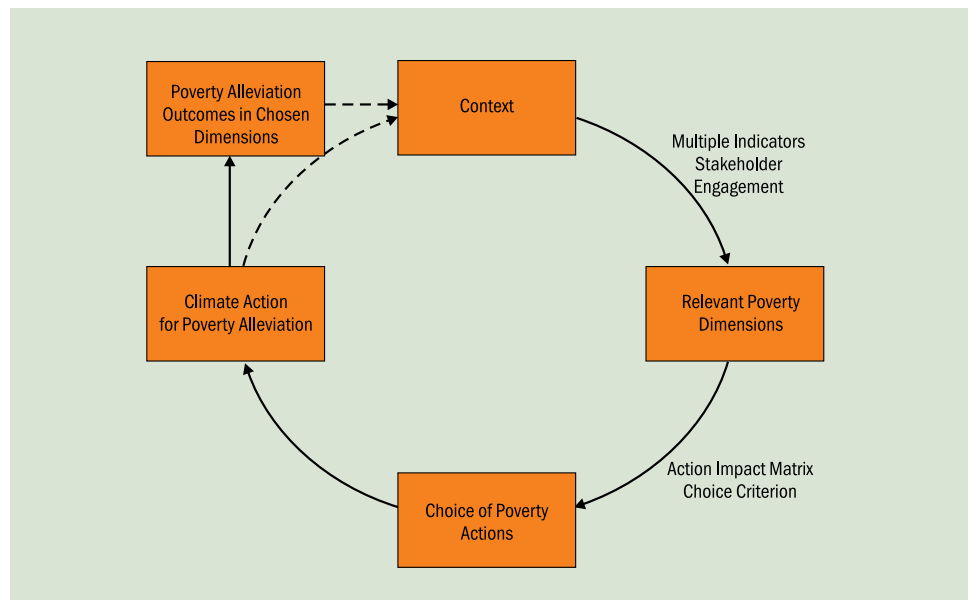
Decisions as to how climate change response programmes are designed, and what climate actions are finally taken depend on a number of considerations such as, context, country specific vulnerability to climate change, sector specific concerns, international commitments, specific project details, finance and available technology, communities targeted, political will, and so on.

Alignment of climate action with poverty alleviation requires an integrated climate and development planning framework. By indicating the potential poverty impact of each component of a climate action, it can help the planner decide whether the climate action meets the poverty alleviation goals well enough, and if not, assess the design changes that would be needed to achieve these. Conceptualization and operationalization of such a framework needs identification of multiple poverty indicators, choice criterion, validation processes, and monitoring and evaluation mechanisms. Considering that many of these components change over a period of time, the integrated framework also needs to have an in-built responsiveness to these changes.

The integrated framework can be represented by the figure given below.

Understanding the context and dimensions of poverty can lead to the identification of specific sectors and design elements that would systematically help introduce poverty alleviation as a choice criterion in development planning and

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**FIGURE 1** INTEGRATED CLIMATE AND DEVELOPMENT PLANNING FRAMEWORK

in shaping country positions in international climate change negotiations. Using relevant choice criteria and mapping a given climate action onto the various poverty dimensions it affects (using the action impact matrix), the range of potential policy actions can be determined. These actions must be validated through a bottom up validation processes that promote public participation at all levels in decision making and is associated with empowerment of people and inclusive growth. This is important for the programme to be relevant and its specific design elements to be accepted by the people.

The modified climate action will have poverty alleviation outcomes in the chosen dimensions which will have an impact on the context. The design and implementation of the new climate action will itself have an impact on the context. The constant change in context makes this process an iterative one and builds in policy dynamics.

## Way forward

The approach will be valuable for informed decision making in terms of national efforts linking climate and development, fund disbursement under external assistance and in promoting international cooperation on climate change.

The proposed framework can contribute to the process of alignment of climate action with poverty alleviation action. By indicating the potential poverty impact of each component of a climate action, it can help the planner decide whether the climate action meets the poverty alleviation goals well enough, and if not, assess the design changes that would be needed to achieve these.

This information will be valuable for informed decision making in terms of national efforts linking climate and development, fund disbursement under external assistance and in promoting international cooperation on climate change.

This proposal details the approach to a working decision-making tool that would help look at climate and poverty action in an integrated way. However, the translation of the approach from the conceptual to the operational level would need rigorous meta-analysis of a wide range of poverty impact assessments so that poverty outcomes corresponding to specific interventions and context can be determined (or predicted) with reasonable levels of certainty. Further challenges would be to address issues of social preference among various dimensions of poverty (in effect, the weights that each dimension should receive), to determine the social desirability of enhancing equity (that is, the inequity aversion weights in a given country context), and to design systems of stakeholder engagement that would validate and provide feedbacks to the suggested approach.

In the coming months, TERI will continue its work on linking climate action and poverty alleviation and elaborate on this framework. We welcome comments, suggestions, feedback and ideas on this work and are open to opportunities to collaborate with interested institutes and organizations working on similar lines.

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