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Perspectives on non-economic loss and damage: Understanding value at risk from climate change

EXECUTIVE SUMMARY

Introduction

Loss and damage pertains to those impacts of climate change which cannot be adapted to, and therefore result in net losses. Currently there is no international protocol describing with whom responsibility on this matter lies, or how to address it.

There is currently good data documenting how losses and damages, as a result of extreme events, have increased. However it needs to be appreciated that much of that which will be potentially lost or damaged as a result of climate change cannot be accurately captured in economic terms. The fact that non-economic losses and damages are difficult to assess, quantify and aggregate means that they may well be excluded from policy discussions. Such exclusion will result in an underestimation of the potential costs of climate change, thereby compromising our decision-making ability on how to respond to climate change, with potentially significant implications for both social justice and human well-being.

What is non-economic loss and damage

It must be emphasised that **concerns about loss and damage fundamentally pertain to issues of valuation**. This is because how we understand loss and damage, as well as how we measure it, depends on how we value those things, which will be, or have been, lost or damaged.

In terms of non-economic loss and damage, the issue is one of accounting. **Non-economic loss and damage refers to loss and damage which is not accounted for in the formal accounting procedures**. Non-economic loss and damage is therefore driven by two processes:

1. *Not knowing how much of something has been lost or damaged*
2. *Not knowing the value of that which has been lost or damaged*

The first of these is essentially an issue of formal record keeping: If we don't know how much of something existed to begin with, then we cannot determine how much of it was lost or damaged. Climate change threatens many things for which there are no, or only very poor records. Addressing this is fundamentally about better record keeping. It is cautioned however that increasing the bureaucratic and surveillance capacity of the state, is by no means simply a good thing.

The second driver of non-economic loss and damage - 'Not knowing the value of that which has been lost or damaged' – is significantly harder to address. This is because value is a social construct: To value something is an emotional state that humans experience. Determining the value of something therefore requires some means for expressing/revealing that emotional state.

One powerful means for expressing value is in relative terms. In this regard the market is highly effective. By observing market behaviour – i.e. looking at how much of one thing people are willing to forego for another thing – we can gain insights into how people value certain things, as compared to others. Where money serves as the means by which all things can be traded, and where markets function *efficiently*, money values become a useful means for representing value (and therefore for calculating loss and damage).

However, not everything that is threatened by climate change is effectively traded on the market. There are many things that we value, but which we don't buy and sell. For example, one does not (and cannot) purchase emotional well-being after going through the trauma of an illness or the death of a loved one – both of which are potential impacts of climate change

There are also cases in which value is inalienable from the thing which has been lost. These are cases in which symbolic value is high. Often symbolic value cannot be separated from the object in which it resides. In such cases relative valuation is severely compromised.

Concerns about symbolic value might be dismissed as simply irrational sentimentality in the face of the very material challenges presented by climate change. Shared symbolic meaning, however, is a core element of social coordination. Morality, rules, institutions, trust, etc. all stem from a shared symbolic understandings of the world. The destruction of such symbolically valuable goods can therefore result in major losses in well-being, which are not accounted for in economic terms. As such, symbolic value, and the systems that maintain it, lie at the heart of social capital which is central to resilient societies.

Finding a way to express non-economic loss and damage

Because policy-makers often use money values to express how important an issue is, there are efforts to find a way to place non-economic losses in monetary terms. One way to address the challenge posed by non-economic loss and damage is to try and put monetary values on things that currently defy accounting. The most obvious way to do this is to try and trade these goods on the market and see what values we arrive at. There are two problems with this:

1. *Price and value are not the same*

Price is not determined by value. Price is the result of the intersection of supply and demand. Value impacts on price through its impact on demand, however dynamics around supply can distort price as a measure of value. The distinction between price and value is most problematic in cases where we value things for symbolic reasons, which render value inalienable from the thing itself.

2. *Public goods are not priced accurately*

Public goods refer to goods for which one person's ownership of something cannot be enforced by excluding other people (non-owners) from accessing it. In terms of price, if people cannot be excluded from using a good, they will not be willing to pay for it. The implications of this are that public goods tend to be undervalued on the market because their full value cannot be realised.

Other approaches: Contingent valuation and reparations

Acknowledging the above problems, there are other means for dealing with the issue of valuation. Regarding goods which are not regularly traded on the market, one approach is to ask people what they would be willing to accept for the loss of a good or service. This approach, called **contingent valuation**, however tends to result in undervaluation. This is because, in order to avoid strategic behaviour, contingent valuation asks: how much people are willing to pay for a good. This necessary framing limits value according to how much money people actually have. In addition, contingent valuation assumes that value is alienable from an object.

Where that which is lost or damaged cannot be replaced, the offer of **reparations** (and the cost thereof) is another possibility. **Compensation** is one form of reparation that involves the payment of money to an injured party for losses experienced. At the community-level, such compensation is designed to be rehabilitative. However, historic experience suggests that this has not had much success, with compensations tending to be either inadequate or inappropriate.

More qualitative approaches are also available, including **restitution**, which involves restoring an offended state to its former conditions, prior to alteration. **Satisfaction** principally addresses non-material losses and can include: formal apologies, the acknowledgement of wrongdoing and the awarding of damages for hardships experienced as a result of the original violation.

While valuable, reparations are compromised when conditions cannot be restored, when apologies do not affect the material outcomes of social disarticulation and when symbolic value is not alienable. In addition, they are severely limited as they rely on the existence of a party that is clearly responsible for the damages – something that is politically and analytically challenging in the context of climate change. In addition, due to

their focus on restoring conditions, reparations miss the opportunity for a more fundamental transformation of the power structures that resulted in the damages in the first place.

Understanding non-economic value in terms of social reproduction

Failings of economic means of addressing loss and damage suggest that we need to find alternatives. This has to include some means of articulating how and why people value things, rather than simply observing their willingness to trade them and at what price. In order to account for value in societies with different ways of thinking and different modes and relations of production, will require developing an understanding of the role things play in social and material reproduction, in those particular societies.

One way to explore such issues is to examine the different ways that people relate to their material and social worlds and how they are manifested in the experience of loss. Just as property is a manifestation of social relations, so is loss. There are three primary registers of loss: possession (the loss of property), belonging (the loss of a sense of 'belonging' to a place) and knowing (the loss the knowledge embedded in the traditional practices which are located in material resources). All of these need to be accounted for in addressing non-economic losses and damages that will be associated with climate change.

Proposals for policy

Because formal economic metrics of loss and damage are likely to significantly undervalue many of the goods and services threatened by climate change, and because the features driving this undervaluation are likely to be worst in less-industrialised countries, it will be necessary to *tailor policy and practical responses to the livelihood needs of vulnerable people (in vulnerable geographies)*.

Given the complicated manner in which social meaning is created and maintained, as well as the role it plays in sustaining social and material reproduction, developing tools to address non-economic loss and damage will require that *social participation be a central feature*.

Finally, with *resilience* among humans being a fundamentally socio-cultural concept that is shaped by people's ability to coordinate action based on a shared understanding of common symbols, it is essential that non-economic loss and damage focus on efforts that maintain, or recreate the cultural practices, symbols, rituals and ways of life that determine the capacity of a community to respond to stress. This will require a focus on assisting affected people in preserving the features of their society that *enhance and sustain community social relations and nurture social capital*.

Conclusions

Climate change threatens many things for which adaptation efforts will not be sufficient and which, for a multitude of reasons, will not be fully accounted for in solely economic assessments of loss and damage. Finding a means for accounting for non-economic loss and damage is thus crucially important for efficient decision-making about climate change. How exactly this can be achieved is unclear and it should be noted, that non-economic loss and damage will not provide a means for addressing the injustice associated with differentiated responsibility and limits to adaptation.

The above notwithstanding, efforts to look outside of traditional economic loss and damage accounting are a positive contribution. To this end combinations of approaches are required, that take the form of continuous corrections and address the underlying conditions of vulnerability, while also sustaining social relations and maintaining social capital.