



Non-Economic Loss and Damage in the Context of Planned Relocation: Gaps and Areas for Further Research

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1. Introduction

An increasing number of people have to abandon their homes and livelihoods due to the adverse impacts of climate change (Platform on Disaster Displacement, 2018). Human mobility has always been part of people's lives, however, some movements, especially planned relocation, have become involuntary and have been associated increasingly as an adaptation response to climate change. These movements are associated with Loss and Damage (L&D)¹ from climate change impacts, a concept that was formally recognised under the United Nations Framework Convention on Climate Change (UNFCCC) in the Paris Agreement in 2015². One aspect of L&D, so-called non-economic loss and damage (NELD), is closely linked with human mobility. Different from economic losses, such as the loss of a house or a car that can be put into monetary value, NELDs occur on a personal level (Serdeczny, *et al.* 2016a). Examples could be loss of life, cultural heritage and social networks. Planned relocation is potentially associated with non-economic losses, however, if done well, can also address and minimize those non-economic losses (UNFCCC 2018b). Existing frameworks, such as Hino *et al.* (2017), Dow *et al.* (2013) and Boyd *et al.* (2017) are unsuitable to assess whether planned relocation is an adaptive response to climate change or are rather L&D from climate change impacts (Hino *et al.*, 2017).

This extended abstract gives firstly, a brief summary of the book chapter written by Pill (2020) on NELDs and planned relocation, where the author developed a new spectrum to measure and address

¹ For further reading on a definition for L&D refer to Huq *et al.* (2013) and Durand and Huq (2015)

² For further reading on the history of L&D refer to Roberts and Huq (2015)



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NELDs. Secondly, based on this summary, this paper identifies current gaps in literature and provides recommendations on how academia can address these gaps.

2. Non-economic losses in the context of planned relocation

Non-economic losses are context-dependent, incommensurable and not easily, if at all, determined or traded in a market. Serdeczny *et al.* (2016a, 2016b) and Kirsch *et al.* (2001) explain that these losses go unnoticed to an outsider who is not immersed in them and are often neglected in policy-making and planning, in favour of more tangible economic and financial considerations. NELDs also lack a common unit of measurement and do not have a monetary value attached to them. Losses with sentimental value are experienced and felt differently from individual to individual, and cultural and social values may be implicit within. Further, non-economic losses can exacerbate communities’ capacity to cope with climate change, therefore multiplying stressors on individuals (Olssen, 2014).

Human mobility, particularly planned relocation, is increasingly considered to be an adaptation response to climate change, where the original location becomes unviable due to environmental changes and associated loss of lives and livelihoods (Nichols 2019).

All types of movements of people can take different forms which are summarised in Table 1.

Table 1: Different types of relocation (Pill (2020), adapted from Warner *et al.* (2013) and Martin *et al.* (2013)

Characteristic	Description
Spatial (local, regional internal or external / international)	Meaning the movement within or outside national boundaries
Temporal (permanent or temporary)	Meaning the length of time that individuals stay away from their usual homes. This may be because homes have become inhabitable or because they are unwilling to return
Scale (individuals, households, communities, towns, cities, countries)	Meaning how many people are moving



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Forced vs voluntary	Meaning the extent to which the decision was based on personal desire to move or determined by external circumstances were beyond control
Planned vs ad hoc	Meaning whether the decision to move was made and prepared for over a longer period or had to be made in a hurry. Most of the time these types of relocations refer to the movement of a collective of individuals due to the changes in the environment and surroundings that make their current homes uninhabitable, or movement due to extreme weather events such as hurricanes

Any type of human mobility is linked to NELDs. . Therefore, in any relocation project, especially where planning takes place in advance, it should be a priority to keep NELDs to a minimum. With current climate change projections, planned relocation is likely going to be an increasingly accepted adaptation response. Human mobility and displacement are also increasingly included in countries’ national policies and frameworks, as well as in their National Determined Contributions (NDC) (UNFCCC, 2018a), giving evidence of the importance of relocation of communities. The Government of Fiji, for example, has developed guidelines to assist communities, government, and other actors to plan relocations and to minimize losses (Ministry of Economy, 2018). Fiji’s relocation guidelines define community relocation as “the voluntary, planned and coordinated movement of climate-displaced persons within (a State) to suitable locations, away from risk-prone areas, where they can enjoy the full spectrum of rights including housing, land and property rights and all other livelihood and related rights”, however they are yet to be tested to assess how well they address and minimise NELDs.

3. The loss and damage spectrum

As NELDs become too high, human mobility can no longer be described as adaptation. However, the existing frameworks are inadequate to assess community relocation as L&D or adaptation. In addition, tools how to address these losses are missing.

In order to address this research gap, Pill (2020) conducts a conceptual exercise, based on existing literature and stakeholder interviews, to develop a framework that ensures the consideration of NELDs in project planning. This framework is described as a spectrum, ranging from planned relocation as an adaptive response to the point of L&D, arguing that the higher the NELDs, the higher the L&D suffered by the individual and vice versa (see appendix 1). Pill (2020) develops a tool box with counter actions



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to address and mitigate NELDs which should be considered within policymaking (see appendix 2). The spectrum, as well as the counter actions, recognise that women are disproportionately affected by any L&D suffered and are therefore gender-sensitive. The counter actions developed by Pill (2020) can be used in conjunction with, for example, Fiji’s relocation guidelines to provide a useful aid to assess past present and future relocation projects and to address NELDs.

4. Research gaps and implications for policy-making

Determining the success of the relocation of communities is challenging, a view which is also supported by Nalau and Handmer (2018). The L&D spectrum can assist in evaluating planned relocation projects and in conjunction with the counteractions is a useful tool to address NELDs. However, there are three areas that lend themselves for more research to inform the L&D spectrum further and test its validity for policy making. Firstly, the appropriateness of compensation to address NELDs and reduce L&D. Secondly, the need for qualitative research in the field to address the context-dependency, subjectivity and non-monetary character of NELDs. Thirdly, the application to and usage of the L&D spectrum in existing policies and guidelines for planned relocation projects.

4.1. Compensation

With increasing NELDs as a consequence of planned relocation due to anthropogenic climate change, one of the questions to be answered is whether compensation to the individuals or the government can or should play a role in the relocation process. The current counter actions of the L&D spectrum do not have compensatory payments included as a way to mitigate NELDs. Compensation in the context of L&D from climate change impacts is contentious in international negotiations and also called for by Parties to the UNFCCC. However, 43 Stakeholder interviews with policy makers, negotiators and representatives from small island developing states) have shown that there is no consensus on whether compensation in the traditional sense, namely a flat payment, would be an appropriate or sufficient way to address L&D due to human mobility, particularly NELDs. Another 21 interviews conducted in Dominica with residents affected by hurricane Maria in 2017 have shown a similar result: simple compensation payments are not the solution to NELDs. Therefore, other avenues should be pursued and require further research. These options could include alternative “payments” such as improved health services or livelihoods, access to and assistance with education and associated fees or upskilling.

4.2. Qualitative research



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The understanding of individual experiences and individual values requires research and will assist in developing strategies to address NELDs. As fieldwork is a crucial component to address questions of the actual needs of people (REFERENCE) and in order test conceptual frameworks, as NELDs are highly subjective, this research should be conducted with qualitative research methods such as community-based participatory methods within a specified context and on a local level. Actual needs of people can be identified, and conceptual frameworks validated, dismissed or adjusted.

More qualitative research is therefore crucial as existing case studies, such as Vunidogoloa and Narikoso in Fiji, have shown that relocation planned long-ahead still results in disagreements and resistance within the community (Charan et al, 2018, Bertana, 2019). Communities can be divided in whether and where to relocate (Nichols, 2019). Barriers to relocation are even greater when no or insufficient consultation has taken place. The limited, but growing research in the field, would benefit from a greater understanding of the individual experiences set within the local social, cultural and environmental context, to inform policy and procedures.

In conjunction with compensation, on-the ground research is key to determine whether a one-off payment is actually desired by from a community or an individual and whether alternative compensatory measures, such as the ones mentioned above, are preferred. Fieldwork would allow for a case by case assessment and result in the most appropriate option to provide means for solace and consolation.

4.3. Existing policies and guidelines

The spectrum can be used to determine whether and how NELDs are addressed so that planned relocation remains an adaptive response. Two major documents have recently been developed and lend themselves to test the suitability of the L&D spectrum. Firstly, Fiji's national relocation guidelines (Ministry of Economy, 2018) and secondly, the recommendations on displacement collated by the Task Force on Displacement (2018b) as part of the five-year rolling work plan of the Warsaw International Mechanism for Loss and Damage (WIM)³. The L&D spectrum can be used to determine whether and how the current existing guidelines address NELDs. The Fiji relocation guidelines are a first step towards best practice community relocation and allow for adjustment in the future when necessary.

³ The Warsaw International Mechanism for Loss and Damage (WIM) was established in 2013 at COP 19. It is an executive committee comprising of an equal number of representatives from developing and developed countries working on aspects related to L&D which include slow onset events, non-economic losses, comprehensive risk management approaches, human mobility and action and support, including finance, technology and capacity building. It had a five-year rolling work plan that was reviewed at COP25 in Madrid.



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Similarly, the WIM is currently under review and “addressing” L&D as part of its mandate “avert, minimise, address” (AMA) has been widely neglected; a major point of dispute between developed and developing countries in L&D meetings.⁴at COP25 in 2019.

5. Conclusion

The aim of this extended abstract was to provide a brief summary of the chapter written by Pill (2020) who developed a spectrum to assess the extent of L&D from planned relocation projects and provides counter actions to reduce NELDs. Based on the L&D spectrum, gaps for further research and recommendations on how to conduct this research were identified. A crucial area to explore are alternatives to compensatory measures as stakeholder interviews suggest that the traditional concept of compensation as a one-off payment is not necessarily preferred to address NELDs. Insights from the use of participatory as well as on-the-ground research methods would provide a beneficial addition to the L&D spectrum. It could see compensatory provisions as another possible counter action to address as well as reduce NELDs. Lastly, existing policy documents can be evaluated against the L&D spectrum to determine how well and whether they account for NELDs. Should these not be the case, they require adjustment and further development.

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⁴ Own observations during attendance of meetings on L&D



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Appendix 1

Planned relocation project X

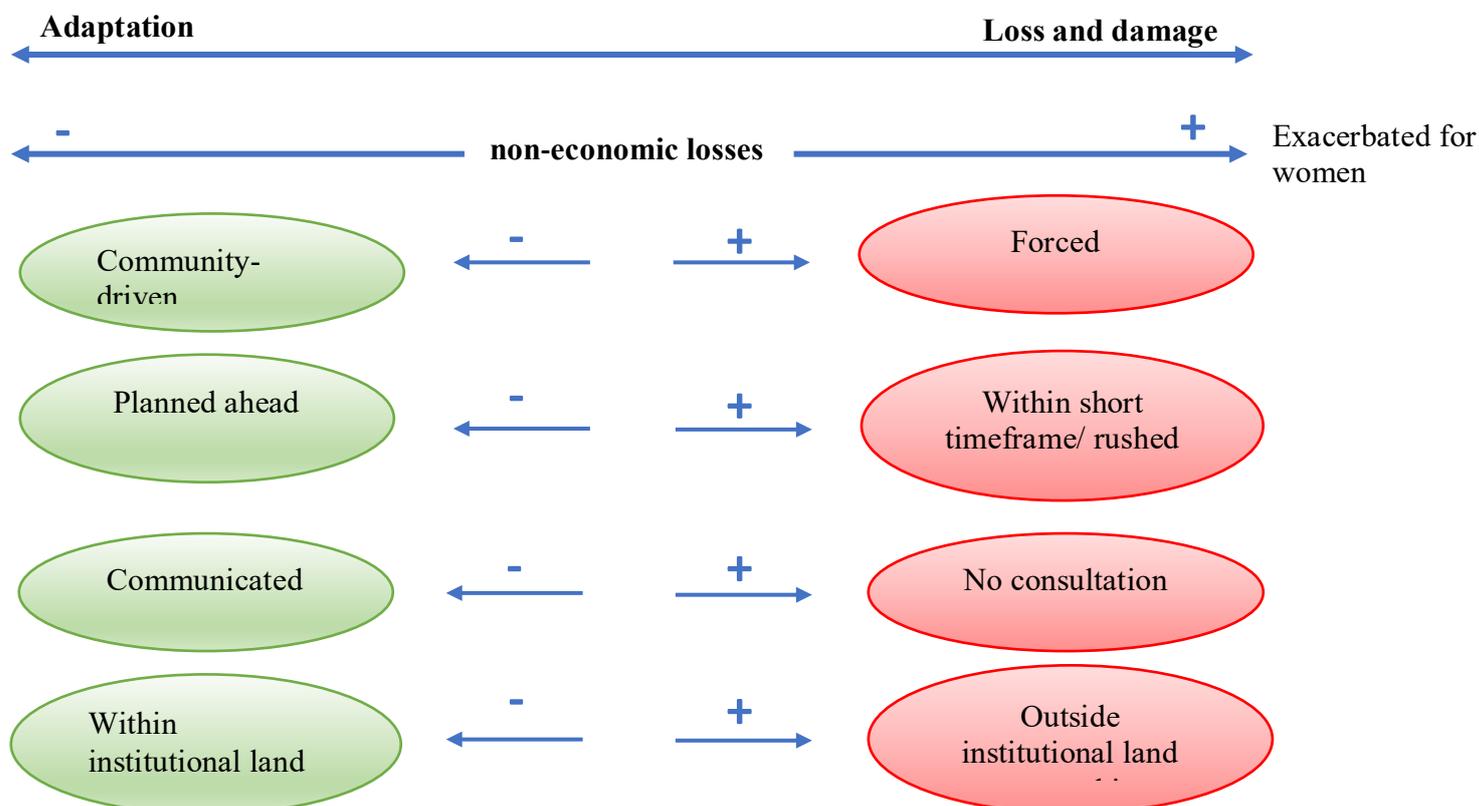


Figure 1: Loss and damage and adaptation visualised as a spectrum for relocation project

Appendix 2

Non-economic losses identified literature	L&D as in non-economic losses	before action to reduce non-economic loss	Action to avert, minimise or address non-economic loss	Residual from non-economic (high, medium, low)	L&D non-loss medium, low)
Physical well-being	High for males	Integrate physicians and doctors in the relocation process; ensure adequate number of female doctors as well	Low for males	Extremely high for females	recognition of different female medical needs Medium for females



Psychological well-being	High for males	Integrate psychologists in the relocation process; ensure adequate number of female psychologists	Low for males
	Extremely high for females		Medium for females
Territory (sovereignty, sense of place)	High	Choose a place close to the original settlement	Low-medium
		Discuss land rights	
		Provide as many options as possible for relocation and allow residents to provide options. Ensure women are included in the decision-making process	
Cultural heritage	High	Choose a place close to the original settlement	Medium-low
		Discuss land rights	
		Provide as many options as possible for relocation and allow residents to provide options. Ensure women are included in the decision-making process	
Indigenous knowledge	High	Communicate with major knowledge holders of the community to preserve knowledge and develop a collection	Medium
Destruction of culturally important landscapes	Extremely high	Protect and retain with infrastructure	Low-medium
		Where possible consider relocating with the new settlement	
Loss of identity and ability to	High for males	Find a way to make decisions together and decide on a way forward	Medium for males
			High for females



solve problems collectively	Extremely high for females	Facilitation of community meetings to discuss changes	
		Ensure women are included in the discussions and have a voice	
		Facilitate community meetings after relocation to ensure longevity and preempt conflict	
Loss of knowledge/ ways of thinking that are part of lost livelihood systems	High	Find a way to make decisions together and decide on a way forward	Medium
		Facilitation of community meetings to discuss changes	
		Ensure women are included in the discussions and have a voice	
Social cohesion, peacefully functioning society	High	Facilitate community meetings after relocation to ensure longevity and preempt conflict	
		Find a way to make decisions together and decide on a way forward	Medium
		Facilitation of community meetings to discuss changes	
Education	High for males	Prioritise building of educational facilities in the new location	Low-medium for males
	Extremely high for females	Ensure continued education during relocation by integrating teaching staff or freeing up existing staff in the village	Medium for females
		Facilitate community meetings after relocation to ensure longevity and preempt conflict	



		Ensure attending school is compulsory for female and male students	
		Consider escorts to educational facilities for female students	
Traditions/ religion/ customs	High	Ensure religious sites are re-erected at the new location or still adequately maintained and reachable in the old place	Low
		Consult what needs to be in place to continue with embedded customs and traditions	
Social bonds/ relations	High	Ensure that residents who have personal or close relationships with each other move at the same time or shortly thereafter	Low
	Extremely high for females	Ensure that residents who have personal or close relationships with each other stay in the same neighbourhood or house	
		Ensure that couples with shared responsibilities move together	
Changed labour conditions	Extremely high	Provide education and new skills if changing occupation	Low for males
		Provide adequate infrastructure to reach food and water resources	Medium for females
		Recognise the multiple roles of women in society for preparing, planting and gathering food as well as child minding and caring for the elderly	

Table 1: Types of non-economic losses. Consolidated from Fankhauser *et al.* (2014), Morrissey and Oliver-Smith (2013), UNFCCC (2013b), Andrei *et al.* (2015), Serdeczny *et al.* (2016a) The table shows the extent of non-economic losses and damages before and after mitigation responses have been implemented Source: Pill 2020