UNIVERSITY OF SOUTHAMPTON

FACULTY OF SOCIAL, HUMAN AND MATHEMATICAL SCIENCES

Social Sciences

Can the World Bank effectively promote and protect the needs of vulnerable communities?

by

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ABSTRACT

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The present investigation explored if the World Bank could effectively promote and protect the needs of water-stricken Andean communities through the implementation of bottom-up environmental resilience building and community political empowerment efforts in the context of technical cooperation programmes on climate change adaptation (CCA). The investigation was motivated by the fact that while World Bank CCA programmes have received relatively less attention by the mainstream literature compared to structural adjustment programmes, they have become one of the fastest growing catalysts for support to vulnerable people worldwide. The dissertation adopted a qualitative research approach through a single-country deviant case study, which was selected on the assumption that it would provide the most relevant data. Information was gathered through forty semi-structured key informant interviews with representatives of sixteen institutions, across six cities and towns, spanning three countries. The study found that the Bank enhanced local community resilience to climate change. At the same time, the study also found that the Bank did not facilitate the shifting of deeper lying power structures necessary to empower the local community vis-à-vis long term natural resource management decision making. However, what set apart the case study from traditional Bank programmes was the effort to mediate social conflict by attempting to empower local communities through the implementation of capacity development activities. This unexpected role is defined as that of a *buffer institution*, which is a concept that is used in a novel fashion in the present investigation. The study contributes to the literature on international development aid by helping to understand if the Bank may be pursuing a different type of engagement with poor communities compared to its past interventions, and whose interests this type engagement might best serve. The findings disclose avenues for future research into the extent to which the Bank may embrace new approaches to development assistance.

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DECLARATION OF AUTHORSHIP

I, Alexander Voccia

declare that this thesis and the work presented in it are my own and has been generated by me as the result of my own original research.

How does the World Bank attempt to address the needs of water-stricken Andean communities?

I confirm that:

1. This work was done wholly or mainly while in candidature for a research degree at this University;
2. Where any part of this thesis has previously been submitted for a degree or any other qualification at this University or any other institution, this has been clearly stated;
3. Where I have consulted the published work of others, this is always clearly attributed;
4. Where I have quoted from the work of others, the source is always given. With the exception of such quotations, this thesis is entirely my own work;
5. I have acknowledged all main sources of help;
6. Where the thesis is based on work done by myself jointly with others, I have made clear exactly what was done by others and what I have contributed myself;
7. None of this work has been published before submission.

Signed: .....

Date: 7 November 2018

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The present dissertation stems from seven years of intense work, unwavering dedication and wholehearted commitment. When I first embarked on this adventure, I did not know that it would prove to be a journey of self-discovery. Like an archaeologist, I savoured the opportunity to unearth a silent truth from the bedrock of a forgotten land. The path, however, has been torturous and the findings unexpected. Elation and frustration, joy and despair, desolation and exaltation became engraved in each thought, concept and perspective uncovered. As I relentlessly pursued the investigation, the world around me was revolutionized by life-changing events. Today, I see chiselled pieces of the lives of my loved ones scattered throughout every page of this study.

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I dedicate this dissertation to her.

Definitions and Abbreviations

ACCA	Associación para la Conservación de la Cuenca Amazonica
ALA	Local Water Authority of Quillabamba
AusAID	Australian Agency for International Development
CBC	Centro Bartolomé de las Casa
CCA	Climate Change Adaptation
CENEPRED	Centro Nacional de Estimación, Prevención y Reducción del Riesgo de Desastres
DFID	United Kingdom Department for International Development
ECLAC	Economic Commission for Latin America and the Caribbean
EU	European Union
GEF	Global Environmental Facility
IMF	International Monetary Fund
JICA	Japanese International Cooperation Agency
MEM	Ministry of Energy and Mines of Peru
MINAM	Ministry of Environment of Peru
NGOs	Non-Governmental Organizations
OECD	Organization for Economic Co-operation and Development
PRAA	Adaptation to the Impact of Rapid Glacier Retreat in the Tropical Andes
SERFOR	Servicios Nacional Forestal y de Fauna Silverstre
SGCAN	General Secretariat of the Andean Community
UN	United Nations
USAID	United Sates Agency for International Development
USAID	United States Agency for International Development

Chapter 1: Introduction

1.1 Research puzzle

The purpose of the present research is to investigate if the World Bank can effectively promote and protect the needs of vulnerable communities.

For decades, the mainstream literature on international development aid has critically assessed the role of the World Bank as failing to address the needs of local communities in developing countries by studying the impact of neoliberal structural adjustment programmes (Mosely *et al*., 1995, p.1472; Stiglitz, 1999, p.580; Gilbert *et al*., 1999, p.599; Garcia, 2007, p.472; Cammack, 2007, p.194; Sender, 2002, p.198; Ritzen, 2005, p.187; Woods, 2006, p.4; Park, 2010, p.8; Kapur *et al*., 2011, p.16). The present research does not call into question these findings. However, the issue arises as per whether the criticisms advanced in relation to structural adjustment hold firm also for other types of interventions. Among these interventions are climate change adaptation (CCA) technical cooperation programmes[1], which envision a different type of engagement with local actors in developing countries compared to structural adjustment programmes.

World Bank CCA technical cooperation programmes have become one of the fastest growing catalysts for support to vulnerable people worldwide (Murdiyarso, 2010, p.767; Sullivan & Huntingford, 2009, p.3989). With USD 52 billion pledged to over 900 climate change programmes since 2011, the World Bank is the major international provider of CCA technical cooperation programmes (World Bank, 2016). In 2014 alone, the Bank committed USD 11.9 billion towards the realization of climate change programmes spanning 77 countries (World Bank, 2016a). To date, the World Bank has designed 292 climate change programmes. Of these, 49 programmes (i.e., 17%) directly addressed water resource management issues – including hydropower, water supply and irrigation –, while 83 programmes (i.e., 28%) targeted countries in Latin America (World Bank, 2016a).

[1] Technical cooperation activities can be defined as "*activities financed by a donor* […] *whose primary purpose is to augment the level of knowledge, skills, technical know-how or productive aptitudes of the population of developing countries*" (White, 2015, p.90). The main actors involved in technical cooperation comprise of a 'technical expertise' entity (e.g., the United Nations, the World Bank, development banks, and international NGOs), a local implementing counterpart (e.g., national ministries, local government entities, local NGOs and civil society groups), and in some cases third party funding (e.g., the Global Environmental Facility; major donors, such as the Swiss Development Cooperation Agency and DFID; or development banks).

Although some empirical work has been carried out on the impact of World Bank CCA technical cooperation programmes on local communities (Khanna *et al*., 2015), these programmes have received relatively less attention by the mainstream literature compared to structural adjustment programmes, which have captured the interest of academic and policy literature more generally. As per the existing literature on technical cooperation programmes more generally, it presents contrasting evidence regarding the design and impact of said undertakings on the lives of local communities.

In this context, it would be very beneficial for the existing body of knowledge on international development aid to understand if the World Bank can effectively promote and protect the needs of climate-affected water-stricken communities communities through the implementation of CCA technical cooperation programmes.

On the one hand, critiques of the World Bank have denounced that technical cooperation programmes – similarly to structural adjustment programmes – are designed and implemented to serve solely the interests of central government authorities and powerful multinational companies (Beymer-Farris & Bassett, 2012, p.339; Lynch, 2012, p.370; Goldman, 2005, p.41; Harrison , 2005, p.256; Gould & Ojanen , 2003, p.69; Ayers *et al*., 2011, p.77; Shankland & Chambote, 2011, p.68; Alam *et al*., 2011, p.56; Ireland, 2012, p.159; and Carey *et al*., 2012, p.190). On the other hand, proponents of Bank-led interventions have focused on how the design and implementation of technical cooperation programmes – unlike structural adjustment programmes – has responded to the needs of civil society groups and local communities (Bose *et al*., 2001, p.178; Low *et al*., 2001, p.278; D'Agostino & Sovacool, 2011, p.701; Dumaru, 2010, p.754; Ahmed & Fajber, 2009, p.42; Rawlani & Sovacool, 2011, p. 859; Kaul, 2001, p.22; Verkooijen, 2011, p.51; and Khanna *et al*., 2015, p.1212).

Against this backdrop, a first sub-question that the present dissertation will investigate is if the World Bank can design programmes that respond to the needs of climate-affected water-stricken communities through CCA interventions.

As chapter two will illustrate in detail, the existing literature strongly suggests that bottom-up resilience building[2] and local community political empowerment[3] are pivotal in responding to the needs of climate-affected water-stricken communities. However, the existing literature provides very limited and contrasting evidence of whether World Bank technical cooperation programmes foster bottom-up resilience building activities, and whether they facilitate a process of local community political empowerment.

Bottom-up resilience building is of great importance in light of the fact that much of the existing literature on international development aid has denounced the support of government and elitist agendas - which are presented as being disconnected from the needs of local communities -, as being one of the main reasons underpinning the inability of the World Bank to protect the interests of those most in need (Woods, 2006, p.1; McAfee, 1999, p.139; Beymer-Farris & Bassett, 2012, p.339; Lynch, 2012, p.370; Goldman, 2005, p.41; Harrison , 2005, p.256; Gould & Ojanen , 2003, p.69; Ayers *et al*., 2011, p.77; Shankland & Chambote, 2011, p.68; Alam *et al*., 2011, p.56; Ireland, 2012, p.159; and Carey *et al*., 2012, p.190). It is thus necessary to understand if the resilience building activities implemented through technical cooperation programmes reflect a top-down process of elitist knowledge transfer – aimed at justifying, legitimizing and crystallizing unequal natural resource access benefits of political elites vis-à-vis poor local communities (Beymer-Farris & Bassett, 2012, p.333; Sheehan, 2000, p.14; Castree, 2003, p.277; Goldman, 2005, p.19; Gudynas, 2009, p.213; Burchardt & Dietz, 2014, p.474).

Against this backdrop, a second sub-question that the present dissertation will investigate is if World Bank CCA technical cooperation programmes can help to build environmental resilience through a bottom-up approach.

[2] The concept of environmental resilience is herein understood as referring to the timeliness with which a community is able to react to environmental shocks, the amount of environmental stress that a community can sustain, and the ability of a community to adapt to a changing environmental context (Davoudi *et al*., 2013). Please see chapter two for the details of the theoretical assumptions underpinning this concept.

[3] The concept of community political empowerment vis-à-vis decision making in natural resource management is herein understood as referring to the enhancement of the ability of communities to remain fully aware of their environmental needs, to understand the implications of their interests, and to express their views in a meaningful manner during the course of participatory decision making processes that take place during the implementation of CCA programmes, and which are defined on the basis of "*the fairness of the institutions, their representativeness, and how they incorporate the diverse values and views of the community and collective as well as the individual good*" (Nelson *et al*., 2007, p.410). Please see chapter two for the details of the theoretical assumptions underpinning this concept.

In addition to the above, the ability of the World Bank to respond to the needs of water-stricken local communities will most likely also require efforts aimed at empowering local communities, alongside those focusing on building their environmental resilience. Moreover, scholars such as Budds & Hinojosa (2012, p.128) highlight that water security[4] is not only the result of environmental stressors, but that it also stems from the political and economic interests of government authorities and private sector multinationals. Moreover, Budds & Sultana (2013, p.275) assert that "*flows of water are not external to power relations, but intricately enmeshed in, and reflective of, them*". In this context, it is argued that water security issues internalize social relations and politics (Linton & Budds, 2014, p.171; Wutich et al., 2017, p.46; Swyngedouw, 2004, p. 2), and as such shape and reflect socio-economic power relations among central government authorities and multinational companies on the one hand, and local communities on the other (Budds & Hinojosa, 2012a, p.50).

Against this backdrop, a third sub-question that the present dissertation will investigate is if World Bank CCA technical cooperation programmes can politically empower vulnerable communities.

On the basis of the aforementioned three sub-questions, the present dissertation will investigate if the World can promote and protect the needs of vulnerable water-stricken communities through the implementation of CCA technical cooperation programmes that attempt to build the resilience of local communities whilst also politically empowering them. Through this approach, the current dissertation will refocus attention on types of World Bank interventions that the literature has not traditionally studied in depth; namely water-based CCA technical cooperation programmes. In doing so, the study will address two main research gaps within the existing body of knowledge on international development aid.

First, by helping to understand if water-based CCA technical cooperation programmes are able to engage local needs, the study will help to enrich the existing literature vis-à-vis the interests that these types of World Bank interventions are currently serving; namely those of local communities or those of powerful elites, such as central government authorities and private multinational companies. The literature presented above illustrates the lack of consensus regarding the ability of the World Bank in particular (and multilateral organizations in general) to effectively promote

[4] The present research defines water security "*as part of a hydro-social process that is simultaneously material, discursive, and symbolic, differently valued – as not solely material or social, but relationally, based on negotiation and interaction at individual and collective scales*" (Jepson, et al., 2017, p.48)

and protect the needs of vulnerable communities through the implementation of CCA technical cooperation programmes. Even more importantly, there is no overarching understanding of the reasons for which the World Bank may be (un)able or (un)willing to implement CCA technical cooperation programmes that provide bottom-up grassroots environmental resilience building and political empowerment. Moreover, the aforementioned studies appear to point to singular examples where programmes may have had positive or negative outcomes for individual stakeholder groups. Instead, the question should become that of understanding the meanings ascribed to the various elements of the programmes by the different stakeholders involved in it, as suggested by Lewis *et al*. (2003, p.543), as well as the dynamics that led to certain outcomes – such as those related to the power and autonomy of the World Bank.

Second, by exploring the relationship between the activities of water-based CCA technical cooperation programmes on the one hand, and the multi-faceted interests of local communities and powerful elites on the other, the study will help to enrich the existing literature by providing insights into the factors that might influence the sustainability of these types of World Bank interventions. There is no overarching consensus within the literature in this regard since existing studies offers widely diverging and contrasting perspectives and findings. On the one hand, scholars such as Bottrell (2009, p.334) and Joseph (2013, p.51) denounce that the benefits of resilience-building interventions are not sustainable since central government authorities use the presumed greater resilience of poor communities to pressure them into absorbing and accepting market-driven exploitation of environmental resources. On the other hand, Batterbury & Fernando (2006, p.1856) and Lewis (2017, p.4) suggest that the benefits of World Bank interventions can be sustainable to the extent that they are supported by an enabling institutional environment and by the enforcement of proper rules, backed by strong government commitments and accountability of civil society leaders. However, neither of these perspectives would appear to address the reasons for which the World Bank itself may be (un)able or (un)willing to help ensure the sustainability of its own interventions.

In summary, stemming from the recognition that "*new methods of exploring* [World Bank] *activities are needed if its contribution is to be adequately understood and assessed*" (Yi-chong & Weller, 2009, p.xii), the profound significance of aforementioned lines of enquiry resides in the fact that they might suggest that future research on international development aid programmes, including on World Bank technical cooperation programmes, should avoid the pitfall of drawing hasty conclusions by pointing to singular examples where programmes may have had positive or negative outcomes for individual stakeholder groups. Instead, the question could become that of understanding the meanings ascribed to the various elements of programme interventions by the

different stakeholders involved in them, as suggested by Lewis *et al*. (2003, p.543), and – ultimately – whether different interests are served in different ways.

Figure 1 summarizes the research puzzle that guides the present investigation.

Figure 1: Research puzzle

1.2 Contribution to the literature

The purpose of the present research is to investigate if the World Bank can effectively promote and protect the needs of vulnerable communities. This question acquires particular importance in light of the fact that World Bank CCA technical cooperation programmes have become one of the fastest growing catalysts for support to vulnerable people worldwide (Murdiyarso, 2010, p.767; Sullivan & Huntingford, 2009, p.3989). Although some empirical work has been carried out on the impact of World Bank CCA technical cooperation programmes on local communities (Khanna *et al*., 2015), these programmes have received relatively less attention by the mainstream literature compared to structural adjustment programmes, which have captured the interest of academic and policy literature more generally. By focusing on World Bank CCA technical cooperation programmes, the present study will thus contribute to the existing literature on international development aid by helping to understand if the Bank may be pursuing a different type of engagement with poor communities compared to its past interventions, and whose interests this type engagement might best serve; those of the local communities or those of powerful stakeholders, namely central government authorities and private multinationals.

As the following paragraphs will highlight, there is no overarching consensus within the literature regarding the impact of World Bank technical cooperation programmes on the lives of local communities, since existing studies offers widely diverging and contrasting perspectives and findings

Scholars such as Goldman (2005, p.41), McAfee (1999, p.139), Gould & Ojanen (2003, p.69), Woods (2006, p.4) and Harrison (2005, p.256) claim that the World Bank – far from addressing the needs of poor communities – serves the interests of central governments by strengthening existing forms of hegemonic and elitist powers that are disenfranchised from the real needs of vulnerable and impoverished local communities. Moreover, while Goldman (2005, p.34) claims that the Bank uses development programmes to infiltrate the decision-making substrata of developing countries in order to create a demand that is carefully tailored to the resources that it wishes to provide for the realization of the initiatives that it wishes to support, Edwards & McCarthy (2006, p.128) complete the picture by asserting that central governments request CCA technical assistance programmes solely to secure financial and non-financial resources, given that there is increasing international interest surrounding the development of CCA initiatives (Meinzen-Dick *et al.*, 2002, p.45). In other words, the agendas of both the party requesting assistance, i.e., the government, and the one providing assistance, i.e., the Bank, are supposedly unrelated to the needs of climate-affected communities (Shankland & Chambote, 2011, p.62). Along the same vein, Beymer-Farris & Bassett (2012, p.333) argue that CCA technical cooperation programmes stem solely from an agenda that aims to shift access to, and control and management of natural resources from local people to national elites and global actors.

These positions are supported by numerous empirical case studies, which highlight how multilateral technical cooperation programmes – and World Bank technical cooperation programmes, in particular – have failed to provide bottom-up grassroots environmental resilience building and to politically empower vulnerable communities. In this regard, while Mirumachi & Torriti (2012) found that in Laos local communities were pressured by government institutions into participating in the consultation processes of resilience building project only to safeguard World Bank funding, Selfa (2010), Ayers (2011), Alam *et al.* (2011) and Ayers *et al*. (2011) found that resilience building technical cooperation programmes in Brazil, Bangladesh and Nepal – respectively – were the result of a largely a specialist-driven process, with a techno-managerial as opposed to capacity building focus, which failed to either build the adaptive capacity of vulnerable communities, or to involve them in the capacity building process through a grassroots process.

Furthermore, with regard to politically empowering local communities, investigations carried out by Lynch (2012, p.370) in Peru, and Alam *et al*. (2011, p.56) in Bangladesh, denounce the fact local communities and civil society organizations are almost never empowered by CCA projects, so much so that even when they are supposedly involved in the decision making process they appear to know little or nothing about the project itself. Very similar conclusions were drawn by Peterson (2012), in Ethiopia, and Ireland (2012, p.195), in Nepal.

In contrast to these critical findings, several other scholars offer a more positive outlook of World Bank programmes. According to Stiglitz (1999, p.580), "[i]*ndividual projects remain at the core of the Bank's work. Many of these projects have been shown to be quite successful at reducing poverty and its effects*." This assessment is shared by Vetterlein (2012, p.50), who underscores that*"*[l]*ooking at Bank lending, policies and discourse today, it is difficult to wholeheartedly criticise the Bank*", as well as by Gilbert *et al*. (1999, p.599) who firmly believe that the Bank is succeeding in addressing the many criticisms that marked its early approaches to poverty reduction and development assistance. In the same vein, Selfa (2010, p.717) notes that following much criticism concerning its top-down approach in the 1980s, during the past two decades the World Bank has made significant attempts to move forward in ensuring the participation of programme beneficiaries in the design and implementation of its projects. Furthermore, according to Slaughter (2004, p.8) the presence of global multilateral institutions, such as the World Bank, is essential to solving collective problems of people and their governments that can only be addressed on a global scale. These positions are echoed by Ritzen (2005, p.187), who stresses that the World Bank should strive to "*continue along all the routes which have been shown to be promising".*

These positions are supported by several empirical case studies, which highlight how multilateral technical cooperation programmes – and World Bank technical cooperation programmes, in particular – have succeeded in providing bottom-up grassroots environmental resilience building and in politically empowering vulnerable communities. In this regard, empirical work on World Bank technical cooperation programmes carried out in India by scholars such as Khanna *et al*. (2015) and Kaul (2001), as well as in Bangladesh by Bebbington *et al*. (2007) suggests that the World Bank has made considerable steps forward in successfully addressing the needs of local communities, including through CCA programmes. The findings of these scholars highlight the ability of Bank-led technical cooperation programmes to successfully enhance the capacity of local communities to manage their environmental resources (Kaul, 2001, p.22), as well as to provide

said communities with the know-how necessary to generate useful additional income (Bebbington *et al*., 2007, p.610).

In addition, while Rawlani & Sovacool (2011, p.859) found that a UNDP CCA technical cooperation programme succeeded in strengthening the resilience of local communities to climate change in Bangladesh, D'Agostino & Sovacool (2011, p.712), Dumaru (2010, p.758) and Ebi *et al*. (2011) highlight the positive results achieved by technical cooperation programmes in Cambodia, Fiji and Ethiopia – respectively – in terms of building the adaptive capacity of local communities to the impacts of climate change, including through a bottom-up grassroots approach. While none of these investigations specifically documents water-related World Bank CCA technical programmes, they do however focus upon a number of highly relevant aspects for the present research.

Furthermore, with regard to politically empowering local communities, the findings of Khanna *et al*., (2015, p.1211) in India present the cross-cutting benefits of World Bank-led technical cooperation participatory schemes vis-à-vis women's stark increased empowerment and active involvement in public life and domestic decision making. Further empirical research carried out by Bebbington *et al*. (2007, p.610), in Bangladesh, D'Agostino & Sovacool (2011, p.711), in Cambodia, Ahmed & Fajber (2009, p.42) and Kaul (2001, p.22), in India, and Gippner *et al.* (2012, p.10), in Nepal, yield similar findings vis-à-vis the establishment of village water committees to work in partnership with government authorities, the direct involvement of local communities in project activities, and the empowerment of people through the decentralization of information paradigms.

Stemming from all the empirical evidence presented thus far, two main research gaps can be identified. The first gap pertains to whose interests the World Bank may be serving through its understudied water-based CCA technical cooperation programmes; namely those of local communities or those of powerful elites, such as central government authorities and private multinational companies. In this regard, most of the existing literature would appear to draw conclusions by pointing to singular examples where programmes may have had positive or negative outcomes for individual stakeholder groups as a means to justifying to criticizing the approach taken by the Bank, without addressing the dynamics that led to certain outcomes – such as those related to the power and autonomy of the World Bank. Moreover, it would appear that while most case studies detail the social injustices perpetuated by international actors vis-à-vis the impacts of climate change (Beymer-Farris & Bassett, 2012, p.339; Ayers *et al*., 2011, p.77; Shankland & Chambote, 2011, p.68; Alam *et al*., 2011, p.56; Ireland, 2012, p.159; Carey *et al*., 2012, p.190; Lynch, 2012, p.364), the majority of the remaining case studies present factual

evidence of the success of a given project as a means to justifying it (Dumaru, 2010, p.761; Kaul, 2001, p.22; Rawlani & Sovacool, 2011, p.859; Ahmed & Fajber, 2009, p.41; D'Agostino & Sovacool, 2011, p.701; Verkooijen, 2011, p.51).

In addition to the above, a second research gap pertains to the fact that there are also limited insights within the literature regarding the factors that might influence the sustainability of World Bank CCA technical cooperation interventions. On the one hand, scholars such as Bottrell (2009, p.334) and Joseph (2013, p.51) denounce that the benefits of resilience-building interventions are not sustainable since central government authorities use the presumed greater resilience of poor communities as an excuse to pressure them into absorbing and accepting market-driven exploitation of environmental resources. On the other hand, Batterbury & Fernando (2006, p.1856) and Lewis (2017, p.4) suggest that the benefits of World Bank interventions could be sustainable to the extent that they are supported by an enabling institutional environment and by the enforcement of proper rules, backed by strong government commitments and accountability of civil society leaders. However, neither of these perspectives would appear to address the reasons for which the World Bank itself may be (un)able or (un)willing to help ensure the sustainability of its own interventions.

The present dissertation will attempt to address these research gaps.

1.3 Research methods

The study adopts a qualitative research design through a single-country case study, which is analyzed in a structured and focused fashion at the meso and micro/sub-national levels by means of a 'thick description'. The research builds on solid theoretical foundations.

With regard to the case study selected for the present research, the investigation focuses on the World Bank CCA technical cooperation programme entitled 'Adaptation to the Impact of Rapid Glacier Retreat in the Tropical Andes' (PRAA), which was implemented in the municipality of Santa Teresa, in Peru, between 2008 and 2014. The main goal of the PRAA was to contribute to strengthening the resilience of local ecosystems and economies to the impacts of glacier retreat in the Tropical Andes (World Bank, 2008, p.9). The case of the PRAA was selected insofar as it offers an excellent opportunity to explore if the World Bank can effectively promote and protect the needs of vulnerable communities.

As a water security-focused CCA technical cooperation programme implemented in Latin America, the PRAA is reflective of a fast-growing trend of programmes that the World Bank is implementing, and which may arguably be indicative of changing modes of practice of the Bank itself (White, 2015, p.90). However, within this trend, the PRAA represents a "*deviant*" case (Seawright & Gerring, 2008, p.302) – also referred to as an "*extreme*" case by Flyvbjerg (2001), or a "*special interest*" case by Baškarada (2014, p7) – due to its "*unusual/special attributes*" (Baškarada, 2014, p7). The 'deviant' nature of the PRAA resides firstly in its ability to explicitly, and unexpectedly, recognize the link between environmental issues and power structures in the context of water security – which is a link that defines the fabric of the present research puzzle, and which is uncommon in CCA programmes –, and secondly to seek to address both dimensions to the benefit of the local population.

Against this backdrop, the PRAA was chosen as the case study for the present investigation based on the assumption that it would provide an opportunity "*to collect the most relevant data*" (Baškarada, 2014, p.6) to understand if the World Bank can effectively promote and protect the needs of vulnerable communities. The case study was thus selected based on "*purpose*", as opposed to "*convenience*" or "*probability*" (ibid.). Moreover, the official goals of the PRAA, as well as the criteria based on which the geographical locations for the PRAA were selected, capture well not only the environmental aspects but also the socio-political elements that define the three sub-questions[5] that guide the present investigation.

The present investigation differs and brings added value compared to both World Bank and Independent Evaluation Group assessments of technical cooperation programmes insofar as it analyzes the achievements of the PRAA in relation to the normative frameworks developed by leading scholars in the fields of resilience building (Davoudi *et al*., 2013; Tschakert & Dietrich, 2010; and Nelson *et al*., 2007, p.401) and community empowerment (Lukes, 2005; Hermansson, 2010, p.51; Young, 2000, p.26; Paavola, 2008, p.651; Braun, 2010, p.181; Adger *et al*., 2006, p.3; Dow *et al*., 2006, p.96; Schlosberg, 1999, p.12).

The choice of the case of the PRAA poses three main research challenges from a methodological point of view, namely: proximity to the reality being investigated; double hermeneutics; and bias

[5] The three sub-questions are: Can the World Bank design interventions that respond to the needs of climate-affected water-stricken communities? Can World Bank CCA technical cooperation programmes provide bottom-up grassroots environmental resilience building? Can World Bank CCA technical cooperation programmes politically empower vulnerable communities?

towards verification. The actions taken to mitigate these risks and address these challenges will be discussed in detail in chapter three.

In terms of the data collection methods, the research gathered information through 40 semi-structured key informant interviews. The interviews captured the thoughts, opinions and perspectives of local community and civil society representatives in Santa Teresa, in addition to PRAA focal points and representatives from each of the entities, bodies and organizations involved at the local, national and international level in the design and implementation of the PRAA programme.

In total, representatives from 16 institutions were interviewed, ranging from multilateral development agencies, to central and local government offices, regional organizations, the private sector, research institutes and non-governmental organizations, in addition local community members. These institutions include the World Bank, the Economic Commission for Latin America and the Caribbean (ECLAC), the *Presidencia del Consejo de Ministros de Peru,* the *Centro Nacional de Estimación, Prevención y Reducción del Riesgo de Desastres* (CENEPRED) Lima, the *Servicios Nacional Forestal y de Fauna Silverstre* (SERFOR), the Ministry of Environment of Peru (MINAM), the General Secretariat of the Andean Community (SGCAN), CARE Peru, CENEPRED Cusco, the Cusco regional government, *Empresa de generacion electrica de Machupicchu*, the *Associación para la Conservación de la Cuenca Amazonica* (ACCA), the *Centro Bartolomé de las Casa* (CBC), *Municipalidad Distrital de Santa Teresa*, CENEPRED Piura, and Piura regional government.

These interviews were collected from a total of 6 different towns and cities spanning 3 countries, namely Washington (USA), Port of Spain (Trinidad & Tobago), Lima, Cusco, Santa Teresa and Piura (Peru). The research also analyzed policy documents, reports, assessments, and any other accessible documentation.

With regard to the data analysis methods, the present research analyzed the data collected through a four-step process which consisted in coding, connecting, categorizing and describing (Dey, 1993, p.31). This four-step process benefitted from the expertise of the researcher writing the present study, who has spent the past fifteen years of his professional career working as an Officer for the United Nations, during which time he has carried out technical cooperation evaluation, monitoring and assessment missions in over twenty countries across Africa, South-East Asia, Eastern Europe, the Caribbean, and Central and South America.

The findings of the case study were contrasted to the events that unfolded in Tia Maria[6] and Las Bambas[7] – i.e., neighboring locations to Santa Teresa, that bear similar traits to Santa Teresa in terms of poverty, climate vulnerability, natural resource dependency, government exploitation and social tensions, but in which – unlike in Santa Teresa – a CCA technical cooperation programme was not carried out by multilateral development organizations.

In terms of the potential ethical issues, there is no reason to believe that the investigation caused any kind of distress or inconvenience to any of the interviewees involved throughout the research. The study received ethics approval by the University of Southampton's social sciences ethics committee. All participants were made fully aware of their participation in the study, no covert observation techniques were used, and informed consent was obtained through the signing of a consent form. All participants were over eighteen years of age. In addition, the interview dates and times were scheduled in accordance to the availability of the interviewees and took place where most convenient for the interviewees. To ensure that participants felt totally at ease during the interview, the possibility to withdraw consent, together with the anonymity and confidentiality issues was explained to them upfront.

1.4 Dissertation structure

By reviewing the existing literature, chapter two – 'Literature review: The World Bank, community needs and aid interventions' – will review the literature related to the development undertakings carried out by the World Bank. In particular, the chapter will present the resilience building and community empowerment efforts of the Bank and look at how these activities might relate to the needs of local communities in developing countries. This discussion will help to shed light on the existing evidence vis-à-vis the possibility that the Bank could effectively promote and protect the needs of vulnerable communities.

Chapter three – 'Methods' – will explain the rationale behind the choice of a qualitative approach; the rationale behind the choice of a case study method in general, and of the significance of the 'Adaptation to the Impact of Rapid Glacier Retreat in the Tropical Andes' (PRAA)' programme vis-à-vis the main research puzzle in particular; the methods of data collection; the methods of data

[6] Located in the Arequipa region, neighboring the Cusco region of Santa Teresa.

[7] 'Las Bambas' indicates a geographical area that includes Chuquibambilla, Lambrama District, Cotabambas and Tambobamba District, all of which reside in the Apurimac region, which also neighbor the Cusco region.

analysis, including the use of coding, connecting, categorizing and describing procedures; and the ethical considerations of the methodology adopted.

Chapter four – 'The World Bank and community needs in Santa Teresa' – will be the first findings chapter and will address the first research sub-question by analyzing if the design of the PRAA responded to the needs of the climate-affected water-stricken community in Santa Teresa. The chapter will focus solely on the design of the PRAA by discussing the intended goals of the World Bank programme in Santa Teresa, and as such will not address the results and impacts of the specific activities implemented, which will instead be discussed and analyzed in great detail during the course of chapters five and six.

Chapter five – 'The World Bank and resilience building in Santa Teresa' – will be the second findings chapter and will address the second research sub-question by discussing if the World Bank met the needs of the local community in Santa Teresa vis-à-vis environmental resilience building through the implementation of practical strategies and project activities. In particular, the chapter will present the specific pilot adaptation activities that the World Bank put in place in Santa Teresa to build local environmental resilience through a bottom-up approach, and analyze them in light of the vulnerabilities and environmental needs of the local community, as well as in light of the intended goals of the PRAA discussed in chapter four.

Chapter six – 'The World Bank and community empowerment in Santa Teresa' – will be the third and final findings chapter and will address the third research sub-question by if the World Bank may politically empowered local communities in Santa Teresa through the implementation of practical strategies and project activities. In this regard, the chapter will discuss the specific efforts that the Bank put in place to empower the local community through the establishment of participatory decision-making processes vis-à-vis natural resource management and administration in the context of the PRAA. In addition, the chapter will also address the significant shortcomings of the approach taken by the Bank in terms of providing the local community with the skills necessary to negotiate its interests beyond the timeframe of the PRAA.

Chapter seven – 'Discussing if the World Bank effectively promoted and protected the needs of vulnerable communities in Santa Teresa' – will discuss how the World Bank attempted to promote and protect the needs of the local water-stricken community in Santa Teresa through the design and implementation of the PRAA, by contrasting the main findings analyzed in chapters four, five and six to the arguments and perspectives of the existing literature on international development

assistance. This analysis will be instrumental in defining the contribution of the present dissertation to the existing body of knowledge.

Chapter eight – 'Conclusions' – will present a summary of the main research findings, and in doing so will answer the question "can the World Bank effectively promote and protect the needs of vulnerable communities?" The chapter will also explain the contribution of the present research to the existing literature, formulate policy recommendations, and identify potential future areas of research that may build on the work carried out by the present study.

Chapter 2: Literature Review: The World Bank, community needs and aid interventions

The present chapter will review the literature related to the development undertakings carried out by the World Bank. In particular, the chapter will present the efforts carried out by the Bank in response to the need of vulnerable communities for resilience building and political empowerment. This discussion will help to shed light on the existing evidence vis-à-vis the possibility that the Bank could effectively promote and protect the needs of vulnerable communities, and in doing so will offer an indispensable point of reference for chapters four, five and six, which will present the findings of the current investigation vis-à-vis the (in)ability of the Bank to protect the needs of said communities through CCA technical cooperation programmes.

To present these issues, the chapter will be divided into four broad sections. The first section will discuss the power, autonomy and (in)coherence of the multilateral organizations, in general, and of the World Bank in particular. The analysis will focus on the rise of multilateral organizations (Finnemore, 2005, p.194; Barnett, 2001, p.247); their quest for exponential growth (Yi-chong & Weller, 2009, p.x; Barnett & Finnemore, 2005, p.183) and legitimacy (Barnett & Finnemore, 1999, p.717); their (dis)functional learning process (Barnett, 2009, p.632); their sources of authority (Avant *et al*., 2010, p.11); (alleged) impartiality (Yi-chong & Weller, 2015, p.4); and ability to fix meanings, set agendas and diffuse norms (Goldman, 2005, p.34). Addressing these issues will be necessary to understand the interests and dynamics of the World Bank, which is essential to framing the discussions that will unfold in the following three sections of the present chapter.

The second section will engage the existing literature to ascertain how scholars suggest that the needs of vulnerable communities might relate to the international aid strategies pursued by the World Bank to date. This will be done by means of an historical excursus of the evolution of the World Bank's approach to development assistance, starting with its transition from structural adjustment to neoliberal packages, through to its more recent incarnations centred around presenting a new 'human face' to its development efforts, including in the context of its alleged 'green revolution'.

The third section will start by presenting the normative concepts underpinning the question of whether World Bank CCA technical cooperation programmes can provide bottom-up grassroots environmental resilience building. The focus will be on the notions of environmental resilience building (Davoudi *et al*., 2013), as it pertains to the provision of knowledge and skills to local

communities (Tschakert & Dietrich, 2010; Nelson *et al*., 2007, p.401) through a bottom-up process (Hermansson, 2010, p.511; Young, 2000, p.26; Adger *et al*., 2011, p.5). The second part of the section will then address the practical ramifications of these normative concepts, by presenting the empirical evidence documented by international development aid scholars vis-à-vis the (in)ability of technical cooperation programmes to build environmental resilience in developing countries.

The fourth section will first present the normative concepts underpinning the question of whether World Bank CCA technical cooperation programmes can politically empower vulnerable communities. The focus will be on the 'three faces of power' provided by Lukes (2005), and the related conceptual arguments constructed by Paavola (2008, p.651), Braun (2010, p.181), Adger *et al*. (2006, p.3), Dow *et al*. (2006, p.96) and Schlosberg (1999, p.12). The second part of the section will then address the practical ramifications of these normative concepts, by presenting the empirical evidence documented by international development aid scholars vis-à-vis the (in)ability of technical cooperation programmes to empower local communities in developing countries.

The literature presented throughout this chapter will provide the basis for the present study. Moreover, it will help to understand not only the rationale for which the World Bank has pursued certain types of engagements with poor communities to date, but also the reasons that might underpin the interest of the Bank to potentially pursue a different type of engagement with poor communities compared to its past interventions, and whose interests this type engagement might best serve; those of the local communities or those of powerful stakeholders, namely central government authorities and private multinationals.

2.1 The World Bank: power, autonomy and (in)coherence

The purpose of the present investigation is to investigate if the World Bank can effectively promote and protect the needs of vulnerable communities. As a first step, the present section will review the existing literature pertaining to the factors that might influence the interest or willingness of the Bank to attempt to address said needs by discussing the agenda and power dynamics that might be driving the World Bank.

2.1.1 The rise of multilateral organizations

"*States simply cannot get many of the things they want without engaging in multilateral action*" (Finnemore, 2005, p.194). This simple, yet profoundly poignant assertion captures the essence of the rise and institutionalization of multilateral organizations, paramount among these the World Bank. Understanding if the World Bank can effectively promote and protect the needs of vulnerable communities in the 21st century requires understanding the many variables that shape, govern and drive the Bank's own interests, needs and agendas, which in turn influence its actions. However, the multilateral nature of the Bank inextricably links these variables to traits common to multilateral organizations worldwide. Thus, understanding the Bank requires simultaneously understanding the purpose of multilateral institutions. In doing so, the natural first step is to ask ourselves what motivated the rise of multilateral institutions.

According to Barnett, the answer to this question is that multilateral institutions result from the need of states to "*coordinate shared interests, manage various externalities associated with growing inter-dependence, and settle disputes in a conflict-free manner*" (2001, p.247). Functionality, therefore, is at the heart of the need for multilateral institutions such as the Bank. Functionality alone, however, is not sufficient to explain the survival of multilateral institutions (Finnemore, 2005, p.194).

Moreover, Barnett & Finnemore (2005, p.174; 1999, p.708) underscore that for multilateral institutions to survive they need to be seen as serving a valued and legitimate social purpose in an impartial manner. It is in this context that the rise of international organizations can be looked upon as responding to the (liberal) belief that such entities can "*relieve human suffering*" (Barnett, 2009, p.623) by "*bring*[ing] *the benefits of progress to those in need and at the same time manage*[ing] *conflicts that may accompany these changes* (Barnett & Finnemore, 2005, p.165) while fostering socio-economic development and safeguarding justice, security and individual autonomy (Kahler, 1992, p.681; Gilbert *et al*., 1999, p.598) by abiding "*the principles of humanity, impartiality, neutrality and independence*" (Barnett, 2009, p.623).

In this context, humanity refers to paying attention to the needs of all humankind; impartiality refers to focusing on the needs of people regardless of their race, ethnicity, gender, religious belief or political opinions; neutrality refers to refraining from affecting either way conflicting parties; and independence refers to avoiding partisan interests and state agendas when carrying out specific activities or taking decisions (Barnett, 2005, p.274; Finnemore, 2005, p.196).

While the independence of the World Bank will be discussed at length in section 2.1.3.2 of the present chapter, it is important to highlight that for multilateral institutions to thrive, they must not only be seen as pursuing and carry out certain functions in accordance with the above-mentioned principles, but they must also be seen as being effective in doing so.

Considering the proliferation of such organizations, and the seemingly ever-growing power of the World Bank, it would be natural to assume that the Bank and its fellow development organizations have enjoyed great success in effectively promoting and protecting the needs of vulnerable communities over the past decades. Unfortunately, though, this is not at all the case. Instead, "[t]*he affluent nations and the richest within nations have become rich beyond the wildest imaginations of our forefathers. But the poorest two billion live in the same abject misery as before and on less than two dollars a day*" (Egeland, 2011, p.xvii).

Herein, thus, lays the apparent paradox of the World Bank, which continues to accrue power in the face of what would appear to be mounting failure (Yi-chong & Weller, 2009, p.x), given that "*the world is more socially unjust than in previous generations as the distance between the top and the bottom billion has increased dramatically*" (Egeland, 2011, p.xvii). So while on the one hand multilateral organizations are increasingly looked upon as having become excessively bureaucratized, self-interested and pragmatic (Barnett, 2001, p.245), on the other hand we are left questioning the extent to which the World Bank may actually be able to live up to its aforementioned guiding values, and in doing so to really serve the interests of those most in need. Have the needs of 'the people' been forgotten – as Barnett & Finnemore ask themselves (2005, p.183) – or have they simply been covered under thick layers of organizational incoherence and internal power struggles? The following sections will help to shed some light on this question, which is central to understanding if the World Bank can effectively promote and protect the needs of vulnerable communities.

2.1.2 The (in)coherence of multilateral organizations

In order to investigate if the World Bank can effectively promote and protect the needs of vulnerable communities through new types of interventions, such as CCA technical cooperation programmes – which is the ultimate goal of the present investigation –, it is necessary to understand the factors that might have stifled the ability of the Bank to do so thus far. As highlighted by Yi-chong & Weller (2009, p.1) "[t]*he Bank is an institution that generates high emotion and strong views. Which is right? Neither and both. Most of these accounts share one*

characteristic – they oversimplify a complex, divided and dispersed institution with may faces and functions […] *Behind the myth, of the all-powerful presidents, we know little about how the Bank, as a complex organization with a large bureaucracy, operates and what contribution staff make, whether good or bad".* Moreover, as eloquently stated by Weaver (2007, p.508), it is only "*by unpacking the internal character and dynamics of the Bank's complex bureaucratic environment* [that we may be able to] *say something quite substantive about the kinds of policies and practices the Bank will embrace or resist given the chance for autonomous action*."

In this regard, a useful starting point is to focus upon the organizational fabric of multilateral organizations and thus of the Bank, which "*like any modern complex organization, is fundamentally plural, internally fragmented and dispersed*" (Weller & Yi-chong, 2010, p.229). Moreover, "*international bureaucracies are hardly the value-neutral, technical instruments that they often present themselves as being, and instead are authorities that are invested with cultural content*" (Barnett & Finnemore, 2005, p.171).

According to Barnett & Finnemore (1999, p.706), "*organizational goals are strongly shaped by norms of the profession that dominate the bureaucracy and in which interests themselves are varied, often in flux, debated, and worked out through interactions between the staff of the bureaucracy and the world in which they are embedded*". While there is ample disquisition within the existing literature over the interests that motivate the actions and decisions of institutions such as the World Bank, on the basis of the works carried out by Barnett & Finnemore (ibid.) it would appear plausible to simplify this vast array of normative concepts by condensing it into two, overarching and closely related factors: the pursuit of material interests and the search for legitimacy vis-à-vis the organization's constituency[8].

The first factor that can be looked upon as driving the actions and decisions of bureaucracies such as the World Bank is the pursuit of material interests internal to the organization. This interest is inward looking and focuses on the dynamics that shape the organization's own culture. In simple terms, what this trigger entails is that – rather than being the result of a rational process – the actions and decisions of an organization are the result of an internal competitive process,

[8]The constituency of a multilateral development organization is the ensemble of its member countries. The constituency of the World Bank are its 188 member countries. Moreover, as stated by the World Bank website "*the organizations that make up the World Bank Group are owned by the governments of member nations, which have the ultimate decision-making power within the organizations on all matters, including policy, financial or membership issues*" (http://www.worldbank.org/en/about/leadership/members#1). For a discussion on the intricacies of the dynamics that determine the decision-making processes in the Annual Meetings of the World Bank, please see Stone & Maxwell (2005, p.9).

whereby staff members contend each other budgets, turf and resources of various nature, including human and technical resources (ibid., p.717). For example, the efforts of Directors within a given organization may be directed towards acquiring ownership of an increasing number of tasks and projects in order to secure additional potential sources of funding, increase the number of staff accountable to them, and ultimately grow the size of their own units or divisions and – through them – their personal prestige within the organization itself.

The second factor is the search for legitimacy vis-à-vis its constituency, as well as in the eyes of the media, civil society and powerful multinational corporations. This interest is outward looking, focuses on the dynamics that result from the cultural environment in which an organization operates, and is closely related to the first factor mentioned above. Moreover, while the first factor focused upon the repartition of economic resources within the organization, this second factor focuses on the ability of the Word Bank to secure said resources from the community of donor countries that make up its vast constituency. In order to do so, the Bank needs to legitimize its running costs and expensive endeavours in the eyes of its donor countries; countries which – it is important to remember – are themselves likely influenced (in different ways and to different extents) by the views, opinions and pressures of civil society, the media and powerful multinational corporations, among others.

In this context, Kahler (2006, p.258) suggests that effectiveness is a means for multilateral institutions to achieve legitimacy. In other words, international organizations may gain legitimacy to the extent that they are able to effectively address the needs of poor and vulnerable communities. If this were entirely true, however, organizations such as the World Bank would continuously strive for maximum effectiveness. Instead, Barnett & Finnemore (1999, p.717) argue that what multilateral institutions are really intent in pursuing is symbolic legitimacy, which is something separate and apart from effectiveness. Moreover, the actions of an entity such as the World Bank "*might be only remotely connected to the efficient implementation of its goals and more closely coupled to legitimacy criteria that come from the cultural environment*" in which they operate (ibid). For example, while the timely and effective implementation of a given project activity in a given context may (let's assume) be more likely to be achieved by a team of professionals of the same sex and of the same ethnic, geographic, linguistic and religious background (whichever these may be), it is far more likely that said project activity will be carried out by a gender-balanced, multicultural team. This is because the need to achieve effective results is trumped by the need to ensure that all activities are planned and carried out in such a way that meets the cultural expectations of the surrounding cultural environment. What matters the most, therefore, is not that a given effort is carried out in the most effective way to address a given

problem, but that said effort is carried out in a way that meets the symbolic legitimacy that derives from the cultural environment in which it is produced.

The question that naturally and inevitably stems from this train of thought is if the pursuit of material interests and the search for symbolic legitimacy may lead the World Bank to promote and protect the needs of vulnerable communities in a coherent fashion. According to Barnett & Finnemore (1999, p.719), the pursuit of these organizational interests – which, as discussed, derive from a combination of an organization's own culture as well as that of the environment in which it operates – do not necessarily result in either functional nor dysfunctional behaviour. Instead, these results depend on an intricate combination of ever-evolving empirical conditions, which Barnett & Finnemore (ibid.) summarize into five potential 'pathologies'.

A first potential pathology is 'bureaucratic universalism', which refers to the extent to which technical knowledge may be transferred across different circumstances. In those circumstances in which the universal rules, standards and procedures created by international organizations cannot be successfully redeployed in multiple contexts, the results of individual activities and projects are less likely to be successful, and vice versa (ibid., p.721).

A second pathology is linked to the autonomy and independence of multilateral organizations vis-à-vis their member states. Moreover, "[v]*arious official Bank reports consistently identify pressures for reform as coming from the organization's borrowing countries*" (Weaver & Leiteritz, 2005, p.371). Unfortunately, though, excessive inference of individual countries in the decision-making process of organizations is more likely to result in dysfunctional behaviour. As underscored by Barnett & Finnemore (1999, p.719), international organizations "*are frequently forced to choose between the bad and the awful because more desirable policies are denied to them by states who do not agree among themselves and/or do not wish to see the organization fulfil its mandate*".

A third pathology is over ritualized behaviour. Organizations set rules, guidelines, standards and procedures to ensure that issues are dealt with through a systematic and non-subjective approach. In this regard, for multilateral organizations such as the World Bank "[b]*ureaucratic culture provides stability and meaning to organizational identity and action, enabling the organization to respond predictably and efficiently to environmental uncertainty*" (Weaver, 2008, p.5). However, at the same time, bureaucratic culture runs the risk of subsuming the true, ultimate goal for which certain projects and activities are carried out (ibid., p.718). "*Thus, means*

(rules and procedures) may become so embedded and powerful that they determine ends and the way the organization defines its goals." (ibid., p.720).

A fourth pathology is the 'normalization of deviance'. While making deviations from standard approaches may often times prove to be a successful approach by international organizations to tailor their actions to changing circumstances, the excessive recourse to these 'exceptions to the rule' may result in the normalizations of said exceptions, with the risk of these becoming the rule itself. One of the main problems that results from similar situations is that "*because of staff turnover, those making decisions at a later point in time might be unaware that the now-routine behaviour was ever viewed as risky or dangerous*" (ibid., p.722).

A final, and possibly most profound pathology, is insulation. International organizations concentrate relatively large numbers of staff with similar, specific areas of expertise in units and divisions. In light of the natural tendency towards insulation that often affects these units and divisions, discussions among staff members run the risk of becoming insulated and – what's worse – increasingly detached from the surrounding environment, with the ultimate risk of disenfranchising the organization from the reality in which it should be grounded (ibid., p.723).

These being the key variables that affect the outcomes of the undertakings of international organizations such as the World Bank, it is important to recognize that these empirical conditions are not fixed in time, nor is the way in which they interact. In other words, ever-evolving variables affect in different ways the internal and external dynamics that determine the efforts of multilateral institutions. This being the case, the question naturally arises as per the ability of organizations to adapt to these changes and to learn from them over time.

According to Barnett (2009, p.632), adapting to changing environments and learning from past events should not be looked at as synonyms. Moreover, while some schools of thought argue that changes continuously take place within an organization to ensure its ability to better fit the context in which it operates, other schools of thought look at organizational changes as the result of a learning process in which institutional goals and objectives are shaped by new knowledge and lessons learned (ibid., Weaver, 2008, p.7). In this context, the difference between organizational learning and adaptation is that "*learning differs from adaptation in its dependence on new knowledge that may be introduced into decision making*" (Haas, 1997, p.16).

This constant process of organizational learning and adapting would appear to suggest a continuous drive towards improvement; improvement that is in the ability of institutions such as

the World Bank to better serve their purpose of helping the poor people of the world. This assumption, however, does not necessarily hold true; at least not according to Barnett (2009, p.632). Moreover, Barnett underscores that the learning and adaptation process may produce dysfunctional results, especially to the extent that they become subservient to the organization's aforementioned two overriding interests, i.e., the pursuit of material resources and the search for legitimacy.

The reason for this is because evolution – be it through adaptation or learning – does not automatically result in progress *per se*, especially since certain changes may prove to fit certain environments better than others. "*We need much greater attention to the possibility that evolution need not mean progress, that the power that appears to be driving forms of moral improvement might become entangled in already existing power inequalities"* (ibid., p.656).

This latter statement is very important for the present research, insofar as it reminds us that the World Bank's efforts to adopt new approaches, such as CCA technical cooperation programmes, do not necessarily or automatically give birth to approaches that succeed in addressing the adaptation needs of poor, climate-affected communities. Instead, these approaches may be simply reflective of the continuous effort of the World Bank to secure its power, given the risk that even "*what appears to be progressive and emancipatory might in fact open the door to new forms of domination*." (ibid.). To better understand this dynamic relationship between the Bank's effort to secure power and its ability to protect the needs of vulnerable communities, the following section will focus directly on the forms and sources of power of multilateral organization.

2.1.3 The power of multilateral organizations

The present section will address the forms of power of multilateral organization such as the World Bank, including by focusing on their sources of authority, their claim to independence, and their ability to fix meanings, set agendas and diffuse norms.

2.1.3.1 Sources of authority

Over the past decades a strong voice of criticism has risen to denounce the presumed injustices perpetuated by the World Bank (Goldman, 2005, p.44). Civil society groups, NGOs, as well as politicians and opinion leaders across the world have pointed to the Bank as solely pursuing its

own interests to the detriment of those who it should be serving, i.e., the world's poor (ibid.). As noted by Yi-chong & Weller (2009, p.1), "[t*]he critics of the bad Bank are vocal, articulate and persistent*". In the face of such vigorous criticism, the question naturally and inevitably arises as per what has ensured the survival of the World Bank. While a simple answer to this question might be that the World Bank has imposed a coercive regime on multilateral relations world-wide (McAfee, 1999, p139), Avant *et al*. (2010, p.11) do not believe that coercion alone is anywhere near sufficient to explain the role of the World Bank in international relations, given that in world politics "*no single actor has the power to dictate rules and coerce compliance*". Instead, Avant *et al*. (ibid.) identify 'authority' as the cornerstone of the Bank's power. The question thus becomes what this authority is, and how it is constructed.

Avant *et al*. (ibid.) define authority as "*the ability to induce deference in others*". To better understand this concept, and how it relates to institutions such as the World Bank, it is useful to focus upon the different sources of authority, which can be summarized as being institutional, delegated, expert, moral, and efficacious (ibid).

Institutional authority stems from the ownership of an official position within an established institution (ibid., p.12). This means, for instance, that senior World Bank officials may exercise authority vis-à-vis other actors (governments, civil society, etc.) by influencing their decision-making processes, agendas and preferences by virtue of the weight implicit in the institutional position that they hold.

Delegated authority stems from the responsibilities bestowed on an organization by another actor or group of actors (ibid). For instance, the World Bank is able to exercise authority on other actors by virtue of the fact that it speaks on behalf of – or supposedly represents the interests of –the full spectrum of its 189 member countries. "*International organizations are thus authoritative because they represent the collective will of their members who are, themselves, legitimate authorities*" (Barnett & Finnemore, 2005, p.172).

Expert authority stems from the perceived expertise and knowledge of an individual person on a given subject matter (Avant *et al*., 2010, p.12). Over the years, the World Bank has sought to build and consolidate its image as the prime and most reliable source of expertise in the field of development (Bazbauers, 2015, p.334). This expert-based authority may be influenced by a number of factors, such as individual awards and accolades received, academic titles and professional experiences, such as working for a well accredited international organization.

In this regard, what emerges is that these forms of authority do not exist in isolated silos, but rather interact with each other in a mutually reinforcing manner. For instance, the aforementioned institutional authority of the World Bank is strengthened by the ability of the organization to recruit highly qualified professionals and internationally renowned experts (Barnett & Finnemore, 2005, p.173; Barnett & Finnemore, 1999, p.708), who "*shape the programmes of the Bank*" (Yi-chong & Weller, 2009b, p.875). According to Stone & Maxwell (2005, p.9), the result of this institutional authority exercised by the Bank through its professional exerts is that "*those who count* [in terms opinions vis-à-vis development efforts] *are Northern economists, usually male, and usually working in the World Bank*."

Moral authority stems from the ability of an organization to present its actions as being carried out in the name of widely recognized values (Avant *et al*., 2010, p.13; Barnett & Finnemore, 2005, p.172). For instance, for the World Bank – as for other similar entities such as the United Nations – the sated reference point for all action is that of serving the greater good of humanity and to relieve human suffering while fostering socio-economic development and safeguarding justice, security and individual autonomy by abiding the principles of humanity, impartiality, neutrality and independence (Barnett, 2009, p.623; Barnett & Finnemore, 2005, p.165; Kahler, 1992, p.681).

Efficacious authority stems from the ability to achieve the desired results vis-à-vis a given problem (Avant *et al*., 2010, p.13). In this regard, it is important to recall that – as previously discussed – according to Kahler (2006, p.258), effectiveness is the main means for multilateral institutions to achieve legitimacy, and thus power. In other words, international organizations such as the World Bank may gain legitimacy to the extent that they are able to successfully address issues that their member states have requested them to tackle, especially when they (i.e., the individual countries) claim to not able to solve said problems without the Bank's intervention (Weaver, 2008, p.6).

While it is essential to re-emphasize that these sources of authority are closely related to each other, influencing and re-enforcing each other; and while it is equally important to underscore that the ability of the World Bank to successfully live up to the expectations implicit in the aforementioned sources of authority is very much debated within the existing literature (as will be further analysed in the following sections of the present chapter); what needs to be well understood is that the minimum common denominator that underpins these five sources of authority is the premise that the World Bank is able to operate as an independent, depoliticized entity from political as well as corporate influences – but is this actually the case? This question is central to the present investigation, insofar as the potential for the Bank to operate in an independent and depoliticized fashion will most likely impact its ability to promote and protect

the needs vulnerable communities, whose interests are often found to contrast those of powerful institutional actors, such as central government offices private corporations. The following sections will help to shed light in this regard.

2.1.3.2 Independence

According to Barnett & Finnemore (2005, p.173), for international organizations "[t]*he greater the appearance of depoliticization, the greater the power of the expertise*". This because the basis on which the authority of these institutions rests is the claim that their actions are carried out in an objective, rational, independent and neutral fashion, which does not follow the desires and impositions of any of its individual member states, but rather represents the will and interests of the international community at large (Barnett & Finnemore, 1999, p.710). The "*claim to "neutrality" and its "apolitical" technocratic decision-making style, have given the World Bank an authoritative voice with which it has successfully dictated the content, direction, and scope of global development over the past fifty years*" (ibid.). Given the notable importance of this issue for the overall power of the Bank – and thus its ability to pursue its previously discussed interests – the obvious, inevitable question becomes whether or not the World Bank actually adheres to these principles of political independence and neutrality. There is, however, no simple answer to this question, as scholars have been debating the issue for many years.

The majority of scholars look upon multilateral organizations as being heavily politicized institutions that lack any real independency, and whose may purpose is to further the individual interests of their member states. Otherwise stated, multilateral institutions have no life of their own (Barnett & Finnemore, 2005, p.169; Barnett & Finnemore, 1999, p.704; Barnett, 1997, p.527; Barnett, 2009, p.624; Kahler, 2006, p.259). Examples of scholars who uphold these convictions include McAfee (1999, p.139), Harrison (2005, p.256) and Goldman (2005, p.41), all of whom see multilateral development agencies and national governments being at cahoots in consolidating powerful, donor-driven, monolithic interests.

On the opposite end of the spectrum, scholars such as Barnett & Finnemore (2005, p.162) assert that although the efforts of international organizations may be reflective of the interests of their member states, to a certain extent, there is no empirical evidence to substantiate the claim that they passively implement the agendas of their constituency. On the contrary, it would appear that international organizations have the power to act independently from the desires of member states. Moreover, "[s]*tudies of the World Bank consistently identify an independent culture and agendas for action*" (Barnett & Finnemore, 1999, p.705). Along the same lines, Yi-chong & Weller

(2015, p.4) underscore that international organizations "*are not simple passive instruments through which states make their voices heard*", but actors that strategically pursue their own interests.

In line with these claims, the intellectual independence of the Bank from powerful member states and private multinational corporations is one of the main arguments proposed Vetterlein (2012, p.37), according to whom Bank policies and interventions are shaped by internal advocacy far more than they are ever directly influenced by member states. In this regard, Vetterlein asserts that the World Bank is characterized by a strong apolitical culture, as are other major international organizations that – like the World Bank – "*do not necessarily do what their principals want them to do* […] [and] *have sufficient autonomy and authority to define policy problems on their own, and through their knowledge and expertise determine policy responses*" (ibid., p.38).

While there would thus appear to be no overarching consensus within the existing literature on this issue, the intellectual independence of the Bank lies at the core of the present investigation. Moreover, it is important to re-emphasize that – within the broader context of investigating if the Bank can protect the needs of vulnerable communities – the present study will focus the ability of the Bank to politically empower local vulnerable communities through CCA technical cooperation programmes. If therefore, as suggested by McAfee (1999, p.139), Harrison (2005, p.256) Cammack (2007, p.190, and Goldman (2005, p.41) – among many others –, the aim of the Bank is purely to consolidate powerful, donor-driven, monolithic interests, then it would appear extremely unlikely that it may be able or willing to politically empower vulnerable communities whose needs may not necessarily be well-aligned with the interests of powerful stakeholders.

2.1.3.3 Fixing meanings, setting agendas and diffusing norms

From a normative standpoint, the ability of the World Bank to exercise the power that it accrues through its aforementioned sources of authority and presumed independence can be summarized by the variety of ways in which it is able to produce real-world consequences. These include fixing meanings, setting agendas and diffusing norms.

These concepts acquire particular relevance in the context of the first sub-question of the present research, which aims to understand if the World Bank design can interventions that respond to the needs of climate-affected water-stricken communities. Moreover, if the Bank is able to fix meanings and set agendas, then the question arises as per regarding whose needs the design of

technical cooperation programmes may actually reflect: those of the vulnerable communities or those of the Bank itself? By reviewing the existing literature, the present will attempt to shed light on this question.

According to Barnett & Finnemore (1999, p.710), one of the first and most notable ways in which international organizations impact the world is by fixing meanings and classifying knowledge. Moreover, "*the ability to classify objects, to shift their very definition and identity, is one of bureaucracy's greatest sources of power*", which – according to Handelman (1995, p.280) – international organizations achieve by *"moving persons among social categories or by inventing and applying such categories."*

The ability to fix meanings also enables entities such as the World Bank to determine what are the most pressing, most important and most cause-worthy issues and problems that require immediate attention and urgent action. As Barnett & Finnemore (2005, p.179) eloquently put it "[p]*roblems do not simply exist out there as objective facts; they are defined as problems by some actor.*"

Once an international organization has succeeded in constructing a seemingly universally (or rather politically) accepted view or understanding of a given issue as representing a problem, the next step becomes that of prioritizing those issues and problems which should be addressed as a matter of priority among the many that exist – something which multilateral institutions accomplish by setting international agendas (Avant *et al*., 2010, p.14). Moreover, international organizations are not only able to define issues that need to be addressed, but also to determine the supposedly most appropriate timeframe, modalities and interventions through which they should be dealt with. An illustrative example of this agenda-setting impact of international organizations is given by Barnett & Finnemore (2005, p.179), according to whom development agencies such as the World Bank "*were very much involved in determining that "development" was an omnibus solution to a set of problems associated with the inability of countries to apply resources in efficient ways to further economic growth*."

Having framed (or constructed) select issues as problems and prioritized them, the next step for international organizations is that of defining the most appropriate modalities and means through which the issues should be addressed – something which multilateral institutions accomplish by diffusing norms. What this means is that organizations "*act as conveyor belts for the transmission norms and models of "good" political behaviour* – with a view to – *shape state practices by*

establishing, articulating, and transmitting norms that define what constitutes acceptable and legitimate state behaviour" (Barnett & Finnemore, 1999, p.713).

According to Finnemore (1996, p.35; 1993, p.593), this results in states adopting policies as a result of "*socially constructed norms and understandings held by the wider international community*", as opposed to the will, direct interests and needs of their constituencies, i.e., their population – which, in the context of the present research, would suggest that the Bank is not able (or interested) to design technical cooperation programmes that actually reflect the needs of local communities.

This ability of the World Bank to fix meanings, set agendas and diffuse norms has led many scholars to openly criticize the impact of the Bank on world politics. The views, opinions and perspectives of these scholars are well summarized by the position upheld by Goldman (2005, p.34), according to whom the key to the survival of the World Bank resides in its ability to create a demand that is carefully tailored to the resources it wishes to provide for the realization of the initiatives it wishes to support.

These observations acquire particular relevance in the context of the present investigation. Moreover, if – as argued by Goldman (ibid.) – the initiatives implemented by the Bank in developing countries are designed to support its own interests, then it naturally follows that the ability of the Bank to promote and protect the needs of vulnerable communities is only limited to the extent to which their needs overlap with those of the Bank – something which, the aforementioned literature would suggest, is highly unlikely to happen in situations in which the interests of government authorities and powerful corporations may not overlap with those of the communities themselves. To better understand this issue, which lies at the heart of the present investigation, it is necessary to contextualize these power dynamics in the broader context of the evolution of the Bank's approach to development assistance – which is what the following section will do.

2.2 The World Bank and community needs in developing countries

Having thus far presented literature related to the agenda and power dynamics of the World Bank, the following sections will look at how these dynamics have shaped the (in)ability of the Bank to protect the needs of vulnerable communities to date. This analysis will offer an indispensable point of reference for chapters four, five and six, which will present the findings of

the current investigation vis-à-vis the (in)ability of the Bank to protect the needs of said communities through CCA technical cooperation programmes.

2.2.1 Introduction: framing the needs of climate-affected water-stricken communities

The first of the three sub-questions guiding the present investigation is if the World Bank can design interventions that respond to the needs of climate-affected water-stricken communities. While the empirical findings of the present research related to this question will be presented in chapter four, a necessary pre-condition to investigating this question is to understand what the existing literature suggests that these community needs might be.

Scholars such as Milanez & Ferraz Fonseca (2012, p.1069) and Lynch (2012, p.364) hypothesize that since vulnerability to climate change reflects social structures rather than natural processes, and since social inequality defines levels of exposure to environmental risks, it follows that vulnerability of local communities and their natural environments to climate change is inherently interlinked to national or international interests, as opposed to simply relating to poverty or lack of entitlements. In line with this assertion, the existing literature on water security suggests that the needs of climate-affected water-stricken communities should be framed not only in environmental terms but also – and equally importantly – from a socio-political empowerment standpoint. Emblematic in this sense is the position argued by Killoran-McKibbin (2010, p.83), according to whom "*climate change is inherently linked to the issue of power – who has it and who has not*".

In this context, Linton & Budds (2014, p.171), Wutich *et al* (2017, p.46) and Swyngedouw (2004, p. 2) underscore that water (in)security issues internalize social relations and politics, and as such shape and reflect socio-economic power relations among central government authorities and multinational companies on the one hand, and local communities on the other (Budds & Hinojosa, 2012a, p.50). As a result, limited access to water has more to do with lack of political representation and power distribution than with actual water scarcity (Swyngedouw (2006, p.52), as also highlighted by the United Nations Development Programme (UNDP, 2006, p.2), which eloquently affirmed that "*water scarcity is manufactured through political processes and institutions that disadvantage the poor*".

In the specific context of Latin America (which the present investigation will focus upon) Budds & Hinojosa (2012a, p.50) and Lynch (2012, p.364) argue that the root causes of vulnerability reflect social structures rather than natural processes. As a result, the vulnerability of Andean

communities to climate-induced water scarcity is the result of a water regime that favors some users and uses over others.

Stemming from the above, Budds & Sultana (2013, p.278) stress that "*development interventions should not be understood simply as mechanisms to provide water to un(der) served people, but as means of pursuing* […] *measures that enable people to reclaim control over their own hydrosocial relations.*" As a result, the ability of the World Bank to protect the needs of water-stricken local communities will most likely require programmes designed not only to build environmental resilience of vulnerable communities, but also efforts aimed at politically empowering said communities.

While the notions of environmental resilience building and community political empowerment will be conceptually framed in sections 2.3.2 and 2.4.2, respectively, the aforementioned literature is in itself sufficient to affirm that the needs of vulnerable local communities must be addressed from an environmental as well as a socio-political standpoint. Consequentially, the following sections will engage the existing literature to ascertain how these needs relate to the international aid strategies pursued by the World Bank. This will be done by means of an historical excursus of the evolution of the World Bank's approach to development assistance, starting with its transition from structural adjustment to neoliberal packages (section 2.2.2), through to its more recent incarnations centred around presenting a new 'human face' to its development efforts (section 2.2.3), including in the context of its alleged 'green revolution' (section 2.2.4). With regard to the empirical evidence related to the implementation of some of the most recent efforts that stem from this evolution in the Bank's approach to development assistance, this will be presented in sections 2.3.3 and 2.4.3, which will review the results achieved by World Bank technical cooperation programmes vis-à-vis resilience building and political empowerment.

2.2.2 From structural adjustment to neoliberal policy packages

While a full disquisition on the World Bank's approach to poverty reduction falls well beyond the remit of the present investigation, a brief and broad-brush overview of the evolution of the Bank's approach is instrumental to framing the context of its CCA technical cooperation programmes in developing countries. An essential starting point in framing the discussion is to recognize the distinction made by Gilbert *et al*. (1999, p.603) who identify three overarching types of activities carried out by the Bank: lending; development research; and development assistance.

Given the focus of the current investigation on technical cooperation programmes, the present discussion will mostly address the Bank's development assistance role, in order to understand which – however – introductory remarks on the Bank's overall approach to poverty reduction are indispensable. Moreover, according to Kapur *et al*. (2011, p.5), "*the most defining characteristic of the World Bank as viewed in history is that, from the beginning, whether the institution knew it or not, its pivotal issue was that of coping with poverty, both between countries and within developing countries. Nearly the whole Bank experience can be interpreted under this proposition*." When looking at the evolution of the World Bank's approach to poverty reduction, it is necessary to start by recognizing that the concept itself was originally introduced as a win-win approach to creating a better world. "*By helping the poor, rich nations could answer the moral imperative and serve their own interests at the same time*" (Finnemore, 1997, p.211). How would helping others serve their own interests? "*By alleviating the poverty of others, rich nations could create a more stable and secure world for themselves*" (ibid.).

The World Bank ensured that its approach to solving the needs of destitute people across the planet was conducive to increasing both its own material resources as well as its organizational legitimacy. In this regard, Kapur *et al*. (2011, p.16) point out that economic growth remained the overriding concern of the Bank – alongside poverty reduction.

As amply discussed above, over the years, the key to the success of the Bank's growth has lied in a well-crafted combination of intellectual prestige – which resulted from its highly qualified experts – and persuasive power, which stemmed from the moral imperative to reduce poverty coupled with the Bank's multilateral nature and aforementioned humanitarian principles (Finnemore, 1997, p.219; Kapur *et al*., 2011, p.17). As for the ability of the approach to meet its stated objective of reducing poverty, that has been – arguably – less of a success.

The poverty reduction focus of World Bank lending gave birth to the very much debated and vastly criticized structural adjustment programmes, which have been looked upon as having done more harm than good (Finnemore 1997, p.220), and which have been met by mounting opposition and strenuous resistance over the past decades (Barnett, 2005, p.168).

Accounts of the failures of the World Bank's structural adjustment programmes are abundant within the existing literature. While left wing scholars looked upon these programmes as an imperialist imposition, right wing scholars criticized them for echoing the interventionist early post-war era that interfered with market-led economic development (Gilbert *et al*., 1999, p.599). As eloquently and unambiguously stated by Mosely *et al*. (1995, p.1472) "[t]*he empirical evidence*

is clear: World Bank structural adjustment programs have not stimulated recovery […] *The attempt to demonstrate the contrary is technically flawed beyond salvaging and rests upon unsustainable theoretical arguments*."

Seemingly recognizing the limitations of its initial approach to development assistance, the World Bank shifted gears in the 1990s, and in doing so moved towards attempting to foster local environments in developing countries that would have supposedly been more conducive to long-term, sustainable development (Kuhl, 2009, p.552).

It the midst of these changes, the 90s also marked a vigorous push by the World Bank towards the adoption of neoliberal policy packages of market liberalisation and privatization (Cammack, 2007, p.191). In the view of the Bank, failure by developing countries to adopt specific market incentives coupled with social, political and institutional reforms meant "*not being serious about reducing poverty*" (ibid.). It followed that countries that did not wish to align themselves with this approach would not receive any development aid from the Bank – nor from any other development donor, bilateral or multilateral. The framework envisaged was set to create a competitive market environment that would win the confidence of the private sector, with a view to integrating developing economies in the global economy (ibid., p.192). In other words, the pathway to poverty reduction was the adoption of macroeconomic strategies geared towards increasing competitiveness and labour productivity (ibid., p.194).

In the context of Latin America, between 1991 and 1994, this approach resulted in the adoption of market-assisted approaches to agrarian reform in Mexico, Ecuador, Bolivia and Peru. The adoption of these neoliberal structural reforms led to the abolishment of community property and the building of a land market (Petras & Veltmeyer, 2009, p.390). In the case of Peru, the Empresa Comercializadora del Arroz (ECASA) – a government price support and marketing institution that had ensured price stability – was abolished, and the national rice market was liberalized (Crabtree, 2003, p.147). The result of this push towards the commercialization of agricultural credit and the removal of subsidies, coupled with the reduction of tariffs, "*has been deterioration in the market situation of small peasant farmers who are forced to sell their products at prices below the cost of production, incur enormous debts, and in many cases are pushed into bankruptcy*" (ibid., p.391).

2.2.3 The new human face of the World Bank

The end of the 1990s marked a mutation in the Bank's 'trickle-down' approach to poverty reduction, which Stiglitz (1999, p.580) summarizes as having "*shifted from large-scale, growth-oriented projects towards projects, programmes and policy advice that more explicitly incorporate the poverty reduction goal*."

According to scholars such as Goldman (2005, p.22) and Cammack (2007, p.190), this more recent representation of the Bank as a voice for civil society groups, women and the poor, is merely a façade which masks its unchanged objective of facilitating capitalist accumulation on a global scale, and which has resulted in the cover-up and legitimization of global social inequalities through 'development talk'.

In reality, it is argued, the apparent shift away from broad structural reform programmes, with the emphasis suddenly placed on 'country ownership', and on the role of the Bank as conveyor of knowledge and expertise, is nothing more than a means to complete the neoliberal revolution envisaged by the Bank – certainly not a step away from it (ibid., p.192). While on the one hand development activities are now carried forward in coordination with other international institutions, civil society, NGOs, and even critics to some extent (ibid., p.194), on the other hand the Bank presents itself as the only institution possessing the right kind of knowledge to achieve true development (ibid., p.196). Therefore, while the Bank may present itself as not pushing for structural reforms anymore, it has started to do so only with a view to establishing an intellectual justification to guide developing countries towards the adoption of the 'right' policies and reforms, which still serve neoliberal ends (ibid., p.202).

Against this backdrop, according to Goldman (2005, p.34) the main challenge for the World Bank has never been to raise money, but to find ways to spend it. In order for the Bank to spend its money, it needs to lend it. However, in lending its money to countries in need, Goldman sustains that the Bank wants to ensure that it is safeguarding its particular interests and advancing its own agenda. In order to achieve both these objectives – i.e., to provide loans and to forward its own agenda – the Bank depends on its ability to generate new reasons for countries to borrow on the basis of its own interpretation of new global problems and the necessary mechanisms to address them. In other words, Goldman claims that the key to the sustainability of the World Bank model resides in the ability of the Bank to create a demand that is carefully tailored to the resources it wishes to provide for the realization of the initiatives it wishes to support (ibid.).

In this regard, the representation of the Bank as a voice for local communities has been vividly criticized as being nothing more than a necessary means to achieve public acceptance. Moreover, Bhattacharyya (2007, p.348) argues that 'popular participation' as envisaged by the World Bank is a meaningless concept given that 'people' as a category include different classes with conflicting interests. In addition, according to Alam *et al*. (2011, p.59) participatory processes become increasingly inefficient and non-transparent insofar as they are overshadowed by donor concerns regarding aid effectiveness, and conflicts between international organizations and government institutions, as well as within government institutions themselves (Shankland & Chambote, 2011 ,p.68).

In this context, Alam *et al*. (2011, p.58) argue that the design of projects is the result of a largely specialist-driven process with a techno-managerial focus, in which the actual design of activities not only is constrained by significant conflicts among the main national and international institutional actors – such as the local government and sponsoring donors –, but also fails to take into account the perspectives, needs and knowledge of local population groups, which according to Lynch (2012, p.370) are considered by technocratic institutions as being incapable of handling the activities required to adapt to climate change.

In essence therefore, the formulation of the World Bank's supposedly 'people centred' projects is hypothesized as being the result of political ideologies (Ayers *et al*., 2011, p.70), as well as of economic forces, cultural values, knowledge structures and environmental conditions (Carey *et al*., 2012, p.182), which depreciate the identities of the most vulnerable groups and excludes them from participatory processes (Adkin, 2009, p.309).

In contrast to the criticisms advanced by the aforementioned scholars, other researchers and academics look at the World Bank's focus on participatory processes, grass root support, aid effectiveness and – most notably – social development issues, including environmental protection, human rights, gender, indigenous peoples and sustainable development, as a clear departure from how the neoliberal structural reform strategy papers were presented in the early 90s. According to Stiglitz (1999, p.580), "[i]*ndividual projects remain at the core of the Bank's work. Many of these projects have been shown to be quite successful at reducing poverty and its effects*." This assessment is shared by Vetterlein (2012, p.50), who underscores that *"*[l]*ooking at Bank lending, policies and discourse today, it is difficult to wholeheartedly criticise the Bank*", as well as by Gilbert *et al*. (1999, p.599) who firmly believe that the Bank is succeeding in addressing the many criticisms that marked its early approaches to poverty reduction and development assistance.

In the same vein, Selfa (2010, p.717) notes that following much criticism concerning its top-down approach in the 1980s, during the past two decades the World Bank has made significant attempts to move forward in ensuring the participation of programme beneficiaries in the design and implementation of its projects. Furthermore, according to Slaughter (2004, p.8) the presence of global multilateral institutions, such as the World Bank, is essential to solving collective problems of people and their governments that can only be addressed on a global scale. In this regard, Garcia (2007, p.472) stresses that it is only by modifying inefficient national structures that the Bank is able to truly address social inequalities through a process of national and sub-national redistribution of social goods for the benefit of the least advantaged (ibid).

These positions are echoed by Ritzen (2005, p.187), who stresses that since the "*1990s have been a time of unparalleled increase in efficiency of development assistance (getting results for the 'buck' in terms of lifting more people out of poverty) and in effectiveness (reaching the poverty reduction goal of halving poverty by 2015)*", the World Bank should strive to "*continue along all the routes which have been shown to be promising and inviting for convergence and for reaching the MDGs*". In essence, this position well reflects the thoughts of modernization scholars, who look at the developmental efforts undertaken by institutions such as the World Bank as a natural path towards the improvement and progress of countries in the global South (Goldman, 2005, p.22). As per the distrust and criticism that surrounds much of the work carried out by the Bank, Ritzen (2005, p.192) puts it down to a lack of communication between the Bank and opposed parties that hinders the awareness and understanding of the activities of the Bank, especially among youth in developing countries; a position which echoes some of the most recent empirical findings uncovered by Newby (2018, p.671) who – albeit in the context of UN Peacekeeping operations in Lebanon – notes that the perceptions and awareness of local stakeholders vis-à-vis the efforts of international organizations may be subject to the politicized influence of local elites.

In summary, while on the one hand scholars such as Goldman (2005, p.22) and Cammack (2007, p.190) denounce the representation of the Bank as a voice for civil society groups as a façade which masks its unchanged objective of facilitating capitalist accumulation on a global scale, other scholars such as Vetterlein (2012, p.50), Selfa (2010, p.717) and Garcia (2007, p.472) look upon this shift as a clear departure from the governance tools adopted by the Bank in pursuit of structural reforms of the early 90s.

2.2.4 The 'green revolution' of the World Bank

The previous section presented the contrasting perspectives related to the 'alleged' efforts of the World Bank to move towards a development assistance *modus operandi* that favours a more inclusive engagement with local communities. The rationale driving these efforts notwithstanding, in the context of the present investigation it is necessary to understand if this supposed shift towards a 'new human face' of the Bank may also have implications vis-à-vis the need to build the environmental resilience of local communities. Otherwise stated, after "*decades of debacles*" (Rich, 1994, p.25), during which Bank-led initiatives had arguably been responsible for overwhelming environmental devastation – or, to use the words of Rich (1994, p.25), for "*an environmental and social tragedy of global dimensions*" –, the question arises as per how the World Bank might now attempt to safeguard the environment while addressing the needs of poor communities.

As emphasized by Park (2010, p.8), while it may be undisputable that the Bank put in place a strong push towards incorporating concepts such as sustainable development in its development programmes, the extent of the actual change produced by this push is vastly debated.

According to Stiglitz (1999, p.581) "*as the world has turned its attention to global environmental issues, the Bank has not only integrated these concerns into its development agenda* […] *but has actively promoted work on specific issues*". This observation is echoed by Park (2010, p.13), according to whom "*the shift within the Bank* [vis-à-vis its environmental efforts] *is both ongoing and much deeper than is currently recognized within the greening debate as a result of changing its internal priorities as well as its external behaviour*".

Against this backdrop, McAfee (1999, p.134) highlights with a vein of irony that several multilateral institutions have somewhat suddenly begun to advocate the need to invest resources to bring planetary ecological degradation to a halt. These institutions, among which the World Bank has a prominent role, have now become the centre of a new global environmental discourse (ibid.). In essence, according to McAfee (ibid., p.36), the key to this supposed 'green revolution' of the Bank – which McAfee defines as 'green developmentalism', or 'green neoliberalism' – resides in the rationalization of agricultural and industrial practices to safeguard the natural environment while ensuring that profits continue to grow (ibid.).

These assertions cast serious doubts over the ability and willingness of the World Bank to design programmes that meet the environmental needs of local communities. Moreover, after decades

and more of economic growth that has taken place at the expense of global natural resources, how might it now be possible for the World Bank to safeguard the environmental needs of local communities whilst still seeking to push economic growth? "*Can you make the omelette called development without breaking eggs?*" (Rich, 1994, p.48).

According McAfee (1999), the solution to this problem is found in the commoditization and privatization of virtually every aspect of nature. What this means is that nature must earn its right to survive by re-inventing itself as a world currency, or – as otherwise ironically stated by McAfee – that 'we' must sell nature in order to save it. It follows that, based on this environmental-economic paradigm, the key to succeeding in saving nature lies in the liberalization of international trade in ecosystem services, whereby ecosystems become repositories of genetic resources for biotechnological multinationals (ibid., p.133), and permits to pollute, intellectual property rights to traditional crop varieties, and exports of natural resources such as minerals and timber, are assigned monetary price-tags calculated on the basis of hypothetical markets for those commodities (ibid., p.134).

In this context, scholars such as Beymer-Farris & Bassett (2012, p.333) and Castree (2003, p.277) argue that this approach aims to save nature to the extent that it can measure its marketable value, package it, transform it into an 'ecological commodity', and thereafter sell it on international markets. For instance, McAfee (1999, p.139) claims that according to 'green neoliberalism' if food crops and water were sold at prices that reflected their economic costs – and developing countries stopped 'irrationally' giving away irrigation water and subsidizing food crops – the market would naturally allocate these resources in the most efficient way possible, thus minimizing wastes.

This approach is vividly criticized by Liverman (2004, p.735), who stresses that the false claim that nature needs to be sold in order to be saved enables elite economic and political players to gain immense power in regulating environmental markets by determining the prices of 'fictitious' environmental commodities. Moreover, given that nature is to be valued in US dollars, euros and yen, McAfee (1999, p.133, p.141) underscores that the global elites with the greatest purchasing power will *de facto* be entitled to an ever increasingly large percentage of the earth's biomass. Furthermore, Liverman (2009, p.294) stresses that the carbon trading system (which is central to the climate change discourse) has the potential to allow the wealthy North to maintain virtually unaltered its resource consumption levels by paying developing countries a pittance for offsetting the carbon emissions of inefficient industries.

On the basis of these and other closely related arguments, McAfee (1999, p.135) concludes that the agenda driving the supposed 'green revolution' of the World Bank is nothing more than an attempt to use environmental concerns to further expand capitalism across the world. Moreover, clearly separating environmental issues from development goals not only promotes the fantasy that it is possible to green the planet without substantially altering unsustainable economic models (ibid., p.159), but also implicitly protects existing political institutions; crystallizes distributions of wealth and political powers; and rationalizes resource socio-economic inequalities (ibid., p.137).

In terms of how these claims have actually permeated and influenced the World Bank, Goldman (2005, p.5) stresses that far from being a simple 'airbrushing' of old policies, the advent of this environmental economic approach is possibly the most profound discursive revolution of the recent history of the World Bank – an approach that Sheehan (2000, p.1) describes as being "*a lesson in bureaucratic survival*". Moreover, Sheehan (ibid., p.2) accuses the Bank of having boosted its environmental activities with the prime purpose of avoiding past accusations vis-à-vis the damaging impacts of its projects on natural resources. In this regard, Sheehan (ibid.) denounces that "[a]*lthough it has won the acceptance of environmental groups, the World Bank has neither fundamentally reformed its lending practices nor radically changed the kinds of projects that receive its funding. Bank projects around the world remain environmentally damaging, and most will continue to be funded despite the bank's rhetorical embrace of the NGOs' sustainable development creed. The bank's most noticeable improvement has been in its ability to weather criticism, exposure, and political opposition*."

These criticisms are further echoed by Goldman (2005, p.10), who underscores that the solution to the problem of protecting the environment while continuing to grow being pursued by the Bank is not to be found in the polluting nature of post-industrial revolution economic models, but rather in the under-utilization and distortion of the value of lands, forests, water and minerals in developing countries. Moreover, it is argued that the World Bank maintains that the major barrier to globally shared prosperity and sustainable development is to be found in the 'underdeveloped' institutional arrangements of developing countries that allow the destruction and irrational undervaluation of what need to be understood as being global environmental resources (ibid.).

It is in this context that Goldman (2005, p.41) asserts that environmental capacity building initiatives – which are at the heart of CCA technical cooperation programmes –, far from providing local communities with the knowledge and skills they need to in relation to natural resource management, are funded by multilateral development agencies as a means to propagate donor-

driven perspectives of 'green' science and environmentally sustainable development models. In an even more critical fashion, McAfee (1999, p.139) stresses that in order to ensure that donor-driven 'green' agendas successfully permeate deep into the roots of developing countries, loans to build environmental capacity have in fact been part of the 'green' conditionalities imposed by the World Bank and other Northern lenders – which McAfee fiercely defines as "*donor cartels*" (ibid.).

It is precisely in this context that Lynch (2012, p.369) denounces that the World Bank has played an important role in the architecture of the Peruvian water regime during recent years – a regime which, Lynch finds to be inadequate to address the needs of local communities (ibid., p.371).

In summary, Beymer-Farris & Bassett (2012, p.333) hypothesize that dominant stakeholders, such as the World Bank, – by means of an ahistorical framing of the climate change problem that fails to recognize the environmental history of local communities in the evolution of a given landscape – justify climate change adaptation interventions by presenting powerful donors as 'poor stewards' of natural resources who aim to implement sustainable alternative solutions to counterbalance destructive indigenous resource management practices.

All the claims discussed thus far in the present section are pivotal in the context of this investigation, insofar as they suggest that the design of World Bank interventions, far from reflecting the needs of climate-affected communities, aim to put in place activities that will disenfranchise local communities from their natural resources with the excuse of having to 'protect' said resources from the damaging traditional practices of the climate-affected communities. In doing so, the ultimate aim of the World Bank would arguably be to exploit environmental resources, with a view to generating economic profits (Castree, 2003, p.277) – that the Bank presents as contributing to poverty reduction and environmental protection (Sheehan, 2000, p.14) – in order to satisfy the agenda of its most important clients: multinational private companies and pro-market governments (Goldman, 2005, p.19).

As a result, the majority of the existing literature would appear to strongly suggest the World Bank cannot design interventions that respond to the needs of climate-affected water-stricken local communities.

2.3 The World Bank and resilience building in developing countries

2.3.1 Introduction

The second of the three sub-questions guiding the present investigation is if World Bank CCA technical cooperation programmes can help to build environmental resilience through a bottom-up approach. While the empirical findings of the present research related to this question will be presented in chapter five, a necessary pre-condition to investigating this question is to understand what the existing literature suggests in this regard.

Section 2.2.1. highlighted the need of vulnerable communities for resilience building. These needs notwithstanding, section 2.2.4 presented a vastly critical outlook of the overarching rationale supposedly guiding the 'green revolution' of the World Bank. Therefore, given that a substantial part of the literature would appear to suggest that there is a mismatch between the environmental needs of local communities (outlined in section 2.2.1) and the 'green' agenda of the World Bank (section 2.2.4), the question arises as per whether this mismatch might hold true also for CCA technical cooperation programmes.

To address this issue, the present section will first outline the normative concepts underpinning this question. In particular, the discussion will focus on the notions of environmental resilience building, as it pertains to the provision of knowledge and skills to local communities in relation to water management through a bottom-up process. The second part of the section will focus on the practical ramifications of these normative concepts, by presenting the empirical evidence documented by scholars within the existing literature on international development aid as it pertains to the (in)ability of technical cooperation programmes (and World Bank CCA programmes, to the extent possible) to provide local communities with knowledge and skills in relation to natural resource management through grassroots capacity development activities.

2.3.2 Conceptual framing: providing knowledge, skills and access to resources through a bottom-up approach

When discussing environmental resilience building, a useful starting point is offered by Davoudi *et al*. (2013), who distinguish between engineering, ecological and evolutionary resilience, whereby "[e]*ngineering resilience refers to the ability of a system to return to an equilibrium or steady state after a disturbance*" (ibid., p.308); ecological resilience is the ability of a system to withstand disturbance and to continue functioning (ibid., p.309); and evolutionary resilience is the ability of

a system to transform itself in response to a disturbance in order to continue functioning (ibid., p.310). In essence, the difference between the three levels of resilience resides in the fact that while engineering resilience focuses on the length of time necessary for a system to bounce back from a disturbance and return to its original state, and ecological resilience focuses on the amount of disturbance that a system can absorb in its current state before losing its ability to function (ibid., p.309), evolutionary resilience focuses on the ability of a system to modify its current state – as opposed to maintaining it – in order to adapt to external pressures while safeguarding its ability to function (ibid., p.310).

The value of this conceptual framing of the notion of resilience building lies in the fact that it recognizes the need for resilience building to simultaneously address the timeliness with which a community is able to react to environmental shocks, the amount of environmental stress that a community can sustain, and the ability of a community to adapt to a changing environmental context.

However, the above notwithstanding, vast strands of the literature argue that resilience building *per se* is not sufficient to afford local communities socio-economic wellbeing in the face of environmental change. Moreover, scholars such as Bottrell (2009, p.334) and Joseph (2013, p.51) go as far as asserting that resilience building is a neo-liberal strategy used to ensure that poor communities are able to absorb and accept government-led market-driven exploitation. In light of these critical readings, it is important to highlight three specific aspects that influence the effectiveness and long-term success of environmental resilience building.

The first aspect – which draws from the CCA framework developed by Tschakert & Dietrich (2010) – is that adaptation needs to be understood as a localized process, which requires to look at resilience building as a learning process. Understanding adaptation to water scarcity as a localized learning process implies that any resilience building effort needs to build on a deep understanding of the root causes of local vulnerability, as well as of poverty, inequalities and local power dynamics.

The second aspect – which draws from the framework developed by Nelson *et al*. (2007, p.401) – is the recognition that resilience is never permanent, and that as such the level of resilience of a socio-economic and environmental system (which includes the livelihoods of local communities) to the impacts of climate change "*will change on the basis of the types, frequencies and magnitude of system disturbances*" (ibid.). What this implies is that it would be misleading to assume that the types of knowledge and skills transferred to a local community at a given point in

time – and which may have proven to be successful in the immediate term – will enable them to successfully adapt to all future impacts of climate change (Tschakert & Dietrich, 2010).

The third aspect – which stems from the recent empirical work carried out by Walsh-Dilley (2016, p.12) in the Andes – is the importance of the communal aspect of resilience building. Moreover, the "*pursuit of both individual gain in the short run and individual resilience formation in the long run can be detrimental to the resilience possibilities of other individuals or of larger groups*", and should therefore be addressed in the broader context of the long-term needs of the community as a whole (ibid.).

A common thread across each of three aspects of environmental resilience building is the importance of a bottom-up approach. Undoubtedly, the criteria for framing conceptually what constitutes a grassroots approach to resilience building are very many indeed. However, based on a wide review of the existing literature on procedural justice and decision-making, three main criteria can be identified.

The first criterion is pure procedural justice, which postulates that the outcomes of decision making processes must not be known in advance of the discussions taking place (Hermansson, 2010, p.511).

The second criterion is deliberative participation which, according to Young (2000, p.26), entails that discussions must be reasonable, i.e., there is a common will to reach an agreement, and that all stakeholders involved in the decision-making process are transparent among each other as well as towards the general public vis-à-vis their argumentations and the information they possess. With regard to the latter point, Dulal *et al*. (2009, p.376) underline that impediments to information access and exclusion from decision-making processes exacerbate vulnerability to climate change. The silver lining of deliberative participation is that it requires all parties to genuinely cooperate to achieve an outcome of mutual interest, which is something that – in many cases – may require the development of instruments to increase and stimulate enthusiasm, dedication, education and consciousness (Braun, 2010, p.783).

The third criterion is that the traditional ecological knowledge of the communities – which encompasses skills, habits and livelihood strategies – must be viewed as a vital resource – and not as a hindrance – for effective adaptation to climate change, and thus be allowed to influence the design of programmes and projects. Adger *et al*. (2011, p.5) stress the importance of acknowledging and making effective use of traditional ecological knowledge through procedural

justice processes. In this regard, Jepson *et al*. (2017, p.49) underscore the importance of focusing on "*how cultural knowledge, values, and dynamic practices inform the hydro-social relations of water security at community and local levels*". These positions are echoed by McAfee (1999, p.160) who stresses that the assessment of ecologists, economists and conservation biologists should always be complemented with the views and perspectives of those people who have been living in symbiosis with specific ecosystems for centuries.

In conclusion, the ability of a community to adapt to climate change is inherently related to a combination of environmental issues related natural resource management, and of social issues related to the availability of tangible and intangible resources needed for livelihood changes coupled with the ability of local communities to access and deploy said resources, and to overcome potential limits to availability, access and use of resources caused by external actors (e.g., government interests) as well as individual community interests (Brown & Westway, 2011, p.324; Walsh-Dilley, 2016, p.12; Kuhl, 2009, p.552). Moreover, effective resilience building postulates the need to understand community resilience building as a localized, on-going learning process conducive to enhancing "*the capacity to see what is not commonly seen and create what is not commonly known*" (Inayatullah 2006, p.656), and in doing so "*to develop a dynamic plan for how to deal with potential uncertainties*" (Tschakert & Dietrich, 2010), and to better manage community environmental resources, especially in those instances where these are increasingly scarce.

2.3.3 Empirical evidence of the (in)ability of technical cooperation programmes to build resilience

Stemming from the conceptual framing of the notion of resilience building presented above, the existing literature on international development aid would appear to offer vastly contrasting empirical evidence regarding the ability of technical cooperation programmes to effectively build bottom-up grassroots environmental resilience.

In the specific context of CCA, Agrawala & Van Aalst (2008, p.188) question whether technical cooperation programmes may realistically be looked upon the as the best vehicles to strengthen community resilience in the long term. Moreover, for a given programme to be truly effective in the long term, initial investments made at the local level will need to be sustained beyond the completion of its various project activities and – most likely –scaled up in order to meet the evolving impacts of the ongoing changes brought about by climate change. However, it is argued

that local communities are unlikely to succeed in accessing the necessary financial resources in this regard, given that governments and bilateral donors have limited incentives to invest in adaptation activities insofar as their benefits are difficult to quantify, and thus to justify when compared to investments in more traditional (and lucrative) infrastructure projects (ibid., 189).

In addition, scholars also cast serious doubts over the role played by local communities in shaping the design of 'green' World Bank programmes, and thus critically highlight the inability of these programmes to foster a bottom-up grassroots approach to capacity building. In this regard, an empirical study carried out in Laos by Mirumachi & Torriti (2012) found that local communities were pressured by government institutions into participating in donor-driven consultation processes, which were conducted with the sole intent of safeguarding the interest and funding of the World Bank.

Similar findings emerge from the empirical investigation carried out by Selfa (2010), who investigated the Rondonia Natural Resource Managament Project (PLANFLORO) implemented in Brazil by the World Bank as an explicit effort to overcome the destructive social and environmental impacts of previous development programmes in the State of Rondonia (ibid., p.721). The study findings underscored that not only participation in the design and implementation of the World Bank project had been ineffective in terms of adequately involving local civil society groups and NGOs, but also that the little participation that had taken place in terms of awareness raising and information dissemination had remained at the level of formal NGOs, thus failing to permeate the grassroots (ibid., p.728).

In the same vein, a study carried out by Ayers (2011) on the challenges and opportunities in the development and implementation of the National Adaptation Programme of Action (NAPA) of Bangladesh – which was prepared by the Ministry of Environment and Forests of the government of Bangladesh, and implemented in partnership with UNDP (ibdi., p.69) – also noted serious limitations to the supposedly bottom-up approach to capacity building. Moreover, the investigation highlighted that although the programme supposed benefited from the direct inputs of local communities, the ability of these inputs to actually shape the programme was stifled by preconceived boundaries and stakeholders interests (ibid., p.82).

Likewise, in the case of the Bangladesh Climate Change Strategy and Action Plan (BCCSAP) – focused upon by Alam *et al.* (2011) – which was funded by the UK Department for International Development (DFID) and administered in part by the World Bank (ibid., p.53), although a broad

variety of actors were involved in the BCCASP process, (including civil bureaucrats; national experts; internationally connected campaign groups; bilateral and multilateral donors; and the media), vulnerable local community members were not involved. Moreover, the study found that the programme was the result of a largely a specialist-driven process; with a techno-managerial as opposed to capacity building focus; and significant conflicts, especially among the government of Bangladesh and sponsoring donors, which largely overshadowed the actual content and design process of the entire programme (ibid., p.58).

Furthermore, in reviewing the design and implementation of the Pilot Program for Climate Resilience (PPCR) in Nepal, funded by the World Bank, Ayers *et al*. (2011) found that the way in which conceptual issues were operationalized at the project level – far from stemming from a grassroots bottom-up approach to capacity development – reflected strong vested interests among different stakeholders, especially insofar as they may reflect power and resource allocation issues between multiple owners of the process, as well as the interpretation and definition of process ownership itself (ibid., p.77).

In contrast to these critical findings, a more positive outlook on resilience building and CCA technical cooperation programmes – including from a grassroots capacity development perspective – is given by scholars such as Rawlani & Sovacool (2011), D'Agostino & Sovacool (2011), Ahmed & Fajber (2009, p.44), Ebi *et al*. (2011), and Dumaru (2010, p.758).

Rawlani & Sovacool (2011) noted that the design of trainings in forestry, fishing and farming as part of the "Community Based Adaptation to Climate Change through Coastal Afforestation Program" implemented by UNDP in Bangladesh succeeded in enhancing the social adaptive capacity of local communities, including by helping to diversify local livelihoods (ibid., p.859). In addition, the programme was also found to have strengthened physical resilience by creating a natural buffer to climate hazards through mangrove plantations, dykes and embankments (ibid.).

Similar findings emerged from the study of the UNDP programme 'Promoting Climate Resilient Water Management and Agricultural Practices in Rural Cambodia' carried out by D'Agostino & Sovacool (2011), who noted that the project provided infrastructure resilience by rehabilitating irrigation systems in a climate-sensitive fashion (ibid., p.712). However, in the same context, the scholars underscored the importance for programme design to take into account maladaptation risks. For instance, enhancing the resilience of infrastructures in one area could have negative knock-on effects on other districts (ibid., p.715).

In the same vain, according to Dumaru (2010, p.758) an AusAID-funded climate change adaptation programme in Fiji succeeded in strengthening the environmental resilience of local communities by increasing awareness regarding the risks posed by climate change; institutionalizing an adaptive approach to water resource management; and developing networks that enabled easy access to resources and climate information.

An equally positive outlook on the effectiveness of CCA technical cooperation programmes vis-à-vis the integration of local knowledge is provided by Ebi *et al*. (2011), who studied the efforts of the U.S. Agency for International Development (USAID) to mainstream climate change adaptation into an existing development project that aims to enhance rice productivity and dry-season water access in Mali (ibid., p.425). The study concluded that integrating climate change adaptation practices into existing development activities was not only beneficial and necessary, but also very feasible, especially vis-à-vis programmes that aim to increase food security (ibid. p., 435).

The empirical evidence presented illustrates the lack of consensus within the existing literature regarding the ability of the World Bank in particular (and multilateral organizations in general) to implement CCA technical cooperation programmes that enhance the resilience of local communities through a bottom-up grassroots approach to capacity building. Even more importantly, there is no overarching understanding on the reasons for which the World Bank may be (un)able or (un)willing to implement CCA technical cooperation programmes that provide bottom-up grassroots environmental resilience building. Moreover, the aforementioned studies appear to point to singular examples where programmes may have had positive or negative outcomes for individual stakeholder groups. Instead, the question should become that of understanding the meanings ascribed to the various elements of the programmes by the different stakeholders involved in it, as suggested by Lewis *et al*. (2003, p.543), the dynamics that led to certain outcomes – such as those related to the power, autonomy and (in)coherence of the World Bank (outlined in section 2.1) –, and whose interests will likely be better served in the long run.

2.4 The World Bank and community empowerment in developing countries

2.4.1 Introduction

The third of the three sub-questions guiding the present investigation is if World Bank CCA technical cooperation programmes can politically empower vulnerable communities. While the empirical

findings of the present research related to this question will be presented in chapter six, a necessary pre-condition to investigating this question is to understand what the existing literature suggests in this regard.

Section 2.2.1. highlighted the need of vulnerable communities for political empowerment. In this context, scholars such as Budds & Sultana (2013, p.275), Linton & Budds (2014, p.171), Wutich et *al*. (2017, p.46), Milanez & Ferraz Fonseca (2012, p.1069) and Lynch (2012, p.364) stress that vulnerability of local communities to climate change and water (in)security reflect unbalanced socio-economic power relations, and are thus inherently linked to national or international interests, as opposed to simply relating to poverty or lack of entitlements. These needs notwithstanding, section 2.2.3 presented a critical outlook of the 'human face' that is supposedly guiding the development efforts of the World Bank, whereby the Bank presents itself as a voice for civil society groups, women and the poor. Therefore, given that a substantial part of the literature would appear to suggest that there is a mismatch between the empowerment needs of local communities (outlined in section 2.2.1) and the 'human' agenda of the World Bank (section 2.2.3), the question arises as per whether this mismatch holds true also for CCA technical cooperation programmes.

To address this issue, the present section will first outline the normative concepts underpinning this question. In particular, the discussion will focus on the 'three faces of power' provided by Lukes (2005), the related arguments constructed by Batterbury (2008, p.65), Paavola (2008, p.651), Braun (2010, p.181), Adger *et al*. (2006, p.3), Dow *et al*. (2006, p.96) and Schlosberg (1999, p.12), in addition to introducing the notion of *boundary organizations* (Cash *et al*., 2003, p.8090). The second part of the section will focus on practical ramifications of these normative concepts, by presenting the empirical evidence documented by scholars within the existing literature on international development aid as it pertains to the (in)ability of technical cooperation programmes (and World Bank CCA programmes, to the extent possible) to politically empower local communities, including by providing them with the skills and resources necessary to negotiate their own interests vis-à-vis powerful institutional stakeholders.

2.4.2 Conceptual framing: providing negotiating skills and mediating community interests

According to Dahl (1963, p.4), the most accurate indicator of the power of a group or of an individual is represented by decision making. In this regard, it is important to recall the criteria of pure procedural justice (Hermansson, 2010, p.511), deliberative participation (Young, 2000, p.26)

and integration of traditional knowledge (Adger et al., 2011, p.5), which were amply discussed in section 2.3.2. However, while section 2.3.2 presented these criteria as a means to explain the modalities through which decision-making processes should unfold in order to ensure a bottom-up approach to resilience building, the present section will focus on the power dynamics that underpin these decision-making processes. In doing so, the present section will look at decision-making as a tool for community empowerment, by presenting the 'three faces of power' elaborated by Lukes (2005).

According to Lukes, the first face of power consists in the ability of an individual or group to impose its will over that of other groups or individuals during the course of a decision-making processes (ibid., p.19), while the second phase consists in limiting or jeopardizing the ability of others to participate in a decision-making process (ibid., p.20). In the context of the present investigation, these first two faces of power relate to the ability of all the members of vulnerable communities to openly access and to freely participate in decision-making fora related to the design and implementation of CCA project activities.

Against this backdrop, it is very interesting to underscore that Batterbury (2008, p.65) suggests that the potential exists for development aid projects to empower local communities by fostering extensive dialogue among community members, scientific experts, researchers and development practitioners. In this regard, Braun (2010, p.181) notes that everyone has a role to play in the struggle against climate change, and that hence social participation schemes that promote the full involvement of all stakeholders in the planning of adaptation activities are essential. This position is echoed by Paavola et al. (2006, p.269), Adger et al. (2006, p.3) and Dow et al. (2006, p.96), all of whom underscore the vital need of achieving fair participation for all stakeholders in order to move towards fairness in adaptation to climate change. In addition, Schlosberg (1999, p.12) stresses that stakeholders at all levels should be free to express their ideas and perspectives without the risk of their dignity being jeopardized in any which way.

The third face of power described by Lukes (2005, p.22) – defined as 'non-decision making' – consists in the ability to impose one's will by preventing others from understanding what their actual needs and interests are. Interestingly, what sets apart non-decision making from the previous two faces of power is its ability to exercise power without actually imposing any form of explicit coercion whatsoever. In the context of the present investigation, this third face implies that – for example – while government officials and other powerful stakeholders may invite community members to participate in decision making fora, and while these fora may be conducted in accordance with the three participatory criteria outlined in section 2.3.2, this will

not in itself be sufficient to ensure that vulnerable community members are able to effectively protect their needs and interests. Moreover, for community members to be able to do so, they must first fully understand the implications of what is being negotiated, and thereafter understand how to negotiate it.

What emerges from the third face of power is that the simple ability of local communities to participate in decision-making processes, and to influence the design of resilience building activities (in accordance with the criteria set out in section 2.3.2) is not in itself sufficient to ensure their actual empowerment. Moreover, for local communities to be empowered they need to have the opportunities and resources necessary to ensure that, during decision-making processes, they are able to remain fully aware of their needs at all times, to understand the implications of their interests, and to effectively negotiate said needs and interests with powerful stakeholders by applying the necessary know-how, tools and techniques. Given the nature of the present investigation, the question naturally becomes that of understanding what role World Bank CCA technical cooperation programmes could play in this context.

While the existing literature on international development aid would appear to have understudied the possible role that World Bank CCA technical cooperation programmes may play in helping local communities to negotiate their interests, interesting parallels can be drawn between this role and the notion of *boundary organizations,* which postulates the ability of *super partes* entities to mediate the interests of different stakeholder groups.

Cash *et al*. (2003, p.8090) define boundary organizations as "*organizations mandated to act as intermediaries between the arenas of science and policy*". In this regard, boundary organizations aim "*to stabilize the relationship between science and policy communities*" (Cutts et al., 2011, p.977) with a view to creating social order and increasing social capital through the implementation of projects designed on the basis of standardized approaches that draw from knowledge provided by actors in both the science and policy arenas (Guston, 2001, p.401; Agrawal et al., 2001, p.455; Cutts et al., 2011, p.978), who boundary organizations attempt to simultaneously appease (Guston, 2001, p.401).

The ability of boundary organizations to succeed in their aforementioned aim is contingent on three main factors, namely their credibility, i.e., the trustworthiness and validity of their knowledge; legitimacy, i.e., the perception that their knowledge is unbiased and fair; and saliency, i.e., the relevance of their knowledge to multiple audiences (Cutts et al., 2011, p.978) – which interestingly mirror the sources of power of the World Bank analysed in section 2.1.3.

However, according to Miller (2001, p.478), "*applying the theory of boundary organizations to international society requires a refocusing of some of the theory's central features*" given that "*the original theory of boundary organizations is too static to cope with the rapid changes associated with contemporary processes of globalization*" (ibid., p.480). In response to this need, Miller asserts that boundary organizations need to adopt a process of hybrid management, which relates to the ability of an organization not only to combine political and scientific knowledge, but also to deconstruct said knowledge in ways that appease the internal interests of multiple institutional stakeholders, while simultaneously allowing said stakeholders to establish mutually productive relationships (ibid., p.487). According to Miller (ibid., 496), applying the construct of hybrid management to the theory of boundary organizations "*offers a new avenue for exploring power relationships in* […] *global diplomacy and governance*".

Of particular interest in this context is that Lewis *et al*. (2014, p.7579) recognize the potential role of boundary actors in mediating the risk of violent conflict related to diverging interests related to natural resource management by "*translating the cost of conflict into a pragmatic business case that would change corporate strategy*". However, the role envisaged for these boundary actors would appear to be confined to translating local community demands to help companies to "*internalize externalities and translate social risk inward*", rather than working directly with local communities to help them to meet their needs.

Along similar lines, of particular interest for the present research is the future role that Ritzen identifies for the World Bank. Recognizing the often widely divergent positions of a growing multitude of donors in developing countries, Ritzen (ibid., p.190) calls for a harmonised approach to development analysis with a view to achieving "*what would be internationally regarded (including in the developing world) as top advice*". According to Ritzen (ibid., p.191), this responsibility should be bestowed on the World Bank. In this regard, it is argued that the future role of the Bank should be increasingly that of acting as "*the intermediary in countries with good governance between all donors and the government* – including by – *pulling inefficient assistance out of countries with low levels of governance".*

Stemming from the above, Ritzen identifies the future role of the Bank as being that of an intermediary between different stakeholders in developing countries. In particular, Ritzen acknowledges the strength of the Bank as a catalyst to harmonizing an array of divergent positions (ibid., p.192). However, Ritzen's arguments fail to stretch beyond the realm of the major international development players. In other words, Ritzen does not acknowledge the role of civil

society and local communities as agents of change within the decision-making process. The only positions that need to be (or that are worth being) harmonized in order to establish "*top advice*" are those of bilateral donors and central governments. As for civil society, the only role envisaged for them is that of passive acceptance, achieved through better unilateral communication.

2.4.3 Empirical evidence of the (in)ability of technical cooperation programmes to empower local communities

Stemming from the conceptual framing of the notion of community empowerment presented above, the existing literature on international development aid would appear to offer vastly contrasting empirical evidence regarding the ability of technical cooperation programmes to politically empower local communities.

Investigations carried out by Lynch (2012, p.370) in Peru, and Alam *et al*. (2011, p.56) in Bangladesh, denounce the fact local communities and civil society organizations are almost never empowered by CCA projects, so much so that even when they are supposedly involved in the decision making process they appear to know little or nothing about the project itself (Shankland & Chambote, 2011, p.68). Similarly, critical findings are presented by Peterson (2012) who investigated how climate information and economic development interacted in selected adaptation programmes in Ethiopia. In his investigation, Petersen found that – far from empowering local communities – climate adaptation programmes introduced new market risks for local farmers by strengthening private sector insurance (ibid., p.578)

In line with the aforementioned empirical studies, in his investigation Ireland (2012, p.195) concluded that local communities in Nepal were distrustful of international aid organizations. Moreover, local communities felt no ownership of CCA projects, which they perceived as being something imposed from outside, plagued by corruption, and reflective of the political interests of local government authorities – rather than of their own empowerment needs. As summarized by the words of one of the local community interviewees "*foreign [development] organisations just come and do stuff, no one in the community really owns it*" (ibid.).

In contrast to these critical findings, empirical findings produced by other scholars suggest that CCA technical cooperation programmes may not only result in the attainment of the planned adaptation goals, but also contribute to the empowerment and sustainable development of the host community as a whole (Fujimori, 2011), including through increases in public investments

that have a positive, measurable and direct correlation to technical cooperation programmes (Mavrotas, 2005, p.1019).

In this regard, Khanna *et al*. (2015, p.1212) present the cross-cutting benefits of World Bank-led technical cooperation participatory schemes vis-à-vis women's stark increased empowerment and active involvement in public life and domestic decision making, as well as on community livelihoods, skills, employment, asset holdings of households and higher consumption expenditures (ibid., p.1221). Empirical research carried out by Bebbington *et al*. (2007, p.610) in Bangladesh yields similar findings. According to the researchers, the World Bank technical cooperation programme under study resulted in positive changes in the status of women, who gained decision-making strength, among several other benefits.

Along the same lines, findings from the study carried out by D'Agostino & Sovacool (2011) highlight that by including the establishment of farmer water user committees in programme design, the 'Promoting Climate Resilient Water Management and Agricultural Practices in Rural Cambodia' implemented by the United Nations Development Program (UNDP) succeeded in increasing stakeholder control and ownership over planning (ibid., p.711). Very similar findings also emerge from the empirical investigation carried out by Ahmed & Fajber (2009) – according to whom the inclusion in project design of the establishment of village water committees to work in partnership with the government helped the development of management mechanisms and infrastructure that ensured access to safe drinking water (ibid., p.42) –, and Kaul (2001, p.22), according to whom the World Bank Environmental Management and Capacity Building programme that was developed in India was succeeded in empowering people through the decentralization of information paradigms.

Similarly, Gippner *et al.* (2012) found that a CCA programme financed by the World Bank in Nepal empowered local communities through the provision of skills that had a tangible impact on their capacities, which resulted in increased income and employment levels (ibid., p.5), in addition to empowering women specifically by encouraging and facilitating their direct involvement in project activities (ibid., p.10).

The above findings notwithstanding, within the existing literature there would appear to be little or no evidence to suggest that World Bank CCA technical cooperation programmes politically empower vulnerable communities through the provision of the specific skills necessary for them to be able to negotiate their interests vis-à-vis the management of their natural resources with government and other powerful stakeholders. In this context, it is important to recall that the

third face of power postulated by Lukes (previously discussed) consists in the ability to impose one's will by preventing others from understanding what their actual needs and interests are; which is an issue that, in the case of vulnerable local communities, could be addressed by empowering people through the provision of appropriate negotiating skills.

Moreover, while recent empirical evidence uncovered by Newby (2017, p.169) suggests that the potential does exist for multilateral organizations to help to legitimize local actors vis-à-vis other powerful stakeholders – albeit in the context of UN Peacekeeping operations –, in the case of World Bank CCA technical cooperation programmes, there appears to be substantial evidence that suggests the opposite, i.e., that project design is not only tied to strong vested interests among different stakeholders, but also – and most importantly – that it reflects power and resource allocation issues between multiple owners of the process (Ayers *et al*., 2011, p.77), who manipulate access to and use of natural resources – especially water – to facilitate new political agendas under new governance structures (Carey *et al*., 2012, p.190).

In this regard, Lewis *et al*. (2003, p.543) suggest the existence of a disconnect between the commitments made by multiple stakeholders in World Bank technical cooperation programme documents, and the activities implemented on the ground vis-à-vis community empowerment. The reason for this disjuncture is identified as being "*that any agreed upon meanings (discourse) in project documents quickly diverge during implementation (practice), because of fragmentary tendencies within the cultures and practices of the organizations involved*" (ibid.).

Stemming from all the empirical evidence presented above – notwithstanding the scarce information related to World Bank water security CCA technical cooperation programmes – it is clear that there is no overarching consensus within the existing literature regarding the ability of the World Bank in particular (and multilateral organizations in general) to implement CCA technical cooperation programmes that politically empower vulnerable communities. Even more importantly, there is no overarching understanding on the reasons for which the World Bank may be (un)able or (un)willing to implement CCA technical cooperation programmes that politically empower vulnerable communities. Moreover, the aforementioned studies appear to point to singular examples where programmes may have had positive or negative outcomes for individual stakeholder groups. Instead, the question should become that of understanding the meanings ascribed to the various elements of the programmes by the different stakeholders involved in it, as suggested by Lewis *et al*. (2003, p.543), the dynamics that led to certain outcomes – such as those related to the power, autonomy and (in)coherence of the World Bank (which outlined in section 2.1) –, and whose interests will likely be better served in the long run.

To understand these dynamics, it necessary to first recognize that "*that international organizations can only be understood when we dissect their internal operations and identify and analyse the roles, responsibilities, and capacities of key actors*" (Weller & Yi-chong, 2010, p.229). Only thereafter will it be possible to analyse the different interests of each of the stakeholders involved by "*tracing project histories carefully, and charting the interactions among different agencies, the values and meanings prioritised and struggled for by groups within each agency, and the ebbs and flows of particular meanings regarding the purpose to which project resources should be put*" (Lewis et al., 2003, p.554) – which is precisely what the present research will attempt to do in chapters five and six.

2.5 Conclusions

The needs of climate-affected water-stricken local communities are amply recognized throughout the literature as relating to resilience building and community empowerment. However, there would appear a considerable divide in the existing literature vis-à-vis the ability of the World Bank to promote and protect the needs of said communities through the implementation of CCA technical cooperation programmes that address these two overarching needs. In this regard, there are also notable discrepancies in the existing literature regarding the reasons for which the World Bank may be (un)able or (un)willing to implement CCA technical cooperation programmes that empower local communities whilst providing bottom-up grassroots environmental resilience building.

In addition, there are also notable discrepancies in the existing literature regarding the factors that might influence the sustainability of the efforts carried out by the Bank in the context of its CCA technical cooperation programmes. On the one hand, scholars such as Bottrell (2009, p.334) and Joseph (2013, p.51) denounce that the benefits of resilience-building interventions are not sustainable since central government authorities use the presumed greater resilience of poor communities to pressure them into absorbing and accepting market-driven exploitation of environmental resources. On the other hand, Batterbury & Fernando (2006, p.1856) and Lewis (2017, p.4) suggest that the benefits of World Bank interventions can be sustainable to the extent that they are supported by an enabling institutional environment and by the enforcement of proper rules, backed by strong government commitments and accountability of civil society leaders.

Cognizant of the significant differences in the perspectives and arguments discussed thus far, the present chapter concludes by presenting a very interesting parallel that can be drawn between the claims advanced by Goldman (2005, p. 19) – a critic of World Bank programmes –, and those proposed by Kuhl (2009, p.573) – a cautiously more optimistic proponent of the benefits of multilateral development assistance efforts.

On the one hand, Goldman (2005, p. 19) underscores that the key objective of the World Bank is to safeguard its power, without which it could not survive. In this regard, Goldman frames all development and poverty reduction activities carried out by the World Bank within the context of this on-going struggle to maintain power. On the other hand, Kuhl (2009, p.573) asserts that changes in the approaches taken towards development assistance – and the effectiveness of their results – are a direct reflection of an organizational learning process that stems from four decades of criticisms to which multilateral development organizations have been subject to, paramount among these the World Bank. Otherwise stated, both scholars suggest that the World Bank has evolved its approach to development assistance in order to safeguard its power in the face of mounting criticism.

The implications of the above conclusions are extremely important, insofar as they explain the evolution of development aid as being directly related to the expectations faced by multilateral players (ibid., p.574). As unambiguously stated by Kuhl (ibid.), "[t]*he concept of Capacity Development should therefore be seen primarily in light of the legitimacy requirements to which the Western development assistance organizations are subject*." Far from being an isolated position, this argument has been at the heart of a number of studies (Ferguson 1990, 1994; Hanke, 1996; Rottenburg, 2002) which "*take the expectations that are imposed on the major development assistance organizations as the starting point for an analysis of the organizations as 'transformation belts' between the donor countries and receiving countries*" (Kuhl, 2009, p.574).

According to Kuhl (ibid.), what clearly emerges from this literature is that "[d]*evelopment assistance organizations need to defend their legitimacy against the governmental apparatus (on which they depend for their funding), against the critical mass media, and against a growing number of lobby organizations. They are thus continually forced to present a new look. The more these organizations are criticized (or the stronger their self-criticism) concerning their effectiveness, the more they must present new concepts to demonstrate their learning ability and to show that they will not give up the search for new and more effective strategies*".

However, if – as suggested by both Goldman (2005, p.19) and Kuhl (2009, p.574) – the initiatives implemented by the Bank in developing countries are designed to support its own interests, then it naturally follows that the ability of the Bank to meet the needs of water-stricken communities is limited to the extent to which their needs overlap with those of the Bank – something which, the aforementioned literature would suggest, is highly unlikely to happen in situations in which the interests of local communities are opposed to those of central government authorities – whose resources the World Bank is dependent upon.

Moreover, the arguments put forth by McAfee (1999, p.139), Harrison (2005, p.256) Cammack (2007, p.190) and Goldman (2005, p.41) – among many others –, suggest that the adoption of new approaches stemming from the Bank's on-going quest to defend its legitimacy are closely entwined to the interests of government authorities and powerful multinational private companies, rather than to those of poor, climate-affected communities.

However, the above notwithstanding, the significant discrepancies that do exist within the existing literature – which have been highlighted throughout the present chapter –, coupled with the complexities discussed vis-à-vis the factors determining the ever-evolving development programmes of the World Bank, would suggest the possibility that perhaps framing CCA technical cooperation programmes as simply serving the interests of one cluster of actors – for example central governments and multinational corporations as opposed to civil society and local community groups –, may represent an over-simplification of the reality on-the-ground.

This possibility will be at the heart of the following chapters, which will help to enrich the existing literature by helping to understand if the Bank may be pursuing a different type of engagement with poor communities compared to its past interventions, and whose interests this type engagement might best serve; those of the local communities or those of powerful stakeholders. Furthermore, by exploring the relationship between the activities of World Bank CCA technical cooperation programmes on the one hand, and the multi-faceted interests of local communities and powerful elites on the other, the study will help to enrich the existing literature by providing insights into the factors that might influence the sustainability of these types of interventions.

Chapter 3: Methods

3.1 Introduction

The present chapter will present the means of investigation that were used by the present research, which consists in applying a qualitative research method to a single-country case study. In this regard, the chapter will discuss how the methodological approach chosen will enable the main research question, and the thee sub-questions, to be answered. In this context, the chapter will explain the rationale behind the choice of a qualitative approach; the rationale behind the choice of a case study method in general, and of the 'Adaptation to the Impact of Rapid Glacier Retreat in the Tropical Andes' (PRAA)' programme in particular; the methods of data collection; the methods of data analysis, including the use of coding, connecting, categorizing and describing procedures; and the ethical considerations of the methodology adopted.

In particular, with regard to the selection of the PRAA, the chapter will present the basis on which this particular case study was chosen by discussing the significance of the case vis-à-vis the main research puzzle of the current investigation. To do so, the chapter will articulate the value of the PRAA case study from a methodological perspective, the construct validity of the PRAA as the chosen case, the added value of the present methodological approach compared to that of standard World Band end-of-programme evaluation reports, as well as the possible research limitations that may arise from the choice from the selected case study.

3.2 Choice of a qualitative approach

The present study adopted a qualitative research design through a single-country case study, which was analyzed in a structured and focused fashion at the meso and micro/sub-national levels by means of a 'thick description'. The research was built on solid theoretical foundations.

The main implication of choosing a qualitative approach for the present research is that the focus is on deciphering meanings, as opposed to analyzing numbers. Notwithstanding the methodological difficulties of the qualitative method outlined by Merriam (2009, p.8), the present research draws on the arguments made by authors such as Davis (2007, p.574) and Dey (1993, p.30), who have praised the methodological rigor of the qualitative method.

In particular, Dey asserts that it is only through the application of qualitative research techniques that social science research can connect with the reality that it attempts to understand. The reason for this is that qualitative data demonstrates the richness of what is happening by embracing a huge spectrum of social and cultural artefacts (ibid., p.13; Gibbs, 2008, p.4), which quantitative analysis alone cannot capture (Dey, 1993, p.25).

Similarly, Schutt (2011, p.321) highlights that qualitative research offers a way to understand the richness of the real social experience, including by helping to capture the tacit knowledge of the social process (ibid., p.331), which Altheide & Johnson (1994, p.492) underscore would not be possible without a deep contextual understanding. According to Suter (2012, p.344) such a deep understanding can only be achieved by gaining an 'insider' perspective, which in turn implies discovering how individuals construct their own meaning of events, which is a key commitment of qualitative research (Gibbs, 2008, p.7), as well as of the present work.

3.3 Choice of a case study approach

While there are multiple and at times contradictory definitions of what constitutes a case study (Orum *et al*., 1991, p.2; Gerring, 2007, p.95), the present research adopts the definition proposed by Yin (1994, p.13) – a recognized leader in case study methods (Suter, 2012, p.366) – according to whom a case study is "*an empirical inquiry that: investigates a contemporary phenomenon within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident; and that relies on multiple sources of evidence*". According to Rowley (2002, p.18), this definition has the value of emphasizing one of the most distinctive traits of case study research, i.e., the ability to investigate a phenomenon in its original context, without the need to replicate it in an experimental setting in order to better understand it. In this regard, it is also important to underscore that case studies are particularly well-suited for examining the perspectives of multiple actors with a view to achieving a more holistic picture of a situation. In particular, Yin (1994, p.9) praises the methodological rigor of case studies in answering questions about contemporary events over which the researcher has little or no control – which is exactly the case of the present investigation.

Given that the present research involved local communities, an important question to answer is whether this type of approach is appropriate for the intended level of analysis. In this regard, Novak (1977, p.12) makes a distinction between national and sub-national studies, with the latter including a greater focus on local communities. Similar considerations have also been made by

Hantrais (2009, p.54) and by Kennett (2001, p.6), who distinguish between marco, meso and micro levels of analysis, as well as by Landman (2008, p.19), who proposes a more generic distinction between marco and micro levels of analysis. According to Lor (2012, p.17), case-oriented studies are best suited for meso and micro/sub-national levels of analysis – which is perfectly in line with the choice made by the present research.

Having dealt with these initial concerns, there remains nonetheless one additional criticism that scholars move against the use of case studies. Since the late fifties, authors in various fields of political and social science such as James Rosenau (1968) have criticized case studies for being of little or no use in terms of theory-building, since the development or validation of new or existing theories implies the systematic comparison and subsequent generalization of research findings – something which, it was argued, was above and beyond the remit of the case study approach (George & Bennett, 2005, p.69). Over the years, the debate has certainly not died down. On one front, there are scholars such as Krzys and Litton (1983, p.27), Danton (1973, p.46) and Sartori (1991, p.252) who reject the scientific value of single-country case studies given that they "*cannot be subsumed under the comparative method*" (ibid.). On the other front, there are scholars such as Simsova and Mackee (1975, p.30) and Landman (2008, p.28) who defend the value of single-country case studies.

In particular, according to George & Bennett (2005, p.123), while a multitude of diverse cases studied simultaneously may easily prove to have no common patterns, thus jeopardizing the possibility of generalizing specific findings beyond unique historical explanations, studying a few cases or even just one case may be sufficient to unveil a new causal mechanism applicable to a wide variety of cases. In other words, 'quantity' (of cases studied) is in itself not a measure of success, and success (of a study) should not be measured solely in terms of 'quantity', i.e., in terms of the extent to which its results can be immediately compared to a large number of other cases.

In this regard, George and Bennett (2005) state that the key to methodological rigor in single-country case studies is to have a 'structured' and 'focused' approach. First, the method is defined 'structured' when it is guided by a set of standardized, general research questions that reflect the research objective and theoretical focus of the enquiry (ibid., p.69). Second, the method is defined 'focused' when it deals only with specific aspects of the case(s) examined (ibid., p.70).

3.4 Choice of the World Bank-funded programme entitled 'Adaptation to the Impact of Rapid Glacier Retreat in the Tropical Andes' (PRAA)

The case study selected for the present research was the World Bank CCA technical cooperation programme entitled 'Adaptation to the Impact of Rapid Glacier Retreat in the Tropical Andes' (PRAA), which was implemented in the municipality of Santa Teresa, in Peru, between 2008 and 2014. The main goal of the PRAA was to contribute to strengthening the resilience of local ecosystems and economies to the impacts of glacier retreat in the Tropical Andes (World Bank, 2008, p.9). The case of the PRAA was selected insofar as it offers an excellent opportunity to explore if the World Bank can effectively promote and protect the needs of vulnerable communities. In this regard, the present section will discuss the choice of the PRAA as a purpose-based 'deviant' case study, its construct validity as well as its limitations

3.4.1 Choice of a purpose-based 'deviant' case study

As a water security-focused CCA technical cooperation programme implemented in Latin America, the PRAA is reflective of a fast-growing trend of programmes that the World Bank is implementing, and which may arguably be indicative of changing modes of practice of the Bank itself (White, 2015, p.90).

CCA technical cooperation programmes are amply recognized as being one of the fastest growing catalysts for support to vulnerable people worldwide (Murdiyarso, 2010, p.767; Sullivan & Huntingford, 2009, p.3989). With USD 52 billion pledged to over 900 climate change programmes since 2011, the World Bank is the major international provider of CCA technical cooperation programmes (World Bank, 2016). In 2014 alone, the Bank committed USD 11.9 billion towards the realization of climate change programmes spanning 77 countries (World Bank, 2016a).

With regard to the specific issues being addressed by these programmes and their geographical focus, it is important to note that of the 292 climate change programmes that the World Bank has designed to date, 49 of these (i.e., 17%) directly addressed water resource management issues – including hydropower, water supply and irrigation –, while 83 programmes (i.e., 28%) targeted countries in Latin America (World Bank, 2016a).

Against this backdrop, the PRAA was chosen as the case study for the present investigation based on "*purpose*", as opposed to "*convenience*" or "*probability*" (Baškarada, 2014, p.6), based on the

assumption that it would provide an opportunity "*to collect the most relevant data*" (ibid.) to understand if the World Bank can effectively promote and protect the needs of vulnerable communities. Moreover, the official goals of the PRAA, as well as the criteria based on which the geographical locations for the PRAA were selected, capture well not only the environmental aspects but also the socio-political elements that define the three sub-questions[9] that guide the present investigation.

In this regard, while the overarching goal of the PRAA was to contribute to strengthening the resilience of local ecosystems and economies to the impacts of glacier retreat in the Tropical Andes (World Bank, 2008, p.9), one of the specific objectives of the programme was "*to support government interventions to ameliorate potential social conflict*" (ibid., p.153). In this context, the geographical locations in which the PRAA was implemented were officially selected not only on the basis of the "*vulnerability of the areas to climate change*", but also – and equally importantly – on the basis of their "*political importance*" (World Bank, 2008a, p.41).

As a result, although the PRAA reflects the growing trend of water-focused CCA technical cooperation programmes that the World Bank is implementing in Latin America, within this trend it represents a "*deviant*" case (Seawright & Gerring, 2008, p.302) – also referred to as an "*extreme*" case by Flyvbjerg (2001), or a "*special interest*" case by Baškarada (2014, p7) – due to its "*unusual/special attributes*" (Baškarada, 2014, p7).

According to Seawright & Gerring, (2008, p.302), *"*[t]*he deviant case method selects cases that* […] *demonstrate a surprising value; they are poorly explained".* In this regard, the concomitant and explicit focus of the PRAA on both the environmental and socio-political elements that define water security in the context of CCA is certainly very surprising. Moreover, while there may be ample evidence in the existing literature to suggest that "*flows of water are not external to power relations, but intricately enmeshed in, and reflective of, them*" (Budds & Sultana, 2013, p.275), and that therefore water security issues internalize social relations and politics (Linton & Budds, 2014, p.171; Wutich et al., 2017, p.46; Swyngedouw, 2004, p. 2; Budds & Hinojosa, 2012a, p.50), there was very limited evidence of World Bank CCA programmes that officially addressed the environmental and political dimensions of water security concomitantly at the time in which the present investigation was carried out.

[9] The three sub-questions are: Can the World Bank design interventions that respond to the needs of climate-affected water-stricken communities through CCA interventions? Can World Bank CCA technical cooperation programmes help to build environmental resilience through a bottom-up approach? Can World Bank CCA technical cooperation programmes politically empower vulnerable communities?

Therefore, the 'deviant' nature of the PRAA resides in its ability to explicitly, and unexpectedly, recognize the link between environmental issues and power structures in the context of water security – which is a link that defines the fabric of the present research puzzle – and, most importantly, to seek to address both dimensions.

Furthermore, given that "[t]*he purpose of a deviant case analysis is usually to probe for new—but as yet unspecified—explanations*" (Seawright & Gerring, 2008, p.302), the case of the PRAA was also selected in light of its potential to offer an uncharted explanation to the reasons for which the World Bank may now suddenly be willing to explicitly acknowledge the linkage between the environmental and political dimensions of water security in the context of CCA.

Another valuable element that defined the rationale for selecting the 'deviant' case of the PRAA resides in the fact that "[d]*eviant or extreme cases often reveal* […] *the deeper causes behind a given problem and its consequences* [which is more important] *than to* [only] *describe the symptoms of the problem and how frequently they occur*" (Flyvbjerg, 2004, p127). In this regard, by explicitly focusing on the causes of the "*poverty*" of the targeted geographical locations and on the "*socio-economic impact of climate change*" in said locations (World Bank, 2008a, p.41), the PRAA offered an opportunity not only to discuss the symptoms of the local community needs in terms of lack of access to water, but also – and most importantly – presented an avenue for the present investigation to analyze the deeper causes behind the problems that were affecting and shaping said needs.

3.4.2 Construct validity of the PRAA case study

According to Baškarada (2014, p.8), construct validity "*deals with concept operationalisation* […] *Strategies for improving construct validity include using multiple sources of evidence*", which is an argument also supported by Yin (2009, p.116), who notes that case study findings are "*likely to be more convincing and accurate if* [they] *are based on several different sources of information*". In this context, it is important to note that the case of the PRAA offered ample opportunities for multi-layered data triangulation in light of the multiple data sources available.

Moreover, although – as will be discussed at length in the following section on research limitations – the researcher did not have any form of privileged or 'insider' access to non-public information related to the case of the PRAA (it is important to recall that the case of the PRAA was

selected based on 'purpose' as opposed to 'convenience'), there was a relatively vast quantity and variety of information and documentation publicly available related to the PRAA. As will be discussed in the section on 'data collection methods', available data sources related to the PRAA included, in addition to key informant interviews, white literature, grey literature, archival records, policy documents, programme documents, project reports and assessment reports, among others.

These multiple sources of information provided an excellent basis on which to build and strengthen the construct validity of the case study through processes of multi-layered triangulation. In particular, the case of the PRAA offered an excellent opportunity for data triangulation at the following levels: among all the individual sources of information listed above; within each individual data cluster (e.g., within data coming from grey literature; within data coming from stakeholder interviews; within data coming from the project documents of different organizations involved in the project; etc.); among data coming from different data clusters (e.g., among data coming from white literature and data coming from project document reports; among data coming from stakeholder interviews and grey literature; etc.); *within* key informant interviewee stakeholder groups (e.g., within data collected during interviews with local community members, or with government officials, or with representatives of international multilateral institutions, etc.); and *among* key informant interviewee stakeholder groups (e.g., among data coming from interviews with local community members on the one hand and government officials on the other; or coming from private sector representatives on the one hand and officers of multilateral organizations on the other, etc.).

3.4.3 Added value of the present investigation vis-à-vis standard World Bank programme assessment documents

As amply stated, the purpose of the present research is to investigate if the World Bank can effectively promote and protect the needs of vulnerable communities. To address this question, the current study selected the PRAA based on the methodological considerations described in the previous two sub-sections above. It follows that the answer to the main question will largely derive from the success of the project activities carried out by the Bank under the PRAA. This approach, however, raises the question as per how the present investigation might differ or bring added value compared to the standard programme assessment documents that were produced at the end of the PRAA by the World Bank (World Bank 2014), as well as by the Independent Evaluation Group (Independent Evaluation Group, 2014).

To answer this question, it is first necessary to understand the focus and content of the World Bank and IEG assessments. The Bank assessment focused on a set number of standard project indicators that were used to assess the results achieved by the PRAA vis-à-vis the original targets set in relation to an initial baseline. These included, for example, the number of adaptation strategies designed, the number of pilot adaptation activities implemented, and the results obtained by these activities in terms of – including, but not limited to – number of hectares irrigated, number of water reservoirs built, number water distribution systems implemented through the installation micrometers, and number of local irrigation committees established (World Bank, 2014, p.37). Along very similar lines, the IEG report focused on "*the project's efficiency by assessing the cost effectiveness of investments in water supplies for human consumption and irrigation as adaptations to climate change*" (Independent Evaluation Group, 2014, p.7).

Against this backdrop, the present investigation differs and brings added value compared to both the World Bank and IEG assessments by assessing the ability of the PRAA to meet both its resilience-related and its political-related goals by analyzing them in relation to the normative frameworks and arguments developed by leading scholars (and discussed at length in the literature review chapter). These include the resilience building frameworks developed by Davoudi *et al*. (2013), Tschakert & Dietrich (2010) and Nelson *et al*. (2007, p.401); the concepts of pure procedural justice and deliberative participation framed by Hermansson (2010, p.511) and Young (2000, p.26), respectively; and the 'three faces of power' elaborated by Lukes (2005), together with the related conceptual arguments constructed by Paavola (2008, p.651), Braun (2010, p.181), Adger *et al*. (2006, p.3), Dow *et al*. (2006, p.96) and Schlosberg (1999, p.12).

3.4.4 Research limitations deriving from the choice of the PRAA case study

The choice of the case of the PRAA posed three main research challenges from a methodological point of view, namely: proximity to the reality being investigated; double hermeneutics; and bias towards verification.

The first challenge refers to a possible bias in the analysis of the data collected, which stems from the fact that the researcher writing the present study has spent the past fifteen years of his professional career working for the United Nations (UN) , which is a large multilateral institution, as is the World Bank, and has been responsible for designing, managing and implementing on-the-

ground programmes and projects in over twenty countries across Africa, Asia, the Middle East, and Latin America, as well as facilitating high-level policy dialogues within the UN General Assembly.

In addressing the risk of a possible bias, the first issue to highlight is that the researcher had no knowledge of the PRAA or of the Bank officials involved in the programme prior to undertaking the present study. In this regard, it is important to recall that while a 'convenience case study' is "*selected because it* [is] *expedient for data collection purposes*" (Baškarada, 2014, p.7), this was not the case of the PRAA, which was instead selected based on 'purpose'. Moreover, to-date the researcher has never had any interaction either at a personal or at professional level with any World Bank officials. Likewise, the researcher has never been involved in any technical cooperation programme implemented in Peru, neither by the World Bank nor by any other international organization, and has never visited nor had any connections in either Santa Teresa or Cusco (which are the town and region in which the PRAA was implemented, respectively). As a result, as mentioned above, the researcher had no privileged access to any form documentation or information. Instead, all the sources referred to in the present study are publicly available, and as such were retrieved for the most part directly on-line.

To complement the above, the risk of a personal bias stemming from the closeness of the researcher to the study domain (understood as being the realm of multilateral development aid programmes) is further mitigated by the fact that, according to Baškarada (2014, p.9), "*the researchers should be sufficiently familiar with the study domain as to understand the main concepts and theoretical/methodological issues relevant to the study*." This argument is also supported by Flyvbjerg (2004, p.121), according to whom "[g]*reat distance to the object of study* […] *easily leads to a stultified learning process, which in research can lead to ritual academic blind alleys, where the effect and usefulness of research becomes unclear and untested*." In this regard, rather than being understood as an impediment to quality investigation, the proximity of the researcher to the study domain is seen as beneficial to the study. Moreover, "*the most advanced form of understanding is achieved when researchers place themselves within the context being studied. Only in this way can researchers understand the viewpoints and the behavior, which characterizes social actors*" (ibid., p.134).

The second methodological challenge that stems from the choice of the case of the PRAA is double hermeneutics. According to Baškarada (2014, p.10), double hermeneutics "*refers to the situation where researchers influence the interpretations of the study participants*". In this regard, the choice of the PRAA posed the challenge of ensuring that participants did not feel compelled to

provide certain types of answers in light of the fact that the researcher was himself an officer of an international multilateral organization. In a similar vein, there was also a risk that the responses provided by local community members during the interviews could be influenced by concerns about the possible consequences of negative comments regarding the aid received through the technical cooperation programme under review. Likewise, participants from the World Bank and the Peruvian government could have worried about possible consequences of making confidential or negative comments about the role of their respective organizations.

Two overarching precautionary measures were taken to offset these risks. The first was that the researcher did not make any direct reference to his professional background prior to or during the interviews, but instead introduced himself from a purely academic perspective, i.e., as a PhD student. Second, as will be explained in greater detail in the 'ethical considerations' section of the present chapter, these risks were also mitigated to the extent possible by explaining to all interviewees that the information provided would be accessible only to the researcher; that all the interviewees' identities would be kept confidential; and that information provided would be anonymised in all outputs.

The third methodological challenge that stems from the choice of the case of the PRAA is the potential bias towards verification which affects the case study method generally (Flyvbjerg, 2004, p.132). Moreover, it is argued that the case study "*method maintains a bias toward verification, understood as a tendency to confirm the researcher's preconceived notions, so that the study therefore becomes of doubtful scientific value*" (ibid.). In light of the first methodological challenge herein presented (i.e., researcher bias), in the case of the PRAA the risk towards verification could have posed a notable limitation to the quality of the present investigation.

However, according to Flyvbjerg (ibid.) the bias towards verification of the case study method is, in reality, nothing more than a "*misunderstanding*". Moreover, "*it is falsification and not verification, which characterizes the case study*" (ibid., p.133), given that "*experience indicates that the case study contains a greater bias toward falsification of preconceived notions than toward verification*" (ibid., p.135).

In this regard, to offset the potential challenged posed by a possible bias towards verification, the present study adopted a two-pronged strategy. First, the study followed the approach suggested by Flyvbjerg (ibid., p.136), who explains that – in order to avoid any possible bias in the case study method – "*I tell the story in its diversity, allowing the story to unfold from the many-sided, complex, and sometimes conflicting stories that the actors in the case have told me.*" Second, to

further mitigate any potential bias-related limitations to the quality of the research, the findings of the case study were contrasted to the events that unfolded in Tia Maria[10] and Las Bambas[11] – i.e., neighboring locations to Santa Teresa, that bear similar traits to Santa Teresa in terms of poverty, climate vulnerability, natural resource dependency, government exploitation and social tensions, but in which no CCA technical cooperation programmes have been implemented.

3.5 Data collection methods

In terms of the data collection methods, the research gathered information through 40 semi-structured key informant interviews. The interviews captured the thoughts, opinions and perspectives of representatives from all entities involved in the formulation, design and implementation of the PRAA. In addition, the research also analyzed white literature, grey literature, archival records, policy documents, programme documents, project reports and assessment reports, among others.

In total, representatives from 16 institutions were interviewed, ranging from multilateral development agencies, to central and local government offices, regional organizations, the private sector, research institutes and non-governmental organizations, in addition local community members. These institutions include the World Bank, the Economic Commission for Latin America and the Caribbean (ECLAC), the *Presidencia del Consejo de Ministros de Peru,* the *Centro Nacional de Estimación, Prevención y Reducción del Riesgo de Desastres* (CENEPRED) Lima, the *Servicios Nacional Forestal y de Fauna Silverstre* (SERFOR), the Ministry of Environment of Peru (MINAM), the General Secretariat of the Andean Community (SGCAN), CARE Peru, CENEPRED Cusco, Cusco regional government, *Empresa de generacion electrica de Machupicchu*, the *Associación para la Conservación de la Cuenca Amazonica* (ACCA), the *Centro Bartolomé de las Casa* (CBC), *Municipalidad Distrital de Santa Teresa*, CENEPRED Piura, and Piura regional government.

These interviews were collected from a total of 6 different towns and cities spanning 3 countries, namely Washington (USA), Port of Spain (Trinidad & Tobago), Lima, Cusco, Santa Teresa and Piura (Peru). Given the variety of geographic locations, a few interviews were conducted by phone,

[10] Located in the Arequipa region, neighboring the Cusco region of Santa Teresa.

[11] 'Las Bambas' indicates a geographical area that includes Chuquibambilla, Lambrama District, Cotabambas and Tambobamba District, all of which reside in the Apurimac region, which also neighbor the Cusco region.

including through the use of media such as Skype, while the vast majority were carried out on-the-ground though face-to-face interviews.

Code	Date	Group	Organization	City / country
A1	19/02/2013	Multilateral organization	World Bank	Washington, USA
A2	10/7/2013; 17/8/2015	Multilateral organization	World Bank	Washington, USA
A3	11/08/2015	Multilateral organization	ECLAC	Port of Spain, Trinidad and Tobago
A4	11/09/2015	Multilateral organization	ECLAC	Port of Spain, Trinidad and Tobago
A5	28/08/2015	Multilateral organization	World Bank	Washington, USA
B1	15/03/2013	Central government	MINAM	Lima, Peru
B2	19/02/2013	Regional organization	SGCAN	Lima, Peru
B3	05/10/2015	Central government	SEFOR	Lima, Peru
B4	05/10/2015	Central government	SEFOR	Lima, Peru
B5	05/10/2015	Central government	MINAM	Lima, Peru
B6	05/10/2015	Central government	MINAM	Lima, Peru
B7	07/10/2015	Central government	MINAM	Lima, Peru
B8	06/10/2015	Central government	CENEPRED	Lima, Peru
B9	06/10/2015	Central government	CENEPRED	Lima, Peru
B10	07/10/2015	Central government	Presidencia del Consejo de Ministros de Peru	Lima, Peru
B11	05/10/2015	Central government	MINAM	Lima, Peru
C1	06/03/2013	International NGO	CARE-Peru	Lima, Peru
C2	09/10/2015	Regional government	Cusco regional government	Cusco, Peru
C3	09/10/2015	Regional government	Cusco regional government	Cusco, Peru
C4	09/10/2015	Research institute	Centro de Estudios Regionales Andinos Bartolomé de Las Casas	Cusco, Peru
C5	09/10/2015	Research institute	Centro de Estudios Regionales Andinos Bartolomé de Las Casas	Cusco, Peru
C6	09/10/2015	Regional government	Cusco regional government	Cusco, Peru

C7	09/10/2015	Local NGO	Asociación para la Conservación de la Cuenca Amazónica	Cusco, Peru
C8	12/10/2015	Private sector	Empresa de generacion electrica de Machupicchu S.A.	Cusco, Peru
D1	13/10/2015	Local community	n/a	Santa Teresa, Peru
D2	13/10/2015	Local community	n/a	Santa Teresa, Peru
D3	13/10/2015	Local community	n/a	Santa Teresa, Peru
D4	13/10/2015	Local community	n/a	Santa Teresa, Peru
D5	13/10/2015	Local government	Municipality of Santa Teresa	Santa Teresa, Peru
D6	13/10/2015	Local community	n/a	Santa Teresa, Peru
D7	13/10/2015	Local community	n/a	Santa Teresa, Peru
D8	13/10/2015	Local community	n/a	Santa Teresa, Peru
D9	13/10/2015	Local community	n/a	Santa Teresa, Peru
E1	20/10/2015	Regional government	CENEPRED	Piura, Peru
E2	20/10/2015	Regional government	Piura regional government	Piura, Peru
E3	20/10/2015	Regional government	Piura regional government	Piura, Peru
E4	20/10/2015	Regional government	Piura regional government	Piura, Peru
E5	20/10/2015	Regional government	Piura regional government	Piura, Peru
E6	20/10/2015	Regional government	Piura regional government	Piura, Peru
E7	20/10/2015	Regional government	Piura regional government	Piura, Peru

Table 1: List of interviewees

In terms of the content of the questions, they were aimed at understanding through which processes local households were able to participate in the decision-making process and management of the PRAA programme; what was or was expected to be the distribution of benefits of the PRAA programme among and within local communities; and what impact might the current PRAA activities have on the future well-being of local communities and their environment. In terms of the ways in which the questions were presented, the interview questions were formulated in such a way as to avoid the possibility of the respondents feeling that there are 'right' or 'wrong' answers.

In addition, the research also analyzed white literature, grey literature, archival records, policy documents, programme documents, project reports and assessment reports, and any other accessible documentation that relates to the PRAA, including all those produced by its implementing partners, including the World Bank, CARE Peru, the General Secretariat of the Andean Community, and the Peruvian Ministry of Environment.

3.6 Data analysis methods

The present research analyzed the data collected through the following four-step process: coding; connecting; categorizing; and describing. This approach reflects that of authors such as Saldaña (2009), Gibbs (2008), Grbich (2007), Bernard (2006), Ryan & Bernard (2003), Charmaz (2006) and Dey (1993, p.31), among others, who affirm that the core of qualitative analysis lies in the process of breaking data down into pieces (i.e., coding); understanding how these pieces may relate among each other (i.e., connecting); merging these pieces into new categories (i.e, categorizing); and providing a fresh description (i.e., describing).

The first step was coding. The current research adopted a bottom-up, 'data-driven' coding approach, according to which no pre-determined codes were adopted prior to the interviews taking place, since all the codes were allowed to emerge freely from the data collected (Gibbs, 2008, p.46). Saldaña (2009, p.3) defines a code as "*a word or short phrase that symbolically assigns a summative, salient, essence-capturing, and/or evocative attribute for a portion of language-based or visual data*". The process of coding involves applying these codes to the qualitative data collected by looking for patterns among ideas (Bernard, 2006, p.452) in order to segregate, re-group and re-link the data to consolidate its meaning (Grbich, 2007, p.21).

The second step was connecting. The present research connected code sets through a process of systematic comparison among data sets, which were interrogated through the formulation of analytic questions. This systematic process of comparing data through the formulation of analytic questions enables researchers to interrogate the data, and consequently to explore connections between different code sets (Dey, 1993, p.49).

The third step was categorizing. The present research clustered codes together through a conceptual process of categorization. Dey (1993, p.46) explains that categorizing is essentially a conceptual process, whereby codes are grouped together and reassembled in a novel way. In other words, "*coding generates the bones of your analysis. Theoretical integration will assemble these bones into a working skeleton*" (Charmaz, 2006, p.45).

The fourth step was describing. The present research adopted what Dezin (1978, p.33) defines as a 'thick' description, which includes information regarding the context of action, the intentions and meanings of the actors, and the evolution of the process in which actions are embedded. This

approach contrasts that of 'thin' description, which merely states facts (Dey, 1993, p.32). No software was utilized as part of this process.

3.7 Ethical considerations

The study received ethics approval by the University of Southampton's social sciences ethics committee. The main ethical consideration of the present study was the possibility that local community members may have worried about potential consequences of providing negative comments regarding the aid received through the technical cooperation programme under review, and thus may have felt at unease during the interviews. However, this concern was addressed upfront by explaining that all the information provided would have been accessible only to the researcher, that all the interviewees' identities would have been kept confidential and information provided would have been anonymised in all outputs, and that they may have withdrawn consent at any given moment should they have felt uncomfortable for any reason.

In particular, the information collected through the key informant interview process was used in an anonymous and confidential fashion. This means that although the content of the interviews has been used, direct attribution has been cautiously avoided and all information has been anonymised with a view to fostering more genuine discussions, as well as to safeguarding individual interviewees from the risk of negative retribution due to the divulging of potentially confidential or controversial issues. This aspect is particularly important in the context of the present research, given the very conflictual situation analyzed in Santa Teresa. In this regard, reference to any elements or personal information provided during the interviews that could have potentially run the risk of compromising the anonymous nature of the interviews has been carefully omitted from the quotes used in chapters four, five and six. Furthermore, this approach also helped to clarify that all the information gathered from representatives of various entities would not be used as the official position of those institutions, but rather as a reflection of personal opinions.

Stemming from the above, there is no reason to believe that the interviews caused any kind of distress or inconvenience to any of the interviewees. All participants were made fully aware of their participation in the study, no covert observation techniques were used, and consent was obtained through the signing of a consent form. All participants were over eighteen years of age. In addition, the interview dates and times were scheduled in accordance to the availability of the interviewees, took place where most convenient for the interviewees, and were paused if

requested by the interviewees. To ensure that participants felt totally at ease during the interview, the possibility to withdraw consent, together with the anonymity and confidentiality issues were explained to them upfront.

Chapter 4: The World Bank and community needs in Santa Teresa

4.1 Introduction

The present is the first findings chapter and will address the first research sub-question by analyzing if the design of the World Bank's CCA technical cooperation programme entitled 'Adaptation to the Impact of Rapid Glacier Retreat in the Tropical Andes' (PRAA) responded to the needs of the climate-affected water-stricken communities in Santa Teresa. It is necessary to clearly state from the outset that the present chapter will focus solely on the design of the PRAA by discussing the intended goals of the World Bank programme in Santa Teresa, and as such will not address the results and impacts of the specific activities implemented, which will instead be discussed and analyzed in great detail during the course of chapters five and six.

To present these issues, the present chapter will be divided into three main sections. The first section will focus on the resilience building needs of the local community in the context of the vulnerability of the people to climate change and its impacts on their lives and livelihoods. In this context, the section will also present the institutional and community based adaptive capacity of local people and government authorities in Santa Teresa. The second section will look at the political empowerment needs of the local community vis-à-vis the economic interests of government officials and private multinational corporations that gravitate around Santa Teresa. In doing so, the section will unveil the tensions and conflicts that arouse over access to and usage of water resources among the local community on one hand and government officials and private multinational corporations on the other. The third section will will analyze if the goals of the PRAA adequately reflected the two overarching needs of the local community detailed in the first two sections, namely the need for environmental resilience building vis-à-vis the impacts of freshwater shortages, and the need for community political empowerment vis-à-vis decision making in natural resource management.

4.2 Resilience building needs

The present section will discuss research findings related to the vulnerability of the local community to climate change and to the impacts of climate change and freshwater shortages in

Santa Teresa, in addition to presenting the institutional and community based adaptive capacity of local people and government authorities in Santa Teresa.

4.2.1 Santa Teresa: local population, vulnerability and impacts of climate change

Situated 6.5 km northwest of the world renown Machu Piccchu sanctuary, Santa Teresa has a total population of approximately 7,000 people (INEI, 2005) divided in little more than 2,000 families, of which eighty-six per cent live in rural areas (Fontenla *et al*., 2010, p.3). From an ethnic point of view, the entire population is of Quechua descent. The population density is very scarce, with an average of a mere five and a half inhabitants per square kilometer (Ministerio del Ambiente, 2003, p.11), and is divided into nine main communities, namely Totora; Sahuayaco; Paltaychayoc; Saucepampa; Yanatile; Andihuela; Ahobamba; Cochapampa; and Sullucuyoc.

Figure 1: Location map of Santa Teresa within the Cusco region

Internal mobility is particularly high among these rural communities, thanks to systems of extended family networks (Farfán, 2010, p.4).

The inhabitants of Santa Teresa are among the poorest in the region. According to the most recent data provided by the Peruvian national statistics institute (INEI, 2009), seventy per cent of the population lives in poverty; forty two per cent of children under the age of five are chronically undernourished; forty six per cent of the population lacks access to potable water; thirty per cent lacks access hygienic services; thirty per cent lacks access to electricity; ninety per cent of the population uses wood as the main source of energy for cooking, with a mere eight per cent using gas, and 0,001 using electricity.

One of the most immediately visible consequences of the poverty of the communities living in Santa Teresa is in the structure of the majority of homes – which contributes to making the local population susceptible to the consequences and impacts of climate change. Little over one per cent of homes are built with bricks or cement blocks (Houston Chronicle, 1998a, p.23) while the rest are built with wood, and for the most part lack safe roofs. To make matters worse, many of the homes have been built on river banks, thus increasing their susceptibility to sudden overflows.

In terms of internal organizational structures, the communities are managed by the General Assembly (*Asamblea General*), which is composed mostly by male heads of households. The main purpose of the Assembly is to set rules for community life, control the respect of said rules, and also form sub-committees to deal with specific issues relevant to community life in Santa Teresa, including health, schools, water and sanitation. In addition to the General Assembly, other types of local associations include 'COLCA', which is an organic coffee grower cooperative to which many farmers in Santa Teresa belong to. In particular, COLCA provides local farmers access to coffee markets, in addition to offering them opportunities to learn about and implement sustainable agricultural techniques (Dazé, 2011, p.12).

In order to understand how climate change is impacting the lives and livelihoods of communities in Santa Teresa, it is first necessary to understand what these livelihoods are. Most of the local population is engaged in growing honey and fruits such as bananas, passion fruit and avocado, as well as coffee, which represents the main source of income for most people. The produce is sold on markets in Cusco, the regional capital. In addition, some households also grow livestock, including guinea pigs, ducks, sheep and hens, while also engaging in local government infrastructure projects for extra income (Dazé, 2011, p.13).

The reason for the intrinsic vulnerability of Santa Teresa to climate change is to be found in its geographical morphology. Situated in the Urubamba River basin, 1,550 meters above sea level, characterized by a mountainous landscape, with steep slopes prone to landslides and erosion, the district of Santa Teresa is drained by a number of micro river-basin, all of which are fed by the Salkantay and Sacsara glaciers.

During recent years, this risk of large-scale slope failure for communities living in the Urubamba River basin has become ever more serious given the climate-induced rapid retreat of the Cordillera de Vilcanota, and the subsequent risk of mud slides, slope failures and outbursts of the Urubamba River. Over the past thirty years, the glacial coverage of the Cordillera has shrunk from 418 km^2 to 293km^2 (Torres and Gomes, 2008, p.50). While the Quelccaya Ice Cap, which tops the Cordillera Vilcanota, has already shrunk by over twenty per cent since 1963, the Qori Kalis glacier, which is its largest ice outlet, is vanishing even faster. At an alarming rate of 155 meters per year between 1998 and 2001, the glacier is retreating three times faster than the average annual

retreat rate for 1995-1998, and at a staggering thirty-two times faster than the average annual retreat rate for 1963-1978 (Thompson *et al*., 2006).

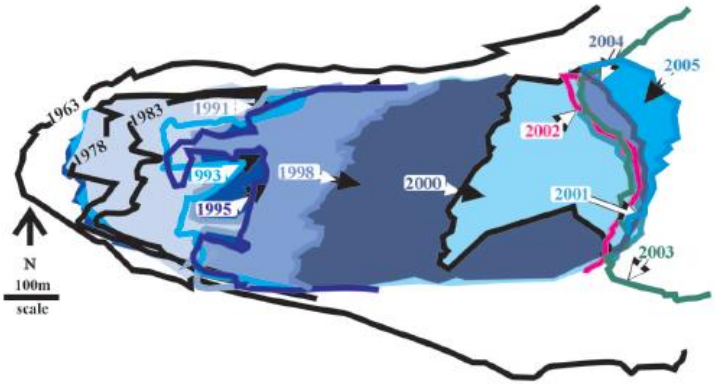


Figure 2: Retreat of Qori Kalis from 1963 to 2005 (Thompson et al., 2006, p.10537).

Sperling *et al*. (2008, p.19) estimate that the aforementioned glacier retreat will result in an initial increase of freshwater, followed shortly thereafter by a sharp decline of water availability as the glaciers disappear. According to

Figure 3: Expansion of the proglacial lake and retreat of Qori Kalis from 1991 to 2005 (Thompson et al., 2006, p.10537).

official documentation released by the Peruvian Ministry of the Environment in collaboration with the National Meteorological Service (Gálvez, 2013, p.140), it is anticipated that Santa Teresa may suffer a 21 per cent loss of hydrological resources by the year 2039.

With regard to the impacts of climate change on the lives and livelihoods of the local community, every single resident of Santa Teresa interviewed during the course of the present study noted that the changes in the climate were negatively impacting his or her quality of life and were having a very detrimental effect on local livelihoods (Interview: local community, D1; D2; D3; D4; D6; D7; D7; D9).

> "*Climate change is certainly affecting Santa Teresa. Before we had no droughts, we had more rain. There is less water. The glaciers are melting*."
>
> (Interview: local community, D1)

Among the several examples of environmental changes listed by local community members during the present investigation, the increasing shortage of freshwater resources was

systematically referred to as the first and most prominent problem that needed to be addressed (Interview: local community, D1; D2; D3; D4; D6; D7; D7; D9). These perspectives were echoed by representatives of the local Municipality (Interview: Municipality of Santa Teresa, D5) – who underscored the causal linkage between climate change, glacial melt and water resources –, and reflect the findings of the study carried out by Dazé (2011, p.13), according to whom the main climatic changes noted by both women and men in local communities in Santa Teresa included increasing temperatures and changing rainfall patters.

"*Climate change is a problem in Santa Teresa, especially for water resources. There are areas where before we had water, now we have none.*"
(Interview: local community, D2)

Community members highlighted that agriculture was one sectors most affected by climate-induced water scarcity, with farmers suffering the immediate consequences, and the rest of the local population having to face the knock-on effects (Interview: local community, D3; D4; D7). These findings confirm those of the study carried out by Dazé (2011, p.13), according to whom as a result of climate change the productivity levels of all the main sources of income had decreased, i.e., coffee, avocado and passion fruit; as had done that of the main food cops cultivated for personal consumption, i.e., manioc and vegetables.

"*Climate change is a problem, and it's getting worse and worse every day. The lack of water resources is an increasing problem, especially insofar as it is impacting the agricultural sector.*"
(Interview: local community, D3)

In addition, Dazé (ibid.) also found that animals had been affected by new diseases, while plants were increasingly disappearing as a result of new pests, thus negatively affecting the local biodiversity – a position confirmed by local community members interviewed during the present investigation (Interview: local community, D9).

"*Climate change is affecting us more and more each year. Temperature is rising. New species and pests have arrived. Water resources are being impacted. Glaciers are melting.*"
(Interview: local community, D9)

To complement the above, a quick review of the recent history of climate change-related catastrophes in the Urubamba River basin – in which Santa Teresa is located – is very useful in terms of framing the potential consequences of climate-induced glacial melt that local communities may find themselves facing.

In February 1998, devastation struck Santa Teresa as a huge chunk of the Salkantay glacier collapsed in the unpredictably and unusually warm weather. That day, at 7:25 in the evening, the vulnerability of Santa Teresa to climate change assumed dramatic proportions. The rumblings that the local people had initially mistaken for the railcars of the local train, turned out to be a twelve-hour, non-stop flash flood (McEntire & Fuller, 2002, p.131). It was not until the following morning that the extent of the devastation became clear. In addition to the seventeen people that lost their lives, one hundred fifty families, i.e., four hundred and thirty people, found themselves homeless (Houston Chronicle, 1998a, p.23); roughly eighty percent of the houses of the old part of Santa Teresa were destroyed, including schools, bridges, the electricity, water and sewerage systems, and the train depot – all of which cumulatively affected the lives of one thousand seven hundred people (OCHA, 1998).

As underscored by McEntire & Fuller (2002, p.131), what made this disaster all the more tragic is that it could have been avoided. Santa Teresa has been subject to similar events for many years, as demonstrated by the flash floods that occurred during the 1982-1983 El Niño, after which people simply returned to their homes. Repeated warnings failed to trigger any reaction, by either the local communities or – even more so – by the national and local authorities. The reconstruction of the local hydroelectric power station – which was shut down for over a year, with obvious consequences for the local population – cost the government a total of USD 400 million.

On 10 April 2004, another devastating debris flow crashed down into the valley, this time claiming the lives of eleven people, elevating the Urubamba River bed by almost three meters, disrupting drinking water facilities, and destroying ten houses, two railway bridges, as well as three hundred meters of railway (Carreño & Kalafatovich, 2006, p.79). For several days, giant boulders blocked the railroad, i.e., the only access route in and out of Machu Picchu Pueblo, thus trapping 1,500 people in the town (Vilmek et al., 2006, p.1041). According to Carreño & Kalafatovich (2006, p.79), this was the most destructive avalanche of all the events on record in this area – but it was not to be the last.

On 25 February 2010, the Urubamba River swelled to an unprecedented 1,100 cubic meters per second. This catastrophic event caused the death of twenty six people, wrecked one hundred commercial buildings (Blummer & Farquhar, 2010, p.2031), and shattered the livelihoods and homes of approximately twenty thousand people (The Economist, 2010). The River also severed twenty-eight kilometers of railway, this time trapping nearly four thousand people, which had to be rescued with helicopters that the government of Peru borrowed from Brazil. In terms of the financial impact of this latest disaster, estimates suggest that while the loss to the tourist industry amounted to at least USD 1 million per day, the damage caused to the local infrastructure totaled USD 240 million (ibid.).

Figure 4: Floodwaters from the River rush past buildings in Machu Picchu Pueblo (Associate Press, 20 Urubamba 10).

Notwithstanding the fact that small landslides have been routine around the Urubamba River basin area for centuries, according to Kozloff (2010) the aforementioned events that have been taking place during the past fifteen years are different. What eyewitnesses saw is known as an *aluvión*, i.e., a glacial flood burst, which is something quite different from a 'simple' mudslide. Experts around the world now recognize the clear causal link between climate change, rising temperatures, glacial melt, and the landslides/river outbursts that have brought grievance in the Urubamba River basin (ibid.).

4.2.2 Institutional and community based adaptive capacity

Against the backdrop of the aforementioned vulnerabilities, the question arises as per the capacity of local communities to adapt to the impacts of climate change on their lives and

livelihoods. The present study found said capacity to be constrained by three main issues, namely: lack of community cohesion; limited involvement of segments of the local community in decision making processes; and low levels of education.

The first issue was lack of community cohesion and commitment towards management and use of natural resources for the common benefit of all local community members (Interview: local community, D2; D6, D9; central government, B5; Farfán, 2010, p.11).

In this regard, local community members denounced that their fellow residents in Santa Teresa were interested in protecting environmental resources vis-à-vis the aforementioned climatic changes only to the extent that this would bring them tangible benefits (Interview: local community, D2; D6). These findings confirm the study carried out by Farfán (2010, p.11), who noted that in Santa Teresa there is a prevalence of individualism at the community level, and the argument postulated by Meinzen-Dick *et al*. (2002, p.654) according to whom there is an "*inverse U-shaped relationship between water scarcity and participation because those with plentiful water do not need to be active, and those who expect too little water have no incentive to be involved*."

> "*Unfortunately, a lot of people showed little interest in the real issues of climate change. Yes, they talk the talk of climate change, but in reality they were not interested in understanding the root causes, consequences and what could be done*."
> (Interview: local community, D6)

> "*People only react if they see that there is an immediate, tangible benefit for them. That is to say if they get something in return.*"
> (Interview: local community, D2)

According to both central governed authorities and local community members (Interview: central government, B5; local community, D2; D9), this approach revealed a short sightedness of local community members who failed to appreciate the likely long term consequences of a lack of collective commitment and cohesive efforts towards ensuring an appropriate and responsible use of the available freshwater resources for the benefit of the community as a whole.

> "*There is often an assumption that local communities are interested in preserving the natural environment, woods, rivers, etc. In reality, what the communities are interested in*

is improving their lives […] *They are not interested in the long-term* [environmental] *benefits."*

(Interview: central government, B5)

"The problem is that people are irresponsible. They don't think about the future, they only think about the present and what is happening here and now. It's not a matter of lack of opportunities. People need to start to understand that they should not only attend in exchange of gifts."

(Interview: local community, D2)

Furthermore, this opportunistic approach taken by community members in Santa Teresa echoes the arguments advanced by Stoian & Henkemans (2000), according to whom the consequences of environmental degradation are likely to be looked upon positively by local communities to the extent that they are ensured food security (ibid., p.316) and access to basic services, such as healthcare, schooling and transportation (ibid., p.299).

"What happens is that when there are private companies that organize something, like Luz Del Sur, they give out gifts to the population, some are small gifts, like t-shirts or sweaters, others may be larger gifts. In these cases, there is a large turnout and people attend. But if there are no gifts, let's say you organize an awareness raising meeting, or a capacity building workshop, people don't go. They prefer to take care of their own personal business and economic activities"

(Interview: local community, D2)

Accordign to Farfán (2010, p.11), this prevalence of individualism at the community level limited the possibility of developing a collectively owned vision and understanding of the best and most appropriate path to mutually follow in order to adapt to the impacts of climate change.

The second factor that limited community based adaptive capacity was constraints vis-à-vis the ability of certain community members to participate in an inclusionary decision-making process. In particular, this issue would appear prominent in the case of gender relations. According to the findings of the study carried out by Dazé (2011, p.14), the decision-making remit of women was for the most part limited to issues pertaining the growing and preparing of food, family health and rearing of small livestock. Inevitably, this limited the possibilities for women to strengthen their adaptive capacity to climate change by accessing skills training and information on possible coping strategies.

The third factor constraining the adaptive capacity was the lack of education, both generally and specifically in terms of climate change. According to the census of 2007 (INEI, 2007), twelve per cent of the local population has not completed primary education, while forty-four per cent has gone no further than primary education. In terms of climate change-related education, based on empirical research carried out by Farfán (2010, p.12), there were very limited educational instruments, strategies and materials related to climate change prior to the implementation of the PRAA.

With regard to the institutional capacity of the Municipality of Santa Teresa and its approach to adapt to the aforementioned impacts of climate change on the lives and livelihoods of the local community, the present study found it to be constrained by three main shortcomings: lack of community involvement in CCA social assistance programmes; lack of effective integration of CCA into development planning at the district level; and absence of disaster management or response mechanisms.

> *"Although we have decentralized many responsibilities and endeavoured to build the capacities of local governments, their capacities are still limited, including in terms of how specific policies should be applied at the local level. It should not be this way.*"
>
> (Interview: central government, B7)

One of the main problems of the approach taken by the Municipality of Santa Teresa vis-à-vis the need to address the impacts of climate change at the community level was the inability to involve community members in adaptation efforts (Interview: Municipality of Santa Teresa, D5). These findings echo those of Farfán (2010, p.6) who noted that community members assumed that the responsibility for ensuring climate-proof agricultural lands and crops, food security, livelihood protection and safe homes vis-à-vis natural disasters lied solely with the regional government and local Municipality.

> *"Here we have a problem* […] *things are managed in the fields like they were 500 years ago, with no interest in adapting to new challenges and implementing new knowledge. They all just want us to solve their problems*."
>
> (Interview: Municipality of Santa Teresa, D5)

A second issue to highlight is that climate change adaptation and disaster risk management were not effectively integrated into development planning at the district level. In this regard, Dazé

(2011, p.14) and Farfán (2010, p.6) express concerns about lack of planning and implementation of disaster risk reduction strategies, especially vis-à-vis early warning systems for glacial lake outbursts and landslides, which appeared to result from the fact that disaster management efforts were more oriented towards emergency response rather than preparedness and risk reduction.

The third issue relates to actual disaster management or response mechanisms. In this regard, the only mechanism identified by Farfán (2010, p.6) was a local district civil defense committee, which took action only once that a natural disaster has struck, and did so primarily to ensure access to areas affected by the disasters.

4.3 Political empowerment needs

Having thus far discussed the vulnerability of Santa Teresa to climate change, looked at the impacts of water shortages on the lives of the local community, and reviewed the limited adaptive capacity of residents and public institutions, the present section will analyze the ways in which the contraposition between the economic interests of central government authorities and the political empowerment needs of the local community gave birth to a number of conflicts among local residents and government authorities over the use and management of freshwater resources.

4.3.1 The political agenda of the Peruvian government

In Santa Teresa, the local community expressed its need for political empowerment vis-à-vis government authorities and private multinational corporations by giving birth to a number of water resource-related conflicts. However, a necessary pre-condition to analysing these conflicts is to understand the strong economic interests of government officials and private multinational corporations that gravitate around Santa Teresa.

In Santa Teresa, the central government was interested in increasing revenues by exploiting the huge hydroelectric potential of the area (Interview: international NGO, C1; Municipality of Santa Teresa, D5). In practical terms, this meant supporting the interests of one extractive company – Luz del Sur – and ensuring that its extractive project did not encounter the resistance of local communities (Interview: research institute, C4; central government, B5).

"*In the case of Santa Teresa, there is a hydroelectric plant that produces 17 per cent of the electricity of the country. The Salkantay glacial* [above Santa Teresa] *has a direct impact on the hydroelectric capacity of the plant*."

(Interview: international NGO, C1)

"*Here in Santa Teresa, the main avenue for economic exploitation is in the hydro electrical sector due to the geographical characteristics of the area.*"

(Interview: Municipality of Santa Teresa, D5)

To understand the case of Santa Teresa, it is necessary to start by framing it within the broader context of the agenda and interests of the Peruvian central government. Extractive activities carried out in Peru over the course of 2018 alone were worth an estimated 20.8 billion US dollars (Leotaud, 2018). As a result, there is a consistently growing interest within the central government to increase opportunities to export local natural resources to increase revenues, which in practical terms means supporting the efforts of extractive companies, and ensuring that their extractive projects do not encounter the resistance of local communities (Interview: research institute, C4, C5; central government, B5; regional government, C6). These findings are in line with those of scholars such as Bebbington (2009, p.101), Bebbington & Bebbington (2011, p.135), Bebbington et *al*. (2010, p.312), Burchardt & Dietz (2014, p.475), Gudynas (2009, p.195) and Veltmeyer (2013, p.87) who note that in Latin America the state has now taken the lead in driving extraction based-expansion.

"*There is a consistently growing interest of the government to increase opportunities to export local natural resources to increase revenues. As a result, the government is looking for ways through which projects can be used to maximise these export opportunities.* […] *There are huge interests at stake*."

(Interview: research institute, C4).

"*Often times the approach taken by the central government is over-protective of the interests of certain actors, especially public or private enterprises that engage in extractive industries, such as mining.*"

(Interview: central government, B5)

In many locations across Peru, this convergence of interests among central government authorities and powerful extractive companies has fuelled the resentment of local communities,

and in several instances has created rifts between the agendas of national authorities and the needs of local communities (Interview: central government, B5), which in turn have given birth to conflicts that have resulted in an estimated 50 billion US dollars' worth of extractive projects coming to a halt (Interview: research institute, C4, C5; central government, B5).

> "*This unfortunate approach has and still is cause for strong resentment and opposition of local communities. Private companies are pleased to accept this protection, but in reality they do not need it.* […] *We know of instances where the greater involvement of the government has resulted in riots and deaths, especially in those instances where there are interests of companies engaged in extractive enterprises. The government is only too quick to intervene to safeguard these interests, because it is looks upon them as critical to ensuring economic growth.*"
>
> (Interview: central government, B5)

> *There is an enormous quantity of extractive projects that are affected by social conflicts, for a combined of 50 billion US dollars' worth of private extractive projects that are paralyzed due to social conflict.* […] *Often what is at stake is the availability of fresh water resources.*"
>
> (Interview: research institute, C5)

For instance, in Tia Maria[12] protests revolve around the extractive activities of a Mexican-owned company, Southern Copper. With a declared State of Emergency, accusations of terrorism, suspension of constitutional rights, the arrival of thousands of soldiers and policemen, open fighting, over two hundred injuries and seven deaths, the situation in Tia Maria was arguably one of the most worrisome in the entire country at the time of the present investigation (Hill, 2015). Along the exact same lines, conflicts in Las Bambas[13] over a US dollar 7.4 billion copper project being carried out by a Chinese-owned company, MMG, resulted in the arrival of one thousand five hundred policemen and one hundred fifty military officers, seventeen injuries, three protestors shot dead, and a thirty-day State of Emergency in the two regions of Apurimac and Cusco – which coincided exactly with the period during which the present field work was carried out (BBC News, 2015; Voice of America, 2015).

[12] Located in the Arequipa region, neighboring the Cusco region of Santa Teresa.

[13] 'Las Bambas' indicates a geographical area that includes Chuquibambilla, Lambrama District, Cotabambas and Tambobamba District, all of which reside in the Apurimac region, which also neighbor the Cusco region.

These realities echo the arguments put forth by Bebbington (2009, p.103) and Lynch (2012, p.370) who argue that in a context such as that of Peru, in which local communities are frustrated by changes in water availability, lack of decision-making power and failed recognition by government institutions of their mounting water needs, it is almost inevitable that local conflicts eventually emerge.

In areas very close to Santa Teresa, community resistance to extractive activities has been won by personally threatening the local population (Interview: regional government, C2).

> "*We* [i.e, the regional government of Cusco] *had a conservation project in an area that was becoming increasingly affected by the mining sector, which was gradually eroding natural forest resources. In the context of this project, we had set-up a regular consultative mechanism that strongly involved the local population. At the beginning, there was a strong and very active participation in the meetings. During these meetings, there started to be a growing number of conflicts within the local population, specifically among those whose livelihoods were linked to the mining activities and those who were not linked to these activates. Then, at a certain point, fewer and fewer people started to attend the meetings. Eventually, no one showed up any more. Then one day people started coming to my office individually, many with tears in their eyes, explaining that nobody was attending the meetings anymore because they had been threatened by the mining companies, who had told them that if they continued creating problems, then many people would have lost their jobs. There are many, many mining sites like this not far from Santa Teresa.*"
>
> (Interview: regional government, C2)

However, in spite of these and many, many other similar stories of threats and adverse retribution – which echo the long list of conflicts across Peru recounted by Bebbington et *al*. (2010, p.319) –, community opposition to extractive projects – especially mining – is not decreasing in the south of Peru (Interview: research institute, C4, C5; central government, B5).

> "*More you try to tell local communities that their region will lose millions of dollars without these activities, more you get nowhere. People only care about what will happen to them today, maybe tomorrow. Nobody thinks ten years down the road*."
>
> (Interview: central government, B5)

However, with enormous economic interests at stake, and confronted with the limitations of approaches solely based on violent repression, representatives of the regional government in Cusco, NGOs and research institutes claim that the central government has been working towards finding ways to manipulate the local population in order to diffuse the violent opposition to extractive projects. In this context, the solution being increasingly sought is that of attempting to silence protesters by proposing the implementation of local social development programmes, aimed at ameliorating infrastructure, housing, transport and other social services (Interview: research institute, C4, C5; central government, B5; regional government, C6).

> "*The question is how can the government put in place an enabling environment in which extractive practices can be maximised? It is in this context that many social development projects have been undertaken. In these areas there are strong conflicts that are going on right now related to the mining industry. We have been working in these areas for the past 15 years, and never before had we seen social development projects like we are seeing now.* […] *These projects are government funded. There is clearly a strong link between the interests of the government and private investments with a view to promote extractive industries on the one hand, and on the other hand the development of these social development projects that are blatantly aimed at calming and appeasing the local population so as to avoid social conflict.* […] *There are many people that benefit much more from these mining activities than the local population, who are supposedly compensated through the social development projects.*"
>
> (Interview: research institute, C4)

> "*It is true that these social projects do have benefits for the local population, but they do not compensate for the damage that is caused.*"
>
> (Interview: research institute, C5)

> "*Development projects are at times developed to avoid conflicts occurring, especially in those areas where there are mining activities going on.* […] *The truth is that the objective of these interventions is often to precisely that of mitigating or – even better – avoiding social conflicts opposed to the mining activities.*"
>
> (Interview: regional government, C6)

4.3.2 Access and usage of water resources

Having discussed the strong economic interests that gravitate around Santa Teresa, the following sections will focus on the conflicts that arouse as a result of the contraposition between these interests and the needs of the local community. However, prior to doing so, the present section will first present the conflicts that arouse among the local residents of Santa Teresa over access to water resources and usage rights, as well as over how these rights differ between personal consumption and usage for productive activities, such as farming, agriculture and livestock.

> *There are a rapidly increasing number of conflicts in areas that are affected by water scarcity, especially during the dry season, among the local populations over who has more access to the water resources.*
>
> (Interview: local NGO, C7)

The first reasons behind the conflicts among community members in Santa Teresa was that the increasing shortage of water resources for agricultural purposes had pushed farmers to use public lands at higher altitude, which had traditionally been used for livestock. However, in order to use the higher slopes for agricultural purposes, the forest cover on said slopes was cleared. This practice had resulted in the greater instability of the slopes, which in turn increased the risks of landslides and erosion (Dazé, 2011, p.14).

> "*Lands at higher altitude are increasingly being used for agricultural purposes, whereas traditionally these lands have been used for livestock. This is resulting in conflicts among the local population for the use of the increasingly scarce land resources*."
>
> (Interview: Municipality of Santa Teresa, D5)

A second reason flaring these conflicts was the fact that farmers were increasingly using slash and burn practices, which the vast majority of community members recognized as having negative environmental impacts and were thus opposed to.

> "*Slash and burn practices are still widely used by farmers. This needs to stop.*"
>
> (Interview: local community, D8)

To make matters even worse, areas surrounding Santa Teresa were also affected by small, informal mining activities, which were causing further conflicts.

"*Although small, these* [mining] *activities were impacting the hydrological resources of the areas and creating many tensions and conflicts among the local community.*"
(Interview: regional government, C6)

In addition to the above, the local community felt isolated and abandoned with respect to their water needs, and this aggravated the sense of frustration and concern that fueled many of the community-based conflicts described above (Interview: local community, D8).

The existence of these conflicts mirrors the arguments postulated by Lynch (2012, p366), who found that in Peru conflicts over scarce water resources occurred as a result of competition among different productive activities, such as agriculture and mining. Furthermore, these findings also echo the positions argued by Verkooijen (2011, p.40) according to whom, in the absence of technical cooperation programmes on CCA, in the mountainous regions of Southern Peru local practices and traditional livelihood approaches are highly likely to result in conflicts in the distribution of natural resources, and the empirical research presented by Batterbury & Forsyth (1999, p.27), who illustrate examples of negative community based adaptation practices. These conflicts also confirm the findings of the research carried out Farfán (2010, p.11), who described conflicts in Santa Teresa among community members as resulting from conflictual – and inappropriate – approaches to dealing with climate-induced water shortages.

4.3.3 Lack of institutional commitment and manipulation of local fears

In addition to the aforementioned conflicts over access and usage of water resources, tensions also emerged in Santa Teresa over the presumed lack of commitment of the Municipality of Santa Teresa towards addressing the impacts of climate change. Stakeholders involved in these conflicts included the local community, the Municipality and local NGOs.

In light of the aforementioned shortcomings of the approach taken by the Municipality of Santa Teresa to address the severe challenges posed by climate-induced water scarcity, community members accused local authorities of lacking interest towards activities aimed at mitigating the impacts of water scarcity (Interview: local community, D2, D4).

"Local government entities, such as the Municipality, should take action to address the impacts of climate change. Unfortunately, there is a lack of interest in all those activities that do not bring a visible, immediate and tangible benefit."

(Interview: local community, D4)

In rejecting these accusations, the Municipality claimed that it had been proactive in supporting the implementation of activities aimed at improving local livelihoods vis-à-vis water scarcity (Interview: Municipality of Santa Teresa, D5).

"*The Municipality is doing all it can to improve the living conditions of people who have been affected by the fewer water resources that are available in Santa Teresa as a result of the melting of glaciers*."
(Interview: Municipality of Santa Teresa, D5)

In this regard, the Municipality of Santa Teresa denounced that the root problem of the tensions among the two groups lied more in the way in which the water shortage problem was presented (and understood) than in the actual problem itself (Interview: Municipality of Santa Teresa, D5). By this, Municipality officials were most certainly and absolutely not implying that water shortages were not affecting local residents, but rather suggesting that the community members had been deliberately misinformed of the extent and timeframe of the possible consequences of the water shortages (Interview: Municipality of Santa Teresa, D5; local community, D2).

"*People think that the impacts* [of water shortages] *will be greater than what they actually will. They are misinformed.*"
(Interview: Municipality of Santa Teresa, D5)

In order to piece together these claims, further data triangulation was necessary. In particular, to fully understand the issue of local fears vis-à-vis the impacts of water shortages, the role of local NGOs operating in proximity of Santa Teresa needs to be introduced and discussed.

According to representatives of local NGOs, their main goal was to protect the interests of the local people and to help them to voice their concerns vis-à-vis local and national authorities, as well as private companies and other stakeholders. In practice, this meant advocating on behalf of the communities for the protection of their environmental heritage, as well as helping them to find ways to safeguard their natural resources vis-à-vis the risks posed by external stakeholders, such as extractive companies (Interview: local NGO, C7).

These findings are in line with the arguments advanced by Coe (2009, p.430), according to whom local NGOs in Peru present themselves as representing the true interests of the communities in

which they operate, pursuing their interests and advocating for their needs. However, Coe argues that the reason for which local NGOs present themselves in this way is to secure continuous funding (ibid). For small local NGOs to survive, they need to ensure a sustainable inflow of financial resources, which are received directly by international donors, or otherwise channelled through government aid agencies (Lewis, 2017, p.19; Feldman, 2001, p.242).

In this regard, local NGOs in the Cusco region safeguarded their *raison d'être* by showcasing their added value compared to other development stakeholders, including international NGOs, large multilateral organizations and government agencies. According to NGO representatives, it was precisely their intrinsic knowledge of local communities, their geographical proximity to them, and their unique understanding of their needs, concerns and socio-environmental reality that set them apart from all other development stakeholders (Interview: local NGO, C7).

> "*There are an ever-growing number of institutions, local, national and international all wanting to deal with climate change issues in our region. However, to deal effectively with these issues you need to understand the local population, you need to understand the challenges they face on a daily basis, and how these have changed over time. In other words, you need to have a long-standing and well-rooted presence in those communities. This is exactly what we have*."
>
> (Interview: local NGO, C7)

However, in spite of their declared goal of acting in the interest of local community members, according to residents of Santa Teresa, as well as to representatives of regional research institutes, of the local government, of the central government, and of multilateral organizations, it was local NGOs that flared fear and resentment among local communities against local authorities vis-à-vis water shortages for their own interests and personal gains (Interview: local community, D2; D3; multilateral organization, A5; central government, B3; B5; B6; regional government, C2; research institute, C4; research institute, C5; regional government, C6).

In this regard, a very useful starting point is to note that while one the one hand representatives of some local NGOs told community members that Santa Teresa would have lost half of its freshwater resources between 2018 and 2023 (Interview: local NGO, C7; local community, D3; research institute, C5; Municipality of Santa Teresa, D5), on the other hand the very latest scientific data estimates that Santa Teresa may lose 21 per cent of hydrological resources by the year 2039 (Gálvez, 2013, p.140) – a very serious loss, without doubt, but considerably less and further removed in time compared to that predicted by some local NGOs.

"*NGO leaders have an interest in instilling fear in local people.*"
(Interview: research institute, C5)

The question, at this point, is "why?". Why would local NGOs benefit from exacerbating local tensions? To answer this question it is first necessary to briefly take a step back and recall that – as previously explained – the Peruvian central government is increasingly implementing social development schemes to attempt to diffuse local tensions in those areas that are affected by extractive activities in the south of Peru (Interview: research institute, C4, C5; Bebbington, 2009, p.106). However, in order to implement these projects, the central government needs to rely on local implementing partners; partners, that is, who can count on the trust of the communities and local population.

According to local community members, representatives of multilateral organizations, and representatives of the central and regional government who have direct experience in the management of development projects implemented in the Cusco region through local NGOs, these NGOs fraudulently manage the financial resources allocated to them, as opposed to using them for the benefit of the local communities (Interview: local community, D2; central government, B3; regional government, C2; multilateral organization, A5).

"*What really happens is that the NGOs get the money from the central government social development schemes, they keep most of it for themselves* […] *they do not carry out the real fieldwork; in fact they do hardly anything at all. So while the local population becomes increasingly frustrated with the fact that nothing actually happens in practical terms, the NGOs continue to receive funding. They are double-faced. They are literally cheating both the central government and local communities.*"
(Interview: regional government, C2)

"The local population is very suspicious of how local NGOs manage financial resources. They do not have a lot of confidence in them, and this diminishes the likelihood of their engagement. There is a lack of transparency.
(Interview: local community, D2)

"Within these organizations there is so much deficiency in terms of governance, accountability and so on. There are times when you have to wonder what the motivation is."

(Interview: multilateral organization, A5)

"[Local NGOs] *do not comply with the same standards of financial accountability* [that the government does]. *Therefore, giving money directly to NGOs is a bit… eh, not that reliable, shall we say.* […] *NGOs can justify spending money – that is very easy –, by simply producing receipts.* […] *Even within the government there are irregularities sometimes, but there things are much worse. Many NGOs claim to support local communities, but they don't.*"

(Interview: central government, B3)

These findings echo those of Dangino (2003, p.10) and Coe (2009, p.429), according to whom the flourishing of 'well behaved' registered NGOs in Peru, which contrasts the sharp decline in the number of 'trouble-making' activist-oriented organizations, can be explained by the fact that local NGOs in Peru are far more interested in securing funding from large donors (who are unlikely to provide said funding to 'trouble-making' organizations), than they are to serve the true interests of local communities in Peru. Furthermore, these concerns echo those advanced by Lewis (2017, p.19) according to whom many NGOs *"have now become vehicles for corporate interests rather than for consolidating democratic structures by confronting local power structures or challenging the state*."

Having explained the interest of local NGOs in government-supported social responsibility schemes, it is now possible to understand how local NGOs benefit from installing fear among local communities vis-à-vis the impacts of climate change. Moreover, in order for local NGOs to be entrusted with government funds as implementing partners of social development schemes, it is first necessary for these schemes to be approved by the central government, which is something that – according to representatives of local research institutes (Interview: research institute, C4, C5) and Bebbington (2009, p.107) – only happens when government authorities feel the need to silence local community protests – protests which, in turn, only take place to the extent that local communities fear the impacts and consequences of the extractive activities. Otherwise stated, when local communities fear and protest against extractive activities, local NGOs receive government funding to implement social development schemes (Interview: research institute, C4; C5; central government B5; B6; regional government, C2).

"What happens is that they want to act as intermediaries between the companies and the central government on the one hand, and the local population on the other, with the pretence of serving the true interests of the local people. In reality, they were unnecessary

> *intermediaries, who in fact increased the level of tension and potential conflict through a process of disinformation."*
>
> (Interview: central government, B5)

> "*There are shameful situations* [in the Cusco region] *in which local NGOs use local people as human shields during protests. The way in which it often works is through forms of blackmail, whereby NGO leaders threaten the mining industry that they will rally people against them unless they receive some kind of personal benefit for keeping people quiet. In addition to financial interests, there are also political interests.*"
>
> (Interview: research institute, C5)

Unfortunately though, the reasons for which NGOs operating in the proximity of Santa Teresa were accused of attempting to manipulate local fears did not stop with fraudulent mismanagement of financial resources and blackmail, but further escalated into land expropriation.

Recounting events that took place not far from Santa Teresa, representatives of the Cusco regional government (Interview, regional government, C2), explained that local communities – whose fears of environmental degradation had been manipulated by local NGOs – in an attempt to safeguard their natural resources, pushed for the establishment of privately managed protected areas, as opposed to publicly managed ones, backed by the promise of technical support of NGOs, who were appointed as temporary administrators of these lands. This support, however, came at a cost.

> "*What they* [i.e., the NGOs] *do is to carry out consultancy work, supposedly in the interest of the communities, to help protect their natural resources. But then, they charge the communities for their consultancy work and, when the communities can't or don't pay, they expropriate them from their resources, which the local communities had previously agreed that they* [i.e., the NGOs] *could manage on their behalf. There are many cases of this. When the local communities try to retaliate and protest against this injustice, it is usually too late from a legal point of view.*"
>
> (Interview: regional government, C2)

The case of Santa Teresa was no exception. As soon as a foreign-owned, large multinational hydroelectric company received approval from the central government to carry out a feasibility study on the implementation of a hydroelectric project in Santa Teresa, local NGOs – who had

never shown an interest in Santa Teresa – immediately started targeting the area, and installing fears among the local population vis-à-vis the presumed catastrophic consequences of the proposed project (Interview: regional government, C2).

> "*NGOs that had never worked in that geographical area and that had never shown any interest in working in those environmental matters, all of a sudden tried to get involved in seeing the possibility of receiving financial resources.*"
>
> (Interview: regional government, C2)

While tensions surrounding the new hydroelectric project played a decisive role in fuelling the aforementioned local-level conflicts among community members and the Municipality of Santa Teresa, it was not long before they escalated and gave birth to a different and far greater conflict altogether, this time involving not only local stakeholders, but also national and international players, the consequences of which would have seriously violent repercussions – as the rest of the present research will analyse in detail.

4.3.4 Exploitation of local hydrological resources

Notwithstanding the significance of the conflicts described above, none of the situations presented thus far gave birth to an intricate array of controversies, fuelled an entwined labyrinth of accusations, involved a seamlessly endless quantity of stakeholders, and spiralled into a full-fledged violent confrontation, as did the showdown between the people of Santa Teresa and the hydroelectric private company Luz del Sur.

On 24 August 2012, Luz del Sur – one of the largest energy companies in Peru, and a subsidiary of California-based company Sempra Energy – requested permission to the Government of Peru to carry out feasibility studies related to the potential for the generation of electric energy in the district of Santa Teresa (La Republica, 2013).

Initially, local residents of Santa Teresa signed off on the environmental feasibility study for the 'Santa Teresa II' hydroelectric project, confirming not only their acceptance of the project, but also indicating that the project would have caused no damages to the local water and environmental resources. This initial acceptance of the project by local community members was largely based on previous negotiations between the local community and another private company – Andean Hydro – that had proposed a hydroelectric generation project that would have

supposedly opened jobs for the local residents, as well as helped to preserve the environment (Morla, 2015). However, the project of Andean Hydro did not meet government approval, and thus never got off the ground.

> "*At the beginning, the local population in Santa Teresa was enthusiastic about the hydroelectric project, because they understood that they would benefit from much greater and much cheaper availability of electricity resources. Then things took a turn for the worst.*"
>
> (Interview: regional government, C2)

No sooner did the local communities in Santa Teresa realize that Luz del Sur was not going to meet their requests for cheap energy and greater employment, they immediately attempted to contact the minister of Energy and Mines (MEM), Jorge Merino Tafur, to protest against the project and to forewarn that, should the initiative move forward, they would have done all they could to obstruct the project by bring the town to a standstill (La Republica, 2013; Interview: Municipality of Santa Teresa, D5)

> "*We* [i.e., the local community] *spoke with a company* [i.e., Andean Hydro] *that wanted to do things properly and the government didn't accept it, and now they want us to embrace Luz del Sur. We will not allow it.*"
>
> (Morla, 2015).

> "*It would now appear that they* [i.e., the local community] *were tricked into signing off on the* [environmental feasibility] *study without realizing what they were signing.*"
>
> (Interview: Municipality of Santa Teresa, D5)

Disregarding the initial protest, on 25 May 2013 the Government approved Ministerial Resolution n.204, by means of which it allowed Luz del Sur to carry out the requested feasibility studies (El Peruano, 2015). Just a few days later, the MEM organized a workshop in which representatives of Luz del Sur presented the vision of the company for energy generation in Santa Teresa (La Republica, 2013). Local residents did not take this well.

> "*I understand that the country has energy needs, but these hydroelectric activities are greatly affecting Santa Teresa. They are affecting the availability of water resources. They only want money, and do not respect the local environmental resources.*"
>
> (Interview: local community, D8)

Local farmers who rely entirely on the cultivation of coffee, denounced that their sole livelihood would have soon be jeopardized due to the damages that the natural water springs may suffer, which are essential for keeping their agricultural lands humid and fertile (La Republica, 2013). A further argument advanced by stakeholders in Santa Teresa was that the project contradicted Peruvian national law, insofar as it proposed to carry out excavations in an area that bears direct environmental consequences on the protected site of Machu Picchu (Morla, 2015).

"*The feasibility study has been rejected* [by the local community]*, and people are very unhappy about the project. The people have no trust in the company.* […] *Santa Teresa II is a major project. The local population is very unhappy about this.*"
(Interview: Municipality of Santa Teresa, D5)

More to the point, the reason behind the aforementioned concerns lied in the fact that approximately 20 kilometers of the Vilcanota River would have had to be dried in order to build the tunnel envisaged by the hydroelectric project. To make matters more worrisome, a similar approach had already been taken in 2010, when Luz del Sur built a large hydroelectric plant near Cusco as part of the Santa Teresa I project (Morla, 2015).

"*Water resources that used to exist have now disappeared. In addition maybe to climate change, this has also been caused by the appearance of hydro electrical projects carried out by large companies such as Luz del Sur, which are those that have impacted the most local water resources.*"
(Interview: Municipality of Santa Teresa, D5)

These fears were substantiated by the fact that as soon as the Government approved Ministerial Resolution n.204, heavy duty vehicles of Luz del Sur started using the small local roads for their explorations, with the result that the roads started to give way under the weight of the trucks, and deep cracks appeared. Needless to say, for many people in Santa Teresa who have built their houses in proximity or on the fringes of these roads, and that rely on these roads for trade and inter-town movement, this became an issue of the upmost concern (La Republica, 2013).

"*We are looking at irreversible environmental impacts. Where is the social responsibility of these companies? What environment will we leave our children and nephews?*"
(Interview: local community, D8)

Cognizant of the inevitability of the social conflicts resulting from the rising social tensions, the Director of the Local Water Authority (ALA) of Quillabamba, Luis Armando Nieto Ramos, decided to step in and take timely action. On 15 June 2013, just three weeks after the central government had passed Ministerial Resolution n.204, ALA announced that it would not grant any permission to the Luz del Sur company for the use of water in the project Santa Teresa II, given that the relevant documentation was still under careful scrutiny, and that the means of implementation outlined in the dossier of the proposed project would have needed to be cross-referenced against the water management procedures established by the law (La Republica, 2013).

In addition, the Director of ALA promised that he would personally carry out a visual assessment of the situation in order determine the extent to which the impact of the proposed project on the natural springs may negatively affect the local agricultural production, as well as the availability of freshwater for personal use by the inhabitants of Santa Teresa. In this regard, he subsequently reiterated that – in accordance to the law – the first thing to do was to assess the water needs of the local population for their daily necessities, and the second was to assess the water needs for agricultural purposes, prior to taking into account eventual claims on the use of the water resources advanced by third parties, such as Luz del Sur (ibid.).

In this regard, it is important to highlight that the legal rights of local communities vis-à-vis prioritized access to water resources are well documented by the Peruvian legislation. According to said legislation, access to water resources is prioritized for the satisfaction of people's prime necessities given that this is a fundamental right that has precedence over any other use, including in times of drought (Government of Peru, 2009, art.2). In particular, all levels of government are called upon to respect the special importance that land and territories have for the cultures and spiritual values of the local populations (World Bank, 2007, p.22), including – according to law n.29338 (Government of Peru, 2009, art.3) – in terms of the optimal use of water resources, which should be based on the social, economic and environmental values of local populations. Furthermore, according to Article 25 of the Peruvian *Ley General del Ambiente* (law n.28611), environmental impact studies should provide information on the direct as well as indirect impacts of proposed activities on the social and natural environment, in the medium and long term (World Bank, 2008a, p.19). In addition, the legislation also calls for the satisfaction of the socio-cultural, economic and environmental needs of present and future generations in the use and sustainable management of water resources (Government of Peru, 2009, art.3).

As a result of these timely actions, with the local authorities unexpectedly siding with the communities in Santa Teresa – to the point of openly contradicting a Ministerial Resolution –, the

activities envisaged by Luz del Sur suddenly came to a grinding halt – without any violent conflicts of any kind.

On 31 March 2014, the World Bank (whose role in the events just described will be analysed at great length in the following chapters) concluded its CCA programme in Santa Teresa (World Bank, 2014, p.i). At that point in time, Santa Teresa was a conflict-free, peaceful town. This peace, however, was destined to be short lived.

In an astonishing turn of events, on 21 March 2014 – ten days before the World Bank programme came to an official closure – a high level government delegation, personally led by the Chief of Staff (*Jefe de Gabinete*), Ana Jara, visited the province of La Convención (of which Santa Teresa is the capital) to meet with civil society leader and president of the *Comité Central de Lucha* of La Convención, Ricardo Caballero – a supposedly strong opposer of the Santa Teresa II project. To the surprise of many, the meeting resulted in the signing of a document by the President of the *Comité Central de Lucha*, Ricardo Caballero, the Chief of the Peruvian Cabinet, Ana Jara, the Minister of Agriculture, Juan Manuel Benites, and the Minister of Energy and Mining, Rosa Maria Ortiz, all of whom agreed on the resumed implementation of the Santa Teresa II hydroelectric project (AmericaNoticias.pe, 2014).

While the signing of the agreement may appear seemingly inexplicable, it acquires clearer contours when inserted in the broader scope of the document, which included a commitment of USD 7.7 million government funds to be disbursed through *Agrobanco* in support of the renovation of 2,000 hectors of coffee plantations to be carried out by local coffee producers in La Convención (ibid.). These concessions – which were part of the agreement – were followed two months later by further sudden government pledges to the Cusco region, this time in the amount of USD 3 million, which were in part to be earmarked for a feasibility study focusing on the development of a much needed new road that would connect Santa María to Santa Teresa (Presidencia de la Republica del Peru, 2014).

Far from being unexplainable, these events can be understood by analysing them through the arguments of Bebbington (2009, p.107), according to whom "*corporate social responsibility schemes disarculate conflict, including by buying off local civil society leaders*", and Stoian & Henkemans (2000, p.299), who note that the social and environmental impacts of extractive activities are likely to be looked upon positively by local community groups to the extent that they feel personally compensated for said impacts.

Suddenly, following well over a year of silence on the Santa Teresa issue, in August 2014 – one month after the above-mentioned government concessions – the US-based multinational Sempra Energy, owner of Luz del Sur, announced its interest in investing substantial additional funds in Peru through the design of two new large hydroelectric projects in the Cusco region that would complement the Santa Teresa II initiative, on which it intended to resume work immediately (Pavia, 2014).

Two weeks after the announcement made by Sempra Energy, thousands of community members from Santa Teresa took to the streets to march in protest against the hydroelectric project and – completely disregarding the agreements signed by their civil society leader on 21 March – to voice their strong, undying opposition to the exploitation of their natural water resources. On 27 August, joined by thousands of people from other nearby towns protesting against another multi-million dollar project – *Gasoducto Sur Peruano* –, the community members of Santa started an indefinite strike period that brought La Convención province, and much of the Cusco region, to a standstill (Tempus Noticias, 2014). It was not long before the situation got out of hand, and violence broke loose.

Seven days from the start of the strike, in the early hours of the morning of 2 September 2014, 200 local community members clashed with armed forces. The official police dispatch spoke of eleven police officers wounded, one police vehicle attacked and thrown down a 50-meter ravine, several arrests – and one 16 year-old boy shot dead in the stomach. The local population was outraged. The main police center was immediately seized by furious community members who demanded justice. Later that same evening, Colonel René Cabrera Gutiérrez was charged with man slaughter, and suspended from his duties with immediate effect (AgendaPais.com, 2014).

With the situation having dramatically escalated, no end in sight for the strike, and more violence on the horizon, on 5 September 2014 the Peruvian High Commissioner for Dialogue and Sustainability of the Executive Power (*Diálogo y Sostenibilidad del Poder Ejecutivo*), Vladimiro Huaroc, convened an emergency press conference in which he announced that discussion forums and workshops would be organized with the local population to address all issues and concerns related to the Santa Teresa II hydroelectric project. At the same time, Mr. Huaroc underscored that the road blockades set-up by community members where having significant repercussions on the delivery of food items to Santa Teresa, and thus invited protesters to mellow their actions (RPP Noticias, 2014).

Fourteen days after it had started, the anti-Santa Teresa II strike came to an end. Just a few days later, on 29 September, the deputy Energy Minister, Edwin Quintanilla Acosta, opened the discussion forum promised by Mr. Huaroc. Forum participants included representatives of the Ministry of Energy and Mines, of the Ministry of the Environment, of the Cusco regional government, as well as of the Quillabamba Defense Front (*Frente de Defensa de Quillabamba*), one of the main civil society groups opposed to the hydroelectric project. Discussions were moderated by representatives of the Office of Social Affairs (*Oficina General de Gestión Social*) of the Ministry of the Environment, with a view to ensuring that all parties had an opportunity to express their argumentations (Gestión.pe, 2014). Following these initial dialogues, the situation appeared to calm down, with all activities pertaining to the hydroelectric project supposedly suspended until a final agreement was reached. Luz del Sur, however, had other plans.

With no prior notice, in December 2014, Luz del Sur organized a briefing meeting with community members in Santa Teresa – to which, however, not all were welcome. What happened next remains steeped in controversy. According to local people, with a row of military police guarding the door, Luz del Sur allowed only selected community members to enter. According to Luz del Sur, instead, local people tried to assault company officials and turned the attempt made to dialogue with community members into an opportunity to riot against government authorities (Morla, 2015).

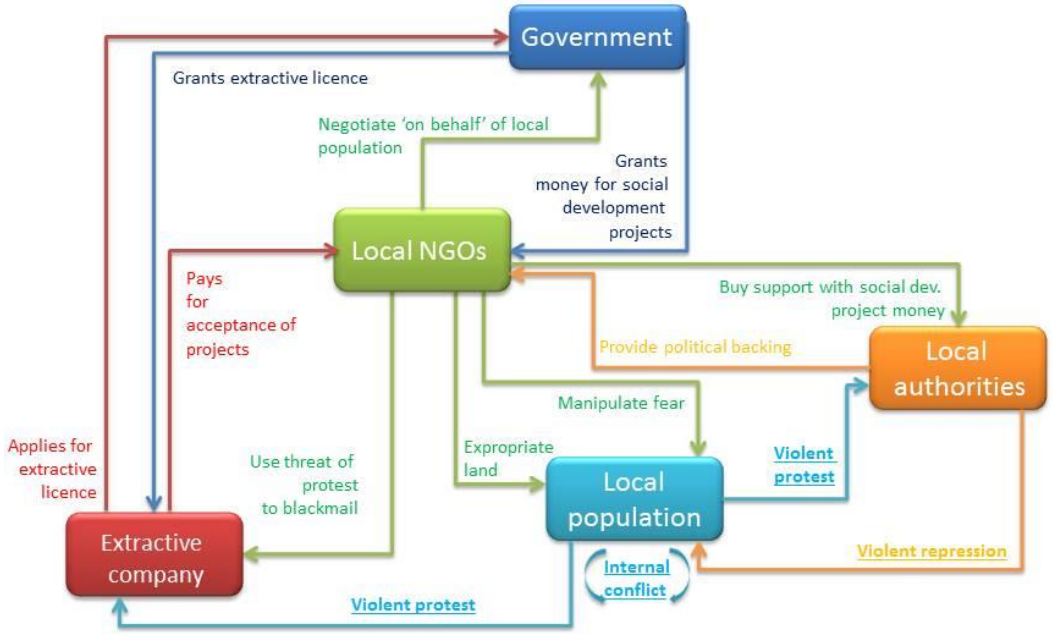
In response to the reiterated opposition of the local community to its proposed hydroelectric project – which culminated in the alleged attempt to attack its senior executives –, Luz del Sur filed an official complaint accusing several people in Santa Teresa of acts of terrorism, violence and even attempted murder (ibid.).

Two months later, on 10 February 2015, Luz del Sur submitted a request to the government for an extension period for the feasibility study of the hydroelectric project, the reason for the request being the manifest impossibility to carry out said study due to the violent opposition of the people living in Santa Teresa. This request was followed by a second one, made on 27 March 2015. On 11 May 2015, the government of Peru officially approved the request of Luz del Sur, and in doing so extended the deadline for the feasibility study from 25 April 2015 (which had just passed) to 25 April 2017 (El Peruano, 2015). Two years' worth of resistance was suddenly rendered useless.

Only two days after the announcement made by the government, Luz del Sur started to carry out its first corporate social responsibility project in Santa Teresa. The project envisaged the construction of a new school for young children, with multi-purpose classrooms, green areas,

washroom services, a gym and a canteen, among other facilities. In addition, the representative of Luz del Sur, Jorge Miranda Grille, announced that the company would offer free transportation services to all children whose schools were located in other towns and added – in the very same speech – that the feasibility study for the Santa Teresa II project was being carried out in the full interests of the local community (Diario del Cusco, 2015).

Figure 5 pulls together the pieces of this complex web of interests and summarizes the agendas and main lines of conflict among the main parties presented thus far.



Government: seeks to increase revenue from neo-extractive licences
Extractive company: seeks to increase revenue from neo-extractive activities
Local NGOs: seek to increase political support, revenue from social development funds and expropriate land
Local authorities: seek to increase financial resources (social development project funds from NGOs)
V.S.
Local population: fear; damaged environment; internal conflict; expropriated land = violent protests = violent repression

Figure 5: Racing for exploitation

4.4 Design of the PRAA

Having analyzed the needs of the local community in Santa Teresa, the present section will discuss if the design of the World Bank's CCA technical cooperation programme entitled 'Adaptation to the Impact of Rapid Glacier Retreat in the Tropical Andes' (PRAA) – which was implemented in the municipality of Santa Teresa between 2008 and 2014 – reflected local community's need for environmental resilience building vis-à-vis the impacts of freshwater shortages, as well as its need

for political empowerment vis-à-vis decision making in natural resource management. In doing so, the present section will focus solely on the intended goals of the World Bank programme in Santa Teresa, and as such will not address the results and impacts of the specific activities implemented, which will instead be discussed and analyzed in great detail during the course of chapters five and six.

4.4.1 Institutional framework of the PRAA

The implementation of the programme started in July 2008 and was originally scheduled to end by June 2012 (World Bank, 2008, p.20). However, to ensure the implementation of all the activities, the official closing date of the programme was first changed to 30 September 2013 (World Bank, 2012, p.4), and then further postponed to 31 March 2014 (World Bank, 2014, p.i). In terms of the main institutions, entities and organizations involved in the PRAA, these included: the Global Environmental Facility (GEF)[14], which was the donor; the World Bank, which was the implementing agency; the General Secretariat of the Andean Community (SGCAN), which was the administrator of the grant; and the Republic of Peru, which was the beneficiary of the grant[15]. In addition to these, other institutions and organizations that played an active role in the implementation of the PRAA in Santa Teresa included the Ministry of the Environment of Peru (MINAM), and the Municipality of Santa Teresa and CARE-Peru who were co-funders and co-executing entities of the PRAA in Santa Teresa (The GEF, 2008, p.2).

Name	Role	Geographical scope
The Global Environmental Facility (GEF)	Provide financial resources to sustain the PRAA through the Special Climate Change Fund (SCCF)	International
World Bank	Coordinate and oversee the planning, management and	International

[14] The GEF serves as a financial mechanism for the implementation of five international conventions: the UN Convention on Biological Diversity; the UN Framework Convention on Climate Change; the Stockholm Convention on Persistent Organic Pollutants; the United Nations Convention to Combat Desertification; and the Minamata Convention on Mercury.

[15] In technical cooperation programmes the use of the terms 'beneficiary of the grant' refers to the country within which the communities who will benefit from the individual project activities are located.

	execution of all PRAA programme components	
General Secretariat of the Andean Community (SGCAN)	Monitor the financial and procurement performance of all project activities	International
Ministry of the Environment of Peru (MINAM)	Inform decisions regarding the PRAA's development, technical difficulties, and management issues.	National
CARE Peru	Co-fund and support execution of project activities	National
Municipality of Santa Teresa	Co-fund and support execution of project activities	Local

Table 2: PRAA institutional stakeholders

The total cost of the adaptation activities implemented in Santa Teresa under the PRAA amounted to USD 1.078 million. Fifty per cent of this cost was paid for by the Municipality of Santa Teresa, while CARE-Peru covered approximately twenty per cent, Scotiabank approximately fifteen per cent, and the World Bank provided a grant to cover the remaining fifteen per cent. The detailed breakdown of the financial costs of each project is as follows: (1) USD 550,000 for the project entitled 'Capacity strengthening for climate change adaptation in areas associated with the Slakantay and Sacsara glaciers in the Santa Teresa district, La Convención, Cusco'; (2) USD 300,000 for the project entitled 'Good local governance and corporate social responsibility to improve the quality of life of women and children in Andean basins'; (3) USD 150,000 for the project entitled 'Income and food security strengthening for women in Santa Teresa'; and (4) USD 76,000 for the project entitled 'Innovations in water management and use for hygiene and human consumption, as a climate change adaptation means in Santa Teresa' (Fukushima 2009, p.18; Fukushima, 2010, p.238).

4.4.2 Environmental resilience building goals of the PRAA

The present section will analyze the goals of the World Bank in Santa Teresa in terms of building the environmental resilience of the local community and local authorities vis-à-vis freshwater shortages. In doing so, a useful starting point is to briefly recall the main findings presented at the beginning of the present chapter, which explained that climate-induced scarcity of freshwater resources was having serious consequences for both the lives and livelihoods of local community members in Santa Teresa (Interview: local community, D1; D2; D3; D4; D6; D7; D7; D9; Municipality of Santa Teresa, D5; Dazé, 2011, p.13). In addition, the chapter also underscored the very limited adaptive capacity of the local community (Interview: local community, D2; D6, D9; central government, B5; Farfán, 2010, p.11; Dazé, 2011, p.14), and the weak institutional capacity of the Municipality of Santa Teresa to address water shortages (Dazé, 2011, p.14; Farfán, 2010, p.6; Interview: local community, D2).

In response to these needs, the main goal of the PRAA was to contribute to strengthening the resilience of local ecosystems and economies to the impacts of glacier retreat. This overarching goal was to be achieved through the implementation of specific pilot adaptation activities that illustrated the costs and benefits of adaptation (World Bank, 2008, p.9; World Bank, 2012, p.8; Fukushima 2009, p.19; Fukushima, 2010, p.238; Interview: multilateral organization, A1, A2).

> "*The purpose was to help all communities dependent on the watershed to start to prepare to the impacts of climate change. That being the entry point, the idea was to try to help communities having a more sustainable and balanced use of resources, so that they could ensure their needs for future generations and at the same time not jeopardize the usage downstream*."
>
> (Interview: multilateral organization, A2)

This being the overarching intent of the World Bank, in order to investigate the comprehensiveness of the PRAA vis-à-vis the environmental needs of the local population, a useful starting point is to discuss the approach taken by the World Bank by analyzing it through the environmental resilience building framework offered by Davoudi *et al*. (2013) – the details of which were discussed at length in chapter two – who distinguish between engineering, ecological and evolutionary resilience.

Engineering resilience focuses on the ability of a system to bounce back from a disturbance and return to its original state (ibid., p.308). In this regard, the PRAA envisaged the design and

implementation of new evaluation systems and action plans in Santa Teresa vis-á-vis mud slides and avalanches caused by glacial melt, aimed not only at better preparing local residents and authorities to the possible impacts of these natural phenomena but also – and most importantly in the context of engineering resilience – to be able to recover as quickly, efficiently and effectively as possible in the aftermath of similar occurrences (Fukushima 2009, p.19; Fukushima, 2010, p.238; Interview: multilateral organization, A2).

Contrasting this goal to the needs of Santa Teresa presented at the beginning of the present chapter, this approach would appear to recognize the importance of putting in place measures to address the natural phenomena that may occur in Santa Teresa due to the fact that glacier retreat in the area will likely result in an initial increase of freshwater, followed shortly thereafter by a sharp decline of water availability as the glaciers disappear (Sperling *et al*., 2008, p.19). In particular, this goal would appear to speak directly to the need for planning and implementation of disaster risk reduction strategies, especially vis-à-vis early warning systems for glacial lake outbursts and landslides identified by both Dazé (2011, p.14) and Farfán (2010, p.6). A similar approach would also appear to recognize the importance of drawing important lessons from past catastrophic events of climate change-related catastrophes in the Urubamba River basin – in which Santa Teresa is located –, such as those that occurred in February 1995 (Cumes, 1999; McEntire & Fuller, 2002, p.131), and in April 2004 (Carreño & Kalafatovich, 2006, p.79; Vilmek *et al*., 2006, p.1041).

With regard to ecological resilience, according to Davoudi *et al*. (2013, p.309) this refers to the ability of a system to withstand disturbance and to continue functioning. In this regard, cognizant of the fact that glaciers feeding freshwater to Santa Teresa would not be able to store water during the rainy period, and would release water during the sunny, dry period, the World Bank sought to counter balance the regulatory buffering capacity being lost by the glaciers (Interview: multilateral organization, A1).

> *"The buffering capacity is disappearing, so what do you do? You have to* […] *increase the retention capacity of the upper water sheds, you have the increase the storage capacity of the soils, for instance, or of the mountain lagoons.*" (Interview: multilateral organization, A1)

Stemming from the above, it would appear that – in addition to strengthening the recovery capacity of Santa Teresa vis-à-vis glacial melt-related disaster – the World Bank also sought to increase the ability of the local ecosystem to absorb the new environmental stressors resulting from the melting of the glaciers. This approach would appear to echo the needs expressed by

local residents in Santa Teresa, who repeatedly stressed the need to find ways to increase access to freshwater resources as a matter of absolute priority (Interview: local community, D1; D2; D3; D4; D6; D7; D7; D9).

The third dimension of the environmental resilience model developed by Davoudi *et al*. (2013, p.310) is evolutionary resilience, which refers to the ability of a system to transform itself in response to a disturbance in order to continue functioning. Therefore, evolutionary resilience focuses on the ability of a system to modify its current state – as opposed to maintaining it – in order to adapt to external pressures while safeguarding its ability to function.

In this regard, through the implementation of the PRAA, the World Bank set out to: (a) develop water management plans in Santa Teresa, with a view to improving water use practices, and preventing negative impacts of water overflow due to glacier melt; as well as to (b) design agricultural production plans, focused on agricultural diversification, improvements in water storage infrastructure, and use of agricultural crops with greater tolerance to water stress and temperature variation; (c) implement highland conservation and reforestation plans; and (d) devise integrated water management plans, with a view to improving drinking water supplies, and to making efficient use of available water for drinking and agriculture (Fukushima 2009, p.19; Fukushima, 2010, p.238).

As a result, it would appear that – in addition to strengthening the recovery capacity of Santa Teresa vis-à-vis glacial melt-related disaster and increasing the local ecosystem and infrastructure to absorb the new environmental stressors – the World Bank also sought to build the capacity of community members and local authorities to adapt to the dwindling availability of freshwater resources. This declared focus on capacity development would appear well-suited to address not only the limited adaptive capacity of local community members (Dazé, 2011, p.14; Farfán, 2010, p.12), but also the institutional shortcomings of the Municipality of Santa Teresa vis-à-vis lack of effective integration of CCA into development planning (Dazé, 2011, p.14), as well as the inability of local authorities to engage with local communities in the design of CCA social assistance programmes (Interview: local community, D2; Municipality of Santa Teresa, D5)

Stemming from the above, by drawing on the three levels of resilience described by Davoudi *et al*. (2013), it would appear that the goals of the World bank in terms of building the environmental resilience of the local community and local authorities vis-à-vis freshwater shortages recognized the need to simultaneously address the timeliness with which Santa Teresa was able to react to environmental shocks, the amount of environmental stress that it could sustain, and its ability to

adapt to the changing environmental context. Furthermore, these resilience building goals would also appear to adequately reflect the needs and challenges of local communities outlined at the beginning of the present chapter.

However, all the above notwithstanding, the findings thus far analysed in the present chapter are not sufficient in themselves to disclose a complete and comprehensive picture of the motives that may have underlined the goals of the World Bank in Santa Teresa – motives that are essential to understanding not only how but also why the Bank may have sought to address the needs of water-stricken communities in Santa Teresa.

In this regard, it is important to recall – as explained in chapter two – that Bottrell (2009, p.334) and Joseph (2013, p.51) go as far as asserting that resilience building is a neo-liberal strategy used to ensure that poor communities are able to absorb and accept government-led market-driven exploitation. Furthermore, scholars such as Beymer-Farris & Bassett (2012, p.333), Castree (2003, p.277), Liverman (2009, p.294) and McAfee (1999, p.139) argue that powerful stakeholders such as the World Bank aim to 'save' nature for the sole purpose of making an economic profit that will help satisfy the agenda of the Bank's most important clients: multinational private companies and powerful central government authorities (Goldman, 2005, p.19); while simultaneously safeguarding the Bank's image as a good steward of the environment by successfully deflecting accusations that its activities damage natural resources (Sheehan, 2000, p.14).

The narrow focus on the resilience building dimension adopted thus far does not allow an exhaustive discussion of the research findings in relation to these important arguments. Such an analysis – which is most certainly necessary – warrants the presentation of research findings that investigate synergies between environmental resilience building and community political empowerment. The investigation of these synergies will be at the heart of the next section.

4.4.3 Political empowerment goals

The present section will discuss the goals of the World Bank in Santa Teresa in terms of community political empowerment. In particular, discussions will focus on how the World Bank may have sought to politically empower local communities by positioning itself vis-à-vis the differing and conflicting interests of the local community and central government presented at the beginning of the present chapter.

The goals of the Bank will be analysed by contrasting them to the needs and interests of the local community in Santa Teresa as well as to the arguments of scholars (presented in chapter two) such Bottrell (2009), Joseph (2013), Barnett & Finnemore (2005), McAfee (1999) and Goldman (2005) vis-à-vis the interest – or lack of – of the World Bank for local community empowerment.

A necessary starting point is thus to recall the findings presented at the beginning of the present chapter, which explained that conflicts exploded in Santa Teresa among and within local communities, local institutions and central government officials over a number of issues related to the management, use and administration of local water resources (Interview: Municipality of Santa Teresa, D5; local NGO, C7; local community, D2, D4, D8; central government, B3, B5, B7; regional government, E6; private sector, C8; international NGO, C1; research institute, C4, C5; regional government, C2; La Republica, 2013; Morla, 2015; El Peruano, 2015). In particular, it is paramount to highlight that the research found that many (albeit not all) of these conflicts were related to a consistently growing interest within the central government to increase opportunities to exploit local natural resources to increase revenues, which in practical terms meant ensuring that the hydroelectric project of Luz del Sur – a foreign-owned multinational – did not encounter the resistance of local communities (Interview: research institute, C4, C5; central government, B5; regional government, C6).

Against this backdrop, it is necessary to begin the present discussion by underscoring that official World Bank documents related to the PRAA explicitly recognize that one of the objectives of the programme was:

> "[T]*o support government interventions to ameliorate potential social conflict*."
>
> (World Bank, 2008, p.153).

The significance of this objective was further validated and underscored by representatives of central government line ministries, who stressed the importance of ensuring that programmes such as the PRAA supported government efforts in dealing with trouble-making local communities – especially in those instances in which the government may not be able to forcedly align the communities with its own interests through official, formal channels.

> "*It is important that these international efforts are targeted towards geographical areas where there are fractures between the priorities and agendas of the central government on the one hand and those of local communities on the other. These are situations that require 'alignment'; we could say in inverted commas, because there is never going to be a formal alignment process at the political level.*"

(Interview: central government, B11).

It is important to note that the conflicts between the local community and the central government over the 'Santa Teresa II' hydroelectric project did not exist at the time that the PRAA was being designed. For this reason, the official PRAA programme document refers to situations of "*potential*" social conflict (World Bank, 2008, p.153) – which was a possibility that the central government and the World Bank had obviously foreseen. The ability to foresee the "potential' social conflict stems from a number of considerations. First – and foremost –, the central government already knew that it intended to further expand the existing 'Santa Teresa I' hydroelectric project, which had already met local community resistance at the time in which it was approved (Interview: Municipality of Santa Teresa, D5). Second, the local community of Santa Teresa and the central government had a recent history of strong conflict, most notably involving the construction of the Carrilluchayoc bridge in the spring of 2007[16] (i.e., exactly at the time in which the PRAA was being designed). Third, there were already abundant examples of local community violent opposition to government-led extractive activities in the Cusco region.

These findings immediately raise the question as per whether the Bank sought to "*ameliorate potential social conflict*" by empowering local communities or if – on the contrary – it sought to

[16] The Carrilluchayoc bridge was constructed under the former mayor of the province of La Convención, Feida Castro, to connect Santa Teresa to the tourist goldmine of Machu Picchu. Vividly supported by representatives of the local government, who stressed the right of the population of Santa Teresa to be able to have trade access Cusco, as well as to benefit from the billion dollar tourist industry that gravitates around Machu Picchu, the bridge was been opposed by many stakeholders, including the National Institute of Natural Resources (Peru21, 2007b), the Ministry of Transport, the Ministry of Civil Defense, the Municipality of Machu Picchu (Peru21, 2007), the National Institute of Culture (INC) and the train company Peru Rail – a subsidiary of Orient Express (Light, 2007). In February 2008 the Ministry of Transport and Communication passed a ministerial resolution based on which the bridge was to be destroyed (El Sol, 2008). The answer of the local population of Santa Teresa and of the district of La Convención to the legislative attacks against the bridge has been unequivocal and unanimous: ¡*Puente o muerte, venceremos*! (Bridge or death, we will win!) (Gutierrez, 2011; El Sol, 2007; Peru21, 2008). Today, the Carrilluchayoc bridge still stands. Although it remains very much an alternative route to the sanctuary, Santa Teresa is now visited by over two hundred tourists per day, most of whom are South Americans that do not wish to pay the fifty dollar train-ride from Cusco to Aguas Calientes (Gutierrez, 2011). Tensions however remain high between the local population of Santa Teresa and Peru Rail, and have further escalated since April 2010 when the subsidiary Company of Orient Express in reopening the train connection between Santa Teresa and Machu Picchu – which had been destroyed in 1998, and never rebuilt – decided to limit to twenty the number of tickets that could be sold to the inhabitants of Santa Teresa on a daily basis. This decision was openly criticized by the President of the Defense Front for the Interests of Ollantaytambo (*Frente de Defensa de los Intereses de Ollantaytambo*) as being an act of outright discrimination (La Republica, 2010). In other words, those tourists that wish to access Machu Picchu via Santa Teresa can now do so by using Rail Peru, as opposed to transiting across the Carrilluchayoc bridge. However, the same does not apply to the local villagers in Santa Teresa itself.

"*support government interventions*" by devising strategies to silence community interests, as the arguments of scholars such as Bottrell (2009) and Joseph (2013) McAfee (1999), Goldman (2005) and Edwards & McCarthy (2006) would suggest.

To address this question, it is essential to fully understand the reasons (as well as the consequences on the ground, which will be analyzed in the next chapter) that brought the World Bank to implement a multi-million-dollar programme in a remote location such as Santa Teresa. Moreover, there are many locations across Peru and the Andes that would warrant CCA technical cooperation programmes, if sufficient funds were available (Interview: multilateral organization, A1).

> "*You cannot address the* [climate change] *problem throughout* [the country]*. There are so many communities that will be impacted* […] *There are many other sights were nothing is being done because there is no money.*"
> (Interview: multilateral organization, A1)

This being the case, what made Santa Teresa so special? According to World Bank officials and official programme documents, Santa Teresa was chosen on the basis of a number of vulnerability-based criteria. In particular, it is claimed that the Bank decided to implement a CCA technical cooperation programme in Santa because it was an area where local communities were highly vulnerable to the impacts of climate change; where the local government institutions had limited adaptive capacity; and where studies, researches and technical cooperation projects had not already been carried out (Interview: multilateral organization, A2; World Bank, 2008, p.153).

However, the above notwithstanding, data triangulation unveils a more complex picture that reveals further motives behind the choice of Santa Teresa. In this regard, it is necessary to recall the findings previously discussed in the present chapter, which clearly articulated the growing interests within the central government to increase opportunities to increase revenue by exploiting local natural resources in Santa Teresa, which in practical terms meant supporting the efforts of Luz del Sur (Interview: research institute, C4, C5; central government, B5; regional government, C6). In this context, when asked about the reasons for the geographic selection of Santa Teresa, representatives of international NGOs, research institutes and central government officials had little doubt in clearly stating that this choice had been made because the area produces seventeen per cent of the electricity of the entire country (Interview: international NGO, C1; central government, B1; research institute, C5).

"Why Santa Teresa? Well, because there is a hydroelectric plant that produces 17 per cent of the electricity of the country in the area. The Salkantay glacial has a direct impact on the hydroelectric capacity of the plant.

(Interview: international NGO, C1)

"The main criterion for the selection of the areas in which the PRAA was implemented was energy security. In the area of Santa Teresa there is a very important energy plant."

(Interview: central government, B1)

"In the area there is a large hydroelectric plant. So it is a strategically important area. This weighed on the decision to implement the project there."

(Interview: research institute, C5)

The ability of the central government to strongly influence the area of intervention of the PRAA to ensure that it reflected its own political agenda is further validated by triangulating the above findings with the words of representatives of other multilateral institutions, who confirmed the imposing role of the government in ensuring that interventions are directed to areas in which it has strong economic interests, regardless of the actual needs of the local communities (Interview: multilateral organization, A5).

"Ehm, well, let's say that one party [within the government] *may sign off on the* [project] *document, but another entity* [within the government] *will be responsible for implementing it, and when they set about to implement it they realize that while the target region for this project is – let's say – the South* [as in the case of the PRAA]*, the more dire requirement is in the North* […] *You find that if there is a high political stake in that* [location] *nationally, the choice for that location becomes an imposition more than anything else.*"

(Interview: multilateral organization, A5).

Based on the above, it comes as no surprise that in the final PRAA document, which summarizes the official criteria based on which Santa Teresa was selected, the "*political importance*" of the area to target emerges as the second most important criteria – ahead of "*poverty*" and "*socio-economic impact of climate change*" and preceded only by "*vulnerability of the areas to climate change*" (World Bank, 2008a, p.41).

These findings would appear to echo the positions argued by McAfee (1999, p.139) and Harrison (2005, p.256), among others, vis-à-vis a connivance of interests among powerful stakeholders such as the World Bank and central government authorities, and those of Bottrell (2009, p.334) and Joseph (2013, p.51) vis-à-vis the implementation of resilience building activities used to ensure that poor communities are able to absorb and accept government-led market-driven exploitation, whilst also reflecting the argument advanced by Goldman (2005, p.34), according to whom the World Bank carefully tailors international development programmes to the resources that it wishes to provide for the realization of the initiatives that it wishes to support. In addition, these findings also appear to enrich the assertions made by Edwards & McCarthy (2006), by highlighting that technical cooperation programmes may be of use to central governments not only to help secure financial and non-financial resources from abroad (ibid., p.128), but also "*to support government interventions to ameliorate potential social conflict*" (World Bank, 2008, p.153) in order to make the exploitation of local natural resources more effective in areas where the government has strong vested extractive interests.

Two preliminary conclusions would thus appear to stem from the information presented thus far. First, in the case of Santa Teresa, there was a convergence of interests between the central government of Peru and the World Bank. Second, as a result of this convergence, the Bank did not envisage any space for local community empowerment – thus falling well short of addressing the pressing community needs previously discussed. However, further careful triangulation of the information calls into question both of these initial conclusions, as a more far more complex and articulate picture emerges.

The first of the two initial conclusions refers to the apparent convergence of interests between the central government and the World Bank. In reality, the final decision to implement the PRAA in an area affected by social unrest tied to the presence of government interests was cause for significant concern for World Bank officials, as opposed to being the result of a tacit connivance of interests among the Bank and the central government.

In deciding (or agreeing) to implement its project in Santa Teresa, the World Bank found itself faced with a clear dilemma. On the one hand, the central government wanted to protect the interests of Luz del Sur who was looking to operate in Santa Teresa (Interview: research institute, C4; regional government, C6) – an approach that was highly likely to encounter strong, and potentially violent community resistance (Interview: regional government, C2; research institute, C5; regional government, C6; BBC News, 2015; Voice of America, 2015). On the other hand, the

Bank wanted to avoid at all cost being involved in violent clashes between local communities and government authorities, for three main reasons.

First, if conflicts had escalated during the lifespan of the PRAA, this would have rendered very challenging the implementation of the various project activities, thus significantly diminishing the likelihood of the overall programme success in Santa Teresa (Interview: regional government, E6).

> *"Security in the region is also an issue. In the past, projects have been discontinued in certain areas due to high levels of insecurity*."
> (Interview: regional government, E6)

Second, the Bank wants to be seen internationally as a neutral, *super partes* institution that does not take sides in national political disputes. In this regard, it is worth recalling – as explained in chapter two – that according to Barnett & Finnemore (2005, p.173), for international organizations "[t]*he greater the appearance of depoliticization, the greater the power of the expertise*". This because the basis on which the authority of these institutions rests is the claim that their actions are carried out in an objective, rational, independent and neutral fashion, which does not follow the desires and impositions of any of its individual member states, but rather represents the will and interests of the international community at large (Barnett & Finnemore, 1999, p.710). Thus, deciding to implement CCA activities in an area affected by conflicts over the differing socio-economic interests of local communities and central government officials was not in the best interest of the Bank (Interview: regional government, E5).

> "*Many donors do not want to fund communities affected by political conflicts*."
> (Interview: regional government, E5)

Third, along similar lines, multilateral institutions such as the World Bank want to avoid being associated with instances of violent repression in light of the very negative image that inevitably derives from them (Interview: multilateral institution, A5).

Stemming from the above points, agreeing to implement a CCA programme in Santa Teresa was not a risk-free decision for the World Bank, and as such was not the result of a convergence of interests among powerful stakeholders, but rather the result of a very delicate process of careful negotiation (Interview: multilateral institution, A3).

"*The criteria for* [geographic] *selection… is something that has to be carefully negotiated with the government*. *It is not straight forward*."
(Interview: multilateral organization, A3)

As already illustrated, violent repression did eventually take place in Santa Teresa, repression which could have very easily materialized during the lifespan of the PRAA. It is thus in this context that reference to the need "*to support government interventions to ameliorate potential social conflict*" (World Bank, 2008, p.153) can be fully contextualized and understood not as being an indicator of abiding government support, but as an explicit reference to the pursuit of the Bank's own interest to avoid situations of conflict.

While these findings reflect the argument advanced by Goldman (2005, p.34), according to whom the World Bank carefully tailors international development programmes to the resources that it wishes to provide for the realization of the initiatives that it wishes to support, they do not align with those of scholars – such as McAfee (1999, p.139) and Harrison (2005, p.256) – who look upon technical cooperation programme as the simple result of pure connivance of interests among powerful stakeholders such as the World Bank and central government authorities .

Based on these findings, the central question that remains to be answered is if – or to what extent – the design of the World Bank programme in Santa Teresa envisaged a process of community political empowerment that addressed the aforementioned community needs. Otherwise stated, drawing from the literature, the question becomes whether the evidence collected in Santa Teresa suggests that need for the Bank to safeguard its coherence, (apparent) impartiality and professional expertise was greater than that of empowering local communities – as suggested by Wood (2006, p.55) and Mason (2014, p.823) –, or whether it may have led to the implementation of efforts to empower the voices and interests of local communities – as the arguments advanced by Gore (2013, p.775) would suggest.

The key to unlocking the answer to this question lies in the nature of the efforts envisaged by the Bank to "*ameliorate potential social conflict*" (World Bank, 2008, p.153). As previously discussed, reference to the fact that the World Bank would "*support government interventions*" (ibid.) initially suggested alignment between government and Bank goals – an alignment that would have minimized opportunities for political empowerment of local communities. However, in light of the more complex reading of the research findings analysed above, it is now possible to gain a more comprehensive understanding of the approach that the World Bank took to empowering local communities by triangulating the official World Bank document (ibid.) with the words of the

residents of Santa Teresa, regional government, regional organization and Bank officials, and the arguments of scholars such as Edwards & McCarthy (2006), Meinzen-Dick & Knox (2000) and Agrawal & Ostrom (2001, p.488) vis-à-vis engagement with and political empowerment of local communities in natural resource management.

According to regional organizations, regional government and World Bank officials (Interview: regional government, C6; regional organization, B2; multilateral organization, A1, A2), the goal of the World Bank was to use CCA capacity development activities to resolve situations of conflict not by supporting solutions imposed by the central government – as scholars such as McAfee (1999, p.139) and Harrison (2005, p.256) might suggest –, but rather by empowering local communities through the provision of skills and know-how necessary to upscale the pilot CCA activities implemented through the PRAA.

> *"The approach is not to impose conflict-resolution solutions, but rather to facilitate the resolution of conflicts by building the capacities, and in this way demonstrate to all stakeholders how the local resources could be better managed for the benefit of everyone.*"
>
> (Interview: regional government, C6)

However, as noted by Edwards & McCarthy (2006, p.116), the simple availability of financial and other technical resources associated with programmes is not in itself sufficient to guarantee successful engagement of local community members in project activities. In this regard, Meinzen-Dick & Knox (2000, p.57) underscore that local communities choose to engage with activities related to natural resource management to the extent that this engagement is seen as an opportunity to increase their livelihood security, especially in situations of poverty and risk. The importance of this engagement is well-summarized by Agrawal & Ostrom (2001, p.488), who note that the most successful natural resource management initiatives are achieved in those instances in which the interests of powerful decision makers are brought into alignment with the needs expressed by mobilized local actors; a processes which may foster localized political empowerment vis-à-vis decision making in natural resource management.

Combining these arguments with those presented in the paragraphs immediately above, it would thus appear that while on the one hand the World Bank would have been more likely to succeed in implementing the various project activities of the PRAA in Santa Teresa to the extent that it had been able to "*ameliorate potential social conflict*", on the other hand – at the same time – the Bank would have been more likely to succeed in "*ameliorat*[ing] *potential social conflict*" to the

extent that it had been able to engage community members by demonstrating to them that one of the goals of its programme was specifically to address their need for political empowerment.

As suggested by the arguments of Edwards & McCarthy (2006, p.116), Meinzen-Dick & Knox (2000, p.57) and Agrawal & Ostrom (2001, p.488), in the case of Santa Teresa the key to the ability of the World Bank to actively engage the local community in a dialogue conducive to soothing local tensions stemmed directly from the fact that the community members themselves perceived that the goals of the PRAA were explicitly aimed at affording them political empowerment vis-à-vis decision making in natural resource management, in addition to greater environmental resilience (Interview: local community, D1; D2; D6; D9).

"*They* [i.e., the programme officials] *said that they wanted us to decide what to do and where to do it* [with regard to planning and implementation of project activities]. *It was then that we decided to be a part of this because it was our opportunity to make our voices heard, and to defend our natural environment*."

(Interview: local community, D6)

"*People had been waiting for a long time to be protagonists. They knew that this project was going to give them that opportunity. That was why people got involved*."

(Interview: local community, D2)

"*I understood from the start that if I took part* [in the project] *I could have taken decisions that would have protected our water resources*."

(Interview: local community, D1)

"Farmers participated actively [in the project] *because they knew that it would have helped them to improve the water situation. They are those most affected by climate change and lack of water. For this reason, they were interested and committed."*

(Interview: local community, D9)

Therefore, in order to secure its own interests in terms of successfully implementing the PRAA, the World Bank sought to empower the local community as a means to soothe conflicts among said community, local government authorities, central government officials and private sector representatives; as opposed to seeking to implement a resilience building programme solely aimed at ensuring that the local community in Santa Teresa was able to absorb and accept

government-led market-driven exploitation, as the arguments of Bottrell (2009, p.334) and Joseph (2013, p.51) would have suggested.

The final question that stems from this conclusion is why was there no explicit reference to any community support vis-à-vis social conflict in the official PRAA documentation? The reason for this omission is, however, almost self-evident. Explicit reference to any form of support to be provided to local communities in Santa Teresa by the World Bank in the context of the conflicts with central government authorities was not something that the Bank could have included in the official programme document that was to be ratified by the government of Peru. However, this notwithstanding, it was well-understood by those involved in the programme implementation that although officially the focus of the activities was solely on capacity building, these efforts were in fact directly aimed at supporting communities in Santa Teresa vis-à-vis conflict resolution (Interview: regional government, C6).

> "*Support to local communities in conflict-resolution is not explicitly recognized anywhere in the objectives of the individual activities. The focus is always only on capacity development of local officials and community members – officially, that is.*"
>
> (Interview: regional government, C6)

4.5 Conclusions

The present chapter set out to address the first research sub-question by analyzing if the design of the World Bank's CCA technical cooperation programme entitled 'Adaptation to the Impact of Rapid Glacier Retreat in the Tropical Andes' (PRAA) responded to the needs of the climate-affected water-stricken communities in Santa Teresa. To do so, the chapter discussed the resilience building and political empowerment needs of the local community, prior to analyzing if the design of the programme adequately reflected said needs by presenting its main goals. Based on the findings presented, discussed and analyzed, the following four main conclusions can be herein inferred.

First, the present chapter underscores the presence of two overarching community needs in Santa Teresa, namely the need for environmental resilience building vis-à-vis the impacts of freshwater shortages, and the need for community political empowerment vis-à-vis decision making in natural resource management. With regard to the former, the chapter found that Santa Teresa is extremely vulnerable to climate change, the main impacts of which are felt in relation to

the growing scarcity of freshwater resources. The reason for the intrinsic vulnerability of Santa Teresa to climate change is to be found in its geographical morphology (Torres and Gomes, 2008, p.50; Thompson *et al*., 2006, p.10537), which has resulted in serious water shortages, which have had very significant consequences for both the lives and livelihoods of local community members in Santa Teresa (Interview: local community, D1; D2; D3; D4; D6; D7; D7; D9; Municipality of Santa Teresa, D5). Furthermore, the adaptive capacity of local communities and Municipality officials was constrained by a number of issues, including: lack of community cohesion (Interview: local community, D2; D6, D9; central government, B5; Farfán, 2010, p.11); limited involvement of segments of the local community in decision making processes (Dazé, 2011, p.14); low levels of education, both generally and specifically in terms of climate change (Farfán, 2010, p.12); lack of community involvement in CCA social assistance programmes (Interview: local community, D2; Municipality of Santa Teresa, D5; Farfán, 2010, p.6); lack of effective integration of CCA into development planning at the district level (Dazé, 2011, p.14; Farfán, 2010, p.6); and absence of disaster management or response mechanisms (ibid.). Stemming from this situation, the vulnerabilities and unmet needs of the local community for greater political empowerment gave birth to a number of conflicts among community members, as well as among local residents and government authorities over the use and management of freshwater resources.

Second, the design of the PRAA was the result of a complex process of negotiation among the differing priorities of the central government and the World Bank, and as such did not reflect a connivance of interests among powerful stakeholders, as scholars such as McAfee (1999, p.139) and Harrison (2005, p.256) would suggest. Moreover, while the decision to implement the PRAA in Santa was determined for the most part by the central government, who wished to further exploit the hydroelectric potential of the area, deciding to implement CCA activities in an area affected by conflicts over the differing socio-economic interests of local communities and central government officials was not in the best interest of the Bank (Interview: regional government, E5), given that one of its main sources of power resides in its ability to present a depoliticized, independent and neutral façade (Barnett & Finnemore, 1999, p.710; Barnett & Finnemore, 2005, p.173).

Third, through the design of the PRAA, the World Bank aimed to enhance the environmental resilience of the local community in Santa Teresa. In this regard, the environmental resilience building goals of the Bank appeared to reflect the community needs and mirrored the elements of the resilience building framework developed by Davoudi *et al*. (2013, p.310).

Fourth, the World Bank sought to politically empower local communities by involving them in the decision-making process related to the PRAA, whilst seeking to build their ability to manage local natural resources vis-à-vis the new challenges posed by climate change. The rationale for this approach strongly echoes the arguments postulated by Meinzen-Dick & Knox (2000, p.57), who claim that local communities choose to engage with decisions related to the management of natural resources to the extent that this engagement is seen as an opportunity to increase their livelihood security, especially in situations of poverty and risk.

Based on these four overarching findings, three large questions arise. The first question is whether the design of the PRAA translated into the effective implementation of practical strategies on-the-ground that offered an opportunity for bottom-up local community environmental resilience building and political empowerment in Santa Teresa. The second question is what happened in Santa Teresa that – unlike in Tia Maria and Las Bambas – enabled a short term peaceful resolution of conflicts among local residents and central government officials vis-à-vis extractive activities. The third question is why peace in Santa Teresa was short lived. Addressing these issues is essential to understanding if the World Bank can effectively promote and protect the needs of vulnerable communities. The following two chapters will thus attempt to answer these questions.

Chapter 5: The World Bank and resilience building in Santa Teresa

5.1 Introduction

The present is the second findings chapter and will address the second research sub-question by discussing how the World Bank may or may not have succeeded in meeting the needs of the local community in Santa Teresa vis-à-vis environmental resilience building through the implementation of practical strategies and project activities. In particular, the chapter will present the specific pilot adaptation activities that the World Bank put in place in Santa Teresa to build local environmental resilience and analyze them in light of the vulnerabilities and environmental community needs, as well as the of the intended goals of the PRAA discussed in chapter four. The chapter will be structured around two main sections.

The first section will analyze if the World Bank put in place project activities in Santa Teresa to build local environmental resilience and will distinguish between the provision of knowledge and skills in relation to water management, and the facilitation of access to financial resources to upscale water management practices. The findings presented will be related to the CCA and resilience frameworks developed by Tschakert & Dietrich (2010) and Nelson *et al*. (2007, p.401) – both of which were presented in chapter two –, who underscore the importance of not attempting to build local community resilience through the provision of standardized knowledge, practices and a pre-defined set of skills, and Bebbington *et al*. (2007, p.610), who highlight the importance of providing local communities with the tools and skills that may enable them to generate useful additional income.

The second section will analyse if the World Bank put in place strategies to ensure that the environmental resilience building activities were carried out in accordance with a bottom-up grassroots process. In this regard, the second section of the chapter will relate the empirical findings from Santa Teresa with the criteria of pure procedural justice (Hermansson, 2010, p.511), deliberative participation (Young, 2000, p.26) and integration of traditional knowledge (Adger et al., 2011, p.5), presented in chapter two.

5.2 Environmental resilience building: providing knowledge, skills and access to resources

Chapter four explained that climate-induced scarcity of freshwater resources was having serious consequences for both the lives and livelihoods of local community members in Santa Teresa (Interview: local community, D1; D2; D3; D4; D6; D7; D7; D9; Municipality of Santa Teresa, D5; Dazé, 2011, p.13). In addition, the chapter also underscored the very limited adaptive capacity of the local community (Interview: local community, D2; D6, D9; central government, B5; Farfán, 2010, p.11; Dazé, 2011, p.14), and the weak institutional capacity of the Municipality of Santa Teresa to address water shortages (Dazé, 2011, p.14; Farfán, 2010, p.6; Interview: local community, D2).

In response to these challenges, through the PRAA, the World Bank implemented a series of project activities in Santa Teresa aimed at addressing the need of the local community and Municipality for greater skills in relation to water management. The overarching rationale that guided the design of all the various project activities – each of which will be presented in the following paragraphs – was that every activity should be based on a deep understanding of the roots and causes of local vulnerability, as well as of poverty, inequalities and local power dynamics, in order to allow community members and local officials to respond to the changing climatic threats as these evolved over time, and thus ensure the sustainability of the efforts put in place (Interview: multilateral organization, A2; international NGO, C1, C2; World Bank, 2012, p.8). In terms of the types of interventions that the Bank designed, these focused upon ensuring a more efficient, equitable and conscientious management of the local water resources (ibid.).

> "*The purpose was to help all communities dependent on the watershed to start to prepare to the impacts of climate change. That being the entry point, the idea was to try to help communities having a more sustainable and balanced use of resources, so that they could ensure their needs for future generations and at the same time not jeopardize the usage downstream*."
>
> (Interview: multilateral organization, A2)

This approach echoes strongly the recommendations contained in the CCA framework developed by Tschakert & Dietrich (2010), who underscore the importance of not attempting to build local community resilience through the provision of standardized knowledge, practices and a pre-defined set of skills, but instead to understand adaptation needs as a localized process, which requires to look at resilience building as a learning process. In addition, it also recognizes that

resilience is never permanent, and that as such the level of resilience of a socio-economic and environmental system (which includes the livelihoods of local communities) to the impacts of climate change "*will change on the basis of the types, frequencies and magnitude of system disturbances*", as postulated by the resilience framework developed by Nelson *et al*. (2007, p.401).

As the following paragraphs will explain in detail, based on careful triangulation of all the data collected, it would appear that the World Bank succeeded in carrying out this community-focused, learning-based approach to resilience building, and was thus able to enhance the adaptive capacity of the local community and Municipality of Santa Teresa by providing adequate knowledge and skills in relation to water resource management (Interview: international NGO, C1; local community, D1; D2; D6, D8, D9; regional organization, B2; Dazé *et al*., 2009, p.13; Independent Evaluation Group, 2014, p11; World Bank, 2014, p.14).

> "*They built local capacities, especially on issues related to management of water. These activities reflected what we needed. I thought their activities were very useful. These projects are necessary. We need these initiatives to help us deal with these impacts and prevent what might otherwise be worse impacts.*"
>
> (Interview: local community, D6)

> "*CARE Peru* [i.e., the World Bank's implementing partner] *has been taking action to address the impacts of climate change. Their efforts reflect what we need to deal with the increasing lack of water resources* […] *People are better prepared to deal with these impacts* [i.e., of water shortages]."
>
> (Interview: local community, D1)

The following paragraphs will now present the various project activities implemented by the World Bank under the PRAA, as well as the process followed to design them.

Working in partnership with CARE Peru, the World Bank supported the design of a Water Management Plan, which was developed through a joint effort of local communities and Municipality authorities. The plan improved water use practices, including through the introduction of new systems for irrigation, in order to compensate the reduction in water regulation induced by glacier retreat. In particular, the plan included a programme on the rationalization and efficient use of water for agricultural use and human consumption, in addition to the introduction of improvements in the drinking water supply infrastructure through the use

of storage tanks, reservoirs and rain collection systems (World Bank, 2014, p.58). In the same context, the programme also strengthened five local irrigation committees, and installed three water irrigation modules (ibid., p.38; Interview: multilateral organization, A2).

> "*The PRAA helped them* [i.e., local communities in Santa Teresa] *using water resources, getting more organized, thinking more strategically.*"
>
> (Interview: multilateral organization, A2)

Cognizant of the absence of disaster management or adequate response mechanisms in development planning at the district level (Dazé, 2011, p.14; Farfán, 2010, p.6), the World Bank supported the design and implementation of a disaster prevention program – which included capacity development workshops and sensitisation outreach programmes – to protect local communities from catastrophic events such as glacier outburst floods. The programme included an action plan to help communities cope with the potentially devastating impacts of glacier lake outbursts and river floods originated by glacier retreat (World Bank, 2014, p.28; Interview: local community, D9).

> *"We needed those workshops to lean how we can deal with the impacts of climate change, to prevent the worse impacts and protect ourselves.*"
>
> (Interview: local community, D9)

Furthermore, following capacity building workshops in the area of forestry management, the World Bank supported the design and implementation of a forestry management plan in collaboration with local communities. Aimed at conserving the local hydrological system, the plan promoted water retention through the reforestation of 400 hectares of land by using plants prepared in ad hoc nurseries (ibid., p.57), in addition to setting up 5 agricultural demonstration plots to renew and improve planting areas, and re-organizing agroforestry systems in 15 plots (World Bank, 2014, p.38).

The World Bank also carried out several agrobiodiversity and agroclimatology studies under the auspices of the PRAA, cognizant that, as a result of climate-induced water shortages, the productivity levels of all the main sources of income had decreased, i.e., coffee, avocado and passion fruit, as had those of the main food cops cultivated for personal consumption, i.e., manioc and vegetables (Interview: local community, D3; D4; D7; Dazé, 2011, p.13), while new plants were increasingly disappearing due to new pests, thus negatively affecting the local biodiversity (Interview: local community, D9). These studies served as the basis for enabling the Municipality

of Santa Teresa to develop a food safety project (World Bank, 2014, p.11; Interview: local community, D8). Through the diversification of agricultural production, the project aimed at reducing agricultural production losses, and implementing good practices adapted to the anticipated consequences of glacier retreat. In this regard, specific activities included the identification of pilot plots of drought-resistant crops, and the purchasing of seeds to promote drought-resistant cultivars, including by addressing issues related to the financing necessary to purchase the seeds (ibid., p.58). Furthermore, in order to tackle infant malnutrition, pilot activities were carried out to identify new agricultural and non-agricultural sources of income (ibid., p.38).

"*CARE Peru has been doing good work to address climate change and food security. All the activities were very useful.*"

(Interview: local community, D8)

Ultimately, this multi-pronged approach – where complementary activities were designed and implemented vis-à-vis water security, reforestation, disaster preparedness and food security – led to the establishment of 16 communal development plans, which facilitated the prioritization and development of more sustainable investments in the communities (World Bank, 2014, p.36).

"*The PRAA helped them think about their production, revenue generation strategies and how these could be enhanced.*"

(Interview: multilateral organization, A2)

In summary, the World Bank's interventions in Santa Teresa led to the following: improvements in the drinking water supply infrastructure through the use of storage tanks, reservoirs, and rain collection systems (World Bank, 2014, p.58); strengthening of 5 local irrigation committees, and installation of 3 water irrigation modules (ibid., p.38); an action plan to help communities cope potentially devastating impacts of glacier lake outbursts and river floods originated by glacier retreat (ibid., p.28); water retention through the reforestation of 400 hectares of land by using plants prepared in ad hoc nurseries (ibid., p.57), in addition to the setting up of 5 agricultural demonstration plots to renew and improve planting areas, and the re-organizing of agroforestry systems in 15 plots (ibid., p.38); the identification of pilot plots of drought-resistant crops, and the purchasing of seeds to promote drought-resistant cultivars, including by addressing issues related to the financing necessary to purchase the seeds (ibid., p.58); the tackling of infant malnutrition through pilot activities that were carried out to identify new agricultural and non-agricultural sources of income (ibid., p.38); and the establishment of 16 communal development plans, with a

view to facilitating the prioritization and development of more sustainable investments in the communities (ibid., p.36).

> *"We need these initiatives to help us deal with these challenges, and prevent what might otherwise be even worse consequences."*
>
> (Interview: local community, D6)

In addition to the above, the extent to which the resilience building activities designed by the World Bank in collaboration with local communities and Municipality authorities addressed the actual needs of people living in Santa Teresa is further accredited by the fact that by virtue of the experience in Santa Teresa other district governments in the province of La Convención (which is where Santa Teresa is located), namely Echarate and Maranura, requested training to develop similar adaptation projects using their own resources to strengthen their resilience to glacier retreat (Independent Evaluation Group, 2014, p11; Interview: regional organization, B2).

> "*The communities around Santa Teresa were so interested in the project and in the actions that we were implementing there that they went to the Mayor and they said "we want to design a project the same as yours, we have the money, we have our own budget, but we want you to give us advice to design our own projects".*"
>
> (Interview: regional organization, B2)

The requested trainings in the neighbouring towns were carried out by local community members of Santa Teresa who had benefited from the numerous capacity development activities carried out by the World Bank (Interview: regional organization, B2). This particular aspect also highlights the strategy adopted by the World Bank to help ensure the long-term sustainability of the resilience tools provided.

The end-of-programme evaluation report highlights that while it is not possible to measure the full scale of the benefits of these adaptation projects with regard to water security – insofar as doing so would require a greater timeframe –, the PRAA significantly improved the efficiency in the use of water for irrigation, thus improving productivity whilst simultaneously reducing demand for water resources (World Bank, 2014, p.44). In addition, in assessing the benefits of the pilot activities implemented, the evaluation report also underscores the importance of looking beyond the infrastructure deployed, and to take into consideration the enhanced organizational capacity of the water and sanitation committees, the greater sense of community cohesion and reduced competition for water resources (ibid., p.47) – which clearly hints to the role played by

the World Bank in soothing local tensions and conflicts, which will be analysed in great details in the following chapter.

On the one hand, the ability of the Bank to successfully enhance the local adaptive capacity in Santa Teresa is in line with the findings of the empirical work carried out by scholars such as Verkooijen (2011, p.51), who underscored that the design and implementation of climate change adaptation technical cooperation projects significantly increased the resilience of local communities in the Peruvian Andes to climate shocks, including by providing community members with the tangible and intangible assets that they needed to ensure equitable use of natural resources such as water (ibid., p.57). Along similar lines, Kaul (2001, p.22) highlighted the ability of Bank-led technical cooperation programmes in India to successfully enhance the capacity of local communities to manage their environmental resources, and Dumaru (2010, p.761) noted that CCA projects promoted both reactionary as well as anticipatory capacities of local communities in Fiji.

On the opposite hand, these findings contrast with those of scholars who have criticized the inability of World Bank programmes to build local environmental resilience in a sustainable fashion through the provision of adequate knowledge and skills to vulnerable communities (Beymer-Farris & Bassett, 2012, p.339; Ayers *et al*., 2011, p.77; Shankland & Chambote, 2011, p.68; Alam *et al*., 2011, p.56; Ireland, 2012, p.159; Carey *et al*., 2012, p.190; Lynch, 2012, p.364).

However, the above successes notwithstanding, it is essential to highlight that the existing literature questions whether technical cooperation programmes such as the PRAA may realistically be looked upon the as the best vehicles to strengthen community resilience in the long term. Moreover, for a given programme to be truly effective in the long term, initial investments made at the local level will need to be sustained beyond the completion of its various project activities and – most likely – scaled up in order to meet the evolving impacts of the ongoing changes brought about by climate change (Agrawala & Van Aalst, 2008, p.188).

In response to this challenge, through the PRAA, the World Bank recognized from the outset the importance of building the ability of local community members in Santa Teresa to seek additional sources of funding for the future upscaling of the project activities implemented during the course of the programme. As the following paragraphs will explain in detail, based on careful triangulation of all the data collected, it would appear that in Santa Teresa the World Bank succeeded in providing local residents with the skills, tools and resources necessary to source new funding streams to sustain and upgrade the CCA activities implemented under the PRAA

(Independent Evaluation Group, 2014, p11; Interview: multilateral organization, A2; regional organization, B2; international NGO, C1; local community, D2).

> "*We look at the issue far beyond the limits of the PRAA* […] *For this reason, it is important that the activities of the PRAA prove to be sustainable in the long term, over the next thirty to forty years."*
>
> (Interview: international NGO, C1)

The World Bank did not envisage the PRAA as being the solution to all long-term climate change problems in Santa Teresa, but rather recognized that its efforts would be a starting point to show local communities and authorities what solutions could be designed, the way to implement them and the options to sustain and upscale them by identifying and sourcing additional financial resources (Interview: multilateral organization, A2; regional organization, B2; local community, D2).

> *The project was designed as a pilot, intended to get the conversation going, to help convene local, regional and national levels to then follow-up on that* […] *These communities still need national funding to continue developing their plans, strategies, etc.""*
>
> (Interview: multilateral organization, A2)

In Santa Teresa capacity building efforts and trainings were established to ensure that local communities would have the skillset necessary to approach national government officials vis-à-vis the need for future financial support to sustain local adaptation activities. These trainings were held jointly for local residents and Municipality officials, with a view to ensuring that both became fully aware of the opportunities and ways to sustain CCA efforts in the long term (Interview: multilateral organization, A2; international NGO, C1; local community, D2).

> "*Often times these communities would not have access to additional resources from the central government. Some of the requirements for these communities to access funding is for them to prepare investment plans, to have water associations in place, to have statues in place. They did not have them, so the project did provide a lot of advice and support, enabling them to now go to request the government's own funds.*"
>
> (Interview: multilateral institution, A2)

> *"They explained to us how to prepare budgets for climate change activities."*

(Interview: local community, D2)

In terms of the extent to which the training and skills provided by the World Bank may have actually resulted in local community members being able to submit requests for additional funding, and succeeding in receiving said funding, the present findings suggest that the PRAA is already bearing initial fruits. It would appear that the Cusco regional government has agreed to provide the financial support necessary to upscale local CCA initiatives, including the design and implementation of a watershed management plan, developed following the lessons of the PRAA (Interview: regional organization, B2).

"Our lessons are actually being used to generate more activities in adaptation. This is exactly what we wanted."

(Interview: regional organization, B2)

On the one hand, these findings resonate with those uncovered by Bebbington *et al*. (2007, p.610), who presented evidence according to which technical cooperation programmes in Bangladesh succeeded in providing local communities with the tools and skills necessary to generate useful additional income, as well as by Khanna *et al*. (2015) who, in analyzing participatory processes in the context of a World Bank technical cooperation programme in India, found that the project led to the increased ability of local community members – especially women – to approach local government offices for funding (ibid., p.1221). On the other hand, these findings contrast the positions argued by scholars such as McAfee (1999, p.139), Harrison (2005, p.256) and Beymer-Farris & Bassett (2012, p.333), according to whom the attempt perpetrated by multilateral development institutions to facilitate closer interaction among local communities and government officials vis-à-vis the protection of local environmental resources stems solely from a hidden agenda that aims to shift access to, and control and management of natural resources from local people to powerful stakeholders.

5.3 Ensuring a bottom-up approach to resilience building

Based on the empirical evidence uncovered by the present investigation, it would appear that the aforementioned resilience building activities were the result of a community-based, bottom-up grassroots process which the World Bank took to help ensure that the inputs provided by local communities directly shaped specific adaptation activities being implemented. To analyse these findings, the present section will cross-reference the first -hand evidence captured through

interviews with members of the local community and representatives of international NGOs, regional and multilateral organizations, and Peruvian central government officials (Interview: local community, D2, D4, D6; international NGO, C1; World Bank, 2007; regional organization, B2; central government, B1; multilateral organization, A2), with the criteria of pure procedural justice (Hermansson, 2010, p.511), deliberative participation (Young, 2000, p.26) and integration of traditional knowledge (Adger et al., 2011, p.5), which were amply discussed in chapter two.

The concept of pure procedural justice stipulates that the outcomes of decision making processes must not be known in advance of discussions taking place (Hermansson, 2010, p.511), while the concept of deliberative participation (Young, 2000, p.26) stresses the importance of ensuring that all stakeholders involved in the decision-making process are transparent among each other and towards the general public vis-à-vis their argumentations and the information they possess. In this context, in Santa Teresa, the World Bank adopted rigorous procedures to ensure that its workshops and community consultations were conducive to the open and transparent sharing of information. In doing so, the Bank was able to allow project activities to be shaped on the basis of the specific recommendations of local community members (Interview: regional organization, B2; international NGO, C1; local community, D1; D2; D6; D8; D9; World Bank, 2008, p.96; World Bank, 2007, p.25).

> "*One of the most important outcomes of the workshops was to understand how we could integrate the findings of the scientific monitoring process with the perceptions, needs and suggestions of the local communities.*"
>
> (Interview: international NGO, C1)

> "*During the workshops, we discussed a lot among ourselves about the most important problems, and how best to address them. They* [i.e., programme officials] *listened to what we had to say, and developed activities that reflected everything that we had told them."*
>
> (Interview: local community, D8)

The structure of the community workshops consisted in a plenary session during which all the participants would help identify the main climate-related problems affecting the lives and livelihoods of the local community, followed by focus group discussions during which the various problems were prioritized, their causes focused upon and possible courses of action identified. This approach allowed local community members to have a direct and tangible influence in shaping the specific CCA activities that were designed, as well as guiding their implementation (Interview: regional organization, B2; international NGO, C1).

"*They* [the local community members] *were part of the project implementation* […] *They participated in all the technical aspects. They decided which crops we were working with. All decisions were made at the local level.* […] *All the technical decisions were made at the local level."*
(Interview: regional organization, B2)

"*It was so good to see that what we had suggested was being done*."
(Interview: local community, D6)

With regard to the methodology that was applied during the workshops to ensure that community views directly shaped the design of the project, the World Bank adopted the CVCA/CRiSTAL ('Community-based Risk Screening Tool – Adaptation and Livelihoods') methodology. This is a project planning tool that helps ensure that the inputs provided by local communities shape specific adaptation activities (IISD, 2012, p.8; Interview: multilateral organization, A2).

"*We worked a lot with CARE, and CARE applied this instrument called CRiSTAL which is an instrument to identify priorities in a consultative way and based on consensus and based on the feedback of this tool the project took shape.*"
(Interview: multilateral organization, A2)

As part of the CVCA/CRiSTAL methodology, various tools were deployed during the focus group discussions that took place during the workshops, including hazard mapping and vulnerability matrix development (Dazé *et al*., 2009, p.13).

With regard to hazard mapping, the purpose of carrying out this exercise was threefold, and consisted in: identifying important livelihood resources in the community and who had access and control over them; identifying areas and resources at risk from climate hazards; and analyzing changes in hazards and planning for risk reduction. Sample questions used during these sessions included: what are the most important livelihood resources to different groups within the community? What climatic changes is the community observing? What coping strategies are currently employed to deal with shocks and stresses? What are the biggest climate-related hazards faced? Are men and women working together to address challenges? Do households have control over critical livelihoods resources? Do women and other marginalized groups have equal access to information, skills and services? Are there other social, political or economic factors which make particular people within the community more vulnerable than others? (ibid., p.33).

"*The application of this methodology allowed the communities to identify what are the aspects of climate change that are most negatively affecting them, how they can participate in the decision making process of the adaptation activities, and how to prioritize the activities in which they want to take part in the implementation of.*"

(Interview: international NGO, C1)

"*Each one of us decided which activities to take part in, depending on what was most important to us. Most of the time, people took part in those activities that were developed based on what they had personally suggested during the workshops*."

(Interview: local community, D9)

With regard to the development of the vulnerability matrixes, the purpose of carrying out this exercise was threefold, and consisted in: determining the climate-related hazards that had the most serious impact on important livelihoods resources; determining which livelihood resources were most vulnerable; and identifying coping strategies being used to address the hazards identified. Sample questions used during these sessions included: what coping strategies are currently used to deal with the hazards identified? Are they working? Are there different strategies that you would like to adopt which would reduce the impact of hazards on your livelihoods? What resources do you have that would help you to adopt these new strategies? What are the constraints to adopting these new strategies? (Dazé *et al*., 2009, p.39).

"*In partnership with the local councils, we developed local development plans, and we succeeded in understanding with them which are the dangers and why it is important to implement these adaptation measures."*

(Interview: international NGO, C1)

Specific examples of community-shaped projects include the following. First, since local communities highlighted that the absence of an irrigation system hindered agricultural production during the dry season (Interview: local community, D3), technical studies were supported to improve irrigation systems. Second, since local communities highlighted that the areas surrounding Santa Teresa were heavily deforested and reforestation was viewed as a means to conserve water sources and avoid landslides (Interview, Municipality of Santa Teresa, D5), the PRAA supported reforestation of degraded areas. Third, since local communities highlighted that the likelihood of landslides in degraded steeps and the possible overflow of lagoons near snowcapped mountains due to snow melt – in particular from Salcantay – was a matter of the

utmost concern, the PRAA supported the design and implementation of specific project activities to prevent these risks (World Bank, 2008, p.96).

"*It was a very participative process. The local communities were organized into committees with a very large participation of young people, which are now very well aware of the impacts of climate change on the local economy and ecosystems. They already know exactly where and how the adaptation activities are being implemented.*"
(Interview: international NGO, C1)

"*We are facing a lot of threats. It was about time that someone came to help us take care of these problems by listening to what we have to say*."
(Interview: local community, D2)

In addition to the above, in order to ensure that the previously presented resilience building interventions also reflected various sub-texts of specific community needs and concerns, various activities were further revised and modified to take into account additional community perspectives. Specific examples of project activities that were revised based on community concerns include the following.

With regard to the project activity entitled 'Reforestation of degraded mountainsides', two risks were highlighted during the project design phase, namely: that the wrong species be planted vis-à-vis the needs of the local communities; and – consequently – that parts of the local population may not be able to make the best use possible of the trees. A second example relates to the project activity entitled 'Integrated management of water and natural environment resources' where two risks were also identified, namely: that vulnerable groups such as women with small children or people whose lands are located in particularly remote areas may have difficulty in accessing the necessary water resources; and the risk that socio-cultural factors may determine access to water resources, including gender issues, age and social status. A third example relates to the project entitled 'Enhancement of the agricultural production system to increase efficiency in water use' where the risk that socio-cultural factors may determine access to agricultural and water resources was highlighted. A fourth and final example relates to the project entitled 'Capacity strengthening for the management of water and natural resources' where the risk was highlighted that people with a low level of education may be excluded from said activities (World Bank, 2007, p.25).

In addition, the Systema de Vijilancia Communitria (SiViCo) was put in place to ensure that all community members were not only aware of the project activities, but also able to follow and engage with the evolution and implementation of these activities over time.

> "*The system provides information on how many families live in the various areas impacted by the project activities, how they are, how much land they have, what are their main livelihood activities, etc. They have maps indicating this, which also tell them who is responsible for the various activities.*"
>
> (Interview: international NGO, C1)

The third criterion of bottom-up grassroots resilience building presented in chapter two is integration of local traditional knowledge. In this regard, Adger *et al*. (2011, p.5) stress the importance of acknowledging and making effective use of traditional ecological knowledge through participatory decision making. Traditional ecological knowledge, which encompasses skills, habits and livelihood strategies, should be regarded as an important resource for climate change adaptation. In Santa Teresa, the World Bank set out to ensure from the onset that the design of all specific project activities was the result of a well-crafted combination of local knowledge with the latest scientific data available through ongoing monitoring of glacial melt in the area (Interview: international NGO, C1; local community, D1; central government, B1; multilateral organization, A2; multilateral organization, A5).

> "*There are aspects such as local customs, culture, habits, and knowledge that were taken into consideration. For example, in relation to where to implement given activities, when to implement the activities and when not to, etc*."
>
> (Interview: central government, B1)

> "*People know how to take care of their problems. We have been taking care of our environment for generations. Now we have new challenges, especially water* [shortages]*, so what we need is a little help. CARE Peru gave us this* [support]*, and helped us to protect our environment by using the knowledge that we have had for many generations*."
>
> (Interview: local community, D1)

> "*Local knowledge was valued and taken into account. They used ancient, traditional knowledge. For instance in pest management. They have been trying to revert to practices where they use tobacco plants to keep pests away. That has been captured and brought back into practice."*

(Interview: multilateral organization, A2)

It is important to note that the findings herein presented echo those of Braun (2010, p.784), whose empirical investigation in Brazil found that social participation played a major role in the design of development programmes led by the Inter-American Development Bank in Brazil, and Khanna *et al*. (2015, p.1211), whose empirical investigation in India found that new participatory techniques and tools being deployed in Bank-led projects succeeded in promoting horizontal community participation. In addition, the findings are also in line with those of D'Agostino & Sovacool (2011, p.710), whose empirical research in Cambodia on CCA projects found that the UN Development Programme succeeded in putting in place effective knowledge and information sharing mechanisms in the design of project activities, as well as increasingly empowering local people in the decision-making process (ibid., p.711).

Instead, the present findings do not reflect the positions upheld by scholars such as Lynch (2012, p.370) and Alam *et al*. (2011, p.56), according to whom local communities and civil society organizations are almost never involved in the decision making process relative to climate change adaptation, and Shankland & Chambote (2011, p.68) according to whom, even when communities are supposedly involved, they appear to know little or nothing about the project itself. Likewise, the present findings are not aligned with the positions of Ireland (2012, p.159) – who argues that local beneficiaries are distrustful of international aid organizations, and thus unlikely to openly share knowledge insofar as they perceive climate change projects as something imposed from outside, and which as such are not directly related to them – and Blaikie (2006, p.1944), according to whom it is completely unrealistic to believe that unequal power relations can be palliated by inclusionary and participatory techniques that only end up producing some form of hybrid knowledge.

5.4 Conclusions

The present chapter set out to analyze how the World Bank may or may not have succeeded in meeting the needs of the local community in Santa Teresa vis-à-vis environmental resilience building through the implementation of practical strategies and project activities that fostered a bottom-up grassroots approach to capacity building. Based on the findings presented, two main conclusions can be drawn.

The first conclusion is that the World Bank succeeded in building the environmental resilience of local communities by providing knowledge and skills in relation to water management through a series of CCA activities. These activities were designed and developed on the basis of the localized needs of community members, and implemented through a flexible, on-going learning process aimed at ensuring that community members and local officials will be able to respond to the changing climatic threats as these evolve over time. In addition, the World Bank also succeeded in providing local residents with the skills, tools and resources necessary to successfully secure new sources of funding to sustain and upgrade the CCA activities implemented under the PRAA. Moreover, the overarching rationale that guided the design of all the various project activities was that every activity should be based on a deep understanding of the roots and causes of local vulnerability, as well as of poverty, inequalities and local power dynamics, in order to allow community members and local officials to respond to the changing climatic threats as these evolved over time (Interview: multilateral organization, A2; international NGO, C1, C2; World Bank, 2012, p.8). In terms of the types of interventions that the Bank designed, these focused upon ensuring a more efficient, equitable and conscientious management of the local water resources (ibid.).

The second conclusion is that the aforementioned resilience building activities were the result of a community-based, bottom-up grassroots process which the World Bank took to help ensure that the inputs provided by local communities directly shaped specific adaptation activities being implemented. The World Bank adopted rigorous procedures to ensure that its workshops and community consultations were conducive to the open and transparent sharing of information. In doing so, the Bank was able to allow project activities to be shaped on the basis of the specific recommendations of local community members (Interview: regional organization, B2; international NGO, C1; local community, D1; D2; D6; D8; D9; World Bank, 2008, p.96; World Bank, 2007, p.25). In addition to the above, in order to ensure that the specific interventions that were designed to address the community vulnerabilities identified in chapter four also reflected various sub-texts of specific community needs and concerns, various activities were further revised and modified to take into account additional community perspectives. Furthermore, the World Bank also ensured from the onset that the design of all specific project activities was the result of a well-crafted combination of local knowledge with the latest scientific data available through ongoing monitoring of glacial melt in the area (Interview: international NGO, C1; local community, D1; central government, B1; multilateral organization, A2; multilateral organization, A5).

However, the above successes notwithstanding, the question remains as per whether the design of the PRAA translated into the effective implementation of practical strategies on-the-ground

that offered an opportunity – in addition to bottom-up local community environmental resilience building – also for community political empowerment in Santa Teresa. In addition, the question also remains as per what happened in Santa Teresa that – unlike in Tia Maria and Las Bambas – enabled a short term peaceful resolution of conflicts among local residents and central government officials vis-à-vis extractive activities, and why peace in Santa Teresa was short lived. The following chapter will attempt to answer these outstanding questions.

Chapter 6: The World Bank and community empowerment in Santa Teresa

6.1 Introduction

The present is the third findings chapter and will address the third research sub-question by discussing how the World Bank may or may not have succeeded in politically empowering local communities in Santa Teresa through the implementation of practical strategies and project activities. In this regard, the chapter will discuss the specific efforts that the Bank put in place to empower the local community, efforts which led to improved relationships between community members and local government authorities, and which temporarily soothed tensions and potential conflicts. In this context, the chapter will highlight how the Bank sought to mediate the tensions descried in chapter four among the local community on the one hand, and the central government and Luz del Sur on the other by empowering the local community through a suite of CCA interventions.

However, these efforts notwithstanding, the present chapter will also highlight significant shortcomings in the approach taken by the Bank in terms of providing the local community with the skills necessary to negotiate its interests beyond the timeframe of the PRAA. This particular limitation will be analyzed in relation to the eruption of violent conflict between the local community and government authorities – detailed in chapter four – which tainted the immediate aftermath of the PRAA, and which may risk undermining several of the Bank's achievements in Santa Teresa vis-à-vis the safeguarding of the long term empowerment needs of the local community.

To present the above, the chapter will be structured around three main sections. The first section will discuss the three-pronged strategy that the World Bank put in place to attempt to mediate the conflicts outlined in chapter four by empowering the local community. This strategy consisted in first, enhancing skills, know-how and capacities of the local community and local authorities to design and implement activities capable of addressing their water resource needs; second, fostering dialogue among stakeholders, to bridge the distrust between local communities and government authorities; and third, resolving feelings of frustration, abandonment and isolation among the local communities.

The second section will analyze if the World Bank put in place efforts to provide the local community with the skills necessary to negotiate its interests vis-à-vis the conflicting interests

over access and usage of water resources for competing purposes among (and within) the local community on the one hand, and central government authorities and private multinationals on the other. The research findings will be analyzed through the lens of the third 'face of power' defined by Lukes (2005, p.22), which consists in one's ability to impose one's will by preventing others from understanding what their actual needs and interests are. In the context of this 'third face' of power, the research will seek to establish if the World Bank provided the local community with the opportunities and resources necessary to ensure that, during decision-making processes, they were able to remain fully aware of their needs at all times, to understand the implications of their interests, and to effectively negotiate said needs and interests with powerful stakeholders by applying the know-how, tools and techniques required.

The third section will analyse if the efforts of the World Bank to promote and protect the needs of the vulnerable community in Santa Teresa may have served the interests of multiple stakeholders and, if so, will discuss whose interests might have been best served in the short and long term. Moreover, in order to fully understand the role played by the Bank in Santa Teresa, the present chapter will frame the efforts of the Bank in the broader context of the differing interests that they might have helped to serve, with a view to providing a full-fledged picture of the rationale underpinning the *modus operandi* of the Bank in Santa Teresa, which will then be analyzed in detail in chapter seven vis-à-vis the existing literature on international development aid.

6.2 Three-pronged strategy to mediating conflicts by empowering the local community

Based on careful triangulation of all the data collected, the present section will discuss evidence based on which it would appear that what set the PRAA apart from previous, traditional approaches to water-related CCA programmes was the decision of the World Bank to attempt to mitigate tensions and resolve social conflict by politically empowering the local community through a three-pronged strategic approach. In essence, this approach was aimed at first, enhancing skills, know-how and capacities of the local community and local authorities to design and implement activities capable of addressing their water resource needs; second, fostering dialogue among stakeholders, to bridge the distrust between local communities and government authorities; and third, resolving feelings of frustration, abandonment and isolation among the local communities. While this approach proved successful in the short term, it afforded mixed results in the long term.

"*This approach yielded results. Conflicts diminished, gradually."*

(Interview: local community, D3)

Chapter four revealed that that the vulnerabilities and unmet needs of the local community gave birth to a number of conflicts among community members, as well as among local residents and government authorities over the use and management of freshwater resources. In particular, three main lines of conflict were identified as stemming from the issue of water scarcity. The first conflict arouse among the local residents of Santa Teresa over access to water resources and usage rights, as well as over how these rights differ between personal consumption and usage for productive activities, such as farming, agriculture and livestock (Interview: Municipality of Santa Teresa, D5; local community, D8; local NGO, C7).

The second conflict arose among local authorities in Santa Teresa – who were accused by community members of lacking interest in all those activities that did not bring a visible, immediate and tangible benefit to them, such as those aimed at mitigating the impacts that water scarcity will have on the well-being of present and future generations (Interview: local community, D2, D4) – and local communities, who were accused by representatives of the Municipality of lacking any interest in actively engaging in efforts to address the impacts of climate change (Interview: local community, D2; Municipality of Santa Teresa, D5). It would appear that these conflicts were worsened by the presence of local NGOs. According to residents of Santa Teresa, as well as to representatives of regional research institutes, of the local government, of the central government, and of multilateral organizations, it was local NGOs that flared fear and resentment among local communities vis-à-vis water shortages for their own interests and personal gain (Interview: multilateral organization, A5; central government, B3; central government, B5; central government, B6; regional government, C2; research institute, C4; research institute, C5; regional government, C6; local community, D2). The reason for this effort was found to be that when local communities fear and protest against extractive activities – which local NGOs present as being the prime cause of water shortages –, local NGOs receive government funding for the implementation of social development schemes (Interview: research institute, C4, C5; regional and central government, B5, B6, C2).

The third conflict arose among local communities on one hand, and the central government and the foreign-owned multinational Luz del Sur on the other, over the proposed hydroelectric project 'Santa Teresa II', which local communities denounced as being cause for environmental degradation vis-à-vis water resources (Interview: international NGO, C1; Municipality of Santa Teresa, D5; research institute, C4, C5; central government, B5; regional government, C2; La Republica, 2013; Morla, 2015; El Peruano, 2015).

In the context of these conflicts, one of the goals of the World Bank's interventions in Santa Teresa was to "*ameliorate potential social conflict*" (World Bank, 2008, p.153). While the overall rationale guiding this goal has already been analysed at great length in chapter four, it is herein now necessary to understand how this goal may have translated into practical action on the ground vis-à-vis the political empowerment of the local community, and to analyse its possible success and shortcomings.

To start, it is important to highlight that while the scenario in Santa Teresa presented very significant similarities with those that characterized Tia Maria and Las Bambas (described in chapter four) vis-à-vis poverty, climate vulnerability, natural resource dependency, government exploitation and social tensions, unlike in Tia Maria and Las Bambas tensions in Santa Teresa did not result in the outbreak of any form of violence, initially (La Republica, 2013). According to representatives of stakeholder groups ranging from members of the local community, to representatives of local NGOs, multilateral organizations, regional government officials and end-of-programme evaluation reports, it would appear that the World Bank played a decisive role in ensuring that what happened in Tia Maria and Las Bambas did not also take place in Santa Teresa (Interview: local community, D3; local NGO, C7; multilateral institution, A2; World Bank, 2014, p.14).

In this context, the following paragraphs will analyze the details of the three-pronged approach adopted by the World Bank to politically empower the local community in Santa Teresa.

The first approach was to empower the community in Santa Teresa by building the local adaptive capacity. Without recounting the many capacity development efforts discussed in chapter five, what is herein important to underscore is that the Bank sought to ameliorate the relationships between conflicting stakeholders by building capacities and local skills to demonstrate how the local resources could be better managed for the benefit of everyone (Interview: regional government, C6).

> *"The approach is not to impose conflict-resolution solutions, but rather to facilitate the resolution of conflicts by building the capacities, and in this way demonstrate to all stakeholders how the local resources could be better managed for the benefit of everyone.*"
>
> (Interview: regional government, C6)

As already discussed at great length in chapter five, in addition to building the adaptive capacity of the local community, the World Bank also successfully strengthened the capacity of local authorities, which enabled the Municipality to proactively implement a series of activities aimed at improving local livelihoods vis-à-vis water scarcity. These efforts resulted in renewed confidence of the communities in an around Santa Teresa towards the local authorities, and thus brought closer together civil society and local institutions (Interview: Municipality of Santa Teresa, D5; multilateral organization, A2; international NGO, C1; local community, D2; regional organization, B2; Independent Evaluation Group, 2014, p11).

> "*The Municipality of Santa Teresa has been a star in engagement. They have their own technicians working full time with the community, and they have been wonderful. I would say that the municipality of Santa Teresa has been in the driving seat even more so than the ministry of environment, consulting, reaching out to the farmers' association and to the community in general.* […] *The Municipality has also used some of its own resources to do works on different plots that could not be covered by the project.*"
>
> (Interview: multilateral organization, A2)

It would appear that this "*stellar engagement*" was one of the keys to overcoming the mistrust of local communities vis-à-vis the presumed mismanagement and misadministration of local resources by local government institutions, to the point that – for the first time, as already discussed – local people started proactively seeking the leadership of said institutions, and started approaching them with proposals, as opposed to complaints (Interview: regional organization, B2; Independent Evaluation Group, 2014, p11).

> "*The communities around Santa Teresa were so interested in the project and in the actions that we were implementing there that they went to the Mayor and they said "we want to design a project the same as yours, we have the money, we have our own budget, but we want you to give us advice to design our own projects".*"
>
> (Interview: regional organization, B2)

Strengthened by greater institutional capacity, and backed by solid community support, local government authorities did not require the design and implementation of central government-funded socio-environmental development projects – described and criticized as being little more than a smokescreen to justify and to legitimize extractive practices while disarculating local conflict (Bebbington, 2009, p.107; Gudynas, 2009, p.213; Interview: research institute, C4; C5; regional government, C6) – which were being implemented in almost every site where there were extractive interests were at stake, to the dubious benefit of local communities.

Without the need for central government support, wanting not to lose the newly acquired support of their local constituency, and reassured by the on-going in-flow of resources offered by the World Bank, local government authorities decided to take a strong stance and, by overturning the Ministerial Resolution (La Republica, 2013), decided to respect the needs of the local community and thus to block all activities connected to the Santa Teresa II hydroelectric project. In an already much improved local environment in terms of social tensions, this decision eliminated all risks of violent uprising by local communities.

Faced with the declared opposition of local government authorities, in the absence of any forms of violent protest, and cognizant of the ongoing activities of one of the world's most powerful multilateral institutions, i.e., the World Bank, the central government found itself in no position to pursue the Santa Teresa II hydroelectric project, and thus neither granted further support to Luz del Sur (for the duration of the PRAA), nor took the extreme measures that had been taken in Tia Maria and Las Bambas, where a State of Emergency was declared.

The present findings thus confirm the claims advanced by Bottrell (2009, p.334) and Joseph (2013, p.51) – who assert that resilience building can be used as a neo-liberal strategy used to ensure that poor communities are able to absorb and accept government-led market-driven exploitation –, while at the same time moving beyond them. What this means is that, on the one hand, the present investigation found that resilience building was indeed looked upon by central government officials as a means to ensure that local communities were able to withstand the consequences of natural resource exploitation in Santa Teresa. Moreover, by initially endorsing the World Bank-led interventions, the central government sought to demonstrate its closeness to the needs of local communities as a means to reassure them of the legitimacy of the interventions it was going to push vis-à-vis the planned hydroelectric project (Interview: central government, B7)

> *"To understand the role of these* [CCA] *programmes, it is also important to take into account the direct relationship between local communities and the central government in terms of reassuring the communities of the legitimacy of certain* [extractive] *interventions".*
>
> (Interview: central government, B7)

On the other hand, however, the present findings move beyond the arguments of Bottrell and Joseph by highlighting that, in the case of Santa Teresa, World Bank-led environmental resilience

building activities succeeded in addressing the needs of the local communities because they were able to create a convergence of interests between local government officials and local residents – even if this meant greatly frustrating the initial plans of central government officials, as section 6.4 of the present chapter will explain in great detail.

The second approach to empowering local communities was to act as a catalyst for dialogue among multiple stakeholders. While chapter five (section 5.3) explained the modalities through which decision-making unfolded in Santa Teresa to ensure a bottom-up approach to resilience building, the present chapter will focus on the processes and power dynamics that underpinned said decision-making. In doing so, the present chapter will look at what happened in Santa Teresa through the lens of the 'three faces of power' elaborated by Lukes (2005), which have been amply discussed in chapter two[17]. In particular, the present section will highlight the successes of the PRAA by focusing on the first two 'faces of power', while the following section (6.3) will analyse the shortcomings and failures of the approach taken by the Bank through the lens of the third 'face of power'.

It is very important to highlight from the outset that a large part of the success of the World Bank's approach in Santa Teresa is to be found in its ability to act as a catalyst for the interaction among local people and a remarkable number of external stakeholders, ranging from aid workers, to utility companies, scientists and decision makers (Interview: international NGO, C1; local community, D4; World Bank, 2014, p.14).

> "*As one scientist put it during the Project closing workshop, never before had they gone to the field and talked to farmers to hear about their needs.*"
>
> (World Bank, 2014, p.14).

> "*One of the conditions for CARE to be involved in a programme was that all institutions involved in the programme, national and international, work in partnership with the local communities.*"
>
> (Interview: international NGO, C1)

[17] According to Lukes, the first face of power consists in the ability of an individual or group to impose its will over that of other groups or individuals during the course of a decision-making processes (ibid., p.19), while the second phase consists in limiting or jeopardizing the ability of others to participate in a decision-making process (ibid., p.20). The third face of power described by Lukes (2005, p.22) – defined as 'non-decision making' – consists in the ability to impose one's will by preventing others from understanding what their actual needs and interests are.

"*It was a mixture of officials and people from the local community* [who were brought together]."
(Interview: local community, D4)

In this context, chapter four analyzed the lack of decision making opportunities in Santa Teresa for local communities to express their thoughts, perspectives, opinions and concerns regarding the management, administration and use of local freshwater resources. In particular, chapter four highlighted the consequences of these limitations in terms of heighted competition among community members for water resources for various purposes (e.g., personal consumption, agriculture, livestock, mining, etc.) (Interview: local NGO, C7; Municipality of Santa Teresa, D5; local community, D8; regional government, C6; Farfán, 2010, p.11; Dazé, 2011, p.14); distrust towards local institutions, whom community members did not feel adequately represented by vis-à-vis their water related needs (Interview: local community, D2; Municipality of Santa Teresa, D5; Farfán, 2010, p.6); as well as – most notably – conflicts between local residents and central government authorities over the use of water resources for hydroelectric power generation (Interview: Municipality of Santa Teresa, D5; local community, D8; local NGO, C7; La Republica, 2013; Morla, 2015).

In response to these challenges, the World Bank sought to empower the local community by ensuring that all community members were able to participate in an open, transparent and fully participative decision-making process vis-à-vis the management, administration and use of local freshwater resources. In this regard, the overarching rationale that guided the individual efforts of the Bank – which will be analyzed in detail in the following paragraphs – was to establish structured processes that allowed local community members to openly and meaningfully discuss their concerns and perspectives with representatives of all major stakeholder groups involved in the use of water resources in Santa Teresa, with a view to guaranteeing that their interests be adequately reflected in all decisions regarding the management and use of freshwater for competing purposes (Interview: local community, D2, D4, D6; international NGO, C1; World Bank, 2007; regional organization, B2; central government, B1; multilateral organization, A2).

Based on careful triangulation of all the data collected, it would appear that the World Bank succeeded in its approach – in the short-term – and was thus able to empower the local community vis-à-vis decision making in the context of the PRAA (ibid.).

In Santa Teresa, to ensure that all affected parties had an opportunity to voice their concerns, the World Bank structured the process of community engagement over three inter-related phases: preliminary consultation; project design; and project implementation (Interview: regional

organization, B2; local community, D4, D6; international NGO, C1; central government, B1; World Bank, 2007).

"The Bank is consultative. That has not always been the case in country projects, where traditionally things have been implemented top down coming from the national governments […] This is something relatively new that has been getting more attention, so I think that this is something that not only was a requirement, but that is being taken very seriously as well."
(Interview: multilateral organization, A2).

The first phase was 'preliminary consultation'. During this phase, three major preparatory workshops were organized that brought together local community members and representatives of ten institutions who had stakes in the management of water resources (Interview: local community, D4; international NGO, C1; World Bank, 2007, p.18; regional organization, B2).

"*It was a mixture of officials and people from the local community* [who were brought together]."
(Interview: local community, D4)

The first workshop was held on 16 March 2007, and was attended by local community members and representatives of the following institutions: Radio Salkantay; the institute for the management of water and natural resources (*Instituto de Manejo de Agua y Medio Ambiente - IMA*), which is part of the regional government of Cusco; the association for the conservation of the Amazon basin (*Asociación para la Conservación de la Cuenca Amazónica - ACCA*); the National University of San Antonio Abdad (*Universidad Nacional de San Antonio Abad del Cusco*); the Municipality of Santa Teresa; the school of engineers of Peru (*Colegio de Ingenieros del Perú*); the national meteorological and hydrological service of Peru (*Servicio Nacional de Metereología e Hidrologia del Perú*); the general electricity company of Machupicchu (*Empresa de generacion electrica de Machupicchu*); the Municipality of San Sebastián; and a local civil society group (*Asociacion Pukllasunchis*).

"*One of the conditions for CARE to be involved in the programme was that all institutions involved in the programme, national and international, worked in partnership with the local communities.*"
(Interview: international NGO, C1)

The main results of the workshop were: clarification of the relationship between suggested areas of intervention of the PRAA in Santa Teresa and local needs in the areas of agriculture, deforestation, water and biodiversity; and official support by the Municipality of Santa Teresa in

providing all the necessary facilities for the development and implementation of the adaptation activities (World Bank, 2007, p.18).

The second and third workshops were held in the Municipalities of Santa Teresa and Chaupimayo (both in the Cusco region) on 23 and 24 March 2007, and were attended by breadwinners and farmers of local communities in Chaupimayo, Limacmarca and Santa Teresa. The main results of the workshops included: identification of cultural and linguistic definitions related to the impact of climate change on the daily lives of the participants; consultation on the interest of community members to participate in the implementation of specific activities; discussion on the expectations among workshop participants of the benefits of the PRAA for local communities; development of proposals for the outreach and communication of the key messages related to the PRAA with a view to raising awareness at community level of the importance of the activities, including through the use of local radios, slogans and catchphrases, and the development of educational and capacity development materials in Spanish as well as in Quechua (i.e., the local language) for the benefit of those with lower levels of education (ibid., p.19).

"*The consultation activities carried out by CARE Peru were very beneficial to the local population.*"

(Interview: local community, D2)

The second phase was 'project design', during which several consultations and operational community workshops were organized. These consultations involved local communities in various areas related to the project implementation, including in Cochapampa, Lucmabamba, Chaupimayo, Yanatile, Tendalpampa, Totora, Yanama and Huadquiña. During these consultations and workshops, the various adaptation activities that were due to be implemented in the various areas were both discussed and reviewed, with a special focus on the local needs previously identified during the first phase (Interview: regional organization, B2; World Bank, 2007, p.19).

"*They* [i.e., programme officials] *worked directly with local communities to address water scarcity connected to the melting of glaciers.*"

(Interview: local community, D8)

"*The design of the project was a very participative process, we didn't have only workshops. We actually worked with the communities, with the farmers in the field* […] *Community involvement was an issue since the begging of the project. We designed the project based on the local community needs. They* [i.e., the local community] *were involved since the beginning. The*

beneficiaries, the communities were along all the process. It's not that we invited them just for the workshops. That's the reason why it took a lot of time because it was very participative, it wasn't just a plan, we didn't just consult the government to develop a plan; we spent a lot of time working with the local population."

(Interview: regional organization, B2)

The third phase was 'project implementation'. During this phase, representatives of CARE-Peru and local government authorities worked closely with community-based councils to establish local development plans. Based on the directions provided by local community members, several project activities were designed to ensure that livelihood resources be less exposed to climatic hazards. These plans were structured on agreed priorities based on the environmental dangers and economic impacts perceived by local populations, and were built around a series of specific adaptation measures (Interview: regional organization, B2; international NGO, C1; central government, B1).

"*CARE Peru worked hand in hand with the local population.*"

(Interview: local community, D2)

"*We were successful in involving local communities because this is the most critical aspect given that the PRAA aims to enhance the economic resilience to climate change of the local people and of the local ecosystems. Therefore, not involving the local people that are entwined to the local ecosystems: simply, this doesn't exist.*"

(Interview: international NGO, C1)

Having used capacity development activities to address and resolve conflicts and having acted as a catalyst for dialogue among multiple stakeholders, the third approach adopted by the World Bank to empower the local community was to diffuse feelings of frustration, abandonment and isolation among the local communities by carrying out activities aimed at enhancing community awareness, confidence and personal commitment vis-à-vis climate change adaptation activities (Interview: multilateral institution, A2; local NGO, C7; local community, D8).

"*These communities are relatively isolated* […] *they have not been priorities in the past. If the Bank had not put the spotlight on those communities, the central government certainly would not have*."

(Interview: multilateral institution, A2)

"*Prior to the arrival of CARE Peru*, *nobody had done anything to deal with the impacts of climate change in Santa Teresa.* [Instead, with the implementation of the PRAA] *People could see that things were being done to help them, and they did not feel abandoned. This was very important.*"

(Interview: local community, D8)

"*The PRAA significantly diminished the conflicts because the people could see that things were being done to help them, and they did not feel abandoned. This is very important*."

(Interview: local NGO, C7)

In this context, the wealth of information provided by community members throughout the lifespan of the PRAA – in addition to serving as the basis for the design of the actual adaptation projects – was used to develop a host of awareness raising materials (Interview: central government, B1). Through these efforts, the World Bank triggered scientific publications, as well as numerous articles in local, regional and national newspapers, blogs and radio stations, not to mention publications on internationally recognized media houses, including the Spanish *El Pais*, regarding the impacts of glacier retreat (Fukushima 2009, p.19; Fukushima, 2010, p.238).

"*This was the most important aspect of the PRAA; that is to say to raise awareness of the strict relationship between the effects of climate change and the lives of local communities, for instance in terms of their use of water resources and of the impact of climate change on their crops. It is something that must be dealt with.*"

(Interview: central government, B1)

By enhancing community awareness, confidence and personal commitment vis-à-vis climate change adaptation activities, the PRAA helped community members to not feel the need to attempt to address the climatic risks they were confronted with by protecting their natural resources through the establishment of privately managed protected areas under the 'temporary administration' of local NGOs. As a result, nobody ran the risk of losing private land, as had instead been the case in neighbouring towns and villages, as explained in chapter four (Interview: regional government, C2). On the contrary, in the context of the PRAA, only those that wanted to participate in the adaptation activities did so (interview: multilateral organization, A2) – which in turn further helped to ease tensions.

"*The process has been guided by volunteers. Those who have been more keen in experimenting on new approaches and techniques. They themselves decided in which*

pilots to participate, with how much of their plots they wanted to put into these [adaptation] *practices. This has been an ongoing process. As the project has been growing, more and more people show an interest.*"

(Interview: multilateral organization, A2)

In conclusion, through the three-pronged approach to community empowerment described herein, the World Bank was able to not only soothe conflicts among local community members, and between the community and Municipality officials, but also – and possibly most importantly – to temporarily resolve the mounting tensions surrounding the presence of Luz del Sur in Santa Teresa. However, as described in chapter four, the peace obtained in Santa Teresa during the presence of the World Bank was abruptly interrupted as soon as the implementation of the PRAA came to completion. To understand this dramatic turn of events, the following section will analyze in detail the reasons that likely determined the short-lived nature of the success of the PRAA.

6.3 Failing to politically empower the local community through the provision of negotiating skills

The previous section presented the successes attained by the World Bank vis-à-vis the political empowerment of the local community. These successes are underscored by the fact that while all the preconditions for violent conflict were in place in Santa Teresa, violent conflicts did not erupt during the lifespan of the PRAA. However, as amply discussed in chapter four, violent conflict did erupt in the immediate aftermath of the PRAA. While this rapid turn of events highlights the importance of the mediating role played by the Bank for the duration of its stay in Santa Teresa, it also raises serious questions about the long term effectiveness of said mediating role and the actions taken in this regard.

Against this backdrop, the present section will help to better understand not only the strengths of the approach taken by the Bank vis-à-vis political empowerment over the short term, but also the notable shortcomings of said approach – shortcomings which arguably contributed to the short-lived nature of the peace obtained in Santa Teresa, and which risk undermining and curtailing several of the Bank's achievements in the long term.

While the details of the violent conflicts that erupted in Santa Teresa have been analysed in detail in chapter four, it is herein important to recall three particular aspects. First, the 2009 Peruvian Water Law defines water as a national property, recognizes the water rights of campesino communities and indigenous people (Lynch, 2012, p.371; Government of Peru, 2009, art.3), and

asserts that the water needs of the local population for their daily necessities and the water needs for agricultural purposes need to be assessed prior to taking into account eventual claims on the use of the water resources advanced by third parties, such as Luz del Sur (La Republica, 2013; Government of Peru, 2009, art.2; World Bank, 2008a, p.19).

Second, evidence collected by the present investigation raises questions over the fact that the implementation of the 'Santa Teresa II' project may have contradicted the Peruvian national law, insofar as it proposed to carry out excavations in an area that bears direct environmental consequences on the protected site of Machu Picchu (Morla, 2015; World Bank, 2007, p.22). Third, it is claimed that local community representatives were tricked into signing off on the environmental feasibility study of the 'Santa Teresa II' hydroelectric project without realizing what they were signing (Interview: Municipality of Santa Teresa, D5).

In the case of Santa Teresa, although the World Bank ensured that community members participated in decision making fora vis-à-vis the management of water related projects – as already discussed at length – this did not prove to be sufficient to ensure that community members were able to effectively safeguard their long term needs and interests in relation to the management, use and administration of freshwater resources vis-à-vis the 'Santa Teresa II' hydroelectric project. Moreover, while the aforementioned participatory decision making processes succeeded in helping local residents to fully appreciate the risks and impacts of freshwater shortages (Interview: local community, D1; D6), and allowed them to tailor CCA activities to best meet their needs, they fell short of ensuring that local residents were able to defend said needs beyond the remit and scope of the PRAA (Interview: local community, D8; D9).

"*The activities were very useful, but not sufficient. More work is needed, starting with changing the skills of local people when it comes to interacting with government officials.*"
(Interview: local community, D8)

"*They* [i.e., programme officials] *carried out good activities related to climate change. What we need now are more workshops on how we can deal with the government, to prevent the worse impacts* [of climate change] *and protect ourselves.*"
(Interview: local community, D9)

The inability of local community members and their representatives to defend said interests within the remits of a legally institutionalized negotiating process is epitomized by the events that took place on 21 March 2014 – ten days before the World Bank programme came to an official

closure –, when civil society leader and president of the *Comité Central de Lucha* of La Convención, Ricardo Caballero – a supposedly strong opposer of the Santa Teresa II project – signed an agreement that authorized the resumed implementation of the Santa Teresa II hydroelectric project, alongside the Chief of the Peruvian Cabinet, Ana Jara, the Minister of Agriculture, Juan Manuel Benites, and the Minister of Energy and Mining, Rosa Maria Ortiz (AmericaNoticias.pe, 2014).

While similar instances of connivance between government interests and local community leaders are not new (Batterbury & Fernando, 2006, p.1855), in the case of community members in Santa Teresa the lack of negotiating skills and of knowledge of the means to access negotiating fora is further highlighted by the events that unfolded in December 2014, when Luz del Sur unilaterally decided to organize a briefing meeting with a hand-picked selection of community members in Santa Teresa. As for the remaining members of the community, when they sought admittance to the meeting, they were met with the violent resistance of the military police (Morla, 2015).

These and other similar episodes clearly echo the third 'face of power' identified by Lukes (2005, p.22) – defined as 'non-decision making' – which, as explained in chapter two, consists in the ability to impose one's will by preventing others from understanding what their actual needs and interests are. Moreover, the events that unfolded in Santa Teresa confirm that the simple ability of local communities to participate in decision-making processes, and to influence the design of resilience building activities is not in itself sufficient to ensure their actual empowerment. Moreover, for local communities to be empowered they need to have the opportunities and resources necessary to ensure that, during decision-making processes, they are able to remain fully aware of their needs at all times, to understand the implications of their interests, and to effectively negotiate said needs and interests with powerful stakeholders by applying the necessary know-how, tools and techniques.

Instead, in the case of Santa Teresa, although the local community understood what was at stake, community members were not provided with the skills necessary to defend their lawful rights and negotiate their needs with government officials and other stakeholders within the confines of an institutionalized process. This would have required efforts at both the political and technical levels. At the political level, processes and structures would have needed to be put in place to ensure that local community views were able to meaningfully influence decisions of the central government. At the technical level, community representatives would have needed to be provided with the skills necessary to articulate their interests in accordance with the standards of the legal issues that needed to be addressed.

The absence of any such efforts under the remit of the PRAA echo the assertions made by Lewis *et al*. (2003, p.543), who underscore the difficulty of World Bank technical cooperation programmes to fully sustain their commitments to community empowerment.

These shortcomings, which emphasize the need for the outcomes of development programmes to be sustained by an enabling institutional environment backed by strong government commitments and accountability of civil society leaders – as suggested by Batterbury & Fernando (2006, p.1856) and Lewis (2017, p.4) –, also cast doubts over the long term effectiveness of the efforts put in place by the World Bank to politically empower local communities vis-à-vis the management, use and administration of freshwater resources, as the following sections of the present chapter will further analyze.

6.4 Serving multiple interests

The empirical evidence presented thus far throughout all the three findings chapters has illustrated the efforts put in place by the World Bank to mediate the tensions arising from a disconnect between the needs of the local community and the interest of central government officials and Luz del Sur. However, the empirical evidence also revealed serious limitations in the approach taken by the Bank vis-à-vis the safeguarding of the long term empowerment needs of the local community.

Stemming from these findings, the question becomes whether the efforts put in place by the Bank served only – or primarily – the needs of the local community, or whether instead they addressed also – or primarily – the interests of other stakeholders. In this regard, in order to fully understand the role played by the Bank in Santa Teresa, it is necessary to frame the efforts of the Bank in the broader context of the differing interests that they might have helped to serve. Moreover, it is only by discussing how the efforts put in place by the Bank affected the interests of all stakeholders – and not only those of the local community – that an honest and full-fledged understanding of the rationale underpinning the *modus operandi* of the Bank in Santa Teresa may emerge.

To facilitate this analysis, the following sub-sections will present the interests that the PRAA helped to appease from the standpoint of each individual stakeholder.

6.4.1 Local community

While the PRAA unquestionably helped to empower the local community in Santa Teresa through the previously discussed three-pronged approach, the extent to which it enabled the local people to achieve their long term interests depends on the timeframe taken into consideration, as well as – most significantly – on the speculative considerations that can be made regarding the future of Santa Teresa vis-à-vis the possible implementation of the 'Santa Teresa II' project that may follow from the feasibility study that was still ongoing at the time in which the present investigation was carried out.

As the present chapter discussed at length, during the lifespan of the PRAA, the people in Santa Teresa clearly benefitted greatly from the activities implemented by the World Bank in many ways. Based on the information presented thus far, it is not surprising to find the grateful acknowledgement of local community members in Santa Teresa, who stressed that the PRAA succeeded in politically empowering people and in helping them to overcome conflictual situations by building local capacity related to water resource management (Interview: local community, D1; D2; D6; D8; D9; regional government, C6; Interview: local community, D3; local NGO, C7; multilateral institution, A2; World Bank, 2014, p.14). In particular, the findings herein presented highlight that the Bank worked directly with the local communities and took into account their ideas, needs and perspectives (Interview: local community, D2; D8; World Bank, 2014, p.14); sensitized the local population on the causes, consequences and adaptation options to address water shortages (Interview: local community, D6; central government, B1; regional organization, B2; Independent Evaluation Group, 2014, p11); and let them know that they had not been left alone to face the consequences of water scarcity (Interview: local community, D8; multilateral institution, A2).

These perspectives vis-à-vis the benefits of the PRAA for local communities are further corroborated and validated by the findings of the PRAA project closure report and final evaluation report (World Bank, 2014; Independent Evaluation Group, 2014).

However, as previously described, the closure of the PRAA was followed by a rapid turn of events, which arguably curtailed some of the benefits of the aforementioned three-pronged approach to community empowerment. With regard to the capacity-related achievements of the PRAA presented above, it would appear safe to assume that these survived the closure of the PRAA. Moreover, the soft skills garnered by local communities vis-à-vis climate change adaptation, the greater resilience to the impacts of water shortages, the enhanced understanding of the causes and consequences of glacial melt, and the ability of local community members to request and

administer external financial resources for future climate change adaptation projects are relatively unlikely to have been compromised by the events that followed the closure of the PRAA.

Inevitably, however, the ability of these skills to offset eventual future water shortages that may be caused by potential activities that might be carried out by Luz del Sur following the completion of the ongoing feasibility study is impossible to assess at the present time (Interview: international NGO, C1).

> "*We can't say at the present time if these activities that we are implementing will prove to be the most cost-effective and if they will have an impact on the future populations.* […] *The project activities last approximately three years, but in order to verify the extent of their impact in terms of building the resilience of future communities and mitigating the negative effects of climate change we prefer to make an assessments in the years to come. In order to make a similar assessment, we will need to gradually collect information over time in order to make comparative analysis studies before we can say "this is the adaptation activity that we recommend"."*
>
> (Interview: international NGO, C1).

The above notwithstanding, the safeguarding of peace through the soothing of conflicts was jeopardized as violence eventually broke loose. While it may be true that these events took place following the (immediate) closure of the PRAA, they cannot and should not be looked at as not being related to the PRAA. While it is true that the World Bank succeeded in achieving its stated objective to "*ameliorate potential social conflict*" (World Bank, 2008, p.153), the complete lack of sustainability of the peace achieved calls into question the solidity of the results obtained. The question therefore becomes whether the approach taken by the Bank to politically empowering the local community should be looked upon as having failed.

Although the timeframe of the findings herein presented is not sufficient to comprehensively address this question beyond the realm of the PRAA itself, and thus warrants further research, the present study highlighted one causal factor that may have contributed to curtailing the long term success of the World Bank: the lack of skills provided to enable local communities to negotiate their interests with government officials.

Moreover, in spite of the fact that the design of the 'Santa Teresa II' hydroelectric project may infringe on the lawful rights of local community members, the present investigation did not

uncover conclusive evidence that the World Bank put in place any efforts to help local residents to defend their lawful rights and negotiate their needs with government officials and other stakeholders. While the causal relationship that may exist between this shortcoming and the dramatic turn of events that followed the immediate departure of the World Bank from Santa Teresa is forcedly speculative in nature at this stage, these painful events inevitably cast serious doubts over the long term effectiveness of the efforts put in place by the World Bank to politically empower local communities vis-à-vis the management, use and administration of freshwater resources.

6.4.2 Peruvian central government

For the duration of the PRAA, the Peruvian central government benefitted from the programme insofar as it helped avoid the outbreak of violent conflicts or the emergence of any forms of social unrest in Santa Teresa. This achievement clearly echoes one of the official objectives of the programme document endorsed by the government – amply discussed – which stated the need for the programme "*to ameliorate potential social conflict*" (World Bank, 2008, p.153). Given the economic interests that gravitate around Santa Teresa, the soothing of local tensions and – even more so – the establishment of a much-improved relationship between local government authorities and community members was a result that clearly served the agenda of central government officials. However, the attainment of said peace and stability in Santa Teresa came at a very high price.

Moreover, it is essential to underscore that while it is true that the efforts of the World Bank succeeded in (temporarily) appeasing situations of "*social unrest*" by "*support*[ing] *government interventions to ameliorate potential social conflict*" (World Bank, 2008, p.153), the cost of avoiding said conflict was – from a government perspective – of 500 million USD, i.e., the cost of the Santa Teresa II project that was brought to a halt.

Quite clearly, the activities of the World Bank in Santa Teresa frustrated central government officials insofar as they did not comply with a government-driven ideal scenario in which an international donor brings money for a development programme and assigns full responsibility for project implementation and financial resource management to the government (Interview: regional government, E2; central government, B3; B11).

"*The added value of these* [technical cooperation] *projects is that they bring us money. We know what we need to do, and we know how to do it, but often we lack the necessary financial resources. That is where these projects come in handy*."
(Interview: regional government, E2)

These words echo the findings of Edwards & McCarthy (2006, p.128) and Agrawal & Ostrom (2001, p.488) who – in underscoring the diverging goals of multilateral agencies and recipient governments in the design of technical cooperation programmes – explain that the requests for technical assistance programmes represent an attractive vehicle for governments to access financial and non-financial fungible, proprietary resources, and are thus triggered by 'self-interested' calculations that are unrelated to the specific adaptation needs of local communities.

In line with this argument, central government officials openly criticized the implementation of the PRAA noting that, by politically empowering the local community, the World Bank created discrepancies between the national and regional government agendas, and that this had become an increasing matter of concern (Interview: central government, B11).

"*International cooperation not always works in the way that one would wish* […] *This results in an inevitable fracture, where the government is faced with international partners that do not take into account the nationally identified priorities and areas for intervention. Unfortunately, in these instances in which multilateral entities are not aligned with government priorities on sensitive issues – such as those concerning the environment and the management of natural resources – , this also results in a contraposition between the central government and the regional governments and local institutions. Experience has shown that in those geographic areas in which technical cooperation activities were undertaken there were greater discrepancies between the national and regional government agendas. For us this has been an increasing matter of concern* […] *The question becomes "hey, who is in charge here?", because there are funds being spent, which should be aligned with the priorities set out by the government agenda. Unfortunately, with the PRAA that was not always the case. Things are already complicated enough when conflicting positions of regional government entities have to be managed, and they become even more complicated when these deviant positions are financially supported* [by multilateral funds]. *Let's be clear, it's not like we said* [to the World Bank] *"hey, don't you dare come and work directly with the regional government in Cusco". No, that's not at all the case. The local authorities require support and resources, we all know that. Especially in environmental matters, which receive very little*

government support, multilateral funds are very useful at the local level. The problem is when there is a lack of alignment. What we say is not "go away", but rather "please align the activities you wish to implement at the local level with those envisaged by the central government". You understand?"

(Interview: central government, B11)

These words underscore a clear, profound and unambiguous disconnect between the interests of powerful central government authorities and the efforts of the World Bank on-the-ground in Santa Teresa.

On the one hand, these findings echo those of Shankland & Chambote (2011, p.64) and D'Agostino & Sovacool, (2011, p.714), who highlight the presence of serious conflicts between government officials and representatives of international institutions regarding the management and administration of technical cooperation projects. Most significantly, these findings point to the intellectual independence of the Bank from powerful member states, which is one of the main arguments proposed by Vetterlein (2012, p.37) according to whom Bank policies and interventions are shaped by internal advocacy far more than they are ever directly influenced by member states.

On the other hand, these findings do not reflect the claims advanced by scholars who argue that multilateral institutions, the World Bank *in primis*, work together with national governments to strengthen existing forms of hegemonic powers (Goldman, 2005, p.41; Gould & Ojanen, 2003, p.69; McAfee, 1999, p.139; and Harrison, 2005, p.256), and use the financial resources available to satisfy the needs of recipient governments, powerful economic elites and private companies, as opposed to serving those of the most in need (Ayers *et al.*, 2011, p.77; Carey *et al*., 2012, p.190).

6.4.3 Local government authorities in Cusco and Santa Teresa

While local government authorities benefited from the activities of the World Bank in many ways, the extent to which they achieved their interests depends on the timeframe taken into consideration, as well as – most significantly – on the speculative considerations that can be made regarding the future of Santa Teresa vis-à-vis the possible implementation of the Santa Teresa II project that may follow from the feasibility study that is still ongoing.

The World Bank succeeded in building the adaptive capacities of local government officials (World Bank, 2014; Independent Evaluation Group, 2014). Strengthened by greater institutional capacity, local government authorities did not require the design and implementation of central government-funded socio-environmental development projects, which allowed them to take a strong stance vis-à-vis the Santa Teresa II project. While it is true that the strong stance taken by local authorities in overturning the decision of the central government to allow the Santa Teresa II project to move forth created a certain degree of tension between authorities in Cusco and Lima (Interview: central government, B11), the decision to side with its local constituency benefitted local authorities insofar as it resulted in renewed confidence of the people of Santa Teresa towards their local authorities, and thus brought closer together civil society and local institutions.

However, when addressing the events that followed the completion of the PRAA, it must be recognized that several of the initial benefits that the local government had derived from the multilateral programme were jeopardized, to a considerable extent. The turn of events that followed the closure of the PRAA re-ignited a certain degree of distrust of communities towards local institutions (Interview: local community, D2; D4; D5). As for the benefits derived from the peace and stability achieved during the PRAA, they were obliterated by the violence that resulted from the events that followed its closure.

6.4.4 Luz del Sur

While it is true that the implementation of the PRAA caused serious delays to the implementation of the Luz del Sur hydroelectric project, Santa Teresa II, opportunities for speculation may arise vis-à-vis the possibility for Luz del Sur to reap indirect and somewhat unforeseeable benefits from the PRAA in the future.

Moreover, in spite of the severe delays in the implementation of the Santa Teresa II project caused by the PRAA – which frustrated the original plans of Luz del Sur (El Peruano, 2015) – representatives of large hydroelectric companies displayed a subtle, cautious and strategic approach when referring to the outcomes of World Bank activities, to the point of going as far as praising them (Interview: private sector C8).

> "*It was necessary for this project* [i.e., PRAA] *to be implemented in this area* [i.e., Santa Teresa]*, in order to assess the extent of this impact* [i.e., of the dwindling of water resources] *and to improve water management practices among local community members*"

(Interview: private sector C8)

While, at a first reading, similar words of praise may appear difficult to believe in light of all the facts presented thus far, they acquire a clearer connotation when inserted in the context of the ultimate, long term goal of hydroelectric companies in Santa Teresa – which is to implement hydroelectric projects with minimal or no resistance from local communities. As previously noted, in order to succeed in achieving said objective, hydroelectric companies need to demonstrate that their presence is not only not harming local environmental resources, but that through their hydroelectric projects they are actually able to help safeguard said resources to the benefit of local communities (ibid.). However, in order to succeed in doing so, the hydroelectric companies need first to create a need for their presence. To achieve this goal in Santa Teresa, the path chosen was that of downplaying the role of local government authorities in the management and administration of local water resources (ibid.).

> "*The local hydrological resources are not well managed or administrated in the protected area in which Santa Teresa finds itself* […] *What is happening is that the local municipalities in Santa Teresa and Machu Picchu pueblo are negatively impacting the availability of local water resources. They comply with different norms* [compared to those adhered to by the private companies], *different standards, monitored and supervised through different channels. They are not so well regulated and not so well supervised and monitored. Even if there are norms that prohibit the building of certain structures in certain areas, they don't care, they go ahead nonetheless. All they care about are financial revenue streams. The reason for which they are not well regulated is because these are public institutions, and as such they lack supervision and control* […] *There are norms and regulations, but they are ignored locally.*"
>
> (Interview: private sector C8)

Stemming from the above, in a strategically well-crafted (albeit seemingly paradoxical) argumentation, private company representatives ultimately used the example of the PRAA as evidence for the need for external interventions in Santa Teresa (such as theirs) to safeguard locally mismanaged natural resources.

> "*Building on the experiences of this project* [i.e., PRAA]*, what we now need to focus on is how to manage the water resources, regardless of what climate changes may occur, we have to make sure that these resources are well administered. Moreover, over the long term the main problem is likely not to be the greater or lesser availability of water through*

the river, but the level of contamination of that water, which risks killing the ecosystem species that live off those resources, both animals and plants."

(Interview: private sector C8)

Building on these findings, one may speculate as per whether the PRAA will have the long term unintended effect of offering a justification for intervention to those very same hydroelectric projects that it had contributed to bringing to a halt – an unintended 'side effect' that would cast serious doubts over the validity of the approach taken by the World Bank in attempting to protect the interests of local communities in Santa Teresa. In this regard, one may go as far as to speculate that while the World Bank's effort to adopt a new approach to promoting and protecting the needs of vulnerable communities in Santa Teresa may "*appear to be progressive and emancipatory* [it] *might in fact open the door to new forms of domination*" (Barnett, 2009, 656).

While similar argumentations may appear somewhat farfetched at a first reading, it is very important to note that they are not unprecedented within the literature. In this regard, research carried out by Carey *et al*. (2012, p.190) recounting conflicts over scarce water resources among local communities and a foreign energy multinational that took place at Lake Parón, in Peru, tell a tale of distorted climate change adaptation. The adaptation technologies that had been originally installed for a very good reason – i.e., to prevent floods –, were used two decades later to facilitate new political agendas under new governance structures, ultimately resulting in the manipulation of water resource access (ibid.).

6.4.5 The World Bank

The World Bank benefited from the implementation of the PRAA insofar as it was able to claim that it successfully built local adaptation capacities vis-à-vis water shortages by engaging the local population, diffuse social unrest and potential conflict, and demonstrate its critical role in putting the spotlight on the vulnerabilities and real needs of the local community in Santa Teresa. However, official Bank reports notwithstanding, the extent to which the PRAA met some of these objectives – especially those related to social unrest – largely depends on the timeframe taken into consideration.

These findings reinforce the claim advanced by Gore (2013, p.775) that the Bank is putting in place deliberate efforts to ensure that it is increasingly looked upon as representing the voices

and interests of developing countries and the multitude of civil society groups and organizations within them. In this regard, the ability of the PRAA to achieve the aforementioned community-based outcomes by taking fully into account local knowledge, perspectives and inputs (Interview: international NGO, C1; central government, B1; multilateral organization, A2; A3; A5) contradicts the arguments of Cammack (2007, p.192) and Sender (2002, p.198) according to whom the growing emphasis placed by the World Bank on local ownership of projects, and on its role as conveyor of knowledge and expertise should be understood as a means to complete the neoliberal revolution envisaged by the Bank.

The above notwithstanding, all these achievements need also to be looked at on the basis of the dramatic events that followed the closure of the PRAA. The failure of the Bank to accurately assess the threats to the sustainability of the peace it helped to build in Santa Teresa calls into question not only its ability to "*ameliorate potential social conflict*" (World Bank, 2008, p.153) beyond the duration of its programmes, but also casts shadows over the long term effectiveness and appropriateness of the adaptation activities implemented and the capacities built in Santa Teresa. While all the activities carried out on the ground focused on climate-induced water stressors, the factors that may negatively impact water security in the future might not be entirely related to climate change, but rather be the result of the implementation of the hydroelectric Santa Teresa II project.

6.5 Conclusions

The present chapter set out to analyze how the World Bank may or may not have succeeded in empowering the local community in Santa Teresa through the implementation of practical strategies and project activities.

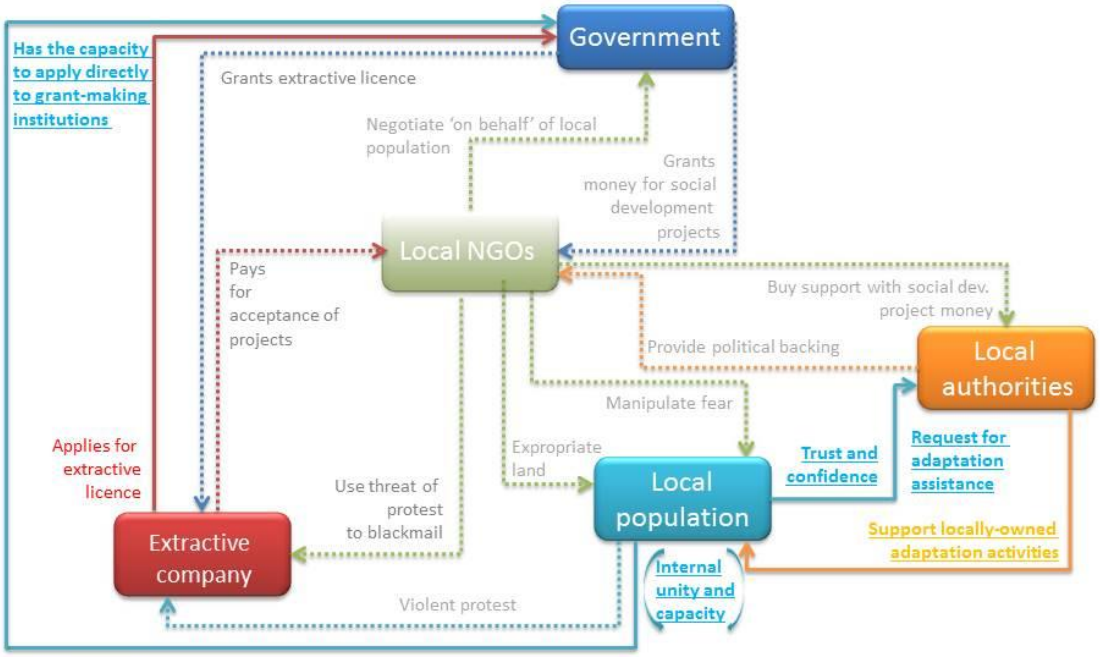
The chapter found that the Bank adopted a three-pronged strategy to politically empower the local community, which proved successful in the short term, but which displayed very concerning limitations in the long term. In this regard, the World Bank succeeded in empowering the community in the short term by providing knowledge and skills in relation to water management through a series of CCA activities; by ensuring that all local community members were able to participate in an open, transparent and fully participative decision making process vis-à-vis the management, administration and use of their local freshwater resources in the context of the PRAA; and by resolving feelings of community frustration, abandonment and isolation.

However, the above did not prove to be sufficient to ensure that community members were able to effectively safeguard their long term needs and interests in relation to the management, use and administration of freshwater resources vis-à-vis the 'Santa Teresa II' hydroelectric project. In particular, local residents were not provided with the skills necessary to defend their lawful rights and negotiate their needs with government officials and other stakeholders.

As a result, while it is true that the World Bank succeeded in achieving its stated objective to "*ameliorate potential social conflict*" (World Bank, 2008, p.153), the complete lack of sustainability of the peace achieved calls into question the solidity of the results obtained. However, the timeframe of the findings herein presented is not sufficient to comprehensively address the causal relationship that may most likely exist between the inability of the World Bank to provide negotiating skills to local community members, and the dramatic turn of events that followed the immediate departure of the World Bank from Santa Teresa.

The above notwithstanding, what sets the PRAA apart from previous, traditional approaches to water-related CCA programmes was the decision of the World Bank to use CCA capacity development efforts as a means to mitigate tensions and resolve social conflict. Through this approach, the Bank temporarily mediated the conflicting interests of local communities and government authorities by enhancing communities' environmental resilience to the impacts of climate change and by empowering them vis-à-vis decision making in natural resource management in the context of the PRAA, whilst also helping government authorities to soothe violent conflicts and latent tensions over the use and management of environmental resources affected by the concomitant pressures posed by climate change and government-endorsed extractive practices.

In contrast to the lines of conflict presented in Figure 5 in chapter four, Figure 6 below pulls together the pieces of this complex puzzle and summarizes the impact of the efforts of the World Bank in transforming conflict into cohesion and exploitation into greater capacity.



Local population: internal cohesion; greater capacity; protected environment; working in partnership with local authorities
Local authorities: community support; working in partnership with local population; greater internal capacity

V.S.

Government: neo-extractive licences not granted
Extractive company: neo-extractive activities not carried out
Local NGOs: cut out of the picture

Figure 6: Diffusing conflicts through capacity development

Chapter 7: Discussing if the World Bank effectively promoted and protected the needs of vulnerable communities in Santa Teresa

7.1 Introduction

The present chapter will discuss if the World Bank promoted and protected the needs of the local water-stricken community in Santa Teresa through the design and implementation of the PRAA, by contrasting the main findings analyzed in chapters four, five and six to the arguments and perspectives of the existing literature on international development aid presented in chapter two. This analysis will be instrumental in defining the contribution of the present dissertation to the existing body of knowledge.

In this context, the chapter will highlight that while the design of the PRAA responded to the needs of the local community, the practical strategies implemented to pursue said design yielded mixed results. This finding will be analysed by triangulating the positions of scholars such as Batterbury & Fernando (2006, p.1856) – who discuss the issues undermining the sustainability of development programmes – with those of Goldman (2005), Gould & Ojanen (2003), McAfee (1999), Harrison (2005) and Beymer-Farris & Bassett (2012) – who argue that the World Bank works together with national governments to strengthen existing forms of hegemonic powers –, and those of Gore (2013), Khanna *et al*. (2015) and Kuhl (2009) – who suggest that the potential does exist for the Bank to represent the voices and interests of civil society.

These successes and shortcomings notwithstanding, what unexpectedly set apart the PRAA from previous, traditional approaches to water-related CCA technical cooperation programmes was the decision of the World Bank to attempt to mitigate tensions and address social conflict by empowering local communities through the implementation of capacity development activities (Interview: regional government, C2). In this regard, the chapter will discuss the role played in Santa Teresa by the World Bank as a *buffer institution*. The notion of a *buffer institution* is a concept that will be utilized in a novel fashion in the context of the present chapter. The concept stems from the works on boundary organizations and hybrid management theory carried out by

Agrawala *et al*. (2001), Cash *et al*. (2003), Cutts *et al*. (2011), Guston (2001), Hage *et al*. (2010) Miller (2001) and Lewis *et. al*. (2014, p.7579), presented in chapter two.

The present chapter will be organized in three main sections. The first will analyze the ability of the Bank to promote and protect the environmental and short term empowerment needs of the climate-affected water-stricken community in Santa Teresa. The second section will analyse and discuss the defining elements that characterized what is herein defined as the *buffer institution* role played by the World Bank, while the third section will address the notable shortcomings of the approach taken by the Bank.

7.2 Promoting and protecting the needs of climate-affected water-stricken communities in Santa Teresa in the short term

The present research set out to investigate if the World Bank could effectively promote and protect the needs of vulnerable communities, which were defined in relation to bottom-up environmental resilience building and political empowerment. The findings of the present investigation suggest that while on the one hand the World Bank addressed the need for greater environmental resilience of climate-affected communities in Santa Teresa and involved local communities in the decision making processes related to the management of natural resources within the context of its CCA programme, on the other hand the Bank did not empower community members in the long term. The notable successes of the PRAA from a resilience building perspective notwithstanding, this shortcoming – which arguably contributed to the short-lived nature of the peace obtained in Santa Teresa, and which risks undermining several of the Bank's achievements in the long term – echoes the assertions made by Lewis *et al*. (2003, p.543), who underscore the difficulty of World Bank technical cooperation programmes to fully sustain their commitments to community empowerment; and Budds & Sultana (2013, p.278), who denounce the risk that "*water-related development interventions reproduce or exacerbate the very deficiencies and inequalities that they were designed to address*" due to their inability to capture the long term "*political underpinnings of deficiencies in access to water*" (ibid., p.276).

Without restating the full spectrum of bottom-up grassroots resilience building activities carried out under the PRAA, it is worth recalling that most local community members in Santa Teresa stressed the importance and value of the PRAA in addressing their needs. In this regard, there would appear to be an almost perfect match between the adaptation needs expressed by all local

community members interviewed, as well as those identified by the empirical investigations carried out in Santa Teresa by Dazé (2011, p.13) and Farfán (2010, p.11), and the various goals and project activities of the PRAA (World Bank, 2014, p.36-58).

These findings bear parallelisms with those presented by scholars such as Bose *et al*. (2001, p.178), Low *et al*. (2001, p.278), D'Agostino & Sovacool (2011, p.701), Dumaru (2010, p.754), Ahmed & Fajber (2009, p.42), Rawlani & Sovacool (2011, p. 859), Kaul (2001, p.22), Verkooijen (2011, p.51), Bebbington *et al*. (2007, p.610), and Khanna *et al*. (2015, p.1212) – all of whom present the direct benefits to local communities of multilateral and World Bank-led technical cooperation programmes – in contrast to the positions argued by scholars who refute any such benefits, including Beymer-Farris & Bassett (2012, p.339), Lynch (2012, p.370), Goldman (2005, p.41), Harrison (2005, p.256), Gould & Ojanen (2003, p.69), Ayers *et al*. (2011, p.77), Shankland & Chambote (2011, p.68), Alam *et al*. (2011, p.56), Ireland, (2012, p.159) and Carey *et al*. (2012, p.190).

With regard to the need of the local community for political empowerment vis-à-vis decision making in the management of local natural resources, especially freshwater, the World Bank succeeded in the short term. In this context, it is important to highlight that one of the keys of the PRAA's ability to pinpoint the needs of climate-affected communities was the participatory and inclusive decision-making process that took place in Santa Teresa vis-à-vis the definition of the specific adaptation activities to be implemented (Interview: local community, D1; D2; D4; D6; D8; D9; international NGO, C1; regional organization, B2; multilateral organization, A2; central government, B1; World Bank, 2007, p.18).

These findings are in line with those of scholars such as D'Agostino & Sovacool (2011, p.711), Braun (2010, p.784) and Khanna *et al*. (2015, p. p.1221), who argue that World Bank CCA technical cooperation programmes have succeeded in increasing stakeholder control and ownership over planning of project activities, as opposed to those of Beymer-Farris & Bassett (2012, p.333), who argue that through the adoption of participatory processes the World Bank aims to replace indigenous resource management practices, and Lynch (2012, p.370), Ireland (2012, p.195), Blaikie (2006, p.1944) and Alam *et al*. (2011, p.56), according to whom local communities and civil society organizations are almost never involved in the decision making process relative to climate change adaptation.

However, the success obtained by the World Bank vis-à-vis the political empowerment of the local community proved to be short lived, as the ability of said community to safeguard its needs came under serious jeopardy as soon as the PRAA came to a closure. This dramatic turn of events – which was epitomized by the eruption of violent conflict – raises important issues of concern regarding the sustainability of the approach taken by the Bank, and casts doubts over the extent to which the PRAA should be looked upon as a having succeeded in politically empowering the local community. Addressing these questions requires, however, a deeper level of analysis, focused upon deciphering the strengths and limitations of the innovative role that the World Bank played in Santa Teresa vis-à-vis conflict mediation.

In this regard, the following two sections will first analyse and discuss the defining elements that characterized what is herein defined as the *buffer institution* role played by the World Bank, and thereafter address its notable shortcomings.

7.3 Acting as a *buffer institution* by mediating the conflicting needs of multiple stakeholders

While it is true that the PRAA only partially succeeded in meeting the political empowerment needs of the local community, what is extremely interesting is the path taken by the Bank to attempt to empower said communities. Moreover, the Bank sought to empower the vulnerable communities as a means to help to mediate the contrasting and conflicting needs of the local community on the one hand, and those of the Peruvian central government and a foreign-owned private multinational company on the other.

In this regard, while the present investigation purely set out to investigate if the World Bank could promote and protect the needs of the local vulnerable community in Santa Teresa through the synergistic approach taken by the PRAA – which combined political empowerment and resilience building elements –, the study surprisingly revealed that what truly set apart the PRAA from previous, traditional approaches to water-related CCA programmes was not (only) its synergistic approach, but also the decision of the World Bank to use CCA capacity development efforts as a means to mitigate tensions and address social conflict (Interview: regional government, C2).

Through this approach, the Bank temporarily mediated the conflicting interests of local communities and government authorities by enhancing communities' environmental resilience to the impacts of climate change and empowering them vis-à-vis decision making in natural resource management in the context of the PRAA, whilst also helping government authorities to soothe violent conflicts and latent tensions over the use and management of environmental resources affected by the concomitant pressures posed by climate change and government-endorsed extractive practices. However, the eruption of violent conflict that followed the immediate closure of the PRAA demonstrated the lack of sustainability of the political empowerment afforded to the local community through the activities of the PRAA, as well as the shortcomings and limitations of the efforts that the Bank put in place to mediate the conflicting interests that gravitated around Santa Teresa.

At a first reading the present research findings would appear to confirm the positions argued by Goldman, (2005, p.41), Gould & Ojanen (2003, p.69), McAfee (1999, p.139) and Harrison (2005, p.256), all of whom look upon the World Bank as working together with national governments to strengthen existing forms of hegemonic powers. Moreover, official World Bank documents explicitly stated that one of the objectives of the PRAA was "*to support government interventions to ameliorate potential social conflict*" (World Bank, 2008, p.153). In this regard, government officials initially underscored the importance of ensuring that the PRAA supported government efforts in dealing with trouble-making local communities (Interview: central government, B11). In this regard, the selection of Santa Teresa as the site in which to implement the PRAA stemmed from the strong agenda of the central government, which wanted to protect the interests of the private multinational Luz del Sur – interests which government officials knew would likely be met with strong and potentially violent community resistance (Interview: multilateral organization, A3; A5; international NGO, C1; research institute, C4; C5; regional government, C6; C2). In this context, the central government looked upon the World Bank intervention as a social responsibility programme which – as explained by Bebbington (2009, p.107) – are used by government authorities to legitimize neo-extractive activities while silencing public debate.

However, upon triangulating the data carefully, it became clear that what while the World Bank was able "*to ameliorate potential social conflict*" (World Bank, 2008, p.153) it did so by attempting to address the needs of the local community in Santa Teresa, and supporting the interventions of the local government institutions, as opposed to those of the central government.

In this regard, an important issue to discuss is the possibility that – although it did not supress public debate – the Bank may have prevented a more fully fledged public debate by giving local communities the impression that their voices and needs were being listened to, while instead they were not being fully addressed. This possibility echoes the findings of Selfa (2010) – who investigated participatory decision making in a World Bank programme in Brazil – and Mirumachi & Torriti (2012), who found that local populations were pressured by government institutions into participating in consultation processes with the sole intent of safeguarding the interest the World Bank.

However, in contrast to the findings of Selfa (2010) and Mirumachi & Torriti (2012), as amply discussed in chapter six, in Santa Teresa the Bank established structured processes that allowed local community members to openly discuss their concerns and perspectives with representatives of all major stakeholder groups involved in the use of water resources in Santa Teresa, with a view to guaranteeing that their interests be adequately reflected in all decisions regarding the management and use of freshwater for competing purposes for the duration of the PRAA (Interview: local community, D2, D4, D6; international NGO, C1; World Bank, 2007; regional organization, B2; central government, B1; multilateral organization, A2). In particular, it is important to recall that the World Bank structured the process of community participation over three inter-related phases: preliminary consultation; project design; and project implementation (Interview: regional organization, B2; local community, D4, D6; international NGO, C1; central government, B1; World Bank, 2007). During each of the consultative workshops carried out during the aforementioned three phases, the World Bank adopted the CVCA/CRiSTAL ('Community-based Risk Screening Tool – Adaptation and Livelihoods') methodology[18] to ensure that community views directly shaped the design of the project activities. Furthermore, the World Bank set out to ensure from the onset that the design of all specific project activities was the result of a well-crafted combination of local knowledge with the latest scientific data available through ongoing monitoring of glacial melt in the area (Interview: international NGO, C1; local community, D1; central government, B1; multilateral organization, A2; multilateral organization, A5). This approach would appear to move in the right direction vis-à-vis the shortcomings of past water security development programmes which – as explained by Budds & Sultana (2013, p.276)

[18] This is a project planning tool that helps ensure that the inputs provided by local communities shape specific adaptation activities. The details of this tool were elaborated upon in chapter five.

– "*framed, analysed, and addressed* [water security issues] *in a technical manner* [with the result of producing] *water-centric rather than people-centric* [interventions]".

These findings echo those of of Braun (2010, p.784), whose empirical investigation in Brazil found that social participation played a major role in the design of development programmes led by the Inter-American Development Bank in Brazil, and Khanna *et al*. (2015, p.1211), whose empirical investigation in India found that new participatory techniques and tools being deployed in Bank-led projects succeeded in promoting horizontal community participation. In addition, the findings are also in line with those of D'Agostino & Sovacool (2011, p.710), whose empirical research in Cambodia on CCA projects found that the UN Development Programme succeeded in putting in place effective knowledge and information sharing mechanisms in the design of project activities, as well as increasingly empowering local people in the decision-making process (ibid., p.711).

As a result, by working with local government officials, the Bank helped to temporarily appease social conflicts not by silencing public debate – as do government-endorsed corporate social responsibility schemes in Peru (Bebbington, 2009, p.107) – but, on the contrary, by opening public debate through an inclusive decision making process; and it did so at the expense of the central government's neo-extractive financial interests – which amounted to US 500 million dollars, i.e., the cost of the 'Santa Teresa II' hydroelectric project that was temporarily brought to a halt.

These findings strongly echo the assertions made by Lewis *et al*. (2003, p.554) who highlighted discrepancies among the meanings ascribed by different stakeholders – in this case, the World Bank and the central government – to certain elements of mutually agreed upon technical cooperation programme documents – in this case, the amelioration of potential social conflict –; discrepancies which inevitably manifest themselves during project implementation.

Moreover, the disconnect between the agendas of the central government and the adaptation actions put in place by the World Bank in Santa Teresa is evidenced by the strong words of frustration lamented by government officials who noted that, in order to diffuse local level conflicts, the World Bank aggravated discrepancies between the national and regional government agendas (Interview: central government, B3; B11; regional government, E2), as well as by the words underscored by Bank officials, who lamented a lack of commitment of central government officials towards the project activities on-the-ground (Interview: multilateral organization, A2).

These findings echo the empirical research of D'Agostino & Sovacool (2011, p.714) and Shankland & Chambote (2011, p.64), who highlight the presence of serious conflicts between government officials and representatives of international institutions in the design and implementation of technical cooperation projects, as well as of Vetterlein (2012, p.37), according to whom Bank interventions are shaped by internal interests – i.e., the pursuit of material interests and the search for legitimacy vis-à-vis their constituency (Barnett & Finnemore, 1999, p.706) – far more than they are ever directly influenced by any individual member state.

These findings would thus appear to suggest that the potential does exist for the Bank to represent the voices and interests of civil society – as argued by Bose *et al*. (2001, p.178), Low *et al* (2001, p.278), D'Agostino & Sovacool (2011, p.701), Dumaru (2010, p.754), Ahmed & Fajber (2009, p.42), Rawlani & Sovacool (2011, p. 859), Kaul (2001, p.22) and Khanna *et al*. (2015, p.1212), – as a means to defend its legitimacy as a provider of technical cooperation programmes (Kuhl, 2009, p.574); and as such do not reflect the claims of McAfee (1999, p.139), Harrison (2005, p.256) and Beymer-Farris & Bassett (2012, p.333), according to whom the desire of multilateral development agencies to act as mediators in the decision making process of issues related to technical programmes and projects stems solely from a hidden agenda that aims to shift access to, and control and management of natural resources from local people to global actors.

In addition to the above, through these findings, the present research also adds to the literature on international development aid by explaining how an organization such as the World Bank may help mediate the needs of multiple clusters of actors, rather than serving the interests of only one type of stakeholder group in a mutually exclusive fashion. As a result, the present investigation suggests that framing CCA technical cooperation programmes as simply serving the interests of one cluster of actors – for example the central government and multinational corporations as opposed to civil society and local community groups –, represents an over-simplification of the reality on-the-ground.

In this regard, the present study found that, in the case of Santa Teresa, the World Bank sought to act as a *buffer institution* – which is a concept that is utilized in a novel fashion in the context of the present investigation – but only partially (and temporarily) succeeded in doing so. The following paragraphs will explain the importance of this finding in relation to the literature on international development aid, in addition to that on boundary organizations and hybrid management theory, while the following section will address the limitations of the approach taken by the Bank.

A *buffer institution* is herein defined as an organization that mediates conflicts between local communities and government authorities by soothing tensions over the use and management of environmental resources affected by the concomitant pressures posed by climate change and government-endorsed extractive practices through the implementation of technical cooperation programmes aimed at enhancing communities' environmental resilience to the impacts of climate change whilst empowering them vis-à-vis decision making in natural resource management.

The notion of a *buffer institution* builds on the work on boundary organizations – presented and discussed in chapter two – carried out by Agrawala *et al*. (2001), Cash *et al*. (2003), Cutts *et al*. (2011), Guston (2001), Hage *et al*. (2010), Miller (2001) and Lewis *et al*. (2014, p.7579), in addition to drawing from a combination of arguments put for by various scholars, including Killoran-McKibbin (2010), Milanez & Ferraz Fonseca (2012), Lynch (2012), Ritzen (2005), Agrawal & Ostrom (2001), Edwards & McCarthy (2006) and Meinzen-Dick & Knox (2000).

In particular, the notion of a *buffer institution* draws from boundary organizations and hybrid management theories insofar as it recognizes the ability of organizations that maintain credibility, legitimacy and saliency to create social order and increase social capital by appeasing the interests of multiple stakeholders, and allowing them to establish mutually productive relationships, through the implementation of projects that combine and deconstruct political and scientific knowledge (Miller, 2001, p.487).

The present investigation highlights that, through the implementation of the PRAA, the World Bank found itself temporarily acting as a *buffer institution* among poor, climate-affected communities on the one hand, and government authorities and private multinationals on the other, and thus did not consolidate powerful, government and private sector-driven, monolithic interests in Santa Teresa. On the contrary, the interventions of the World Bank succeeded in soothing tensions – in the short term – by creating the conditions that temporarily put on hold the interests of central government authorities. These conditions included overcoming feelings of frustration, abandonment and isolation among the local communities by carrying out activities that enhanced community awareness, capacity, confidence and personal commitment vis-à-vis climate change adaptation activities (Interview: local community, D1-D9).

These findings help to build on boundary organizations and hybrid management theories insofar as they highlight the ability of *buffer institutions* to implement projects that in addition to

combining and deconstructing political and scientific knowledge (Agrawala *et al*., 2001; Cash *et al*., 2003; Cutts *et al*.,2011; Guston, 2001; Hage *et al*.,2010; Miller,2001; and Lewis et al., 2014, p.7579), are also able to integrate the valuable traditional knowledge of local communities. Moreover, in the case of Santa Teresa, the World Bank was able to increase social capital and temporarily create social order by taking into account the interests of institutional stakeholders – as suggested by hybrid management theory – together with those of local stakeholders, by understanding the needs of local residents through a continuous process of on-going consultation with communities and civil society.

These findings echo the words of Batterbury (2008, p.65) – who underscores the value of integrating scientific, technical and local knowledge – according to whom development projects can succeed in building the resilience of local communities to climate change through extensive dialogue among local communities, researchers and development practitioners, and Agrawal & Ostrom (2001, p.488), according to whom the most successful natural resource management reforms are achieved in those instances in which the interests of powerful decision makers are brought into alignment with the needs expressed by mobilized local actors.

As a result, the present study asserts that it is the ability to mediate the interests of multiple stakeholders by empowering local communities through an inclusive decision making process that marks the critical difference between the simple implementation of a CCA technical programme aimed at building environmental resilience – which may mask a strategy to protect government interests aimed at exploiting local natural resources, as explained above (Bottrell, 2009, p.334; and Joseph, 2013, p.51) –, and the ability of an organization to act as a *buffer institution*.

7.4 Shortcomings and limitations of the approach taken to empower local communities

The previous section highlighted the importance of the role played in Santa Teresa by the World Bank in terms of acting as a *buffer institution*, as well as the significance of this innovative approach vis-à-vis its contribution to the existing literature. However, while on the one hand in the case of Santa Teresa the World Bank demonstrated the benefits of acting as a *buffer institution*, as well as its ability to do so, on the other hand the Bank also demonstrated its inability (or unwillingness) to do so in a sustainable fashion. Moreover, the events that unfolded

in Santa Teresa following the immediate closure of the PRAA underscore substantial issues vis-à-vis how far and how effectively the Bank acted as a *buffer institution*.

These findings echo those of Batterbury & Fernando (2006, p.1856) and Lewis (2017, p.4), who emphasize the need for the outcomes of development programmes of non-state actors to be sustained by an enabling institutional environment and the enforcement of proper rules, backed by strong government commitments and accountability of civil society leaders.

In this regard, the research found that the World Bank did not provide the local community with the negotiating skills that would have been necessary for residents to attempt to defend their interests in the long term vis-à-vis the exploitation of water resources by Luz del Sur in a non-violent fashion. This aspect arguably contributed to the dramatic turn of events that followed the immediate departure of the World Bank from Santa Teresa – and which likely curtailed some of the aforementioned benefits to local community members.

Undoubtedly, the empowerment achieved by the local community during the PRAA was jeopardized as violence eventually broke loose. While it may be true that these events took place following the (immediate) closure of the PRAA, they cannot and should not be looked at as being unrelated to the PRAA. The lack of sustainability of the empowerment achieved calls into question the solidity of the results obtained – especially insofar as it suggests that the programme did not manage to promote changes in socio-political and economic "*relations that are conducive to securing safe and affordable water for individuals and communities so they can live their lives as they choose, achieve freedoms in line with their own vision, and achieve their fullest potential*" (Jepson *et al.*, 2017, p.48) by shifting deeper lying long-term power structures and dynamics between different actors (Interview: local community, D8; D9; AmericaNoticias.pe, 2014; Morla, 2015).

In this regard, while all the activities carried out on the ground focused on climate-induced water stressors, the factors that may negatively impact water security in the future might not be entirely related to climate change, but rather be the result of the implementation of the hydroelectric Santa Teresa II project. As a result, the fact that the Bank did not assess the threats to the sustainability of the peace it helped to build in Santa casts shadows over the long term effectiveness and appropriateness of the adaptation activities implemented and the capacities built in Santa Teresa, and raises questions as per whether the Bank may have overlooked or

deliberately ignored the long term "*political underpinnings of deficiencies in access to water*" (Budds & Sultana, 2013, p.276).

Whether the lack of attention payed to the sustainability of the peace achieved should be looked upon as 'short-sightedness' of World Bank officials, or otherwise understood as a deliberate effort to distance the Bank from tensions between the central government and local communities, it nevertheless raises issues of concern. While the need for the World Bank to preserve its neutrality is well understood (Wood, 2006; Gore, 2013; Mason, 2014, p.823), the question naturally arises as per whether this need will continue to hinder the ability of the Bank to represent the voices and act upon the interests of local communities – as Wood (2006, p.55) argues – in all those instances in which said interests conflict the agenda of powerful government stakeholders, and whether therefore the role that the Bank found itself playing in Santa Teresa as a voice for civil society groups, women and the poor is a façade – as the arguments of Cammack (2007, p.190) and Rich (2002, p.32) would suggest –, or an anomaly that one day may lead to a *tout court* policy shift in the Bank's development assistance *modus operandi.*

In addition, speculations can also be advanced as per whether the PRAA will have the long-term unintended effect of offering a justification for implementation of those very same hydroelectric projects that it had contributed to bringing to a halt; an 'unintended side effect' that would cast serious doubts over the validity of the approach taken by the World Bank in attempting to serve the interests of local communities in Santa Teresa. In this regard, it is important to recall that private company representatives referenced the example of the PRAA during the interviews of the present investigation as evidence of the need for external interventions in Santa Teresa (such as theirs) to counteract the alleged mismanagement of water resources by the Municipality of Santa Teresa (Interview: private sector C8). This situation appears to echo the words of concern expressed by Budds & Sultana (2013, p.278) vis-à-vis the fact that "*water-related development interventions reproduce or exacerbate the very deficiencies and inequalities that they were designed to address*", as well as those of Barnett (2009, 656) according to whom "*what appears to be progressive and emancipatory might in fact open the door to new forms of domination*", in addition to recalling the empirical findings of Carey *et al*. (2012, p.190) at Lake Parón in Peru.

These considerations, however, remain at the speculative level, and would thus require further research. As already explained, the timeframe of the study does not allow for a longer term understanding of the future water shortages that may be caused by potential activities that might be carried out by Luz del Sur following the completion of the ongoing feasibility study.

Chapter 8: Conclusions

8.1 Introduction

This final chapter will present a summary of the main research findings, and in doing so will answer the question "can the World Bank effectively promote and protect the needs of vulnerable communities?". The chapter will also explain the contribution of the present research to the existing literature, formulate policy recommendations, and identify potential future areas of research that may build on the work carried out by the present study.

8.2 Main findings

The present investigation set out to explore if the World Bank can effectively promote and protect the needs of water-stricken Andean communities through bottom-up environmental resilience building and political empowerment efforts in the context of technical cooperation programmes on CCA. To address this question, the present research studied the case of a CCA technical cooperation programme implemented by the World Bank in Santa Teresa, Peru.

Based on the findings analysed throughout the present dissertation, the research concludes that the World Bank addressed the adaptation needs of the local community in Santa Teresa by enhancing their environmental resilience to the impacts of climate change, whilst also temporarily politically empowering them vis-à-vis natural resource management decision making in the context of the design and implementation of the PRAA. In particular, the World Bank addressed the short term needs of the community through a suite of multi-pronged CCA activities vis-à-vis water security, reforestation, disaster preparedness and food security. These activities demonstrated how environmental resources could be better managed for the benefit of everyone, while helping to overcome feelings of frustration, abandonment and isolation among local community members.

However, at the same time, the research also noted that the approach taken by the World Bank did not address the need for local community empowerment beyond the lifespan of its CCA programme – an issue which risks undermining several of the Bank's long term achievements in Santa Teresa, including by potentially exacerbating the water (in)security deficiencies that it sought to address. In this regard, the Bank did not facilitate the shifting of deeper lying power

structures and dynamics between different actors that would have been necessary to help ensure the direct involvement of local community members vis-à-vis long term decision-making in natural resource management processes.

The aforementioned achievements and shortcomings of the World Bank notwithstanding, the study surprisingly revealed that what truly set apart the PRAA from previous, traditional water-related CCA programmes was the decision of the Bank to attempt to politically empower the local community in Santa Teresa by mediating the conflicts caused by the opposing interests of multiple stakeholders through the use of CCA capacity development activities – a finding which in itself arguably represents the most noteworthy contribution of the present investigation to the existing body of knowledge on international development aid. The present research has defined this mediating role played by the Bank as that of a *buffer institution*, which is a concept that stems from the works on boundary organizations and hybrid management theory, and which is used in a novel fashion in the context of the present investigation.

The research underscores the potential role that a *buffer institution*, such as the World Bank, could play in soothing social tensions surrounding the exploitation of local natural resources subject to the economic interests of powerful stakeholders, by building the capacities of community members and local government officials, whist simultaneously fostering dialogue among them through participatory decision making processes aimed at jointly designing, implementing and managing a complimentary suite of multi-pronged CCA activities vis-à-vis water security, reforestation, disaster preparedness and food security, with a view to demonstrating how environmental resources can be better managed for the benefit of everyone.

To understand the reasons behind this surprising approach taken by the World Bank, as well as the factors that determined its successes and concomitant shortcomings, it is necessary to frame the activities carried out by the World Bank against the backdrop of the needs and agendas of the multiple stakeholders who had an interest in the freshwater resources of Santa Teresa. Moreover, in order to implement the PRAA, the World Bank had to take into account not only the needs of the local water-stricken community, but also the interests of powerful stakeholders, namely the Peruvian central government and Luz del Sur, a private foreign-owned multinational company.

The decision to implement the CCA programme in Santa Teresa was determined for the most part by the Peruvian central government, who wished to further exploit the hydroelectric potential of the area, and who envisioned that the World Bank would support its efforts to silence the local conflicts that it knew would almost certainly arise from the ‘Santa Teresa II’ hydroelectric project.

It is in this context that one of the purposes of the PRAA was precisely "*to support government interventions to ameliorate potential social conflict*" (World Bank, 2008, p.153).

However, while the World Bank did indeed "*ameliorate potential social conflict*" (ibid.) during the timeframe of the PRAA – thus aiding the central government by resolving situations of social unrest –, it did so not by buying the support of civil society leaders – as it would appear that government-endorsed corporate social responsibility in Peru schemes do – but rather by supporting the needs of the residents of Santa Teresa through the implementation of CCA activities that were designed jointly by community members and local government authorities. Moreover, while the efforts carried out by the Bank jointly with local government authorities and international NGOs helped to appease social conflicts, they unexpectedly did so by bring to a grinding halt the central government's financial interests for the entire duration of the PRAA.

As a result, the research highlighted that the ability of the World Bank to temporarily play the role of a *buffer institution* resulted in the implementation of CCA activities that succeeded in serving the short term needs of local communities, as opposed to the implementation of adaptation activities that – if carried out in accordance with the agendas of central government officials – would have likely been executed with the underlying objective of pressuring poor communities into absorbing and accepting government-led market-driven exploitation of local environmental resources.

In this regard, the presence of a *buffer institution* in Santa Teresa most likely marked the difference between peace and violent conflict, such as that which instead broke out in Tia Maria and Las Bambas, which share very similar traits to Santa Teresa in terms of poverty, climate vulnerability, natural resource dependency, geographical location, government exploitation and social tensions, but in which – unlike in Santa Teresa – a CCA technical cooperation programme was not carried out by a *buffer institution*.

However, in addition to the above, the present investigation also uncovered the presence of underlying tensions between the need for the World Bank to preserve its neutrality – especially in matters pertaining to social unrest –, and its ability to sustain peace and avert social conflict in a sustainable manner beyond the duration of its technical cooperation programmes.

In this regard, whether the lack of attention payed to the sustainability of the peace achieved in Santa Teresa should be looked upon as 'short-sightedness' of World Bank officials, or otherwise understood as a deliberate effort to distance the Bank from tensions between the central

government and local communities, the dramatic turn of events that followed the immediate closure of the PRAA raises issues of very significant concern that cannot and should not be overlooked.

The present investigation suggests that conflict in Santa Teresa may not have escalated in such a dramatic manner immediately following the departure of the World Bank, if the Bank had politically empowered the local community by providing them with the negotiating skills, tools and resources necessary for them to attempt to defend their interests and safeguard their needs vis-à-vis the exploitation of water resources by Luz del Sur in a non-violent fashion. Instead, this significant shortcoming may have the long term unintended consequence of offering a justification for intervention to those very same hydroelectric projects that the CCA programme had contributed to bringing to a halt – a 'side effect' that risks potentially exacerbating the water (in)security deficiencies that the Bank sought to address. Moreover, private company representatives referenced the example of the PRAA during the interviews of the present investigation as evidence of the need for external interventions in Santa Teresa (such as theirs) to counteract the alleged mismanagement of water resources by the Municipality of Santa Teresa.

Furthermore, the lack of sustainability of the peace achieved through the implementation of the PRAA project activities also reveals that the presence of the World Bank in Santa Teresa was most likely in itself a determining factor in ensuring the absence of conflict. Moreover, in addition to being influenced by the activities implemented under the PRAA, the decision of the central government to put on hold its extractive interests in Santa Teresa was also most likely born from the need to safeguard its relationship with the World Bank in light of the Bank's future investments in Peru, the majority of which will almost certainly far exceed the relatively small grant made through the PRAA. By stepping back, the central government thus reduced the risk that the World Bank could have founds itself involved in an awkward situation of open conflict among the local population that it sought to aid on the one hand, and one of its constituent members, i.e., the government of Peru, on the other.

While these findings highlight the very influential role that a *buffer institution* may play vis-à-vis the soothing of social conflicts related to natural resource exploitation, they also underline the reticence of the World Bank to empower local communities by shifting long term deeper lying power structures and dynamics between different actors in those instances in which local community needs contrast the extractive agenda of powerful government stakeholders. As a result, the case of Santa Teresa is most likely not indicative of a *tout court* deep policy shift in the Bank's overall *modus operandi.*

Nonetheless, having uncovered the existence of such an anomaly by investigating the overlooked role that the World Bank is able to play among opposing stakeholder groups in situations of social conflict, and having discussed and analysed potential implications of this anomaly for policy making in international aid assistance programmes by "*charting the interactions among different agencies, the values and meanings prioritised and struggled for by groups within each agency, and the ebbs and flows of particular meanings regarding the purpose to which project resources* [were] *put*" (Lewis, 2003, p.554) undoubtedly represents a very noteworthy contribution to the existing literature, as the following section will discuss.

8.3 Contributions to the existing literature

The present investigation contributes significantly to the existing body of knowledge by helping to enrich and broaden the current literature on international development assistance, as well as to build upon boundary organizations and hybrid management theory. In particular, three main contributions can be identified. The first two stem from the research gaps highlighted in the Introduction chapter (section 1.1), while the third contribution is the result of the unexpected research findings uncovered by the present study.

The first contribution that the present investigation makes to the literature on international development assistance is that framing CCA technical cooperation programmes as simply serving the interests of one type of actor – as tend to do both the critiques of World Bank technical cooperation programmes (Beymer-Farris & Bassett, 2012, p.339; Lynch, 2012, p.370; Goldman, 2005, p.41; Harrison , 2005, p.256; Gould & Ojanen , 2003, p.69; Ayers *et al*., 2011, p.77; Shankland & Chambote, 2011, p.68; Alam *et al*., 2011, p.56; Ireland, 2012, p.159; and Carey *et al*., 2012, p.190) as well as the proponents of Bank-led interventions (Bose *et al*., 2001, p.178; Low *et al*., 2001, p.278; D'Agostino & Sovacool, 2011, p.701; Dumaru, 2010, p.754; Ahmed & Fajber, 2009, p.42; Rawlani & Sovacool, 2011, p. 859; Kaul, 2001, p.22; Verkooijen, 2011, p.51; and Khanna *et al*., 2015, p.1212) –, represents an over-exemplification of the reality on-the-ground. Instead, the truth of the matter rests tangled up in a more complex web of interests and agendas.

The profound significance of this first finding lies in the fact that it strongly suggests that future research on World Bank CCA technical cooperation programmes should avoid the pitfall of drawing hasty conclusions by pointing to singular examples where programmes may have had positive or negative outcomes for individual stakeholder groups. Instead, the question should

become that of understanding the meanings ascribed to the various elements of the programmes by the different stakeholders involved in it, as suggested by Lewis *et al*. (2003, p.543). In particular, it will be necessary to understand whose interests will likely be better served in the long run given that – as hypothesized by scholars such as Budds & Sultana (2013, p.275), Linton & Budds (2014, p.171), Wutich et *al*. (2017, p.46), Milanez & Ferraz Fonseca (2012, p.1069) and Lynch (2012, p.364) – water (in)security and vulnerability of local communities to climate change reflect unbalanced socio-economic power relations and are inherently interlinked to national or international interests, as opposed to simply relating to poverty or lack of entitlements.

In this regard, the present investigation enriches the positions advanced by international development scholars such as Gore (2013, p.775), Khanna *et al*. (2015, p.1211) and Kuhl (2009, p.574), according to whom the potential does exist for the World Bank to represent the voices and interests of local communities, by highlighting the ability of the Bank to temporarily empower local communities by mediating their needs vis-à-vis the conflicting interests of other powerful stakeholders.

The second contribution that the present investigation makes to the literature on international development aid is that a relationship would appear to exist between the difficulty to ensure medium-to-long term sustainability of World Bank efforts to empower local communities on the one hand, and the need for an enabling institutional environment and for the enforcement of proper rules, backed by strong government commitments and accountability of civil society leaders – as suggested by Batterbury & Fernando (2006, p.1856) and Lewis (2017, p.4) – on the other.

These findings echo the words of Batterbury (2008, p.65) who underscores that development aid projects are able in some cases to build the resilience of local communities to the impacts of climate change by fostering extensive dialogue among said communities, scientific experts, researchers and development practitioners. However, they also echo those of Batterbury & Fernando (2006, p.1856), who emphasize that "*the reasons for the failure of so many* [development aid] *programs lies with poor government commitments to creating an ''enabling'' institutional environment, and the low accountability of local leadership*", coupled with the limitations intrinsic to the need for the World Bank to preserve its neutrality denounced by Wood (2006, p.55), Gore (2013) and Mason (2014, p.823).

In this regard, on the one hand, the present findings confirm the claims advanced by Bottrell (2009, p.334) and Joseph (2013, p.51), who assert that resilience building can be used as a

strategy used to ensure that poor communities are able to absorb and accept government-led market-driven exploitation. Moreover, the present investigation reaffirms that resilience building is indeed looked upon by central government officials as a means to ensure that local communities are able to withstand the consequences of natural resource exploitation. On the other hand, however, the present findings move beyond the arguments of Bottrell and Joseph by highlighting the potential (only expressed in the short term in the case of Santa Teresa) for World Bank-led environmental resilience building activities to succeeded in addressing the needs local communities for greater political empowerment by creating a convergence of interests between local government officials and local residents.

The significance of this second finding lies in the fact that it strongly suggests that future research on World Bank CCA technical cooperation programmes should focus upon the ability (and willingness) of the Bank to safeguard the solidity of the results it may have achieved vis-à-vis political empowerment of local communities by shifting deeper lying long-term power structures and dynamics between different actors.

The third contribution to the existing literature – which stems from unexpected research findings – is the formulation of the concept of a *buffer institution*. In this regard, the present findings help to build on boundary organizations and hybrid management theories insofar as they underscore the potential for the World Bank to act as a *buffer institution* by implementing CCA technical cooperation programmes that in addition to combining and deconstructing political and scientific knowledge (Agrawala *et al*., 2001; Cash *et al*., 2003; Cutts *et al*.,2011; Guston, 2001; Hage *et al*.,2010; and Miller,2001), are also able to integrate the valuable traditional knowledge of local communities.

The significance of this second finding lies in the fact that it strongly suggests that future research on technical cooperation programmes should focus upon the potential for the World Bank to increase social capital and temporarily create social order by simultaneously taking into account the interests of institutional stakeholders (i.e., government authorities) – as suggested by hybrid management theory –, as well as the needs of local stakeholders through a continuous process of on-going mediation and consultation with communities and civil society aimed at fostering the integration of local practices and scientific knowledge in the implementation of CCA activities, as strongly advocated for by Batterbury (2008, p.64).

In this regard, future research on World Bank CCA technical cooperation programmes should recognize that the critical difference between the simple implementation of CCA resilience

building technical programmes which may mask a strategy to protect government interests aimed at exploiting local natural resources (Bottrell, 2009, p.334; and Joseph, 2013, p.51) on the one hand, and programmes designed and implemented to promote and protect the true needs of vulnerable local communities on the other, rests in the ability of the Bank to empower local communities through an inclusive decision making process. The practical implications of this conclusion are discussed in the next section, which will focus on the policy recommendations and implications for the international community of practice.

8.4 Policy recommendations and implications for the international community of practice

Two main policy recommendations and four programmatic interventions that stem from the findings of the present research regarding the long term ineffectiveness of the efforts put in place by the World Bank to politically empower local communities vis-à-vis the use, management and administration of freshwater resources.

The first recommendation is that policies should be put in place to ensure that local community members are able to fully understand their legal rights vis-à-vis the use, management and administration of freshwater and other local natural resources that may be impacted by programmes, projects and activities carried out by local, national and multilateral organizations.

In this regard, it is important to recall that while in Peru the *Ley de consulta previa* (law n.29785, ratified by the Peruvian Congress on 23 August 2011) legislates that consultation with local communities and indigenous peoples over use and administration of natural resources is mandatory prior to the implementation of any activity that may impact said resources, the present study highlighted that temporary consultation is in itself not sufficient to ensure adequate long term community empowerment vis-à-vis local natural resource management.

Against this backdrop, the second recommendation is that policies should be put in place to ensure that local community members are able to meaningfully influence decisions regarding the use, management and administration of freshwater and other local natural resources, that may be impacted by programmes, projects and activities carried out by local, national and multilateral organizations.

As stated by Lewis (2017, p.4) "[w]*ith appropriate support from non-state actors the poor can begin to free themselves from direct dependence on state or dominant economic elites – but only if they can access assets, build skills, and rely on the enforcement of proper rules*". In this regard, while the two aforementioned recommendations are aimed at policy makers, their realization and implementation on-the-ground has significant programmatic implications for the international community of development practitioners, which includes programme officers and officials of multilateral development organizations, as well as officers and officials from bilateral and national development institutions, offices, agencies, programmes and funds.

In particular, the present research identifies four synergistic programmatic interventions that practitioners should mainstream in the design of CCA technical cooperation programmes in conformity with the two aforementioned policy recommendations.

First, CCA technical cooperation programmes should provide local community members with the tools and resources necessary to analyse and assess the extent to which not only present but also future activities that may impact local natural resources – whether driven by public or private stakeholders – might infringe upon their lawfully constituted rights.

Second, CCA programmes should provide local community members with the tools and resources necessary to identify the local, regional, national and supra-national entities, bodies and organizations that they may approach in those instances in which they fear that their legally constituted rights may be infringed upon by extractive activities and other practices aimed at exploiting freshwater and other local natural resources.

Third, CCA programmes should facilitate the design and implementation of processes and structures to ensure that local communities are able to participate in a meaningful fashion and in an ongoing basis in decision making fora regarding the use, management and administration of freshwater and other local natural resources in relation to extractive activities and other practices aimed at exploiting said resources.

Fourth, upon ensuring the possibility for community members to access decision making fora (recommendation three, above), CCA programmes should provide local community members with the skills and resources necessary to articulate their interests in accordance with the standards of the legal issues that need to be addressed. This would entail a suite of capacity development activities, including but not limited to training in the compilation of specific documentation and on the modalities for submission of said documentation.

8.5 Looking ahead: potential areas of future research

By showcasing the ability of a World Bank programme to support the short term needs of local communities in a situation in which said needs were opposed to the interests of central government authorities, the current investigation highlights a very interesting anomaly in the traditional development assistance *modus operandi* of the World Bank.

However, the extent to which this anomaly may be revealing of a new trend in Bank-led technical cooperation rests largely on the ability and willingness of the Bank to feed the lessons learned from the shortcomings of the PRAA into the design and implementation of future CCA projects – lessons learned which largely relate to fact that the PRAA did not help secure sustained long term peace by addressing deeper lying power structures and dynamics between different actors.

While the *buffer institution* role that the World Bank found itself playing in the case of Santa Teresa might be the result of a context-specific set of circumstances that may not necessary imply a *tout court* policy shift in the Bank's development assistance *modus operandi*, the analysis provided herein represents a noteworthy contribution to the existing literature on international development aid insofar as it allows for an insightful appreciation of how such anomalies can be explained, discussed and framed. In this regard, the present research confirms that "*international organizations can only be understood when we dissect their internal operations and identify and analyse the roles, responsibilities, and capacities of key actors*" (Weller & Yi-chong, 2010, p.229), and thereafter analyse the different interests of each of the stakeholders involved in a particular project by "*tracing project histories carefully, and charting the interactions among different agencies, the values and meanings prioritised and struggled for by groups within each agency, and the ebbs and flows of particular meanings regarding the purpose to which project resources should be put*" (Lewis et al., 2003, p.554).

In summary, the findings uncovered by the present undertaking disclose new and intriguing avenues for additional research into the extent to which the existence of anomalies in the Bank's development assistance *modus operandi* – such as those in Santa Teresa – may possibly, in the coming years, lead the World Bank to embrace *tout court* a new approach to development assistance, focused upon wholeheartedly addressing the true needs of climate-affected local communities in developing countries.

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