

Chapter 10

Remittances for Adaptation: An ‘Alternative Source’ of International Climate Finance?

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10.1 Introduction: Remittances and Adaptation Finance

Even the most stringent efforts to reduce greenhouse gas emissions cannot prevent climate change impacts in the next few decades, making adaptation essential (Klein 2010). Developing countries are historically least responsible for the emissions that result in climate change, but most exposed to its impacts. Those most vulnerable to climate change will be the poorest people in migration-prone areas of developing countries (e.g. Ayers 2011). The costs of adaptation in developing countries are difficult to assess, but were recently estimated in the order of hundreds of billions of US Dollars per year (UNEP 2014). Explicit international funding possibilities for adaptation activities however remain limited in scale. The 2009 Copenhagen Accord of the United Nations Framework Convention on Climate Change (UNFCCC) recognized that substantially greater financial resources are needed to support mitigation and adaptation in developing countries. In this Accord and the subsequent Cancun Agreements, developed countries pledge to mobilize USD 100 billion per year for this purpose from 2020 onwards, coming from ‘a wide variety of sources,

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A. Milan et al. (eds.), *Migration, Risk Management and Climate Change:*

Evidence and Policy Responses, Global Migration Issues 6,

DOI 10.1007/978-3-319-42922-9_10

public and private, bilateral and multilateral, including alternative sources of finance' (UNFCCC 2010; §8).

The sources of adaptation finance are not well understood. And to the extent that they can be tracked, they do not seem to mobilize the billions of adaptation finance that are needed. Concerning public sources, for example, the Adaptation Fund is often considered to be progressive and innovative. Yet the predictability and sustainability of its future funding are uncertain as it partly depends on the development of the Clean Development Mechanism's market (Horstmann and Chandani 2011; 435). Its future had to be safeguarded through a public capital injection during COP19 in Warsaw. Developed and developing countries have now pledged financial resources for the newly established Green Climate Fund, which aims to spend 50% of its resources on adaptation, but its project pipeline still needs to be developed. Multilateral and Bilateral Development Banks are increasingly investing in adaptation, but the expenditure remains low compared to mitigation. The discussion on private sources of adaptation finance, or on private engagement in adaptation in general, is in its early stages (Pauw 2014). It remains hard to even identify public-private adaptation projects, let alone study the effectiveness, replication or up-scaling potential of public-private adaptation interventions (c.f. Kato et al. 2014). Indeed, private financing for adaptation is difficult to track and seems minimal compared to private financing of mitigation (Buchner et al. 2012). What exactly is meant with the third 'alternative source' of climate finance has not been clarified.

This chapter brings together literature on climate finance and remittances—money sent to families and friends in the origin countries by migrants – and analyses whether remittances could be considered as an 'alternative' source of adaptation finance in international climate negotiations. An alternative source means it is neither disbursed by the public sector, nor can it be labelled as 'private finance' as there is no objective of having '*reasonable, relatively quick and predictable returns, at acceptable risks*' (see Pauw and Pegels 2013; 2).

Given remittances' increasing magnitude and potential to contribute to development, governments have already been employing policy measures to harness the remittance potential for investments with a long-term perspective (Aparicio and Meseguer 2012). Some literature shows that households that receive this type of support have also proven to be more resilient to external stressors including natural disasters (Yang 2008; Mohapatra et al. 2012; Ebeke and Combes 2013).

Migrant investors are distinguished from the traditional private sector because determinants for remitting might go beyond profit making and rates of return. Key drivers for investing in areas of origin include family bonds and networks, and thus altruism, prestige, implicit co-insurance agreements and perspectives of return (Straubhaar and Vadean 2006). The 'tempered altruism' or 'enlightened self-interest' that often drive remittance behaviour (Lucas and Stark 1985) makes diaspora investments particularly suitable for adaptation projects. The fundamental difference between individuals or groups either referred to as 'migrants' or 'the diaspora' lays in the willingness of the act. While migration is voluntary, diaspora is forced, either by physical or economic factors. Moreover, one of the key characteristics of diaspora is summarized by the 'leaving home and staying in touch' attitude

(CheSuh-Njwi 2015). Throughout this chapter we will refer to the concept of diaspora for the importance of the need to move away from the places of origin and the links maintained with the family members or the ancestral community.

The need for adaptation investments is often concentrated in the water and agriculture sectors, as the livelihoods of most of the people in developing countries depend on these sectors. However, compared to the large investments in energy and transport infrastructures required for mitigation, land-based sectors are far less attractive to 'traditional' private investors, particularly if they are in exposed disaster-prone areas. The motivation to finance adaptation thus often needs other drivers than monetary returns.

In this context, the potential for remittances to play a role as an 'alternative source' of adaptation finance analysed for the following reasons: (1) the recorded volume of these flows to developing countries -expected to raise up to USD 516 billion in 2016 by the World Bank- has tripled ODA since 2013, which was USD 134.8 billion (OECD 2014); (2) the direct connection with the household level often hard to be reached by public interventions; and (3) the motivation to remit, not only based on returns in profit but also on personal bonds, increasing the likelihood for remittances to be spent in remote areas, where the traditional private sector would not necessary invest and where need for adaptation measures might be higher.

This is, however, not enough to affirm that remittances could be an alternative source of adaptation finance contributing to the annual USD 100 billion pledge of developed countries. To identify whether remittances meet the UNFCCC's expectations of adaptation finance for developing countries, this chapter builds on ten climate finance criteria from the Copenhagen Accord and the Cancun Agreements as distilled by Pauw et al. (2015) and examines literature and existing empirical data on remittances against these criteria.

This chapter is structured as follows. The next section identifies the ten criteria for adaptation finance and a reference framework towards which recurring features of remittances will be analyzed. By applying these criteria, section three then reviews key findings on the remittances and considers the motivation to remit and the key drivers that might lead to adaptation finance initiatives at individual, household and community level. Section 10.4 will analyze remittances as flows and, as such, their potential for being leveraged as investments in adaptation. Section 10.5 will discuss the role of public institutions in guaranteeing appropriate frameworks for remittances to be channeled in a 'transparent' and 'balanced' way towards adaptation actions.

10.2 Adaptation Finance Criteria

This section builds on ten criteria for adaptation finance that were identified and defined by Pauw et al. (2015). They were elaborated for the purpose of this study, as provided in Table 10.1, which (i) lists the ten criteria that were identified for adaptation finance (predictable; sustainable; scaled up; provided with improved access;

Table 10.1 Ten climate finance criteria as distilled from the Copenhagen Accord and the Cancun Agreements (first and second column) as well as our interpretation of these criteria in order to analyse whether remittance can meet these criteria

Copenhagen accord	Cancun agreements UNFCCC	Interpretation to analyse remittances
Predictable (...) financial resources (...) to support the implementation of adaptation action in developing countries (§3)	Decision: (...), predictable (...) funding shall be provided to developing country parties (§97)	Can recipients anticipate these flows and thereby be able to react and plan accordingly to their adaptation needs?
Predictable (...) funding (...) shall be provided to developing countries (§8)		
Sustainable financial resources (...) to support the implementation of adaptation action in developing countries (§3)	–	Are remittances a stable enough source of finance allowing for medium to long- term adaptation?
(...) funding as well as improved access shall be provided to developing countries (§8)	–	Do remittances provide direct access to funding?
Adequate (...) financial resources (...) to support the implementation of adaptation action in developing countries (§3)	Decision: (...) and adequate funding shall be provided to developing country parties (§97)	Could remittances contribute substantially to cover adaptation costs in developing countries?
Adequate funding (...) shall be provided to developing countries (§8)		
Scaled up (...) funding (...) shall be provided to developing countries (§8)	Decision: scaled-up (...) funding shall be provided to developing country parties (§97)	Are remittances an increasing flow?
New and additional (...) funding (...) shall be provided to developing countries (§8)	Decision: (...), new and additional (...) funding shall be provided to developing country Parties (§97)	Can remittances be recorded as new and additional to former ODA levels?
The collective commitment by developed countries is to provide new and additional resources (...) approaching USD 30 billion for the period 2010–2012 (...) (§8)	COP takes note of: (...) developed countries to provide new and additional resources (...) approaching USD 30 billion for the period 2010–2012 (§95)	

(continued)

Table 10.1 (continued)

Copenhagen accord	Cancun agreements UNFCCC	Interpretation to analyse remittances
Funding for adaptation will be prioritized for the most vulnerable developing countries , such as the least developed countries, small island developing States and Africa (§8)	Decision: (...); funding for adaptation will be prioritized for the most vulnerable developing countries , such as the least developed countries, small island developing States and Africa (§95)	Do the most vulnerable developing countries receive relatively large share of remittances?
In the context of meaningful mitigation actions and transparency on implementation, developed countries commit to a goal of mobilizing jointly USD 100 billion dollars a year by 2020 to address the needs of developing countries (§8)	COP recognizes: developed country parties commit, in the context of meaningful mitigation actions and transparency on implementation, to a goal of mobilizing jointly USD 100 billion per year by 2020 to address the needs of developing countries (§98)	Do developed countries create enabling environments to promote adaptation through remittances?
In the context of meaningful mitigation actions and transparency on implementation , developed countries commit to a goal of mobilizing jointly USD 100 billion dollars a year by 2020 to address the needs of developing countries (§8)	COP recognizes: developed country parties commit, in the context of meaningful mitigation actions and transparency on implementation , to a goal of mobilizing jointly USD 100 billion per year by 2020 to address the needs of developing countries (§98)	Are remittances a transparent flow? Are remittances transparent from the source to the final users?
The collective commitment by developed countries is to provide (...) resources approaching USD 30 billion for the period 2010–2012 with balanced allocation between adaptation and mitigation (§8)	Decision: new and additional resources (...) approaching USD 30 billion for the period 2010–2012, with a balanced allocation between adaptation and mitigation (§95)	Do remittances prioritize adaptation over mitigation?

Source: UNFCCC (2009, 2010)

new and additional; adequate; prioritized to the most vulnerable developing countries; mobilized by developed countries; and transparent balanced allocation between adaptation and mitigation),(ii) provides the climate negotiation context explaining how they were distilled from the Copenhagen Accord and the Cancun Agreements and (iii) introduces the angle under which remittances will be dealt to analyze if they can meet the criteria of adaptation finance and be therefore considered in all respects as an 'alternative source'.

Some of these criteria are partly based on longer standing work agreements under the UNFCCC. For example, criteria such as 'new and additional' and 'predictability' have been articulated again and again, not least in Article 4.3 of the

UNFCCC (Müller 2008; Horstmann and Chandani 2011). For climate action-only potentially addressing finance- the Copenhagen Accord includes the additional criteria ‘country-driven approach’ and ‘based on national circumstances and priorities’ (UNFCCC 2010; §11). Supplementary criteria are proposed by research and climate funds, for example for feasible, effective and efficient adaptation finance (e.g. van Drunen et al. 2009; Müller 2008).

The identified criteria are based on two milestones in UNFCCC negotiations on climate finance: the 2009 Copenhagen Accord and the 2010 Cancun Agreements. The Copenhagen Accord declared to up-scale climate finance for developing countries with USD 30 billion of fast-start finance for the period 2010–2012 and with USD 100 billion per year from 2020 onwards; that the private sector would be one of sources of these financial resources; and started discussions on the Green Climate Fund. However, the Copenhagen Accord itself is a non-binding political declaration: it was brought forward by 114 Parties, but there was no consensus by the Conference of the Parties (COP). One year later, the 196 Parties to the UNFCCC transformed much of the Copenhagen Accords’ content on climate finance into COP decision 95–97 of the Cancun Agreements, and therefore these are included in this chapter as well.

Whilst transforming parts of the Copenhagen Accord in the Cancun Agreements, some minor differences were made. For example, the criteria ‘sustainable’ and ‘improved access’ are not included in the Cancun Agreements; and ‘balanced’ only refers to the 30 billion fast start finance period, which ended in 2012. This chapter however still analyses these three criteria, given that they remain important in international climate finance debates. Access modalities and the balanced allocation are for example key concepts in the design of the Green Climate Fund.

10.3 Motivation to Remit and Invest in Adaptation

The International Organization for Migration (IOM) defines remittances as monetary transfers that a migrant makes to the country or area of origin. Most of the time, they are personal cash transfers that can be invested, deposited or donated to a relative or a friend. Although the definition could be broadened further to include in-kind personal transfers and donations (IOM 2009), this chapter focuses on financial remittances only both as private cash transfers and as donations to community projects with a potential to be used for adaptation finance.

Some studies find that remittances are driven by self-interest motives of the sender (Bettin et al. 2012). Others suggest that the altruism motive lead in an increase in remittances to compensate relatives for negative shocks (Agarwal and Horowitz 2002). Starting from these considerations on the motivation to remit, this section discuss the potential for remittances to finance adaptation at community and household level and comply with the ‘predictable’, ‘sustainable’, ‘improved access’ and ‘adequate’ criteria.

Predictability Although predictable funding is key for developing countries when formulating adaptation strategies and implementing activities (AMCEN 2011; AGF 2010), it is not further defined by neither the UNFCCC, nor in adaptation finance literature. In the Accra Agenda for Action (AAA 2008), predictability is translated into donors strengthening budget planning, thus providing (1) full and timely information on annual expenditure; and (2) regular and timely information to partner countries on their rolling 3- to 5-year forward expenditure and/or implementation plans.

Analyzing this criterion in terms of remittances' potential to comply implies looking beyond traditional donors and focus on private and alternative sources. To this end, 'predictability' is interpreted not as whether the amount of funding decreases or increases, but on whether recipients can anticipate on future adaptation finance, and plan accordingly.

In this context, remittances have proved to be a more reliable source of foreign currency than other capital flows to developing countries such as foreign direct investment and development aid (World Bank 2005). This does not mean that they are not influenced by sudden factors such as economic crises in host countries (Frankel 2011), but their fluctuations to exogenous is quite predictable.

For example, an increase of remittances can be also foreseen in case of economic crises, catastrophic weather events and natural disasters in migrant's origin countries. This shock-absorbing function is emphasized in early literature on the topic corroborating the hypotheses on the use money transfers as risk-spreading and co-insurance mechanisms at family level (Blue 2004). Lately, this practice has been recognized as a strategy to 'help mitigate external vulnerabilities' and 'increase resilience'.

Sustainability This criterion is distinguished from 'predictability' and interpreted as constituted by two aspects: (1) it is replenishes (like a fund) or is self-generating; and (2) it is a stable or increasing flow of financial resources over time. In terms of remittances, the question is whether these are a stable source of finance allowing for medium to long-term adaptation.

In a case study on Morocco, De Haas and Plug (2006) found that bilateral per-capita remittance flows from destination countries only started to stagnate or decline after two decades from the onset of migration. Other studies suggest that migrant remittances tend to reach a peak approximately 15–20 years after migration. With these rates, remittances seem to be a more stable and sustainable source of income than more volatile ones, such as FDI or ODA (with disbursement planning up to 4 years).

Remittances can also be examined for their potential to foster investments with a long-term perspective, which is often crucial in adaptation. Adams et al. (2008) describe how remitters' objectives are divided between the short-term (e.g. food consumption and health needs) and the long-term (e.g. reinforcements of assets and social position). Long-term goals also include income accumulation and increase of economically sustainable livelihood, reduction of exposure to external stresses,

food security and more sustainable use of natural resources. As such, remittances have emerged as a key source of livelihood differentiation.

Moreover, these flows are also used to protect people from the destabilizing effects of absent or ill-functioning markets, failing state policies and a lack of state-provided social security (de Haas 2007). For example, an empirical analysis by Giuliano and Ruiz-Arranz (2009) suggests that migrants compensate for the lack of development of local financial markets using remittances to ease liquidity constraints, channel resources toward productive investments and hence promote economic growth in the long-term.

Improved Access should help to use finance more effectively and efficiently. In the context of adaptation, the ultimate goal of improved access is to reach the most vulnerable people. Concrete steps for direct access and enhanced direct access are taken by the Adaptation Fund and the Green Climate Fund (GCF). According to Ayers (2011), vulnerability to the global risk of climate change is locally experienced, which she calls the ‘adaptation paradox’. Current governance of funding relationships is often accountable to contributors of climate finance rather than to the most vulnerable people that experience climate change impacts locally (ActionAid 2007). Rather than a discussion on the institutional settings allowing for improved access, under this criterion this chapter thus focuses on whether the most vulnerable and poor have direct access to finance from remittances.

Although mobility has been recognized by the IPCC as a common strategy for climate change adaptation, it is well known that international migration requires a certain amount of resources and remains too costly for the poorest. Those who cannot afford to undertake travels abroad normally engage in internal migration sending remittances likewise to those left behind. The amount, though, is not comparable to international flows, because of the lower wages and currency. However, the distinction between internal and international remittances is very important for adaptation purposes, as those who migrates internally have more opportunities to visit their families and more control on the use of remittances at home as compared to those who have migrated internally.

Evidence exists that these flows are more likely to reach remote areas than private investments motivated by profit-generation. For example, in Ghana and Burkina Faso remittances are used to increase resilience in vulnerable rural areas by supporting adaptation within the farming sector, for instance through the purchase of agricultural inputs (Deshingkar 2011). When ‘improved access’ is intended as ‘easier access’, including lack of intermediation, it is more straightforward to examine their impacts. For example, building infrastructure through ODA tend to be several time costlier than it would have been if it was funded by local resources, as foreign aid often requires hiring of international consultants (Acharya 2003). The outcome of the 2015 Finance for Development conference, the Addis Ababa Action Agenda, commits to lowering the transaction costs of remittance flows. If this would be achieved, access to remittances will be even easier.

Adequacy Literature generally interprets ‘adequacy’ in terms of quantity. For example, Action Aid (2007), Müller (2008), Christiansen et al. (2012) and Flam and

Skjaereth (2009) refer to sufficiency to cover relevant costs or the inadequacy of adaptation funding compared to the estimated costs. Indeed, van Drunen et al. (2008; 16–17) write that under the Convention, '*adequate (...) funds were meant to help developing countries meet the agreed full incremental costs*'. The question is whether remittances could complement the resources allocated by traditional donors contributing to cover adaptation costs in developing countries.

According to the World Bank, the recorded annual flow of remittances (USD 516 billion) might be a significant underestimate: informal remittances are estimated to be higher in the range of 10–50 % of recorded remittances (Ratha 2003; El-Qorchi et al. 2003). When analysing remittances through their amount, it can be noted how they form a considerable part of the wealth of several countries. For instance, in Mexico remittances are the second largest source of revenues after oil exports (Aparicio and Meseguer 2012). In other countries in different parts of the world, remittances are a vital source of income: they amount to 48 % of Tajikistan's GDP, 25 % of Lesotho's and Nepal's, and 24 % of Moldova's (World Bank 2013).

In certain specific situations, a share of such flows can help to alleviate the impacts of climate change, for example to deal with natural disasters. As shown by the recent evidence in Haiti, it is possible to see that remittances can actually meet the needs for incremental funding better than foreign aid, which seems less sensitive to shocks (David 2010). Remittances seem to have a stabilizing effect in most developing countries vulnerable to environmental changes: by providing a form of private insurance (ex post risk management strategy) and/or by promoting ex ante risk preparedness (ex ante risk management strategy). This hypothesis was tested by Combes and Ebeke (2011) on a large sample of developing countries (113) observed over the period 1980–2007. The results highlight that remittances dampen the marginal destabilizing effect of natural disasters, in particular where remittance ratios comprise 8–17 % of GDP. For remittances, adequacy is not only to be seen in terms of resource quantity, but also for their capacity to effectively flow under particular circumstances, such as climatic risks preparedness and relief.

To summarize: although climate negotiations address adaptation finance at global and national levels and remittances' are not straightforward pledges to adaptation, to some extent they can be considered predictable and sustainable financial flows that can support the most vulnerable people. In fact, under certain circumstances (e.g. shocks or negative trends) literature shows that remittance- flows increased as an effect of the 'altruistic' motivation at the base of certain remit behaviors. This shows how complicated it is to apply criteria ensued by negotiations among states to decisions taken at individual, household and community level.

10.4 An 'Alternative Source' of Adaptation Finance

The ten climate finance criteria are clearly directed towards traditional public finance. In their paper, Pauw et al. (2015) use them to analyse the potential to mobilize private finance for adaptation. In this chapter, remittances are discussed for their

peculiarities in comparison to other international streams in view of possibly including them among the ‘alternative’ sources.

Scaling Up climate finance means constantly increasing it over time, but the UNFCCC does not define by how much and how fast. The increase from the developed countries’ USD 30 billion pledge for the period 2010–2012 (i.e. USD ten billion per annum on average) to USD 100 billion per annum from 2020 onwards would be a tenfold increase, or an additional 26% each and every year up to 2020. Concerning remittances, this chapter analyses to what extent the flows have the potential to be scaled up for adaptation purposes.

While developed countries can only be expected to scale up climate finance if they are confident that these monies will be spent wisely (AGF 2010; 29), diaspora continue to remit regardless. As a matter of fact, the overall annual flow of remittances to developing countries has nearly tripled since 2000 and is also expected to continue at a rate of over 7% annually from 2012 to 2014 (Kebbeh 2012).

Although remittances grow with around 8% per year (OECD 2014), this amount cannot be compared with the necessary annual 26% increase of climate finance. And this potential, cannot be harnessed without the appropriate incentives (e.g. subsidies or tax relief) that make adaptation ‘an opportunity’, diaspora entrepreneurs will continue focusing on traditional sectors (retail, agriculture, etc.) to invest their extra-money.

‘New and Additional’ means that climate finance should be new and additional to Official Development Assistance (van Drunen et al. 2008). It can however be discussed whether it should be ‘new and additional’ to existing, planned or targeted ODA expenditure at the time of the Copenhagen Accord (see Brown et al. 2010). As remittances are not related to a developed-country government budget, it goes without saying that remittances, if used for adaptation purposes, could be recorded as new and additional to former ODA levels. The challenge is to leverage these investments towards adaptation actions and to account for them. Many households might contribute to adaptation without considering it that way (and not knowing that their actions could be supported by further aid devoted for that specific purpose).

Although migrant’s financial transfers to their countries and areas of origin are undeniably increasing (World Bank 2014b), it is well-known and acknowledged by most of the international financial institutions that only about 5% of these flows are used for productive investments. The amount that might be directed towards adaptation actions is thus most likely inferred within this small percentage. We are therefore speaking about a very small part of the huge sum mentioned as remittance flow. Moreover, for this share to be used for future adaptation plans, information is needed, attractive incentives have to in place and depends on the social and cultural context and personal orientations.

The importance of ‘alternative’ sources is key in the discussions on how to attract new type investors. For this reason, enabling environments for attracting these peculiar investments – done by nationals leaving abroad and targeting adaptation- need to be promoted by governments and their international partners. Remittances might

be new and additional sources when the benchmark is the disbursed ODA. However, they cannot be considered as granted, as the direction of their use is very context-specific.

Prioritize the Most Vulnerable Developing Countries Climate funds such as the Global Climate Change Alliance (GCCA), the Pilot Project on Climate Resilience (PPCR) and the Adaptation Fund were all designed to make decisions on country prioritization and allocate funds based on levels of vulnerability, but they all have their own standards for doing so (Klein and Möhner 2011). Altogether it remains unclear what 'prioritization' means in terms of, for example, financial flows or effort made. Of the total public adaptation finance that was approved so far, Climate Finance Update (2014) estimates that 32% flowed to Africa, 52% to The least developed countries (LDCs), and 9% to Small Island Developing States (SIDS); or, given the overlap, 60% to the three taken together. This hardly reflects a country-based prioritization, considering that these three groups constitute 94 out of 140+ developing countries,¹ and that 22% of these 94 countries have been excluded from public climate finance interventions so far. A prioritization based on a per capita basis would have very different outcomes, but this chapter analyses along to the UNFCCC outcomes, thus prioritizing on a per-country basis too. This chapter identifies whether the most vulnerable developing countries receive relatively large share of remittances, and installs a 60% threshold.

The share of all remittances received by today's middle-income countries has risen to an estimated 71% in 2013 from 57% in 2000. Although the share to low-income nations has doubled in those years, it remains a small proportion with 6% of the total (Connor et al. 2013). However, the economic importance of remittances is larger in poorer countries than in richer ones (c.f. Giuliano and Ruiz-Arranz 2009).

Several countries SIDS have important share of GDP constitute by remittances, with the highest amounts in Samoa (23%) and Haiti (21%). Among the other most vulnerable groups, Nigeria (Africa) with \$21 billion and Bangladesh (LDCs) with \$14 billion are among the top recipient countries worldwide (World Bank 2014).

Based on this data, it is impossible to establish a clear-cut connection between the amount of remittances and countries' vulnerability beyond the most vulnerable developing countries as defined by the UNFCCC.

Essentially dealing with the overall amount, the potential share to be invested in adaptation and the countries interested, these criteria go beyond the motivation to remit. Unlike ODA, the quantity of remittances is still growing. Like private investors, remitters respond to incentives to choose specific types of investments (including adaptation) over others (and over consumption). In this context, the role of donors -through e.g. targeted funds, budget support programs and debt swaps- and developing country governments -through e.g. the provision of incentives and fiscal

¹ 'Developing countries' is not an official group under the UNFCCC. However, as a comparison: there are 154 non-Annex I parties (see http://unfccc.int/parties_and_observers/parties/non_annex_i/items/2833.php).

easing and the design of legal frameworks- is key to ensure that the right market mechanisms are in place to increase the share of remittances invested in adaptation, as discussed in the next section.

10.5 Channeling Remittances Towards Adaptation: The Role of Governments

In the context of scarce public funds for climate adaptation, the government's role is pivotal in creating an enabling environment for entrepreneurial initiatives and in triggering new resources, including diaspora's investments to build resilience to climate change.

Mobilizing What mobilizing of climate finance entails is neither defined by the UNFCCC, nor in literature. This chapter interprets 'mobilizing' as a pro-active public intervention from developed countries, for example through domestic mobilization of public climate finance, institution building, capacity building, and creating incentives to increase climate financing from other sources. In this chapter, we identify whether developed countries create enabling environments to promote adaptation through remittances.

The increasing amount of remittances and the awareness of the effects that may have on migrants' countries of origin have led both host and home countries to react with a range of public policies. Developing countries with high rates of emigration have already offered incentives to attract and to invest remittances. For example, Senegalese Governmental agencies are promoting diaspora investments in government-run infrastructure projects by offering loans for development projects (Panizzon 2008) and tax exemptions. Since 2008, the NGO FES (La Fondation des émigrés sénégalais) with support by the Ministry of Senegalese Abroad and by Spain, aims at channeling diaspora investments into Senegal (Scheffran et al. 2012). Another example is the Mexican 3×1 Program for Migrants, where the public sector triples the amount of money to encourage the potential investors to choose certain type of projects.

In order for investments to be 'mobilized', however, developed countries have to create a trigger and incentivize such types of investments. They should play an active role beyond employing the migrants. The authors did not find examples in literature. The solution probably lies in developing adequate institutional mechanisms that serve as a basis for cooperation between developed country governments, migrants and potentially international businesses that operate in both the host and the home country.

Transparency Action Aid (2007) suggests that transparency goes beyond purposes (i.e. adaptation), amounts (i.e. USD 100 billion per year), and results of funding (i.e. meaningful), but also includes the governance structure and procedures at

providers of financial resources. The Adaptation Fund indeed introduced transparency indicators in its overall management (Horstmann and Chandani 2011). Eventually, transparency on climate finance also means monitoring, reporting, and verification and tracking climate finance from source to final use (Buchner et al. 2011; van Drunen et al. 2009).

As such, transparency is essential to a results orientation and for accountability (Chaum et al. 2011; 2). Just like *'increased transparency in the use of international public finance would elucidate the current and potential role of public finance in leveraging private finance, and would increase understanding of the effectiveness and success rates'* (Brown and Jacobs 2011; 7), transparency on public policies and co-finance aiming to secure or redirect remittances could help to leverage larger spending on adaptation. This will, however, not be easy. An array of unofficial and informal modes of sending money exists (from mailing cash or checks using postal service to the *hawalards*-brokers- scattered across cities, which function as private Remittance Service Provider) and many remain unmonitored (Biller 2007).

In order to harness the potential for remittances towards adaptation finance, the regulatory community requires an approach that meets the goals of financial inclusion and financial transparency. Remittances could increase if legislative barriers and fiscal costs of financial transfers can be reduced; the latter can be facilitated by the introduction of more market players and modes of transmission, better provision of reliable information to migrants on the costs of transfer, and generally better and more credible supervision of the sector (Black 2003). By lacking these conditions, remittances currently do not meet the criterion of transparency. The channels through which they flow are partly informal and not adequately addressed in terms of governance structures and regulations.

'Balanced Allocation Between Adaptation and Mitigation' remains undefined by the COP, but upon their request, the GCF Board decided to *'aim for a 50:50 balance between adaptation and mitigation during the initial phase of the Fund'* (Green Climate Fund 2014; 6). So far, around 16% of the public climate finance flows to adaptation (Climate Finance Update 2014); the amount of private adaptation finance is very hard to track but seems minimal compared to private mitigation finance (Buchner et al. 2011, 2013). Whether climate finance should be balanced 50:50 between adaptation and mitigation is an open question, but in any case the finance for adaptation needs to increase (see e.g. Terpstra 2013).

Remittances neither principally aim to address climate change, nor do they aim to balance between adaptation and mitigation. However, throughout the chapter we highlighted that remittances can help to increase resilience against climate stresses and that in case of emergencies and disasters, remitters will invest in immediate relief and rehabilitation. Whether this will be translated into adaptation finance and whether diaspora entrepreneurs will invest in long term projects related to adaptation will depend on how each government will set priorities for incentives allocation.

10.6 Conclusion

Although there is extensive literature on the impact of remittances on development, little research exists on their potential to support adaptation to climate change. There is a huge and unexplored potential: recorded remittances to developing countries are expected to increase up to USD 516 billion in 2016 (World Bank 2014a; even a small part of which could already be a substantial contribution to adaptation. Furthermore, remittances directly reach the local level, and thus potentially to those most vulnerable to climate change that are difficult to reach through existing channels of ODA and climate finance. And finally, remittances offer opportunities for both climate disaster relief and investments in long-term adaptation.

But rather than looking at whether remittances constitute effective financial means to address adaptation, this chapter addresses the question whether they could also constitute an alternative source of the annual USD 100 billion international climate finance from 2020 onwards, as was pledged by developed countries under the UNFCCC regime. This is not uncontroversial: even if remittances could constitute an alternative source of climate finance, it is ethically questionable whether financial resources of poor migrants can substitute (public) climate finance from developed countries. But in any case, this exercise helps to better understand what alternative climate finance sources could be. Based on empirical evidence from literature, this chapter thus identified to what extent remittances meet ten adaptation finance criteria as negotiated under the UNFCCC Copenhagen Accord and the Cancun Agreement (see Pauw et al. 2015).

This chapter finds that remittances can meet a number of criteria such as ‘adequate’, ‘sustainable’, ‘predictable’ and ‘improved access’, mostly because they relate to the motivation to invest in countries of origin and, thus, to some extents, to the willingness to protect and support families, friends and communities. It is a matter of personal connection, affection or altruism. Due to these special drivers, remitters are special ‘investors’ that are available to ‘trade off’ profit with wellbeing, development and, potentially, adaptation of those left behind in developing countries.

Besides this special feature that remittances might have, these flows remains private flows and, as such, they respond to incentives when considered as stocks of money. Under this lens, criteria such as ‘new and additional’, ‘scaling up’ and ‘prioritize the most vulnerable developing countries’ can be met, but, as any other private source, to be leveraged and channeled towards the aim, there is the need for targeted policies.

Finally, criteria such as ‘mobilizing’, ‘transparency’ and ‘balanced allocation’ are more complicated to be analyzed for the remittance potential to finance adaptation, as they are designed for and typical for public finance. In contrast, remittances are driven by individual interests and market mechanisms and flow regardless to the compliance with these criteria. It is only governments’ responsibility to orient them through effective regulations in an attempt for these criteria to be met.

In a first exploration, this chapter found that overall remittances insufficiently meet the ten adaptation finance criteria. Nevertheless, a share of remittances could

still meet the criteria and clearly make a contribution not only to adaptation, but perhaps even to international adaptation finance. As a way general forward, the ten criteria in ongoing UN negotiations on climate finance could be altered in order to stimulate alternative sources of climate finance such as remittances. Whether a share of remittances will ever contribute to the mobilization of the annual USD 100 billion of climate finance, and thus constitute 'international climate finance' is, in the end, a controversial political decision.

Acknowledgement The authors express their gratitude to the editors for providing the opportunity to prepare this chapter. The authors would also like to thank the participants and organizers of the COST workshop in Bonn (February 2014) for their comments and suggestions on the concept. Any remaining shortcomings and flaws are solely the responsibility of the authors. Research funding by the German Federal Ministry for Economic Cooperation and Development (BMZ) is gratefully acknowledged

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