

### Context

Tajikistan and Senegal are highly vulnerable to climate change and have limited ability to cope with climate impacts and climate-induced natural disasters. Most parts of the two countries are arid and semi-arid. As both countries also rely on agriculture and livestock, they face high risks and food insecurity because of their dependence on the weather, ecosystems and soil conditions – all of which are impacted by climate change.

As well as the challenges climate change poses, limited employment and income opportunities for many vulnerable and poor people – in rural as well as urban areas – make internal and external labour migration, and remittances, the most widespread and effective way of coping. Senegal's and Tajikistan's national economies both depend heavily on remittances. In Senegal, remittances contributed 13.75% to national Gross Domestic Product (GDP) in 2015 – more than five times total Foreign Direct Investment (FDI) in the same year. In Tajikistan, remittances contributed to 27.5% of national GDP in 2016. As such, migration, mobility and the investment of remittances can play a crucial role in achieving many of the Sustainable Development Goals (SDGs), including SDG 8: 'Decent work and economic growth', SDG 10: 'Reduced inequalities' and SDG 13: 'Urgent action on climate change', as well as building resilience to climate change.

### Aims

Our research is a comparative analysis between Senegal and Tajikistan, two countries where migrant remittances are major sources of revenue and where migrants are increasingly becoming key actors in local development. In both countries, many people migrate, earn money and develop new knowledge and skills, which can – if invested properly – be used to improve the lives of millions.

We aim to provide an evidence base for decision-makers about the potential of migrants and remittances to be drivers for climate-resilient economic and social development in Senegal and Tajikistan. By providing concrete examples of effective adaptation investments funded by remittances, we aim to improve social and economic policies that support migration and remittances as adaptation measures, and secure long-term climate-resilient development in both countries.

Pathways to Resilience in Semi-Arid Economies (PRISE) is a five-year, multi-country research project that generates new knowledge about how economic development in semi-arid regions can be made more equitable and resilient to climate change. PRISE aims to strengthen the commitment of decision-makers in local and national governments, businesses and trade bodies to rapid, inclusive and resilient development in these regions. It does so by deepening their understanding of the threats and opportunities that semi-arid economies face in relation to climate change.

Where we work: Senegal, Burkina Faso, Kenya, Tanzania, Ethiopia, Pakistan, Tajikistan and Kyrgyzstan.

Member organisations: Overseas Development Institute, UK (lead organisation); Grantham Research Institute for Climate Change and the Environment, UK; Innovation Environnement Développement en Afrique, Senegal; Sustainable Development Policy Institute, Pakistan.

Country Research Partners: Regional Environmental Center for Central Asia, Tajikistan; University of Ouagadougou, Burkina Faso; Kenya Markets Trust, Kenya; Mountain Societies Research Institute, Kyrgyzstan.

#### PRISE research projects:

Research area 1: Migration futures in Asia and Africa: climate change and climate-resilient economic development.

Research area 2: Migration, remittances, adaptation and resilience in arid and semi-arid regions of Senegal and Tajikistan.

Research area 3: Harnessing opportunities for climate-resilient economic development in semi-arid lands: adaptation options in key sectors.

Research area 4: Enabling environment for private sector/ multi-stakeholder action to strengthen resilience to climate change.

Research area 5: Property rights, investments and economic development in the context of climate change in semi-arid lands.

Research area 6, Part 1: Cross-boundary multi-scale governance of semi-arid lands: Implications for climate resilience and economic development.

Research area 6, Part 2: Resilience to climate-related shocks and stressors in Kyrgyzstan: developing resilience indicators to predict well-being.

Research area 7: Water governance in semi-arid lands: political and economic insights for the management of variability and extremes in a changing climate.

## Results

- The role returning migrants play by investing in their home communities is vital. Not only limited to bringing back money and products, returning migrants also provide valuable knowledge, skills, technologies, innovations and new values, such as entrepreneurial spirit and the desire to invest in ‘green technologies’ like solar energy.
- Migrant investments are an important source of money; when migrants invest in education, health, agriculture and business infrastructure, they lessen the negative impacts of climate change, reduce the risk of food crises, and strengthen people’s resilience. However, our initial findings show that the volume of remittances migrants invest directly into environmental and climate change-related activities is not enough to meet the challenges posed by climate change.
- As most migrants in Senegal and Tajikistan are men, women become responsible for managing homes, farms, household spending, and caring for children. This empowers them to have some responsibility for such roles traditionally taken on by men. However, despite national laws to protect women’s rights, the lack of implementation of these laws, coupled with cultural traditions, mean that women continue to have limited power in decision-making.
- If targeted action to increase the resilience of communities and economies is not taken, the growing impacts of climate change mean both countries will become increasingly dependent on – and vulnerable to – external factors like the economies of destination countries.

## Policy recommendations

- By opening dedicated offices to allow migrants to share their new knowledge and skills in home countries, and by providing information and training about climate-resilient business ventures into which migrants can invest remittances, central government decision-makers in sending and receiving countries could encourage migrants and government to collaborate on investments into sustainable, climate-smart development activities.
- If decision-makers planning and budgeting at city councils, regional development agencies, and at the local community level in both countries consider the vital contribution migrant remittances make to spending on education, healthcare and local economies, this will pave the way for decision-makers and returning migrants to coordinate when planning and funding local development programmes – including projects on education, training and healthcare.
- The national governments of Senegal and Tajikistan could develop coherent external and internal migration policies that foster inclusive and sustainable economic development by creating a formal collaborative framework between government and civil society (including local communities, migrant associations, and the migrant diaspora).
- If local officials engage more with communities to protect women’s rights (such as access to land and roles in decision-making), this will help to ensure that national-level laws that guarantee women’s rights are understood and implemented at the local level.

## Impact

‘Since our village is located in [a] mountainous area, climate-induced disasters are very common here. That’s why part of the remittances I spend [are] for [the] maintenance of disaster protection infrastructure,’ Focus group discussion participant from Sangvor, in Tavildara district, Tajikistan.

This work was carried out under the Collaborative Adaptation Research Initiative in Africa and Asia (CARIAA), with financial support from the UK Government’s Department for International Development (DfID) and the International Development Research Centre (IDRC), Canada. The views expressed in this work are those of the creators and do not necessarily represent those of DfID and IDRC or its Board of Governors.



**CARIAA**  
Collaborative Adaptation Research  
Initiative in Africa and Asia



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