

The Other Migrants

Preparing For Change Environmental Changes and Migration in the Republic of Mauritius



International Organization for Migration (IOM)
Organisation internationale pour les migrations (OIM)
Organización Internacional para las Migraciones (OIM)



Republic of
Mauritius

Introducing the Project

Like most island states, Mauritius is particularly vulnerable to the impacts of climate change. This is especially the case given that some key sectors of its economy are highly dependent on environmental conditions.

The Other Migrants project funded by 1035 Facility is thus highly relevant to the Mauritian and regional context.



International Organization for Migration (IOM)
Organisation internationale pour les migrations (OIM)
Organización Internacional para las Migraciones (OIM)



Overall Objective

To contribute towards strengthening the capacity of the Government of Mauritius and the resilience of communities to deal with the challenges of climate and environmental change.

The project also builds on national efforts to implement climate change strategies and formalize a new vision for the Republic.



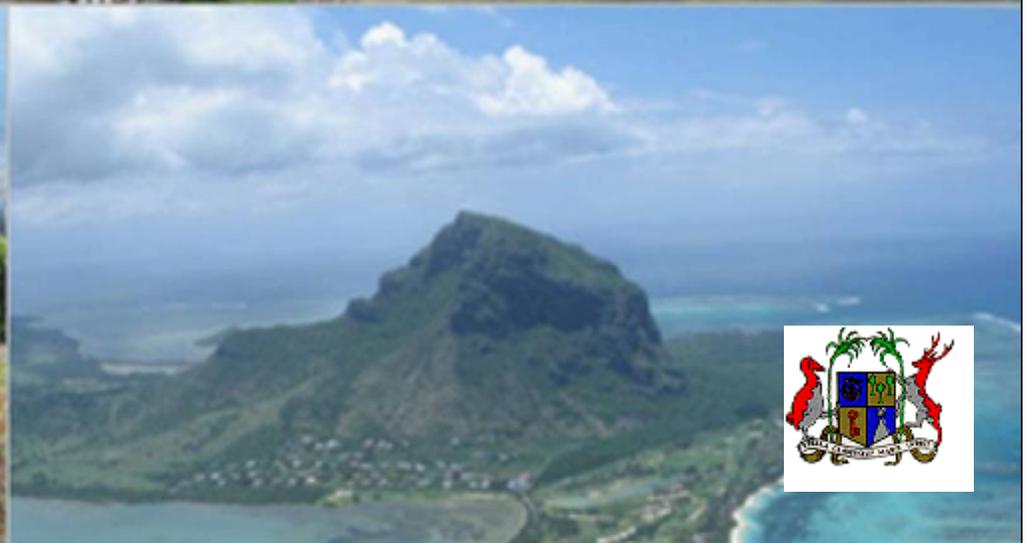
International Organization for Migration (IOM)
Organisation internationale pour les migrations (OIM)
Organización Internacional para las Migraciones (OIM)



Area of Coverage

The Republic of Mauritius

- ❖ Mauritius
- ❖ Rodrigues
- ❖ Agalega



Purposes

- ❖ Compile information through field assessments
- ❖ Strengthen and build capacity of national Institutions
- ❖ Promote alternative livelihoods for the most vulnerable communities with a focus on green jobs
- ❖ To encourage dialogue and information sharing between the different Ministries and Institutions involved and between the different islands in the Indian Ocean Region



International Organization for Migration (IOM)
Organisation internationale pour les migrations (OIM)
Organización Internacional para las Migraciones (OIM)



Existing Initiatives in the Region and Mauritius

- ❖ Barbados Programme of Action for the Small Islands Development States (SIDS)
- ❖ Millennium Development Goals (MDGs) – Goal 7
- ❖ Indian Ocean Commission and WIOMSA Regional Strategy on Climate Change Adaptation
- ❖ Maurice Ile Durable
- ❖ Africa Adaptation Programme



International Organization for Migration (IOM)
Organisation internationale pour les migrations (OIM)
Organización Internacional para las Migraciones (OIM)



Partnership Strategy/ Institutional Framework

- ❖ Project Implementation Committee with relevant ministries
- ❖ Civil Society through NGOs – e.g., MRU2025
- ❖ Academia – e.g., IDDR
- ❖ Private Sector - CSRs
- ❖ Inter-governmental organizations – e.g., COI (Regional Photo Contest) and UNDP (Research on Rodrigues)



International Organization for Migration (IOM)
Organisation internationale pour les migrations (OIM)
Organización Internacional para las Migraciones (OIM)



Methodology and Design

Research Action

- ❖ Assessments
- ❖ Actions to address the Findings
 - Awareness Raising Campaigns
 - Advocacy
 - Pilot Job Creation Project
 - Training in the Setting up of Business
 - Capacity building



International Organization for Migration (IOM)
Organisation internationale pour les migrations (OIM)
Organizaci3n Internacional para las Migraciones (OIM)



Key Environmental vulnerabilities in Mauritius

- ❖ As most SIDS, Mauritius is highly vulnerable to the impacts of environmental changes
 - **Cyclones** – by far the most frequent disaster
 - **Sea-Level rise** – currently 3.5 mm/year
 - **Temperature rise** - +0.84 C to +3.77 C by 2069
 - **Rainfall patterns**

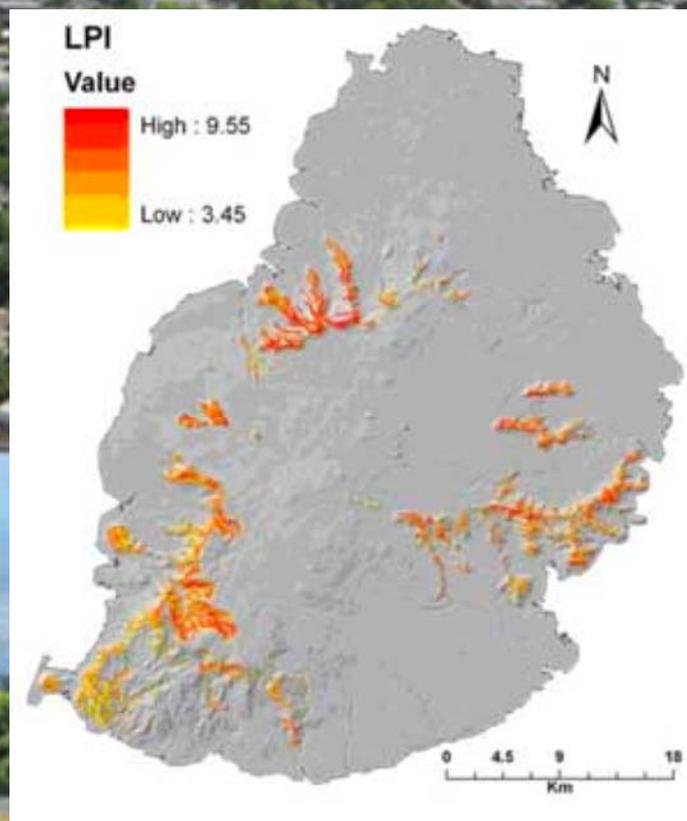
Problems re: uncertainties and monitoring



International Organization for Migration (IOM)
Organisation internationale pour les migrations (OIM)
Organización Internacional para las Migraciones (OIM)



❖ Impacts add up to non climatic environmental degradations: (i) Pollution from pesticides, (ii) overfishing and (iii) landslides



International Organization for Migration (IOM)
Organisation internationale pour les migrations (OIM)
Organización Internacional para las Migraciones (OIM)

Source: Nigel and Rughooputh 2009



An economy dependent on the environment

- Key economic sectors dependent upon environmental conditions and have an environmental impact:
 - 1) Fishing – rough sea; fish migratory routes; coral bleaching; overfishing
 - 2) Sugar cane production – no research done on how crops have been affected; fertilizers
 - 3) Tourism – beach tourism; pressures on coastal ecosystems



International Organization for Migration (IOM)
Organisation internationale pour les migrations (OIM)
Organización Internacional para las Migraciones (OIM)



Methodology

- ❖ Expert interviews – around 35 with key governmental agencies and ministries, NGOs and inter-gov agencies
- ❖ Field visits – Direct observation of environmental changes, habitats and social attitudes in reaction to these changes – 8 sites
- ❖ Focus Groups – Qualitative approach allowing the emergence of a collection opinion – 4 focus groups with about 10-15 participants each.



International Organization for Migration (IOM)
Organisation internationale pour les migrations (OIM)
Organización Internacional para las Migraciones (OIM)



Major Limitations

- ❖ Lack of quantitative data– no register was accessible; no aggregated data on the socio-economic profile of communities;
- ❖ Lack of evolution scenarios re: vulnerability changes – in process
- ❖ Impossibility to get to Agalega
- ❖ Pilot sites were selected – there exist other micro-communities affected by environmental changes



International Organization for Migration (IOM)
Organisation internationale pour les migrations (OIM)
Organización Internacional para las Migraciones (OIM)



Environmental Migration in Mauritius

- Gradual process where people have moved mainly temporarily within the islands (e.g., Rodrigues)
- Multi causality of migration – socio-economic determinants often linked with environmental migration – the search of alternative livelihoods;
- Migration will have a stronger impact on the most vulnerable groups in the islands;
- Not necessarily a failure to adapt



International Organization for Migration (IOM)
Organisation internationale pour les migrations (OIM)
Organización Internacional para las Migraciones (OIM)



Perception of changes

- Migration decision – perception of change is as important as the change itself;
- Tsunami of 2004 – impact in the perception of change
- All coastal zones are particularly vulnerable – erosion and floods compounded with economic development. Some inland sites as well



International Organization for Migration (IOM)
Organisation internationale pour les migrations (OIM)
Organización Internacional para las Migraciones (OIM)



Rethinking vulnerability to natural hazards for improving adaptation to climate change

Alexandre MAGNAN

Iddri - alexandre.magnan@iddri.org

IDDRI

 SciencesPo.

1. Upstream migration

The science of climate change says that:

- Climate change is ongoing
- Its effects during the coming century are partly irreversible



Proactive attitude : Assessing societies' reaction before climate change impacts occur, in order to allow people, in the short and long term, to stay where they currently live.

Vulnerability as an “**upstream entry point**” for launching an adaptation to climate change process

2. Vulnerability : a wide range of influential factors

However, the **preconceived idea** is that *“the poorest are the most vulnerable to climate change because they lack adaptive capacity”*

6 main **influential factors of vulnerability**:

- The spatial configuration
- The sensitivity of the ecosystems
- The societal cohesion
- The diversification of (economic and subsistence) activities
- The political and institutional organisation
- The general living conditions

3. Towards an operational definition of what a “vulnerable local community” is

At a local scale, a “vulnerable” community is:

- **located in an exposed area**: it is directly threatened by natural hazards, or its ecosystems and environmental features in general are degraded and/or sensitive to environmental stresses;
- and/or it is **not characterized by a “community spirit”**: strong links of solidarity and support among a majority of the members of a community reduce its vulnerability;
- and/or it is **strongly dependent on environmental resources** for its subsistence and/or for creating income;
- and/or it is **marginalized** in the territory (geographical isolation) and/or in the organization of the country (institutional and socio-economic isolation);
- and/or its **living conditions are fragile** because of a lack of revenues, a lack of education, a lack of transportation means, for instance.

4. A framework for identifying “adaptation projects”

(1) Sociocultural dimension

Pilot projects should be consistent with the social and cultural values of people and should correspond to the capabilities/competencies/knowledge of communities.

- (1.1) Pilot projects are consistent with social features and cultural values (what people expect from the present and for the future).
- (1.2) They are located near the family/community's living place, and do not induce displacements of the community (or a part of it) for long periods of time.
- (1.3) They are based on existing knowledge and competencies (in order to avoid sociocultural maladaptation).
- (1.4) They do not require too complicated new skills to be developed.

(2) Environmental dimension

Pilot projects should be consistent with the nature and the dynamics of local ecosystems and should take into account potential climate change threats to environmental conditions.

- (2.1) Pilot projects do not degrade the direct environment (through overexploitation, degradation of resources, destruction of habitats, etc. - idea of avoiding environmental maladaptation).
- (2.2) They do not degrade the indirect environment either.
- (2.3) They favour the protection function of ecosystems with regard to current natural hazards and climate change threats (such as buffer zones on the coasts).
- (2.4) They take into account the range of uncertainties concerning the impacts of climate change at local scale, thus preserving some possibilities for adjustment.
- (2.5) They are not focused on reducing greenhouse gases emissions, but rather on adapting to environmental changes.

(3) Economic dimension

Pilot projects should be economically viable.

- (3.1) Pilot projects allow vulnerable local communities to improve or at least maintain their revenues
- (3.2) They ensure a certain level of diversification of activities and sources of revenues
- (3.3) They are consistent with future environmental change projections (in order to avoid economic maladaptation).

(4) Institutional, legal and administrative dimension

Pilot projects should be consistent with the national legal, administrative and institutional framework.

- (4.1) Pilot projects should fit into the national entrepreneurship framework
- (4.2) They should fit into the national legal framework.
- (4.3.) Ideally, they should be relatively easy to formalize, or at least would benefit from administrative support.

Work in Progress

4. A framework for identifying “adaptation projects”

Pilot projects listed in Table 5	1. Sociocultural dimension				2. Environmental dimension					3. Economic dimension			4. Institutional, legal and administrative dimension			Eligibility of the project* The number indicates the total score allocated to the project in the first round of assessment**
	1.1	1.2	1.3	1.4	2.1	2.2	2.3	2.4	2.5	3.1	3.2	3.3	4.1	4.2	4.3	
<i>Pilot projects with direct links with climate change threats</i>																
1. Coral planting and restoration	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	10.0
2. Marine park rangers	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	13.5
3. Climate change ambassadors/association	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	12.5
4. Natural sea salt production	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	12.0
5. Mangrove planting and restoration	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	10.0
6. Eco-guides	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	12.0
7. Changes in crop production	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	13.0
8. Local house-building and upkeep	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	13.0
9. Seaweed farming (sea cucumber)	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	11.0

“Scoring”

Identification of the most relevant actions

Prioritization

Useful for :

- Project **holders** (*what should I do?*)
- Project **funders** (*what should I fund?*)

Way Forward – Enhancing this first pilot project on the national level and regional level

- ❖ Mauritius as a showcase and the IO region as a lab for devising actions to climate change adaptation
- ❖ Improving quantitative data collection methodology and knowledge of current and future environmental pressures on the possible movement of people (internal, intraregional) – Proposal of a regional Climate Change Observatory
- ❖ Further detailing analysis of vulnerability determinants and adaptation pilot actions for the most affected communities;
- ❖ Development of migration policies (adaptation strategies; harmonization of relocation schemes;
- ❖ Implementation of adaptation projects for the MARP



International Organization for Migration (IOM)
Organisation internationale pour les migrations (OIM)
Organización Internacional para las Migraciones (OIM)





Thank you for your attention

For more information:

**Ms Lalini Veerassamy
lveerassamy@iom.int**



International Organization for Migration (IOM)
Organisation internationale pour les migrations (OIM)
Organización Internacional para las Migraciones (OIM)

