

MIGRATION AND CONSERVATION

A toolkit for conservation and development practitioners



International Institute for Sustainable Development

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CONTENTS

Acronyms	5
<u>SECTION 1</u>	
Introduction to the Toolkit	6
<u>SECTION 2</u>	
Migration and Conservation: Background	11
<u>SECTION 3</u>	
Guidance on Analyzing and Addressing Migration Impacts on Ecosystems	15
<u>PHASE 1</u>	
Getting Started	17
Step 1.1 Define the Scope of the Analysis	18
Step 1.2 Plan the Analysis Process	20
<u>PHASE 2</u>	
Analyzing the Context	21
Step 2.1 Analyze the Migration Context	22
Step 2.2 Analyze the Conservation Context	25
<u>PHASE 3</u>	
Assessing the Impacts	29
Step 3.1 Analyze the Migration–Conservation Links	30
Step 3.2 Conduct Stakeholder Analysis	31
Step 3.3 Synthesize and Validate Findings	32

PHASE 4

Responding to the Impacts 33

Step 4.1
Identify Migration-Sensitive Conservation Interventions 34

Step 4.2
Implement, Monitor and Evaluate Interventions 37

SECTION 4

Tools 39

Tool #1
Exploring the Migration Context Through
Surveys and Focus Group Discussions 41

Tool #2
Participatory Mapping 44

Tool #3
Local Conservation Capacity Assessment 47

Tool #4
Migration Impact Chains 49

Tool #5
Stakeholder Analysis 52

Tool #6
Summary Report Template 57

Tool #7
Identifying and Prioritizing Interventions to
Address Key Ecosystem Impacts 66

References and Further Reading 70

Annex A: Case Study Examples 72

Annex B: Sample Workshop Agendas 75

Acronyms

BMNP	Bale Mountains National Park
DRC	Democratic Republic of Congo
EWCA	Ethiopian Wildlife Conservation Authority
FGD	Focus Group Discussion
GIS	Geographic Information Systems
IISD	International Institute for Sustainable Development
IOM	International Organization for Migration
M&E	Monitoring and Evaluation
NGO	Non-Governmental Organization
PRA	Participatory Rural Appraisal
UN	United Nations



Section 1

INTRODUCTION TO THE TOOLKIT

Introduction to the toolkit

What is the Migration and Conservation Toolkit?

The Migration and Conservation Toolkit was developed to help conservation practitioners assess the impacts of human migration on critical ecosystems and to provide guidance on identifying, designing and implementing response strategies.

Integrating existing and potential migration concerns into conservation interventions is increasingly important in many parts of the world. The research supporting the development of this toolkit was carried out in three critical ecosystems found in the Great Lakes region of Africa. This region is already experiencing myriad forms of natural resource and climate stress, and the growing socio-environmental impacts of migration could exacerbate or reinforce existing social tensions and institutional failures, further threatening the critical ecosystems and the livelihoods they support. Policy-makers and practitioners are not fully aware of these threats, nor are they fully prepared to manage them through appropriate interventions. It is hoped that the approach outlined in this toolkit can help to address these challenges—in the Great Lakes region and beyond—before they overwhelm ecosystems and undermine natural resource-based livelihoods.



The toolkit is intended as a roadmap to guide users toward a better understanding of migration dynamics and impacts, an understanding they can then use to better protect ecosystems

The Migration and Conservation Toolkit aims to help conservation practitioners design and implement activities that are sensitive to the dynamics and impacts of existing and potential human migration on livelihoods and natural resource use, and that address the consequent impacts on ecosystems and biodiversity in host communities. It does so by helping conservationists:

- Undertake a participatory analysis process that engages all stakeholders and results in concrete responses to identified issues.
- Understand the context in terms of migration, conservation, and the links between the two.
- Identify interventions that address the conservation issues that are created or exacerbated by human migration.
- Integrate migration-sensitive conservation interventions into existing project management systems.

The toolkit is intended as a roadmap to guide users toward a better understanding of migration dynamics and impacts, an understanding they can then use to better protect ecosystems. It is not intended as a prescriptive process; users can choose to adopt those methods and tools deemed most appropriate and relevant to their work and

context, but do not need to follow the process to the letter to ensure success. It is hoped that by adopting this approach conservationists can strengthen their capacities to respond to migration pressures and find solutions that support migrants, the local population, and biodiversity.

Who is the toolkit for?

This toolkit is directed at conservation practitioners from government, civil society or international organizations, and local authorities working in critical ecosystems who have identified human migration as having a negative impact on the area where they are working. By using the toolkit, these users will be able to better understand the dynamics of the migratory processes that are affecting their conservation priorities, and will be better placed to respond to them.

How do you use it?

The toolkit is designed to be used within existing project and program management processes. It aims to provide guidance on how conservation practitioners can apply a migration lens to the work they are doing. As such, it should complement other processes and procedures for project planning, implementation, monitoring and evaluation. The process involves four phases, each aligned with a typical project cycle. These are presented in the table below, with descriptions of the steps, activities and outputs for each phase.

More details can be found in the process diagram on the next page.

While the scope of the exercise depends on available human and financial resources, the process outlined in this toolkit is ideally undertaken over the course of a few months: desk- and field-based research is followed by multistakeholder workshops to further the analysis, validate the findings, and design response strategies. It can be undertaken at various stages of the project or program life cycle: as part of a conservation planning process, during the design of new conservation projects, or as you evaluate the efficacy of existing conservation interventions.

MIGRATION AND CONSERVATION TOOLKIT

PHASE 1: Getting started

In this phase, you will do desk-based research and initial stakeholder identification to define the scope of the analysis.

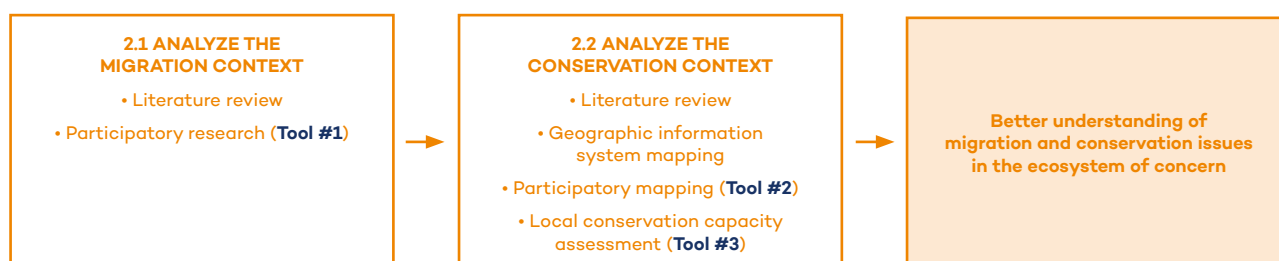
This will enable you to develop a plan for the analysis process.



PHASE 2: Analyzing the context

This stage begins with further desk-based research to ensure that you fully understand the available literature on the migration and conservation contexts. This may include referencing geographic information system (GIS) mapping tools if resources are available.

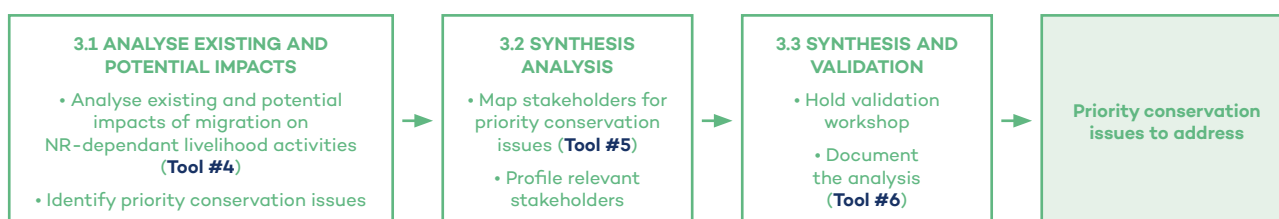
Building on this, you will conduct surveys and focus group discussions to engage different stakeholders and better understand migration dynamics and local livelihoods, and in a workshop setting you will work with stakeholders to produce participative maps of the community and assess local conservation capacities.



PHASE 3: Assessing the impacts

In this phase, you will work with stakeholders to analyze the links among the migration, livelihoods and natural resource use, and ecosystem and biodiversity impacts. You will also map and profile the relevant stakeholders for the issues identified. This is generally done in the same workshop as the mapping and capacity assessment described in Phase 2.

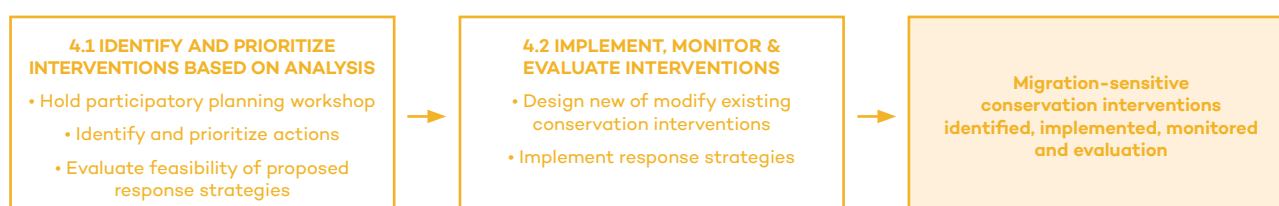
After this workshop, you will analyze and synthesize all of the information that has been gathered, identifying the priority conservation issues to be addressed. When this is complete, you will organize another workshop to validate the findings with stakeholders.



PHASE 4: Responding to the impacts

The validation workshop will also include a planning step, where you will work with participants to identify interventions that address the findings of the analysis. Depending on the nature of the migration impacts, this may involve modification of existing conservation interventions or the design of new activities.

Following this workshop, you can use existing planning processes and projects to implement, monitor and evaluate these new or modified interventions. This may occur through your own organization or through collaboration with partners.



Use of the toolkit will not necessarily lead to radically different approaches to conservation planning and programming, but may lead to practitioners prioritizing different conservation issues or tackling existing issues in a new way. The toolkit is meant to complement other types of analysis, including conflict analysis, livelihood analysis, and climate vulnerability assessments. Conflict-sensitivity, in particular, should be flagged: addressing issues related to migration may trigger tensions between migrant and host communities or other stakeholders, and efforts should therefore be made to try to minimize the emergence of any tensions.

Who developed the toolkit?

The International Institute for Sustainable Development (IISD) developed the Migration and Conservation Toolkit. It was produced as part of the *Migration and Conservation in the Great Lakes Region* project, which, through desk and field research, sought to create and test a methodology for better understanding drivers and impacts of human migration on critical natural resources, ecosystems and livelihoods, and to provide guidance on identifying effective responses for policy-makers and practitioners working on these issues. The draft approach was piloted at three case study sites: the Misotshi-Kabogo ecosystem in the eastern Democratic Republic of Congo (DRC), the Bale Mountains ecosystem in southern Ethiopia, and the Lake Albert ecosystem in Buliisa District in northwest Uganda. Through the case studies and further desk-based research, the assessment framework has been expanded, revised and strengthened into the approach presented in this toolkit.

IISD worked closely with three organizations to develop the Migration and Conservation Toolkit. Without these partners, the toolkit would not have been possible. The **Conservation Development Centre**, based in Nairobi, provided invaluable technical support to the IISD team; the **Frankfurt Zoological Society** guided on-the-ground research efforts in Ethiopia; and the **Wildlife Conservation Society** was central to the research efforts in both Uganda and DRC. The project was made possible through the generous financial support of the **MacArthur Foundation**.

Section 2

MIGRATION AND CONSERVATION: BACKGROUND



Migration and Conservation: Background

For centuries, migration has been a means of adapting to and coping with change. It is driven by a number of oftentimes mutually reinforcing factors, including: livelihood strategies (such as mobile pastoralism); the pursuit of economic opportunities; population pressures; environmental and climate stresses; development policies; and political persecution and conflict.

The livelihood and natural resource management strategies that are adopted during the migration process can have a range of impacts on ecosystems and the livelihoods they support. Critical ecosystems are particularly vulnerable: the land and natural resources available in areas rich in biodiversity will attract people trying to escape hardship, poverty, environmental degradation or civil unrest (Oglethorpe Ericson, Bilsborrow, & Edmond, 2007). The impacts can be wide-ranging: habitat and species loss can undermine ecotourism opportunities, pollution can increase health risks and threaten watersheds, land degradation and deforestation can undermine agricultural productivity, and so on. New livelihood strategies may emerge as migrant and host communities interact, to the benefit or detriment of local ecosystems. As traditional migration systems break down and the push and pull factors influencing migration increase both in scale and complexity, the migration story in many countries is becoming increasingly complicated.



The livelihood and natural resource management strategies that are adopted during the migration process can have a range of impacts on ecosystems and the livelihoods they support

Migration is increasing (Oglethorpe et al., 2007). While much of this migration is from rural areas into the world's burgeoning cities, rural-rural migration continues, and it is here where the greatest impacts on biodiversity are felt: migration to areas on the agricultural frontier, to forested areas, or to marginal lands with low rainfall or steep topography (Oglethorpe et al., 2007). The three case studies undertaken as part of the research behind this toolkit illustrate these dynamics. In Ethiopia, migrants arrived in Hareenna Buluk in search of agricultural land, resulting in a dramatic change to the local forest cover. In Uganda, Congolese migrants came to Buliisa District in search of jobs in the local fishery, which is now threatened with collapse. In the DRC, the return of stability to the Misotshi-Kabogo region attracted migrants, who brought with them slash-and-burn agricultural practices that now threaten the ecosystem. Summaries of the case studies are provided in Annex A to the Toolkit.

- **The Lake Albert Ecosystem in Uganda**
- **The Bale Mountains Ecosystem in Ethiopia**
- **The Misotshi-Kabogo Ecosystem in DRC**



BOX 1: KEY MIGRATION TERMS

MIGRATION

“The movement of a person or a group of persons, either across an international border, or within a state. It is a population movement, encompassing any kind of movement of people, whatever its length, composition and causes; it includes migration of refugees, displaced persons, economic migrants, and persons moving for other purposes, including family reunification” (International Organization for Migration, 2015).

MIGRANT

“[A]ppplied to persons, and family members, moving to another country or region to better their material or social conditions and improve the prospect for themselves or their family” (IOM, 2015).

HOST COMMUNITY

The community that is the destination of the migratory flows.

PUSH AND PULL FACTORS

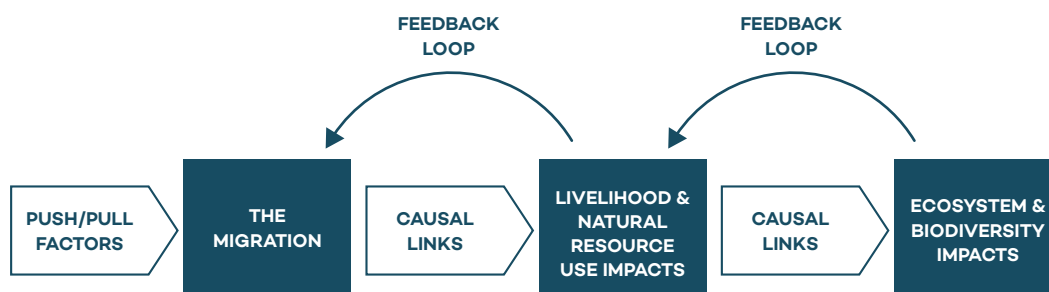
Push factors drive people to leave their area of origin (and could include economic, social, or political problems), while pull factors attract them to the area of destination (and could include the promise of jobs and livelihoods, or family reunification).

This toolkit does not aim to offer or facilitate a detailed analysis of the drivers of migration; such an analysis exceeds its scope. There are, however, broad categories that can be applied to migrants to help better understand their motivations: economic migrants, including temporary labour migrants, highly skilled and business migrants, and irregular migrants; family reunification migrants; internally displaced persons; refugees and asylum seekers; return migrants; seasonal migrants; and transient migrants, such as nomads and wanderers (Oglethorpe et al., 2007). It should be noted that within these categories lies a variety of experiences: migrations will differ according to duration, intensity and geographic scope, among other characteristics. As such, understanding the unique migration context is an important first step in the process of responding to it.

Addressing the drivers of migration is likely to be beyond the mandate, geographic scope and political reach of a conservation organization. As such, the focus of this toolkit is on addressing the ecosystem impacts of migration. To facilitate this, an analytical framework has been developed to help users better understand the context in which the migration is happening, and the connections between the various

dynamics. The analytical framework (Figure 1) focuses on three areas: the nature of the migration itself, its impacts on natural resource use and livelihoods, and its impacts on ecosystems and biodiversity.

FIGURE 1: The migration-livelihood-ecosystem analytical context



It is important to note that while it is generally changes in a population's use of natural resources that lead to ecosystem impacts, feedback mechanisms exist by which changes in ecosystems and biodiversity can in turn influence livelihoods and natural resource use practices. These can subsequently alter migration dynamics.

When using this toolkit, activities will largely focus on the second and third parts of the analytical framework: understanding the livelihood choices of the migrant community and the ecosystem impacts of those choices. Interventions will also focus on these two areas: addressing local livelihood choices will be a key dimension in reducing ecosystem and biodiversity impacts. The framework offers a useful way of consolidating the information gathered in the context and impact analyses presented below; by the end of **Phase 3** of the approach, as outlined in the next Section, you will have a full understanding of how these migration-livelihood-ecosystem dynamics are working in the local context, and will have the information required to identify interventions that address ecosystem impacts.

Section 3

**GUIDANCE ON
ANALYZING AND
ADDRESSING
MIGRATION
IMPACTS ON
ECOSYSTEMS**

Guidance on analyzing and addressing migration impacts on ecosystems

This section provides guidance on completing the steps introduced in **Section 1**. It discusses the purpose and intended result of each of the steps, and suggests tools that can be applied, following the general process presented in Figure 2. Practical guidance on using specific tools is provided in **Section 4**. As you go through the analysis, it is useful to organize the information you gather in a summary report; a template for such a report is provided in **Tool #6**.



Phase 1

GETTING STARTED

Phase 1 overview



PURPOSE

Phase 1 involves preparatory steps to ensure an efficient and effective process.



STEPS

Step 1.1: Define the scope of the analysis

- Conduct background research
- Identify stakeholders

Step 1.2: Plan the analysis process

- Familiarize yourself with the analysis process
- Assign roles and responsibilities



ACTIVITIES

In this phase, you will conduct desk-based research and initial stakeholder identification to define the scope of the analysis. This will enable you to develop a plan for the analysis process.



OUTPUTS

A plan for the analysis



STEP 1.1

DEFINE THE SCOPE OF THE ANALYSIS

At this stage, it is helpful to define the scope of the analysis in terms of the timescale, geographic boundaries and issues to be explored, and the stakeholders that must be involved. Decisions about scope must be informed by initial background research and will likely also be influenced by your ongoing activities, your organizational mandate and the time and resources you have available to conduct an analysis. You may need to revisit these boundaries at a later stage if important issues arise that are beyond the initial scope.

Background research

If you are not already working in the area, it is important to gather as much background information as you can in advance of the analysis. This initial research should explore the basic characteristics of the communities and ecosystems in the study area, to enable informed planning and avoid duplication of efforts. Good sources for this information include academic journal articles, conservation organization reports and surveys, development reports by United Nations (UN) agencies or non-governmental organizations (NGOs), and the national bureaus of statistics. If time and resources permit, a field visit and interviews with key stakeholders and potential partner organizations can be very useful to complement the desk-based research, providing a deeper understanding of the issues and the work already being done.



The success of your analysis will rely on stakeholders being engaged throughout the different steps of the assessment process

Initial stakeholder identification

The success of your analysis will rely on stakeholders being engaged throughout the different steps of the assessment process. A detailed stakeholder analysis will be conducted in **Step 3.2**; however, at this point you will need to identify the key stakeholders that should be engaged in the analysis process. **Box 2** provides a set of principles for engaging stakeholders throughout the different steps. If you are already working in the area where the analysis will occur, it is likely that you already have a good understanding of the key stakeholders and how to engage them.



BOX 2: GOOD PRACTICE FOR ENGAGING STAKEHOLDERS IN PARTICIPATORY RESEARCH

The following principles should guide your process for engaging stakeholders in the analysis:

INFORMED CONSENT

All participants in the research must be informed about the purpose of the research and how the results will be used. You should give them the opportunity to ask questions and only begin the process when they have given their consent.

QUALITY FACILITATION

When people are giving their valuable time to the process, it is important to respect this by being prepared and ensuring that interactions are as efficient and well-facilitated as possible. Fluency in local languages and knowledge of local customs is essential for team members that will be interacting with community-level stakeholders.

GENDER AND SOCIAL BALANCE IN PARTICIPATION

It is important to ensure that research and analysis processes include a diversity of voices, including those of people who might face barriers to participation due to gender inequality or social marginalization. You may need to make special arrangements to ensure that the research process is inclusive, for example by organizing meetings or interviews at times when women are not busy with their daily household responsibilities. Please see **Box 4** for more information on the gender dimensions of migration.

CREATING A SAFE SPACE FOR DIALOGUE AND CONSULTATION

It is the role of the facilitation team to ensure that all participants in the process feel secure, comfortable and able to express their opinions openly and without fear of judgment or reprisals.

CONFLICT SENSITIVITY

When dealing with issues around migration, livelihoods and resources, there is the potential to trigger or exacerbate tensions or conflicts between different groups or actors. For more information on conflict-sensitive facilitation, please see **Box 8**.

INTERVENTION-ORIENTED ANALYSIS

The intended outcome of the analysis is the identification of interventions that will address the impacts of migration on ecosystems. Before beginning the analysis, consider how interventions will be resourced, who will be responsible for their implementation, and how interventions will be monitored and evaluated. It is generally a good idea to involve local government authorities and representatives of community-based organizations that are active in the area to ensure continuity and follow-up throughout the process.



STEP 1.2

PLAN THE ANALYSIS PROCESS


Using the information gathered in [Step 1.1](#), you will now develop a plan for your analysis. How this occurs will depend on your organizational structure in terms of the partners and stakeholders involved in the process.

Familiarize yourself with the analysis process

Ensure that you have a clear understanding of the steps, the recommended tools and the expected outputs of each step presented in this toolkit. You will refine the process and tailor the tools to your needs as you move through the different steps, but it is important to begin with a view of the entire process, keeping your desired results in mind. The **process diagram** is a good place to start for this.

Assign roles and responsibilities, timeline and budget

Identify the team members who will undertake the research and planning process, and decide who will do what in terms of management, data collection, analysis and documentation of the results. It is generally helpful to assign a team member to oversee the process. You should also develop a budget and a timeline for the analysis.



Phase 2

ANALYZING THE CONTEXT

Phase 2 overview



PURPOSE

Phase 2 of the process is designed to develop a detailed understanding of the context of the migration, and of the affected ecosystems. Doing so provides a basis for analyzing the effects of the migration on ecosystems and identifying the stakeholders that must be involved in interventions to address the impacts.



STEPS

Step 2.1: Analyze the migration context

- Conduct literature review
- Carry out participatory research (**Tool #1**)

Step 2.2: Analyze the conservation context

- Conduct literature review
- Develop maps (**Tool #2**)
- Assess local conservation capacity (**Tool #3**)



ACTIVITIES

This stage begins with further desk-based research to ensure that you fully understand the available literature on the migration and conservation contexts. This may include analyzing GIS maps, if resources and technical capacities are available. Building on this, you will carry out participatory research, using surveys and focus group discussions, to engage different stakeholders and better understand migration dynamics and local livelihoods. With this information in hand, you will organize a workshop (**Workshop #1**) to develop participatory maps of the community and to assess the local conservation capacities with relevant stakeholders.



OUTPUTS

Context analysis report
(**Summary Report** Sections 1–4)



STEP 2.1

ANALYZE THE MIGRATION CONTEXT

To analyze the ecosystem impacts of migration, you must first understand the context in terms of who is migrating and why. As discussed in **Box 3**, the decision to migrate is driven by a complex range of factors that propel individuals or households to leave their homes and motivate them to settle in new communities. Understanding these push and pull factors is an important part of identifying appropriate responses that minimize the negative impacts of migration on ecosystems. Often, these drivers are linked to livelihoods, in terms of opportunities, constraints and access to resources and services that enable people to improve their income, food security and overall well-being. The presence of migrants may have a positive or negative impact on the livelihoods of the host community, with consequences for the dynamics between migrants and non-migrants, both in the current context and in the future, should the population continue to grow and the ecosystem degrade. By analyzing the context, you will gain a better understanding of the drivers of migration, local livelihoods and the dynamics between migrants and host communities.



The presence of migrants may have a positive or negative impact on the livelihoods of the host community



Literature review

Before engaging communities, it is important to first explore any research that has been conducted on the host and migrant communities. While such research may be scarce, if it can be found relevant topics to look for include: any push factors in the community of origin, including conflict or economic challenges; existing statistics on migration to the area of interest; livelihood opportunities and challenges in the host community; and local governance issues, including those governing natural resource access, use and control, in the settlement area. Key sources for this information include academic journals, reports from government institutions, the UN, NGOs, and local or national media.



BOX 3: DRIVERS OF MIGRATION

The decision to leave one’s home and settle in another community is rarely taken lightly. It is generally based on a combination of drivers that include “push” factors—the circumstances that drive people to leave their country or community of origin—and “pull” factors, which attract them to their destination community. Push factors may be economic, such as a lack of employment opportunities at home; or environmental, including extreme events such as drought or the degradation of natural resources making livelihoods untenable. Migration may also be driven by conflict, or by government policies that favour migration or make living conditions unbearable in the place of origin. Factors that pull migrants toward the host community include livelihood opportunities, availability of resources such as land or water, family reunification, and local officials and other community members who are supportive of resettlement.

Many of these issues are evident in the migration context of the **case studies**. In Harennā Buluk district in southern Ethiopia, which contains part of the Bale Mountain ecosystem, steady migration from the mid-1990s onward has increased the local population. The major pull factor was a campaign by local leaders to increase Harennā Buluk’s population after the district’s administration was combined with that of a neighbouring district, a political decision that led to a loss of services, institutions and positions of power for the local leaders. To justify re-establishing Harennā Buluk as a separate district, population numbers had to increase, and local leaders began informally allocating public land to migrants. Harennā Buluk was an attractive option for farmers in the West and East Hararghe zones in the eastern, drier part of Oromia state, as these farmers tried to escape food insecurity caused by erratic rainfall, drought, pest infestations and crop diseases. These environmental conditions were a major push factor driving the migration. By 2007, migrants represented over 25 per cent of the population and, with this greatly increased population, Harennā Buluk was re-established as a separate district. Today, with land becoming increasingly scarce, there is no longer a politically motivated incentive to bring in migrants; however, they continue to arrive in Harennā Buluk in search of the same successes as their predecessors, driven by increasingly uncertain climatic conditions, population pressures and land scarcity in their area of origin (Wakjira, D’Udine, & Crawford, 2015).

For more information, please see the case study **summary** and the **full report**.

Participatory research

Participatory research involves engaging the concerned communities—both host and migrant—in dialogue to gather their perspectives on the local context and to better understand their priorities and challenges. In this process, you are interested in learning about:

- The most important local livelihood strategies.
- Access to livelihood resources (for example land, water, inputs, infrastructure and markets, as appropriate).
- Key household and community assets.
- The migration timeline.
- The drivers of migration, including both push and pull factors.
- The host community's perceptions of the migration.

Tool #1 provides details on how to use surveys and focus group discussions to gather this information. Attention to gender is very important in understanding migration dynamics, as outlined in **Box 4**.



BOX 4: GENDER AND MIGRATION

Women and men may experience both the causes and the effects of migration in very different ways. “Gender roles, relations and inequalities affect who migrates and why, how the decision is made, the impacts on migrants themselves, on sending areas and on receiving areas” (Jolly & Reeves, 2005). Depending on their situation, women may migrate alongside their husband or to reunite their family, or they may decide to move in order to increase their options for generating income for themselves and their family. In the worst cases, migration is driven by a desire to escape gender-based discrimination or violence, or is forced by traffickers. The decision to migrate can create both opportunities and risks for women. Resettlement may provide an opening to challenge existing gender dynamics, resulting in more decision-making power and economic opportunities for women in their households and communities. For example, in the case study from the Lake Albert fishery in Uganda, the research found that migrant women had diversified their livelihoods beyond fisheries-related activities, including the establishment of businesses such as restaurants and bars (D’Udine, Kyasiimire, Hammill, & Crawford, 2015). On the other hand, women’s personal security may be compromised during the move and resettlement, and the way they are received in the host community is influenced by the gender norms of that place, potentially leading to greater restrictions and discrimination than they experienced in their community of origin. The stress of the transition may also affect relations within the household. Given these complexities, it is helpful to examine the situation of male and female migrants separately to reveal gender-based differences (Jolly & Reeves, 2005; Petrozziello, 2013).

For more information on gender and migration, please see **Gender on the Move**, a UN Women training manual, or the **Gender and Migration Cutting Edge Pack** developed by BRIDGE.



STEP 2.2

ANALYZE THE CONSERVATION CONTEXT

In this step, you will identify the key ecosystems, natural resources, habitats and species in the region under study. This information is likely already available from research institutions or conservation organizations that are active in the area, so it is important to engage them in the analysis and access the data that has already been collected. With this basic information, you will conduct a more detailed analysis of the stresses and threats that are affecting ecosystems, as well as the degree to which the local community is aware of conservation values. Having a good understanding of the conservation context in terms of existing stresses and threats to ecosystems is critical for the next step, where the impacts of migration on the ecosystems of concern are analyzed.



Having a good understanding of the conservation context in terms of existing stresses and threats to ecosystems is critical for the next step, where the impacts of migration on the ecosystems of concern are analyzed

Literature review

As with the previous step, there may already be a great deal of information available on the conservation context in the region under study. Reports from academia, national conservation authorities and local, national and international conservation organizations on the key ecosystems in the area may provide essential information to inform the analysis. If available, the research team should also review existing management plans for the ecosystem, as well as develop an understanding of the institutional structures that govern management of the ecosystem at the local and national levels. It is important for the project team to understand these management plans and institutional structures, particularly if they represent an outside organization, as the feasibility of responding to migration impacts may be strongly tied to these structures and plans.



BOX 5: KEY CONSERVATION DEFINITIONS

BIODIVERSITY

The variability among living organisms—animals, plants, their habitats and their genes—from all sources, including terrestrial, marine and other aquatic ecosystems, and the ecological complexes of which they are part. This includes diversity within species, between species, and of ecosystems.

CONSERVATION

The protection, care, management and maintenance of ecosystems, habitats, wildlife species and populations, within or outside of their natural environments, in order to safeguard the natural conditions for their long-term permanence.

ECOSYSTEM

A community of plants, animals and smaller organisms that live, feed, reproduce and interact in the same area or environment. Ecosystems have no fixed boundaries; a single lake, a watershed, or an entire region could be considered an ecosystem.

ECOSYSTEM SERVICES

The goods and services provided by healthy ecosystems, including medicinal plants, clean water and air, and protection from extreme natural events.

HABITATS

The place or type of site where an organism or population naturally occurs.

SPECIES

A group of interbreeding individuals with common characteristics that produce fertile (capable of reproducing) offspring and which are not able to interbreed with other such groups.

Source: International Union for the Conservation of Nature (n.d.)

Mapping

Mapping is a useful process for understanding the conservation context. There are two different types of mapping that you may consider using:

Geographic Information System (GIS) mapping

GIS mapping provides a graphical representation of the distribution of key natural resources and of the areas under threat. Incorporating GIS mapping can be expensive, as it requires access to GIS systems as well as specific expertise to analyze and interpret the information. However, it can be useful in tracking changes to ecosystems over time, for example

by looking at satellite images generated over the same period as the migration. As GIS information provides only an aerial assessment of the situation, the information must be triangulated with other data on the ground to provide an accurate analysis of the observed changes. More information on this can be found in **Box 6**.

Participatory mapping

To complement GIS mapping (or substitute for it, if GIS mapping is not possible due to resource constraints), it is useful to bring community members together with other stakeholders to develop maps of their community and the surrounding area. These participatory maps can be used to identify the location and composition of key natural and physical resources, settlements and areas of high population density, species habitats, and areas at risk. The information generated during the mapping exercise will help validate the findings from the surveys and focus group discussions. It will also help you to identify where the community sees migration as having an impact on natural resources and the ecosystem (see **Phase 3**). Guidance on participatory mapping can be found in **Tool #2**.

Using the maps as a basis, you will identify the stresses and threats to ecosystems and biodiversity. It is helpful to disaggregate the stresses and threats as internal to the host community (for example, cutting of forest to expand agricultural land) or external (for example, the development of a copper mine within the boundaries of a protected area), as the stakeholders and interventions required to respond to these threats and stresses may be different.

Assess local conservation capacity

The final piece in understanding the conservation context is to assess the local capacity for conservation action, including the systems and structures that govern natural resources and protected areas, as well as the degree to which local actors are knowledgeable about and committed to conservation values. A simple tool to guide this assessment is provided in **Tool #3**.

Ideally this step will include a workshop (**Workshop #1**) that brings together different stakeholders to analyze GIS maps (if used), develop participatory maps and conduct the local conservation capacity assessment.



BOX 6: GIS MAPPING IN BALE MOUNTAINS NATIONAL PARK

In the Bale Mountains National Park case study undertaken as background research to this toolkit, surveys and interviews on the ground indicated that human migration was having a significant impact on the Harenna Forest ecosystem in southern Ethiopia. In order to further validate these qualitative findings with some quantitative data, the project team turned to the analysis of satellite imagery. Satellite images from three different years (1995, 2000 and 2011) were used to detect land-cover change across the case study area during the major migration period. Using commercially available remote sensing and GIS software, the satellite images were analyzed and interpreted to quantify and map the relative changes in the four major land-cover categories (i.e., forest, farmland, grassland and woodland) since the onset of the migration. The images were obtained from the United States Geological Survey.

If your project team has the resources and expertise, using GIS mapping can be an effective way of further visualizing how the ecosystem has changed during the migratory period in question. It will not, however, conclusively illustrate the extent of that change. Satellite images will be able to tell you a canopy-level story of how the ecosystem is being affected by the migration, but will not be able to give you further detail on what is happening to the ecosystem beneath that canopy. In Ethiopia, this meant that while it was clear from the images that agricultural expansion was reducing forest cover, it was unclear from the GIS exercise alone what the cultivation of shade-grown coffee was doing to biodiversity within the forest. A significant expansion of coffee cultivation and corresponding reduction in biodiversity at the ground level would not necessarily be reflected in satellite images, as it was happening under the forest canopy. As such, GIS mapping should be used to support ground level, qualitative research.

Source: Wakjira, D'Udine, & Crawford, (2015)



Phase 3

ASSESSING THE IMPACTS

Phase 3 overview



PURPOSE

Phase 3 brings together the information gathered in the **previous phase** to analyze the links between human migration and ecosystem stresses and threats in the area of focus. This will allow you to prioritize the stresses and threats to be addressed, noting which of these are endemic to the host community, which are exacerbated by migration, and which are external.



STEPS

Step 3.1: Analyze the migration–conservation linkages

- Analyze the impacts of migration (**Tool #4**)
- Identify priority conservation issues

Step 3.2: Conduct stakeholder analysis

- Map stakeholders for priority conservation issues (**Tool #5**)
- Profile relevant stakeholders (**Tool #5**)

Step 3.3: Synthesize and validate findings

- Synthesize findings
- Validate findings with stakeholders
- Document the analysis (**Tool #6**)



ACTIVITIES

In this phase, you will work with stakeholders to analyze the links among the migration, livelihoods and natural resource use, and ecosystem and biodiversity impacts. You will also map and profile the relevant stakeholders for the issues identified. This is generally done in the same workshop as the participatory mapping and capacity assessment exercises completed in **Phase 2 (Workshop #1)**. After this workshop, you will analyze and synthesize the information gathered so far, identifying the priority conservation issues to be addressed. When this is complete, and if resources permit, you will hold another workshop (**Workshop #2**) to validate the findings with stakeholders.



OUTPUTS

Impact analysis report
(**Summary Report** Sections 3–5)



STEP 3.1

ANALYZE THE MIGRATION- CONSERVATION LINKS

In this step, you will bring together the information on the migration context and the conservation context to analyze the links between the two. To do this, you will use the **analytical framework** presented in **Section 2**. This step in the analysis aims to answer the following questions:

- To what extent are the livelihoods of migrants and non-migrants dependent on key ecosystems, habitats and species?
- How do the livelihoods activities of migrants and non-migrants affect key ecosystems, habitats and species?
- Is the presence of migrants mitigating or exacerbating stresses and threats to ecosystems? How?
- Is the presence of migrants creating new stresses and threats to ecosystems?
- Where are the areas of highest pressure on ecosystems?
- Who are the key stakeholders to involve in migration-sensitive conservation interventions?



Analysis of the links between migration, livelihoods and natural resource use is the starting point for understanding the impacts on ecosystems and biodiversity

Analyze the impacts of migration

Analysis of the links between migration, livelihoods and natural resource use is the starting point for understanding the impacts on ecosystems and biodiversity. **Tool #4** provides a structured process for this analysis, using impact chains to understand impacts, links and feedback loops associated with the migration. The GIS and participative maps generated during the context analysis will help you to identify where in the community migration dynamics are tied to ecosystem impacts. Ideally, this impact analysis will be done in a workshop setting—it can follow directly from the participatory mapping and capacity assessment exercises conducted in **Phase 2 (Workshop 1)**.

Identify priority conservation issues

Based on the impact chains, you will be able to identify the priority conservation issues that must be addressed in order to minimize the impacts of migration on ecosystems and biodiversity. The issues to prioritize are those that are linked to the migration and that potentially have significant long-term effects. The feasibility of addressing the issues may also be factored into the prioritization process. This is the final step in **Tool #4**.



STEP 3.2

CONDUCT STAKEHOLDER ANALYSIS

At this point, you have identified the priority conservation issues that you would like to address. Before moving on to the next step of identifying the actions to be taken, it is important to identify the stakeholders that must be engaged in the process for these response strategies to be effective, and understand the dynamics that exist among these stakeholders that may influence a given strategy's implementation. Depending on the conservation issues that you have prioritized, there may be one set of stakeholders for all, or there may be different groups of stakeholders for the specific issues. Through this step, you will gain an improved understanding of the priorities and capacities of different stakeholders in relation to the conservation issue. You will also analyze the relationships and power dynamics among the key stakeholders, and whether these dynamics need to be addressed for ecosystem impacts to be reversed. This understanding can provide a basis for initiating dialogue and collaboration on conservation issues among key stakeholders. This step builds on the initial stakeholder identification that you conducted in the preparatory stage.

Map stakeholders for priority conservation issues

The stakeholder mapping exercise provides a visual overview of all of the stakeholders for a particular conservation issue. In a workshop setting, you will work with participants to identify key stakeholders, their relative power and influence, and the relationships that exist among them. This understanding allows you to identify the stakeholders that should be engaged in the design and implementation of response strategies, based on their influence over the issue and their relationships to other stakeholders. It also highlights the relationships among stakeholders that may be either beneficial for or harmful to addressing migration impacts on ecosystems. Guidance on stakeholder mapping is found in **Tool #5**.

Profile key stakeholders

Stakeholder profiling is a more detailed analysis of the key stakeholders, examining their positions, interests, needs and capacities. It allows you to identify common interests and shared positions among different stakeholders, where alliances can be built around these shared traits, and how stakeholders may be influenced to address the priority conservation issue. Stakeholder profiling is also covered in more detail in **Tool #5**.



STEP 3.3

SYNTHESIZE AND VALIDATE FINDINGS

As the final step in Phase 3, you will synthesize and document the information and analysis that you have gathered in a way that is useful for the next part of the process. Before finalizing the analysis, it is important to share the findings with stakeholders to ensure that the information has been interpreted correctly and that nothing has been missed.

Synthesize findings and validate with stakeholders

The validation is generally done in a workshop that bring together a range of stakeholders to discuss and provide feedback on the results of the analysis. In preparation for the validation workshop, you will need to pull together the findings into a concise synthesis that can be easily presented and understood by a wide range of stakeholders. This can lead nicely into the initial steps of Phase 4 in a single workshop (**Workshop 2**). If adequate resources are not available to conduct a second workshop, validation can be conducted by email or other electronic means, provided a range of stakeholders are consulted for feedback.

Document the analysis

Tool #6 provides a template for a simple summary report to organize the information you have generated in the first three phases of the analysis. It is recommended that you include a narrative that provides more details to ensure that those interested parties unable to participate in the analysis understand the process and how you arrived at the findings. You may also want to consider preparing a research brief to more succinctly share the findings with a broader audience.



Phase 4

RESPONDING TO THE IMPACTS

Phase 4 overview



PURPOSE

At the end of **Phase 3**, you will have identified the priority conservation issues that must be addressed, based on their significance from a biodiversity point of view and the linkages to migration. In Phase 4, you will use this information to identify, implement, monitor and evaluate interventions that respond to the priority issues.



STEPS

4.1 Identify migration-sensitive conservation interventions

4.2 Implement, monitor & evaluate interventions



ACTIVITIES

The validation workshop (**Workshop 2**) will also include a planning step, where you will facilitate identification of interventions that respond to the findings of the analysis. Depending on the nature of the migration impacts, this may involve modification of existing conservation interventions or the design of new activities. Following this workshop, you can use existing planning processes and projects to implement, monitor and evaluation these new or modified interventions. This may occur through your own organization or through collaboration with partners.



OUTPUTS

List of migration-sensitive conservation interventions

Plan for integrating migration-sensitive conservation interventions in project implementation and M&E systems



STEP 4.1

IDENTIFY MIGRATION-SENSITIVE CONSERVATION INTERVENTIONS

With the context analysis and priority conservation issues validated by stakeholders, it is time to design response activities that address the impacts of migration on the ecosystem in question. This step involves the identification and prioritization of interventions that respond to the issues identified in **Phase 3**. Box 7 discusses the characteristics of migration-sensitive conservation interventions.



BOX 7: MIGRATION-SENSITIVE CONSERVATION INTERVENTIONS

Migration-sensitive conservation interventions are conservation interventions that are sensitive to the existing and potential impacts of human migration on critical ecosystems. Often, these interventions will look very much like conservation interventions that are implemented in contexts where migration is not an issue. However, the stresses and threats that are caused or exacerbated by the migration will take higher priority when identifying conservation issues to address. Further, in some cases, new approaches may be required or existing approaches may need to be adjusted in order to take the migration and its effects into account. The key characteristics of migration-sensitive conservation interventions are that they:

- Address conservation issues that are exacerbated by human migration
- Are designed based on an analysis of migration dynamics and their impacts on livelihoods and natural resource use and the consequent impacts on ecosystems and biodiversity in host communities
- Emphasize livelihood interventions to address the identified pull factors for the migration and to enable sustainable livelihoods for a growing population, while minimizing the ecosystem and biodiversity impacts
- Recognize migrants as a stakeholder group, whose needs, priorities and capacities are analyzed and addressed separately from the host community
- Emphasize dialogue among different stakeholder groups, including migrants and non-migrants
- Promote governance and resource management systems that are inclusive of migrants
- Are conflict-sensitive (**see Box 8**)

Participatory planning

Ideally, the identification of appropriate interventions will occur in collaboration with affected stakeholders. As such, it can be useful to move directly from validation of the findings to participatory planning within the same workshop (**Workshop 2**). Discussions with stakeholders will generally focus on identifying interventions that aim to minimize or reverse negative impacts on ecosystems, rather than addressing the drivers of migration themselves. Addressing the drivers of migration is likely beyond the scope and mandate of your organization; however, there may be an opportunity to use the evidence generated through the analysis in **Phase 1** to engage in advocacy on issues that require attention at a higher level within the country of study or internationally. Appropriate interventions will be identified based on the analysis you have conducted, and should consider local and migrant livelihoods, stakeholder interests, and local power dynamics, among other things. **Tool #7** provides guidance on identifying and prioritizing migration-sensitive conservation interventions.



Discussions with stakeholders will generally focus on identifying interventions that aim to minimize or reverse negative impacts on ecosystems, rather than addressing the drivers of migration themselves

Design new or modify existing activities

Building on the participatory planning process, you will need to develop implementation plans for those interventions that have been identified. These interventions will most likely be integrated into a broader conservation plan or strategy, rather than undertaken as a stand-alone initiative. To integrate migration-sensitive interventions into conservation programming, you will either need to design new activities or adjust existing activities to ensure that they are addressing the migration impacts. These new or modified activities can then be incorporated into existing or future initiatives through ongoing planning and program design processes.



BOX 8: CONFLICT-SENSITIVE CONSERVATION

When designing conservation interventions that address migration impacts, users should try to ensure that their interventions are also conflict-sensitive. Conflict-sensitive conservation programming and implementation takes into account the causes, actors, dynamics and impacts of conflict in order to minimize conflict risks and enhance peacebuilding opportunities. The process of designing and implementing conflict-sensitive conservation activities includes (Hammill, Crawford, Craig, Malpas, & Matthew, 2009):

- a. Analyzing the conflict to obtain a better, more systematic and in-depth understanding of the conflict(s) in an intervention area.
- b. Assessing how the proposed/ongoing work will affect the analyzed conflict(s).
- c. Program/project (re)design that uses this understanding to develop and implement conservation activities that will minimize conflict risks and maximize peacebuilding opportunities.

For more information on conflict-sensitive conservation, please see IISD's **Conflict-Sensitive Conservation: Practitioners' Manual** and the **Conflict Sensitivity Resource Pack** developed by the Conflict Sensitivity Consortium.



STEP 4.2

IMPLEMENT, MONITOR AND EVALUATE INTERVENTIONS

The final step in the process puts the analysis into action, through implementation, monitoring and evaluation of the identified interventions. Ideally, the interventions that you have chosen will be integrated into a broader conservation plan, project or initiative that provides a framework and resources for taking them forward. Consequently, this step focuses on integrating the migration-sensitive conservation interventions into existing project management systems.

Implement interventions

Your migration-sensitive conservation interventions will be implemented according to your organization's internal processes; there is no need to design new implementation processes for the prioritized activities. Implementing the interventions that you have chosen to address the impacts of migration on ecosystems may occur in the context of a local conservation plan, an externally funded project, or through community-based initiatives. Your interventions will likely be implemented alongside or as part of other conservation or development activities being undertaken in or around the ecosystem. Depending on the scope of your analysis and the mandate of your organization, this step, and the ones that follow, will likely need to involve working with other actors who will be able to support implementation of the priority interventions. As such, implementation of your migration-sensitive interventions will likely be determined by the overarching plan or project into which it is integrated. Given the dynamic nature of migration, not to mention other factors that may affect the execution of the activities, such as climate change and conflict, flexibility is key for successful implementation.



Given the dynamic nature of migration, flexibility is key for successful implementation



Integrate migration-sensitive conservation interventions in your monitoring and evaluation system

The monitoring and evaluation (M&E) of your chosen intervention(s) will follow the same M&E structures that already exist within your organization. Ideally the migration-sensitive interventions will be integrated into the broader M&E system of the plan, project or initiative through which the interventions are implemented. The approach to M&E will therefore be determined by your organization's existing policies and the overarching conservation initiative, with the M&E system helping you design quantitative or qualitative indicators to

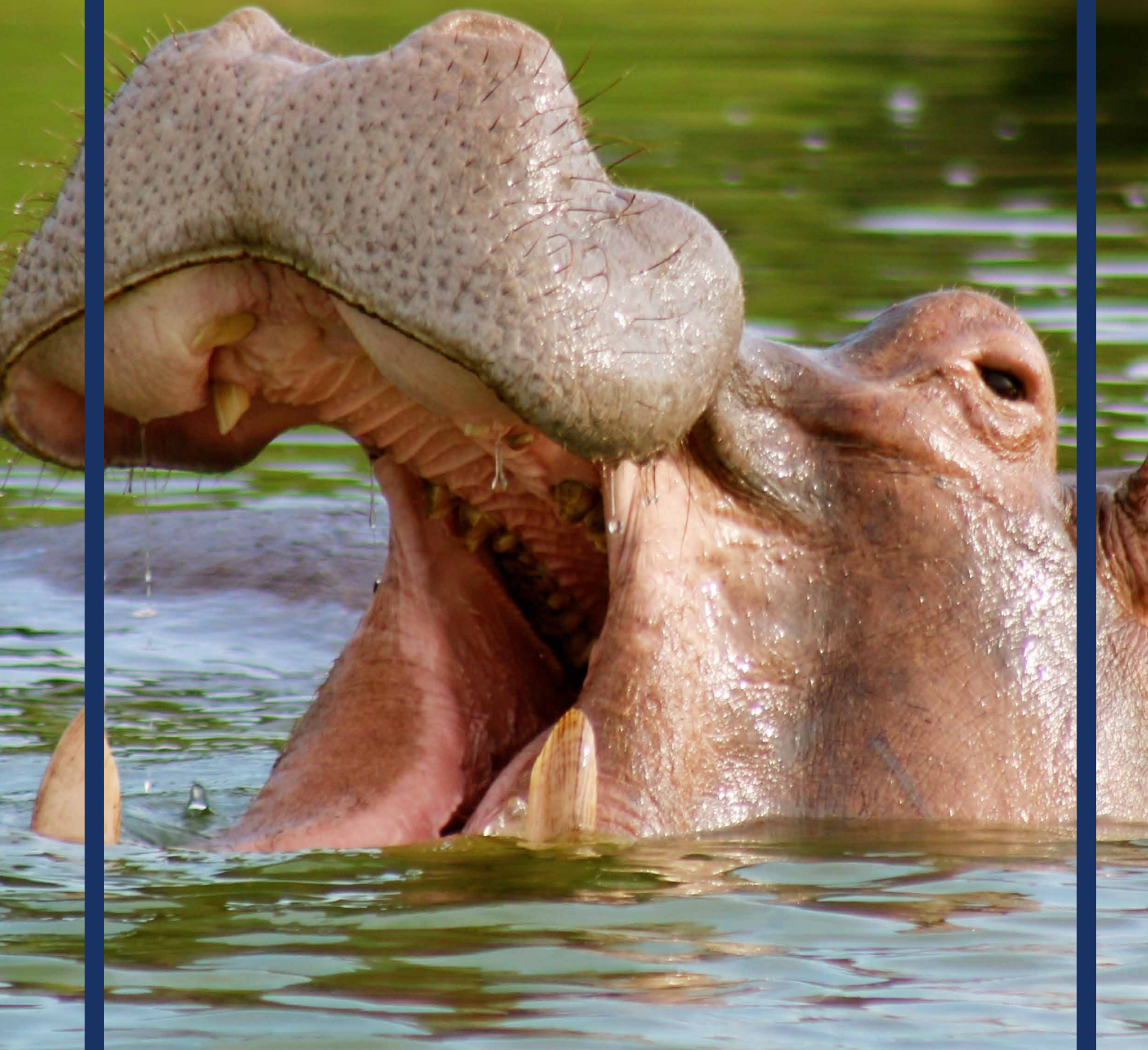
determine whether your migration-sensitive intervention is achieving its goals of addressing related ecosystem impacts. It is recommended that the monitoring system include stakeholder participation and consultation to ensure their engagement throughout the implementation of the interventions.

Ongoing monitoring of the migration and conservation contexts

In addition to monitoring results of the migration-sensitive conservation interventions, it can be helpful to continue monitoring the context in order to track changes in migration trends, identify new ecosystem threats and capitalize on emerging opportunities. This may involve periodically revisiting and updating some of the tools, notably the participatory map, the stakeholder analysis tools and the migration impact chains. The advantage of this approach is that it promotes ongoing dialogue among stakeholders. It can be useful to assign a particular actor the responsibility of conducting the ongoing context monitoring and communicating any changes to relevant stakeholders. This can help to ensure continual monitoring, which will enable you to assess any changes in terms of ecosystem and biodiversity impacts of migration, allowing for the adjustment of implementation approaches in response to changes in the context.

Section 4

TOOLS



OVERVIEW

In this section, you will find practical guidance on using the tools described above. Examples from the case studies in Ethiopia, Uganda and DRC are provided, to help you become familiar with each of the tools. The tools should be adjusted and adapted to the specific context in which you are operating, and used as and when appropriate; it is possible that some tools may not be relevant for your analysis. Using and adapting the tools is best done through a team-based process, to build ownership of the tools and the results of the analysis.

Tool #1

Exploring the migration context through surveys and focus group discussions

Tool #2

Participatory mapping

Tool #3

Local conservation capacity assessment

Tool #4

Migration impact chains

Tool #5

Stakeholder analysis

Tool #6

Summary report template

Tool #7

Identifying and prioritizing interventions to address key ecosystem impacts



TOOL #1

EXPLORING THE MIGRATION CONTEXT THROUGH SURVEYS AND FOCUS GROUP DISCUSSIONS

To better understand the migration context, two participatory research approaches are recommended:

- **Surveys**

Surveys are conducted to gather data from a sample of individuals within the population under study—both migrants and non-migrants—using a standardized questionnaire. Surveys are very effective in gathering detailed information on particular issues—in this case, the livelihoods of migrants and host communities and the push and pull factors driving migration. They generate data that is often not available from other sources and may be valuable beyond the scope of this assessment process. Surveys will require a significant investment of time and resources for the design, translation, data collection and analysis. Sample questions relating to migration and conservation dynamics are provided below.

- **Focus group discussions**

Focus group discussions (FGDs) bring together small groups of people that share certain characteristics (for example, migrant women or non-migrant boat owners) to explore issues through a facilitated process. FGDs can be an efficient way to collect information if a survey is not possible due to time or resource constraints, or if more detail is required on a specific topic or issue. There are a number of different toolkits available that provide practical guidance on using participatory research tools with focus groups, including ones developed by the **Food and Agriculture Organization** and the **World Bank**. The **Participatory Learning & Action** journal is another helpful resource. In all cases, the tools must be adapted to address the specific issues of concern.



TIP: GENDER BALANCE

Gender balance is important in conducting surveys and focus group discussion, as women and men may have differing perspectives and priorities. In many contexts, it is helpful to hold separate focus group discussions for women and men, to ensure that women have an opportunity to speak without the influence of their male counterparts.

The following table provides an overview of the types of issues that should be covered through surveys and focus group discussions, with examples of questions that can be incorporated in the process. Please note that questions are framed as they would be for a survey, and would need to be adapted for a focus group discussion. The specific questions or exercises you use in your analysis should be designed to address the specific context and issues of the area under study, in collaboration with people who are familiar with the area. It is important to conduct surveys and FGDs in the local language whenever possible. Once survey and FGD findings are collected and analyzed, a narrative should begin to emerge around how migration is changing local demographics, local livelihoods, and the surrounding environment.

The Summary Report Template (**Tool #6**) provides options for summarizing the information gathered through the surveys and focus group discussions.

EXAMPLE: Issues to cover in surveys and focus group discussions

Issue	Key data to capture	Examples of questions
Basic information about the respondent	Gender	How old are you, in years?
	Age	What is your current marital status?
	Marital status	How many people comprise your household?
	Educational level	What are their genders, ages and relationship to you?
	Migrant or non-migrant	Where do you live?
	Address	What is your educational level?
Livelihoods	Most important livelihood strategies	What are the major livelihood strategies that you use to support your family?
	Access to livelihood resources (for example land, water, inputs, infrastructure, markets as appropriate)	Do you have access to land? If yes, is it owned/leased/sharecropped? What crops do you grow? Are they for sale or for household consumption?
	Key assets	What livestock do you own (number and type)? For what purpose? Did your household buy and use any inputs for crop production in the last harvest season? Is any of your agricultural land irrigated? Do you run businesses other than farming to support your livelihood? Do you own: list assets, for example radio, mobile telephone, kerosene stove, etc.? Does the household have any savings in banks, credit associations or savings groups?
Migration	Timing of migration	For migrants: Where were you born? How long have you lived in this community? Why did you or your family decide to settle in this community? What are the benefits of living in this community instead of your birthplace? What are the challenges of living in this community instead of your birthplace? What is your relationship with people in this community?
	Drivers (push and pull factors)	
	Perceptions of host community	For host community members: Do you know any migrants? If yes, what is your relationship with them? How long have migrants been coming to stay in your community? What benefits do the migrants bring to your community? What are the negative impacts of the migrants on your community?



TOOL #2

PARTICIPATORY MAPPING

Participatory mapping is a tool whereby community members work with other stakeholders to develop maps of their community and the surrounding area. The exercise is designed to help stakeholders, including the project team, become more familiar with the study area, better understand where key population densities are settled, and identify those local critical ecosystems most at risk. By drawing on multiple stakeholder perspectives, participatory maps also give the project team a more well-rounded idea of how the community understands ecosystem impacts and conservation threats.

Preparing the map should take participants—working in small groups in a workshop setting—between one and one and a half hours. To create the map, participants can use a flip chart and coloured markers or, if these are not available, can draw the map on the ground, using local materials such as sand, stones and sticks (CARE, 2009).

Each small group is asked to identify:

- The boundaries of the community.
- The key feature of their community, such as a topographical or manmade landmark.
- The location of key resources, particularly natural resources (such as forests, crops, and rivers) and physical resources (such as houses, health clinics, and schools).
- Settlement areas, including areas of high population for the local and migrant population.
- Important biodiversity zones and key conservation features, including protected areas, key habitats and species ranges.

The data generated by the participatory mapping exercise can help to validate the findings of the literature review and the GIS exercise. An example of a participatory map is provided below. Once complete, the project team can use the map to discuss the following with stakeholders:

- How have population densities in the community changed over time? Where are migrant populations settling in the local community?
- How is natural resource use changing over time?
- How and where is this natural resource use interacting with and impacting local critical ecosystems?

- Are there ecosystems that are particularly vulnerable to future population growth?
- Is the population responding to these ecosystem impacts? If so, how?

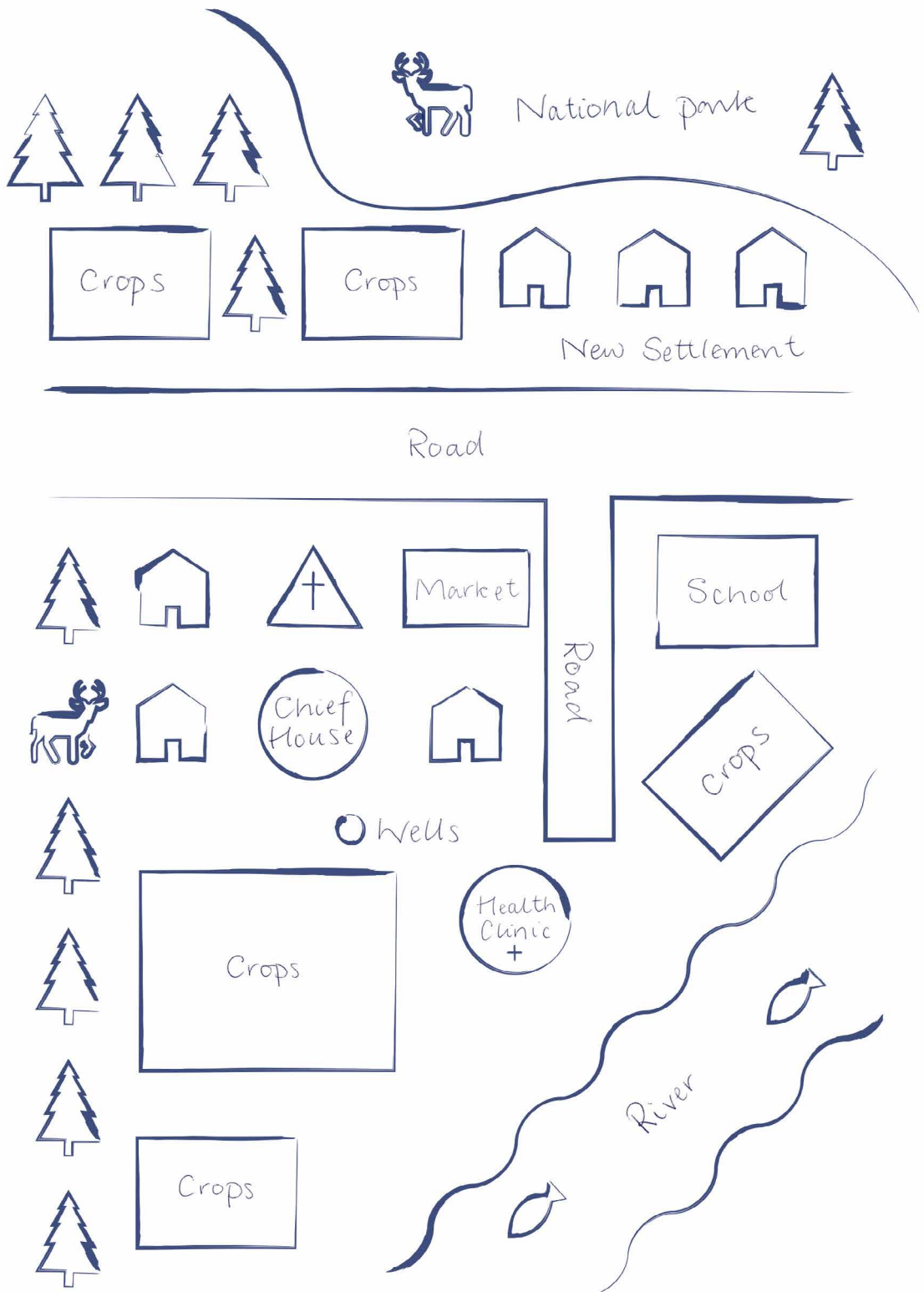
The Summary Report Template (**Tool #6**) provides a template for summarizing the information gathered during the mapping exercise and subsequent discussions. It is useful to include a photograph of the participatory map in the Summary Report if possible, both to inform the analysis and help establish a community baseline for future monitoring of the migration context.

For more information on participatory mapping, please see the following resources:

CARE's Climate Vulnerability and Capacity Analysis Handbook

IISD's Community-based Risk Screening Tool – Adaptation and Livelihoods

EXAMPLE: Participatory map





TOOL #3

LOCAL CONSERVATION CAPACITY ASSESSMENT

This tool is designed to assess conservation capacities in the study area. It enables you to identify those capacities that can be drawn upon in addressing the impacts of migration on ecosystems, as well any capacity gaps that may represent barriers. The assessment is best done in a workshop setting, as described below, but if this is impossible, the information may be gathered through interviews with conservation actors.

1. Ask participants to brainstorm all of the actors who are involved in conservation in the area of study (or adjacent areas if the activities are relevant for the area of study).
2. For each actor on the list, discuss:
 - The focus or scope of operations of the actor (for example, do they target a specific species, ecosystem or protected area? Do they cover an entire district or region?)
 - The role they play in conservation
 - Their strengths and weaknesses
3. Capture this information in a table such as the one provided in **Tool #6**. You will use it in a later step. An example is provided on the next page.



TIP: CONSERVATION ACTORS

When thinking about conservation actors, do not overlook the role of local community members, either through community-based organizations or through informal community groups.

EXAMPLE: Local conservation capacity assessment from Hareenna Forest in Ethiopia

Actor	Focus or scope of operations	Role in conservation	Strengths	Capacity gaps
Ethiopian Wildlife Conservation Authority (EWCA)	National government entity with lead responsibility for conservation and sustainable utilization of wildlife	Works with communities and other stakeholders to conserve and manage wildlife and habitats	Has a legal mandate to conserve Bale Mountains National Park (BMNP), including Hareenna Forest	Limited human resources Limited resources for equipment and transport Limited monitoring data on status and trends of the forest ecosystem
Frankfurt Zoological Society	Supports EWCA through the Bale Mountains Conservation Project	Supports management of BMNP, including ecotourism development, outreach, park operations and ecological management	Strong technical capacity	
Bale Forest Enterprise	Manages the section of Hareenna Forest that falls outside BMNP	Implementing sustainable forest management in partnership with forest-adjacent communities		
Participatory Forest Management by Community-Based Organizations	Enhancing livelihoods through community-based conservation action within communities and in adjacent forest areas	Developing forest, grassland and water management strategies Establishing and enforcing bylaws to protect local resources	Legal mandate to pass bylaws regulating access to forest resources	Limited human resources Limited resources for effective enforcement of bylaws Limited technical capacity to develop long-term sustainable management plans Limited information on status of forest ecosystem

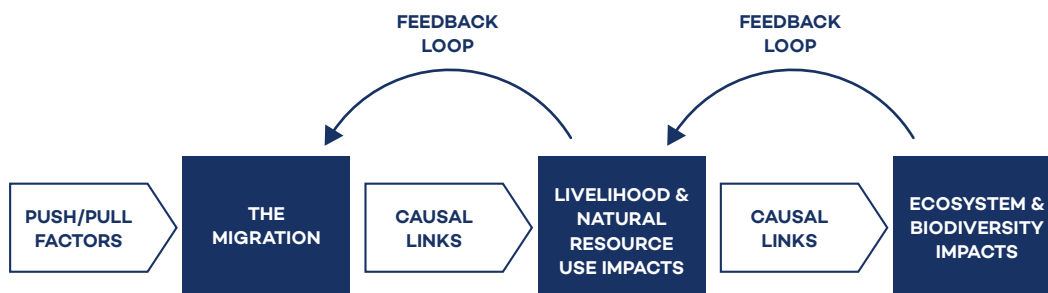
Assessing the local conservation capacity in Hareenna Forest provided the research team with an increased understanding of which locally active conservation organizations would be best placed to collaborate on migration-sensitive conservation interventions. In this case, community-based organizations working on participatory forest management presented an opportunity for action due to their focus on livelihoods and local forest governance and management. Their limited technical capacities could be addressed through cooperation with the Frankfurt Zoological Society.



TOOL #4

MIGRATION IMPACT CHAINS

This tool will help you to connect the information gathered about the migration context and the conservation context to analyze the impacts of migration on key ecosystems in the study area. The process below assumes that this is done in a workshop, which is recommended. The impact chain follows the same process that was initially laid out in Figure 1.



1. Begin by preparing the space to develop the impact chains. This can be done on flip charts, or with cards on the wall or on the floor if wall space is not available. You will need three columns, as shown in the example below, which cover from left to right: the migration; livelihoods and natural resource use impacts; and ecosystem and biodiversity impacts.
2. Describe the migration issue that is being analyzed and create a card/box for it in the migration column.
3. Ask participants to review the information on migration push and pull factors from **Step 2.1** and to agree on the most important factors to be included in this analysis. Add these to the first column, as shown in the example.
4. Next, ask participants to identify the impacts of the migration on livelihoods and natural resource use, drawing on the context analyses above. You can refer to the surveys, FGDs, literature reviews and participatory mapping discussions when leading these discussions. Create a box or card for each individual impact and place it in the middle column as shown below. Using cards is helpful as it allows you to move the impacts around as the relationships become clearer. Refer back to the livelihood information gathered in **Step 2.1**.
5. Discuss and agree on the relationships among the different impacts, using arrows to show the progression of impacts along the chain where appropriate, as shown below.

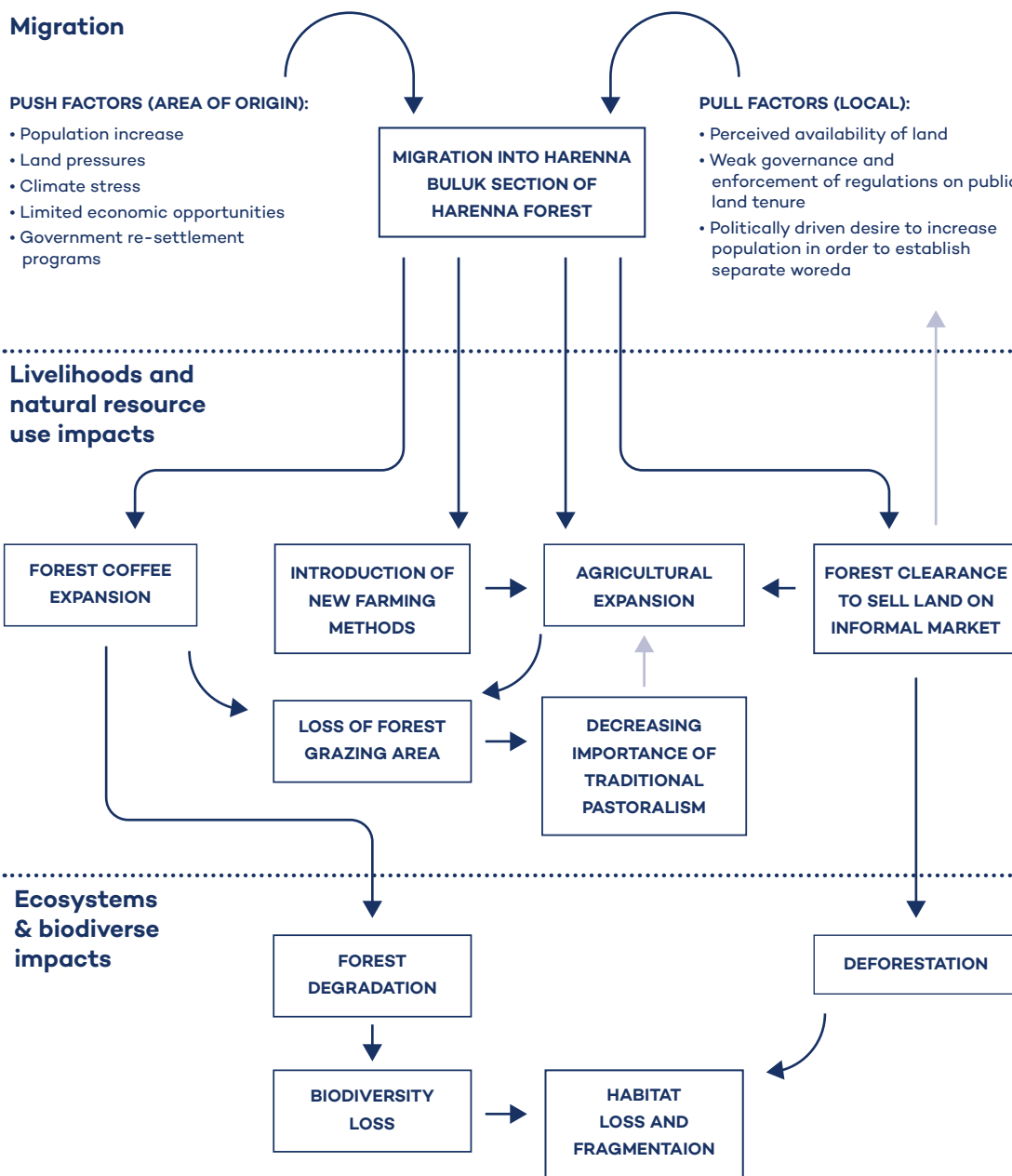
6. When the livelihood and natural resource use impacts column is complete, move on to the ecosystem and biodiversity column. Ask participants to identify the ecosystem and biodiversity impacts that result from the different livelihood and natural resource use issues. Refer to the map(s) and other information from **Step 2.2** to ensure that the impacts are covered. Create a box or a card for each of the impacts and place it under the ecosystem and biodiversity impact heading.

**TIP: IMPACTS**

When identifying the ecosystem and biodiversity impacts, it is important to consider both the immediate impacts (for example, overfishing) and the longer-term impacts (for example, fisheries collapse).

7. Discuss and agree on the relationships among the different impacts, including the links between the livelihood and natural resource use impacts and the ecosystem and biodiversity impacts. Place arrows between the cards to illustrate these relationships. Use dotted lines to indicate potential future impacts on ecosystems and biodiversity. Refer back to the **literature review** to ensure you have captured all of the issues.
8. Ask participants if they can identify any feedback loops, where impacts in one column affect or exacerbate the issues in a previous column. For example, in the Ethiopia case study, it was determined that the clearing of forest for agriculture was actually creating more pull for migrants to settle in the area. If feedback loops are identified, indicate them on the impact chain.
9. When you are satisfied that your impact chain is representative of the situation, move on to identification of the conservation issues, keeping in mind that this exercise is focused on those issues that are linked to migration. Looking at the issues in the third column, discuss and agree on the issues that represent the highest priorities in order to reduce the ecosystem impacts of migration. These are the issues you will take forward in the following steps.
10. Copy your impact chain into the Summary Report Template in **Tool #6**.

EXAMPLE: Migration impact chain from Bale Mountains National Park



In the above case study, deforestation was identified by stakeholders as the key conservation issue to focus interventions on, while forest coffee expansion and forest clearance to sell land on the informal market were also identified as livelihood and natural resource use areas in which conservation interventions could reasonably be expected to lessen ecosystem impacts.



TOOL #5

STAKEHOLDER ANALYSIS¹

The stakeholder analysis combines two tools: stakeholder mapping and stakeholder profiling. It aims to identify relevant stakeholders, assess the relationships and power dynamics among them, and better understand their motivations and capacities. It is typically done for each of the ecosystem stresses or threats that have been prioritized, while recognizing that some stakeholders may be relevant to more than one (or all) of the priority conservation issues.

Stakeholder mapping

The first step is to create a stakeholder map. This is ideally done as part of **Workshop 1** in a participatory process that involves at least some of the stakeholders themselves. The aim of the exercise is to identify relationships that can be leveraged for positive change, as well as the broken connections and conflicts that are actively blocking action or causing negative impacts. It can also help in determining what alliances might be beneficial for implementation of the interventions identified in **Phase 4**.



TIP: STAKEHOLDER GROUPS

When identifying stakeholder groups, it is useful to treat the migrant community (or communities) as a unique stakeholder group, as their relationships and influence in the local community will likely differ from other local groups.

To facilitate the process:

1. Choose one of the priority conservation issues and ask participants to brainstorm all of the different actors who have a stake in the issue. Create a list. Encourage them to be as specific as possible, breaking down broader categories (for example, community members) to groups with shared interests (for example, migrants and non-migrants). Refer to your initial stakeholder identification (**Step 1.1**) and the **local conservation capacity assessment** to ensure that all stakeholders have been captured.

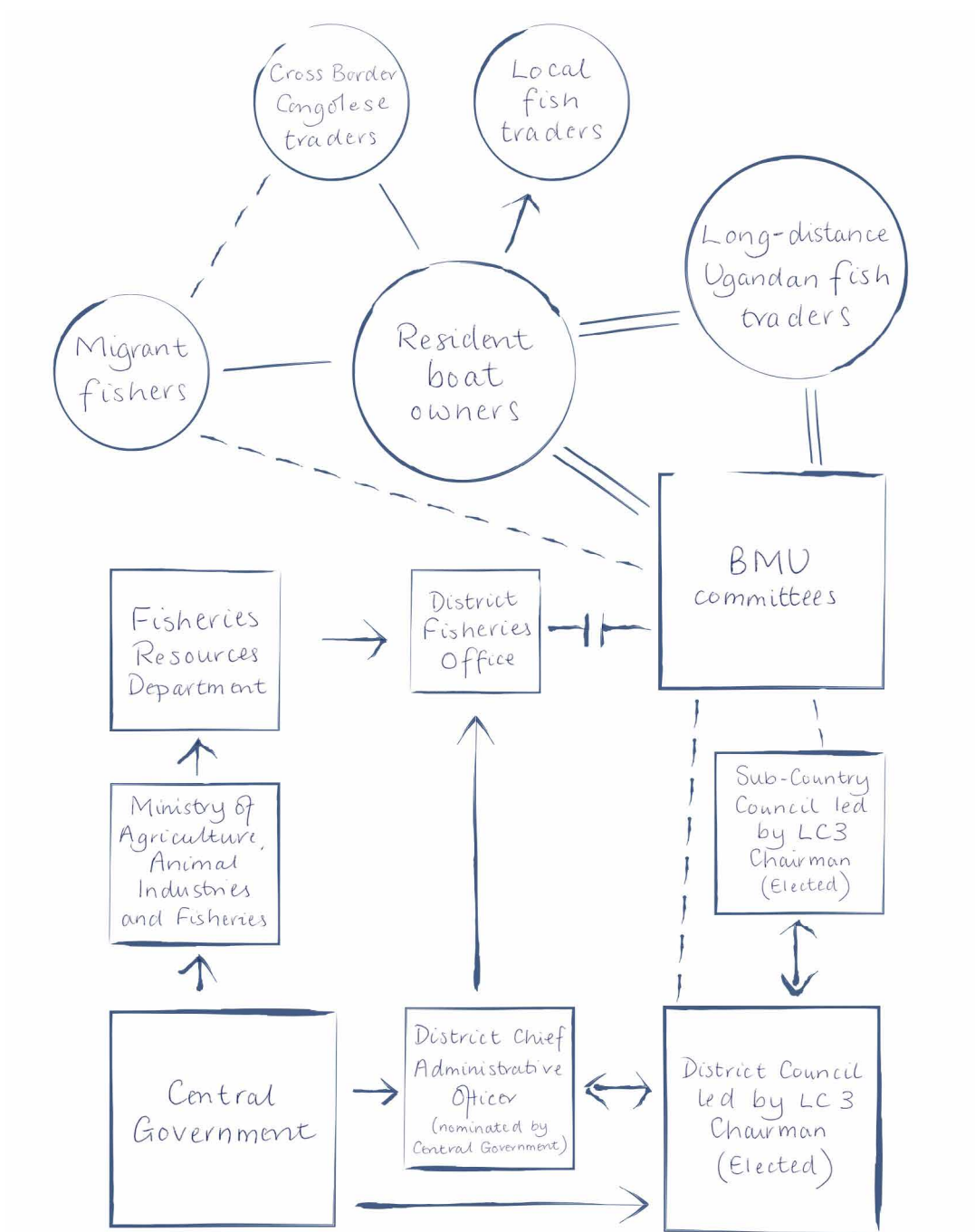
1. Adapted from: Hammill, A., Crawford, A., Craig, R., Malpas, R. and Matthew, R. (2009). *Conflict-sensitive conservation practitioners' manual*. International Institute for Sustainable Development. Retrieved from www.iisd.org/pdf/2009/csc_manual.pdf

2. For each actor on the list, rate the degree of influence they have over the issue, using a scale agreed upon by participants (for example, high, medium or low influence).
3. Draw a map of the stakeholders, representing each specific stakeholder with a circle for institutional stakeholders or a square for informal stakeholders. The size of the circle or square should represent their degree of influence, as shown in the example from Uganda below.
4. Next, ask participants to evaluate the relationships between the different stakeholders, noting:
 - Relationships involving regular exchange and contact
 - Informal, non-regular relationships
 - Relationships of influence, noting the direction of influence
 - Alliances between different actors
 - Relationships involving friction or open contact
 - Broken connections or open conflicts

Indicate these relationships on the map, using different symbols to represent the various types of relationships, as shown in the legend below. Do not forget to include your own organization and the relationships you have that can be leveraged in the steps that follow.

5. Identify the 4–5 most important actors, based on their degree of influence over the issue and/or their relationships with other actors (positive or negative). These priority stakeholders will be carried into the profiling step.
6. Repeat for the other priority conservation issues. If time is limited and multiple conservation issues are being considered, you can divide workshop participants into smaller groups and have each work on one issue. Their findings can then be presented back in plenary for discussion and validation.

EXAMPLE: Stakeholder map from Buliisa-Lake Albert



STAKE HOLDER MAPPING SYMBOLS

- | | | |
|---|--------------------------------|-----------------------------------|
| ○ Institutional stakeholders (size denotes influence) | — Regular exchange and contact | - - - Informal, non-regular links |
| □ Informal stakeholders (size denotes influence) | ➔ The direction of influence | ⊥ Broken connections |
| | == Alliances | ⚡ Conflict |

Stakeholder Profiles

This tool enables you to develop profiles for the priority stakeholders. It helps in analyzing where there are common interests or conflicting needs among key stakeholders, as well as to identify areas requiring capacity building, investment in human resources or other means of organizational strengthening.

For each of the priority stakeholders, discuss and agree upon the following:

Position

The publicly presented demands and solutions related to the conservation issue and the impacts of migration.

Interests

What a particular actor/stakeholder wants to achieve in relation to the conservation issue.

Needs

What is essential for the stakeholder's well-being and security.

Capacities and capacity gaps

The resources (physical, financial, human, social, political) that the stakeholder is able to access to influence the conservation issue and/or the impacts of migration, and where gaps in these capacities exist.



TIP: STAKEHOLDER GROUPS

In conducting this analysis, refer back to the drivers of migration in **Phase 2**, as these provide insights on the positions, interests and needs of both migrants and host communities. The results of the local conservation capacity assessment will also provide useful inputs for this step when stakeholders are also conservation actors.

Below is an example of a stakeholder profiling exercise that builds on the stakeholder map from Uganda. Across the three stakeholders, shared concerns for sustainable fishery-based livelihoods can be seen, which can then be promoted as a basis for shared dialogue and action and an entry point for addressing ecosystem impacts. Referring back to the stakeholder map above, this common ground could be particularly useful when trying to address the conflictual relationship that exists between the Beach management units (BMUs) and the District Fisheries Office.

EXAMPLE: Stakeholder profiling from Buliisa-Lake Albert

	Beach Management Unit (BMU)	District Fisheries Office	District Council
Positions	<p>Fishers' livelihoods must be improved</p> <p>Declining profitability of fishery must be addressed</p>	<p>The fisheries sector must be promoted and enhanced</p> <p>Fisheries Resources Department regulations must be enforced</p>	<p>Poverty among fishing communities must be reduced</p> <p>Continued employment for those depending on fisheries is a priority</p>
Interests	<p>Relaxation of current restrictions on fishing equipment</p> <p>Outside investments in Lake Albert fisheries</p> <p>Introduction of fish farming</p>	<p>Regular collection of data on fish catches</p> <p>Enforcement of existing national fisheries regulations</p> <p>Development of local regulations in partnership with District Council to ensure sustainability of Lake Albert fisheries</p>	<p>Enhancing employment in the local fisheries sector</p> <p>Enhancing profitability of the local fisheries sector</p> <p>Social cohesion among different ethnic groups involved in fisheries sector</p>
Needs	<p>Long-term sustainability of Lake Albert fisheries</p> <p>Preservation of fisheries-related livelihoods</p>	<p>Long-term sustainability of Lake Albert fisheries</p> <p>Compliance with Fisheries Resources Department regulations</p>	<p>Sustainable employment opportunities for constituents</p> <p>Peaceful relationships among different ethnic and socioeconomic groups in the district</p>
Capacities	<p>Artisanal fishing fleet and fishing know-how</p> <p>Informal knowledge of key fishing grounds and ecologically sensitive habitats</p>	<p>Knowledge of Fisheries Resources Department regulations</p>	<p>Legal mandate to pass ordinances and bylaws regulating local fisheries</p>
Capacity gaps	<p>Insufficient capacity/ incentives to record fish catches and analyze trends</p> <p>Insufficient capacity/ incentives to develop BMU-specific management plans</p> <p>Lack of technical expertise in sustainable fisheries management</p> <p>Lack of patrol boats and/ or other tools to enforce existing regulations</p>	<p>Limited human resources</p> <p>Limited resources for equipment and transport</p> <p>Limited data on the state of local fisheries and the trends in fish catches</p>	<p>Lack of technical expertise to pass ordinances and bylaws regulating local fisheries</p>



TOOL #6

SUMMARY REPORT TEMPLATE

This template provides a structure for organizing and documenting the results of the analysis and planning process. Feel free to adapt it to suit the particular issues covered in your analysis. A narrative that analyzes the information and provides more background details where appropriate should accompany this summary report. You may want to print this template to take into the field with you so you can fill it out as you work through the process.

1. General information on the study area

Description of study area

Country

Region/District/Province

Community or communities

Study boundaries

Team members (with organization names if applicable)

2. Migration context

Fill in the tables and answer the questions below based on the information collected through the literature review, survey and/or focus group discussions.

Drivers of migration

Where is the migrants' area of origin?

Where is the host community?

How long has the migration been occurring? Is it ongoing?

What are the push factors driving migrants to leave their area of origin?

What are the pull factors motivating migrants to settle in the host community?

Resources and livelihoods			
Livelihood strategy Describe the key livelihood strategies for each group.	Key resources required Identify the resources required to implement the livelihood strategy.	Resource access and benefits Describe the situation in terms of how key resources are accessed, who has access, who benefits, etc.	Role of migrants/ host community If applicable, describe the role of migrants in host community livelihoods and/or the role of the host community in migrant livelihoods.
Host community livelihoods			
Migrant livelihoods			

Dynamics between host community and migrants

What are the benefits for the host community that result from the migration?

What are the challenges faced by migrants and/or the host community as a result of the migration?

How does the host community perceive the migrants?

How do the migrants perceive the host community?

Are there any points of conflict between the host community and the migrants?

3. Conservation Context

Fill in the tables and answer the questions below based on the information collected through the literature review, surveys, **mapping** and **local conservation capacity assessment**.

Literature review: Key ecosystems, habitats and species, and existing stresses and threats

Ecosystems	Description of ecosystem	Habitats and species	Stresses and/or threats	Other information (e.g., is it part of a protected area?)

Participatory mapping

How have population densities in the community changed over time? Where are migrant populations settling in the local community?

How is natural resource use changing over time?

How and where is this natural resource use interacting with and impacting local critical ecosystems?

Are there ecosystems that are particularly vulnerable to future population growth?

Is the population responding to these ecosystem impacts? If so, how?

Local conservation capacity				
Actor	Focus or scope of operations	Role in conservation	Strengths	Capacity gaps

4. Impacts of Migration on Ecosystems

Copy the impact chain into the box below.

Migration impact chains		
Migration	Livelihood and Natural Resource Use Impacts	Ecosystem and Biodiversity Impacts

MIGRATION AND CONSERVATION TOOLKIT

Describe the priority conservation issues that should be addressed by response strategies in the table below, linking each to the migration, describing how they interact with livelihood and natural resource impacts, and identifying any longer-term impacts that the conservation issue may have on the ecosystem and local livelihoods if left unaddressed.

Priority conservation issues			
Priority conservation issue	Links to migration	Links to livelihood and natural resource use impacts	Longer-term impacts on the ecosystem and livelihoods

5. Stakeholder Analysis

Fill in the tables below based on the stakeholder mapping and profiling exercises.

Copy the stakeholder maps into the space below.

Stakeholder mapping
Priority conservation issue
Stakeholder map

Fill in the table below, adding columns as necessary.

Stakeholder profiling		
Stakeholder 1	Stakeholder 2	Stakeholder 3
Positions		
Interests		
Needs		
Capacities		
Capacity gaps		

Moving toward design and implementation

Based on the findings of the analysis and their validation by affected stakeholders, what are the issues that will be taken forward in the next step?



TOOL #7

IDENTIFYING AND PRIORITIZING INTERVENTIONS TO ADDRESS KEY ECOSYSTEM IMPACTS

This tool is designed to help you identify and prioritize interventions that respond to the priority conservation issues that you identified through Phase 3 of the process. As the interventions will be highly context-specific, the tool provides a general framework and examples, rather than a prescriptive set of activities. It may be helpful to bring in external technical expertise to work alongside other stakeholders in this step of the process, which is generally undertaken in a workshop setting.

1. Review and discuss the priority conservation issues (unless this is combined with the validation step in Phase 3, in which case this will already be done).
2. For each of the priority conservation issues, work with stakeholders to identify a set of interventions that could be undertaken in response. You will want to refer back to the different elements of the analysis conducted in Phase 3. For example:
 - a. Can your organization directly intervene to sustainably reduce any of the ecosystem impacts?
 - b. Where in the critical ecosystem should efforts be focused, based on the GIS and participatory mapping exercises?
 - c. What livelihood choices and natural resource use practices among migrants and the local community must be addressed to reduce ecosystem impacts, and do viable alternative livelihoods exist which can help to minimize these impacts?
 - d. Can policy actions be taken to reduce the pull factors drawing migrants into the area?
 - e. What stakeholder relationships can we leverage for positive change? What relationships present a barrier to implementation, and how can this be remedied?
 - f. What common ground can we find among stakeholders, and can this be used to leverage positive change?
 - g. Should interventions be field-based or policy-based? Should they focus on present impacts of migration or future impacts? Is there scope for action at the migrants' place of origin?

3. To prompt the flow of ideas, you may want to consider the following categories of activities:
- Developing local capacity for conservation and sustainable natural resource management.
 - Raising awareness among migrant and non-migrant communities on the positive and negative ecosystem impacts of livelihoods and natural resource use.
 - Strengthening policies and governance systems for land-use planning, environmental protection and conservation.
 - Promoting collaborative management of natural resources.
 - Enhancing opportunities for sustainable and resilient livelihoods for migrants and non-migrants.

The table below provides examples of the types of activities you could consider in each of the categories.

Activity category	Examples of potential activities
Developing local capacity for conservation and sustainable natural resource management	Improve planning, management and fundraising skills of conservation actors Strengthen organizational capacities of community-based conservation actors Improve technical skills and/or access to technical expertise to enable monitoring and analysis of trends in resource use and state of ecosystems
Strengthening policies and governance systems for environmental protection and conservation	Strengthen regulations and enforcement for protection of threatened ecosystems, species or resources Develop and enforce land-use management plans
Promoting collaborative management of natural resources	Strengthen participatory resource management systems and structures, ensuring they are inclusive of migrants Facilitate dialogue and conflict resolution processes among stakeholders with different needs and interests
Enhancing opportunities for sustainable and resilient livelihoods for migrants and non-migrants	Promote alternative income generating strategies that are less dependent on threatened ecosystems, for example by: <ul style="list-style-type: none"> • Offering vocational and technical training and skills building • Strengthening access to inputs and markets • Facilitating access to services (financial, extension, etc.) • Facilitating access to employment information
Awareness-raising, advocacy and policy influence	Engage community members and policy-makers in dialogue about the ecosystem impacts of migration, extending communications to populations in the area of origin Advocate for improved immigration services and border controls Work with civil society organizations in the country/community of origin to demand policy action on migration push factors: poverty-reduction strategies, improved livelihoods, the provision of social services, improved access to land and resources, climate change adaptation

Once you have a list of potential interventions for each of the priority conservation issues, move on to selecting which interventions you will move forward with. Create a matrix like the one shown below. With workshop participants, agree on the criteria for prioritizing activities (examples are provided below).

EXAMPLE: Matrix for prioritizing interventions

Intervention	Feasibility of implementation	Potential for addressing key ecosystem impacts	Capitalizes on existing stakeholder collaboration
Strengthen participatory resource management systems and structures, ensuring they are inclusive of migrants	3	3	2
Advocate for improved immigration services and border controls	1	1	1
Strengthen organizational capacities of community-based conservation actors	3	3	3
Engage community members and policy-makers in dialogue about the ecosystem impacts of migration, extending communications to populations in the area of origin	3	2	3

SCORING

3 = high probability of success in relation to the criteria

2 = medium probability of success

1 = low probably of success

- Next, agree on a scoring system for the prioritization process. One possible way of doing this is shown in the example above.
- Agree on the score for each of the potential interventions against each of the criteria. You will need to decide whether you are looking at all of the interventions collectively, or prioritizing within the list of interventions identified for a particular conservation issue.
- Once you have identified the priority interventions, return to the stakeholder analysis and determine which actors need to be involved in implementing the interventions and their potential role. A generic example is shown in the table below, and a blank version of this table is provided in **Tool #6**.

EXAMPLE: Stakeholder roles in migration-sensitive conservation interventions

Priority intervention	Stakeholders	Role of stakeholders
Strengthen organizational capacities of community-based conservation actors	Stakeholder A	Role of Stakeholder A: Training and capacity building, awareness-raising
	Stakeholder B	Role of Stakeholder B: Organization, implementation
	Stakeholder C	Role of Stakeholder C: Legislative support

References and Further Reading

Barbero, C., Bayne, S., Brusset, E., Campbell, S., de la Haye, J., & Leonhardt, M. (n.d.). *Conflict-sensitive approaches to development, humanitarian assistance and peacebuilding: Resource pack*. Conflict Sensitivity Consortium.

BRIDGE (2005). *Gender and migration cutting edge pack*. Retrieved from www.bridge.ids.ac.uk/bridge-publications/cutting-edge-packs/gender-and-migration

CARE. (2009). *Climate Vulnerability and Capacity Analysis Handbook*. Retrieved from http://careclimatechange.org/wp-content/uploads/2014/12/CVCA_EN.pdf

Crawford, A., Kujirakwinja, D., & Bamba, A. (2015). *Migration and conservation in the Misotshi-Kabogo ecosystem*. Winnipeg: IISD.

D'Udine, F., Kyasiimire, B., Hammill, A., & Crawford, A. (2015). *Migration and conservation in the Lake Albert ecosystem: Case study report*. Winnipeg: IISD. Retrieved from www.iisd.org/sites/default/files/publications/migration-conservation-lake-albert-ecosystem-report.pdf

Food and Agriculture Organization of the United Nations (FAO). (1999). *Participatory Rural Appraisal (PRA) Toolbox: Modified PRA tools*. Retrieved from www.fao.org/docrep/003/x5996e/x5996e06.htm#6.2.%20Modified%20PRA%20Tools

Hammill, A., Crawford, A., Craig, R., Malpas, R. & Matthew, R. (2009). *Conflict-Sensitive Conservation Practitioners' Manual*. Winnipeg: IISD. Retrieved from www.iisd.org/pdf/2009/csc_manual.pdf

International Organization for Migration (IOM). (2015). *Key migration terms*. Retrieved from www.iom.int/key-migration-terms

International Union for the Conservation of Nature. (n.d.). *IUCN definitions – English*. Retrieved from https://cmsdata.iucn.org/downloads/en_iucn_glossary_definitions.pdf

Jolly, S. & Reeves, H. (2005). *Gender and migration overview report*. BRIDGE Cutting Edge Pack. Retrieved from www.eldis.org/vfile/upload/4/document/1109/Migration_OR_English.pdf

Oglethorpe, J., Ericson, J., Bilsborrow, R. E. & Edmond, J. (2007). *People on the move: Reducing the impacts of human migration on biodiversity*. Washington, DC: World Wildlife Fund and Conservation International Foundation. Retrieved from <http://wwf.panda.org/?118600/People-on-the-Move-Reducing-the-Impact-of-Human-Migration-on-Biodiversity>

Petrozziello, A. (2013). *Gender on the move: Working on the migration-development nexus from a gender perspective*. Santo Domingo: UN Women. Retrieved from www.unwomen.org/~media/Headquarters/Attachments/Sections/Library/Publications/GenderOnTheMove_low2b.pdf

Rietbergen-McCracken, J., & Narayan, D. (1998). *Participation and social assessment: Tools and techniques*. Washington, D.C.: World Bank. Retrieved from <http://siteresources.worldbank.org/INTPCENG/1143331-1116505657479/20509228/Toolkit.pdf>

Wakjira, D.T., D'Udine, F., & Crawford, A. (2015). *Migration and Conservation in the Bale Mountains Ecosystem: Case Study Report*. Winnipeg: IISD. Retrieved from www.iisd.org/sites/default/files/publications/migration-conservation-bale-mountains-ecosystem-report.pdf

Annex A: Case Study Examples

Case Study Example: Migration and Conservation in the Lake Albert Ecosystem in Uganda

Buliisa District lies on the shores of Lake Albert in western Uganda, in one of the key biodiversity areas of the Upper Nile Basin. Over the past five decades, an increasing number of migrants from neighbouring Democratic Republic of Congo have settled in the district, drawn to the region by the economic opportunities available on Lake Albert, Uganda's third most productive fishery. Migration in Buliisa District is primarily driven by economics and livelihood opportunities: most Congolese migrants are drawn to the district by the incomes available in the local fishery. The scale of this migration is significant, as Buliisa District fisheries are now almost fully dependent on migrant workers for cheap labour.

Migration has had a variety of impacts on Buliisa District's demographics, infrastructure, economy and politics. It has also had a significant impact on Lake Albert's aquatic and terrestrial ecosystems: a dramatic change in the composition of Lake Albert's fish species has taken place over the past two decades, the result of overfishing linked to migration. Research identified a number of key barriers to addressing the impacts of migration on the Lake Albert fishery: poverty; a porous border; a lack of documentation among the local population; village expansion; weak law enforcement; limited livelihood diversification options; and local governance structures that work against sustainable management of the fishery. Efforts to minimize the impacts of migration on the Lake Albert fishery must first address these significant challenges; a lack of action on addressing the impacts of migration on the Lake Albert fishery will contribute to its continued decline.

For a full case study report, please visit www.iisd.org/publications/migration-and-conservation-lake-albert-ecosystem.

Case Study Example: Migration and Conservation in the Bale Mountains Ecosystem in Ethiopia

The Bale Mountains ecosystem is located in southeast Ethiopia. It is made up of Bale Mountains National Park (BMNP), a globally important centre of endemism, in the north, and Haremma Forest, the largest remaining stand of moist tropical forest in Ethiopia, in the south. Haremma Forest has experienced a major influx of migrants since the 1990s, which threatens the forest's critical conservation values and ecosystem services. The influx of migrants into the area has been driven by a combination of pull factors relating to local politics and the perceived availability of arable land, and push factors relating to limited economic opportunities and access to suitable agricultural land in the migrants' areas of origin. The most significant pull factor has been the desire of political elites to rapidly increase the local population by actively promoting migration.

Across the area, livelihood diversification and the intensification of previously sustainable, traditional forest resource management systems are having negative repercussions on the forest, including deforestation, forest degradation, and habitat loss and fragmentation. Satellite images and anecdotal observations from stakeholders indicate that forest cover has decreased in both *woredas*, while agricultural land continues to expand. The ultimate impact is biodiversity loss. The decline of Haremma Forest must be reversed, not only for the sake of its flora and fauna, but also for the communities that rely on it for water, food and livelihoods. For this to happen, policy-makers and practitioners must recognize the role that migration has played in its decline, and work with the local and migrants communities to minimize its negative impacts and—where possible—enhance its positive contributions.

For a full case study report, please visit www.iisd.org/sites/default/files/publications/migration-conservation-bale-mountains-ecosystem-report.pdf.

Case Study Example: Migration and Conservation in the Misotshi-Kabogo Ecosystem in DRC

The Misotshi-Kabogo ecosystem is found in the eastern Democratic Republic of Congo. The ecosystem is found in the lower portion of the Albertine Rift, one of the most species-rich regions of Africa. It lies along the shore of Lake Tanganyika, and straddles the border of South Kivu and Katanga provinces. The ecosystem does not yet have formal protection, but is of great importance to the survival of local species—including 1,500 chimpanzees—due to the fact that forests in the ecosystem's altitude range are increasingly rare in the DRC. While the area has been relatively sparsely populated for years because of regional insecurity, migrants have begun to arrive in the region, drawn to the area by perceptions of abundant arable land and an absence of conflict. The corresponding increase in local population, and their livelihood choices, threatens to have a significant impact on the ecosystem.

Community surveys indicate a number of key drivers for the migration into the Misotshi-Kabogo region. Displacements linked to conflict are driving migrants into the area: returning refugees, displaced to neighbouring Tanzania during the Congolese wars, have returned to the DRC and have found that they are unable to resettle in those regions where they previously lived. As a result, many of the displaced have migrated to the now-stable Misotshi-Kabogo region in search of pasture, arable land and livelihood opportunities. Family reunification is also a significant driver, as immediate and extended family members move to the region to be with those migrants who have already settled near the ecosystem. Farmers from neighbouring South Kivu province have migrated to the region, taking advantage of its low population densities, fertile soils and extensive pasturelands; the population influx is reported to have led to the clearing of considerable amounts of forest for conversion into farmland. Market access is also better in the region than in many of the surrounding areas, and these improved transportation links draw many to the region. Finally, non-farm economic activities are also pulling new migrants into the area: artisanal mining, small-scale logging and fishing are increasingly seen as providing livelihood opportunities in the region. The cumulative impact of these population increases will be deforestation, threatening habitats, species, the watershed and local livelihoods.

For a full case study report, please visit www.iisd.org/sites/default/files/publications/migration-conservation-misotshi-kabogo-ecosystem.pdf

Annex B: Sample Workshop Agendas

The Migration and Conservation Workshops can each take between one and three days, depending on the resources available, participant availability, and the level of detail you require for the analysis. Sample agendas for Workshops 1 and 2 are provided below.

Workshop 1

Day 1	
Welcome and introductions	30 mins
Background: The migration context	30 mins
Background: The conservation context	30 mins
Participatory mapping	120 mins
Local conservation capacity assessment	90 mins
Closing	

Day 2	
Summary of Day 1	30 mins
Migration impact chains	90 mins
Prioritization of conservation issues	30 mins
Stakeholder mapping	90 mins
Stakeholder profiles	90 mins
Discussion	30 mins
Discussion	30 mins

Workshop 2

Day 1	
Welcome and introductions	30 mins
Summary and validation of Workshop 1 findings	120 mins
Identifying interventions	120 mins
Prioritizing interventions	60 mins
Stakeholder identification	60 mins
Discussion	30 mins
Closing	

Integrating existing and potential migration concerns into conservation interventions is increasingly important in many parts of the world. Many critical ecosystems are already experiencing myriad forms of natural resource and climate stress, and the growing socio-environmental impacts of migration could exacerbate or reinforce existing social tensions and institutional failures, further threatening the critical ecosystems and the livelihoods they support. Policy-makers and practitioners are not fully aware of these threats, nor are they fully prepared to manage them through appropriate interventions.

The Migration and Conservation Toolkit was developed by the International Institute for Sustainable Development (IISD) to help conservation practitioners assess the impacts of human migration on critical ecosystems. It aims to help these practitioners design and implement activities that are sensitive to the dynamics and impacts of existing and potential human migration on livelihoods and natural resource use, and that address the consequent impacts on ecosystems and biodiversity in host communities.

