# INDEPENDENT MID-TERM EVALUATION OF "BUILDING NATIONAL AND LOCAL CAPACITIES FOR DISASTER MANAGEMENT IN RWANDA" PROJECT

FINAL DRAFT

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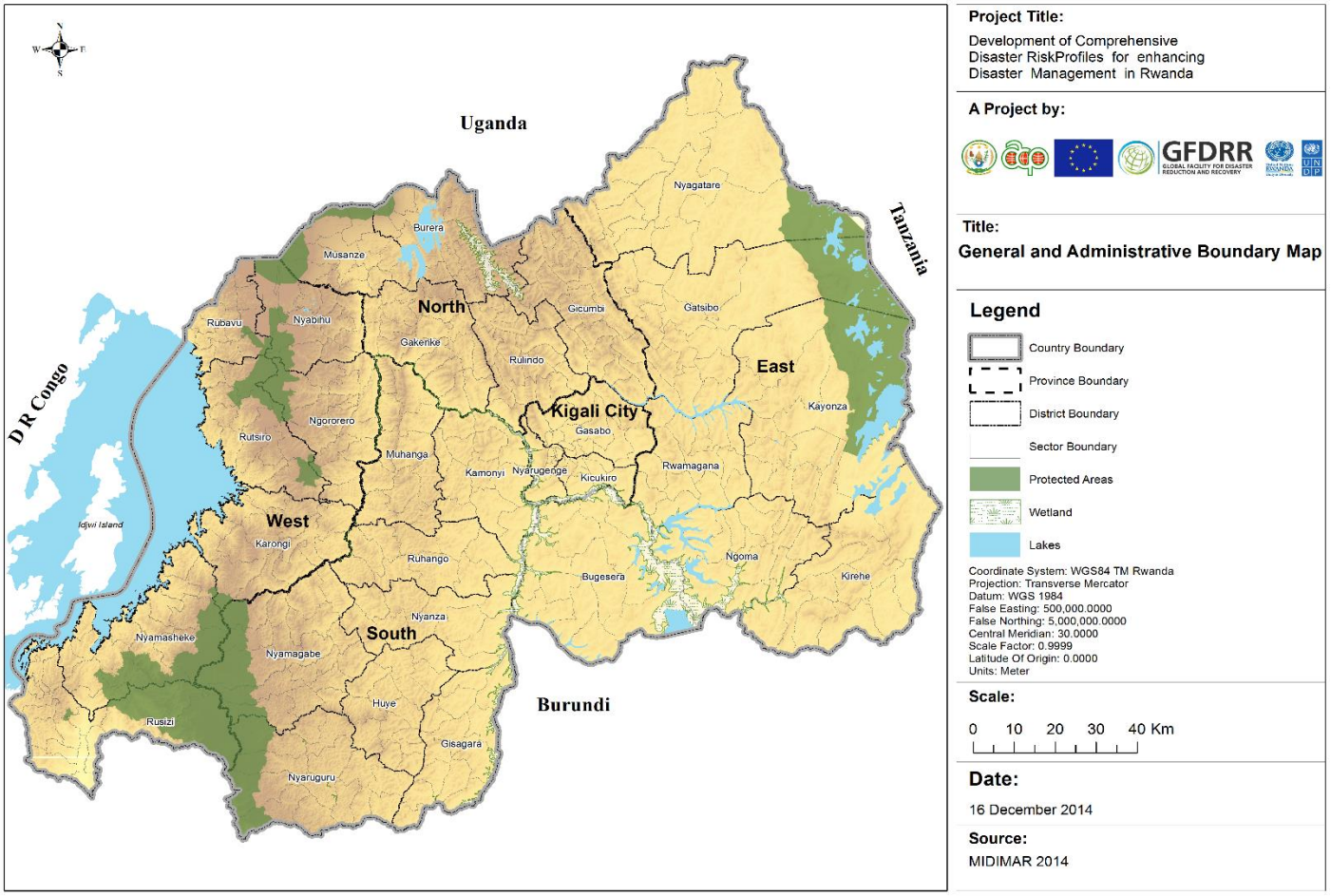
## *General and Administrative Map of Rwanda, 2014*




## *Acknowledgments*

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## *Acronyms*

| | |
|---|---|
| CBDRRM | Community Based Disaster Risk Reduction and Management |
| CCHF | Crimea Congo Hemorrhagic Fever |
| CFSVA | Comprehensive Food Security and Vulnerability Analysis and Nutrition Survey |
| CHW | Community Health Workers |
| DDMC | Disaster Management Committees |
| DDMO | District Disaster Management Officer |
| DDPs | District Development Plans |
| DHS | Demographic Health Survey |
| DRG | Development Results Group |
| DRM | Disaster Risk Management |
| DRR | Disaster Risk Reduction |
| EDPRS | Economic Development and Poverty Reduction Strategy |
| EICV | Integrated Households and Living Conditions Survey |
| EVD | Ebola Virus Disease |
| FOSACOM | Health Post |
| GDP | Gross Domestic Product |
| GFDRR | Global Facility for Disaster Reduction and Recovery |
| GoR | Government of Rwanda |
| HRBA | Human Rights Based Approaches |
| HS | Human Security |
| IDSR | Integrated Disease Surveillance and Response |
| IEC | Information, Education and Communication |
| IRRF | Integrated Results and Resources Framework |
| IOM | International Organization for Migration |
| JPSC | Joint Project Steering Committee |
| KRAs | Key Result Areas |
| LPTC | Local Project Technical Committee |
| MERs | Middle East Respiratory Syndrome |
| M&E | Monitoring and Evaluation |

| | |
|---|---|
| MINAGRI | Rwanda Meteorological Agency |
| MIDIMAR | Rwanda Ministry of Disaster Management and Refugee Affairs |
| MINAGRI | Rwanda Ministry of Agriculture |
| MINALOC | Ministry of Local Government |
| MINECOFIN | Rwanda Ministry of Finance and Economic Planning |
| MINISANTE | Rwanda Ministry of Health |
| NGO | Non-Government Organizations |
| NHDR | National Human Development Report |
| NIM | National Implementation Modality |
| NISR | National Institution of Statistics Rwanda |
| NPDRR | National Platform for Disaster Risk Reduction |
| OneUN | One United Nations Rwanda |
| PC | Project Coordinator |
| PPOC | Programme Planning and Oversight Committee |
| ProDoc | Project Document |
| RBC | Rwanda Biomedical Center |
| RBM | Results Based Management |
| REMA | Rwanda Environment Management Authority |
| RHA | Rwanda Housing Authority |
| ROR | Republic of Rwanda |
| RVF | Rift Valley Fever |
| SARS | Severe Acute Respiratory Syndrome |
| SDMCs | Sector Disaster Management Committees |
| SMART | Specific, Measurable, Achievable, Relevant, Timebound |
| UN | United Nations |
| UNDAF | United Nations Development Assistance Framework |
| UNDAP | United Nations Development Action Plan |
| UNDP | United Nations Development Programme |
| UNDS | United Nations Development System |
| UNFPA | United Nations Population Fund |
| UNHABITAT | United Nations Human Settlements Programme |

| | |
|---|---|
| UNICEF | United Nations Children's Fund |
| UNISDR | United Nations Office for Disaster Risk Reduction |
| UNTFHS | United Nations Trust Fund for Human Security |
| UNV | United Nations Volunteers |
| WASAC | Water and Sanitation Corporation |
| WATSAN | Water and Sanitation |
| WB | World Bank |
| WHO | World Health Organization |

# CONTENTS

# EXECUTIVE SUMMARY

Rwanda, known as the "land of a thousand hills", is a small, fertile, landlocked country in the heart of Africa. Just south of the equator, it has an area of 26,338 km$^2$. Rwanda has Africa's 3$^{rd}$ highest population density, with an estimated population of 11, 821,752 (NISR, 2014b with projections) and 451 inhabitants per square kilometre in 2016. About 83% of the population is rural and ekes out a sustenance in intensive hillside cropping at elevations of up to 3,500 meters, half with plots of .33 hectares; any environmental threat exacerbates their poverty.

Rwanda has taken impressive strides in implementing an ambitious and comprehensive agenda of socio-economic change that has lifted a tenth of its population out of poverty, and is aimed at achieving Middle Income Country status by 2020. Nonetheless, the Rwanda Poverty Profile Report (EICV 4: "Enquete Integrale sur les conditions de vie des menages") established that 39.1% of Rwandans lived in poverty in 2013/14 (from 56.7% in 2005/06) with 16.3% living in extreme poverty (35.8% in 2005). Poverty and extreme poverty are concentrated in rural areas. Female-headed households are common, constituting 29.2% of all households in 2014, and bear a disproportionate share of the poverty burden. Women form the majority of agricultural workers. Other marginalized socio-economic groups include 163,000 refugees fleeing conflict in the Democratic Republic of Congo (2012) and Burundi (2015-16).

Rwanda's topography is highly susceptible to natural hazards, including droughts, flooding, earthquakes, windstorms and lightning. Mount Nyiragongo, and Mount Nyamuragira, responsible for 40% of Africa's historical volcanic eruptions, fall kilometers just outside Rwanda's northwest border. The region, including Uganda and DRC, is a hot spot for emerging and re-emerging infectious diseases, including viral hemorrhagic fevers, Ebola, Marburg, Yellow and Rift Valley Fevers. Over the past decade, the frequency and severity of natural disasters, particularly floods and droughts, have significantly increased in Rwanda, resulting in higher human casualties, as well as increased economic and environmental losses. The array of disaster impact has included human mortality and morbidity, population displacement, damage to roads, bridges, houses, schools and other infrastructure, crop destruction and serious environmental degradation.

Following a decade of success in reducing malaria, in 2015-16 Rwanda saw a dramatic increase in reported malaria cases, from an estimated 225,176 cases in 2011 to 1,957,000 in 2015, almost a 10-fold increase, with 424 related deaths in 2015, continuing into 2016. A driver is thought to be climate change which creates new reservoirs and expands the geographical range of Anopheles mosquitos. Delayed rains and elevated temperatures related to climate change also caused Rwanda's worst drought in 60 years in two consecutive planting seasons creating crop failure, livestock loss and food shortages for some 78,000 households in 2016.

Rwanda's Economic Development and Poverty Reduction Strategy 2013-2018 (EDPRS II) recognizes that an effective systematic strategy is required to mitigate the increased impact of natural and other disasters, with a vision of building a "disaster resilient nation" through consolidated, cross-cutting efforts. Towards this aim, UNDP and the newly-founded Ministry of Disaster Management and Refugee Affairs (MIDIMAR) designed a USD 8.845 million five-year (2013-18) capacity development project: "*Building National and Local Capacities for Disaster Management in Rwanda"* on the foundation of a Project Initiation Plan (2012-2013), with MIDIMAR as the primary implementing partner at the local (10 of Rwanda's 30 districts) and national levels. UNDP's role was to provide advisory, policy, and technical support, including a Technical Advisor. Funding was to come from three primary designated sources 1) UNDP Regular Resources 43% ($3,803,548); 2) External Resources 43% ($3,803,548), including WB/EU/ACP approved funding/GFDRR of ($581,350) and a soft pipeline under a proposal to AfDB of ($3,222,198), and 3) to be mobilized 14% ($1,238,364.26).

## *1. Building National and Local Capacities for Disaster Management Project*

The project has five inter-related outputs that are currently in progress:

**Output 1:** Enhanced capacities of national and local institutions to manage disaster risks and recover from disaster events; including improved national and local coordination mechanisms (49% of budget or USD$ 4,347,623)**;**

**Output 2:** DRR mainstreamed into national/district/sectorial plans and policies; and capacities on DRM Planning enhanced. (2% of budget or USD $ 190,000);

**Output** 3: A functioning national disaster risk assessment and monitoring system (DRAMS) established. (17% of budget or USD $ 1,313,955);

**Output 4:** End-to-end early warning systems established and operational. (13.3% of budget or USD $ 1,181,455);

**Output 5:** Reduced community vulnerabilities and increased household resilience in selected high-risk districts and increased public awareness on DRR. (20.4% of budget or USD $ 1,812,427).

The project was designed to have an independent, external Mid-Term Evaluation (MTE), to assess the Government of Rwanda's and UNDP's results, achievements and constraints in implementing the project, and to inform any changes in the project's final phase. Due to funding constraints, the evaluation took place in the project's 41st month of implementation, a year later than planned. As it transpired, the MTE was timed at a strategic moment following the 2015 international adoption of the Sendai Framework for Disaster Risk Reduction 2015-2030, which places a strong emphasis on disaster risk management, and defines seven global targets. Moreover, the nearly simultaneous adoption of the 2030 Agenda for Sustainable Development and the Sustainable Development Goals (SDG's) have broad implications for both governments and the UN development system at country, regional and global levels. Considerable attention is now being invested in the harmonization and alignment of both internationally. Both MIDIMAR and the UN in Rwanda will need to adapt their results, planning and reporting systems in the coming implementation periods.

The evaluation was designed with a parallel, multi-level mixed-method design, aimed at combining quantitative analysis of results and indicators with qualitative methods to understand how the programme and participants were affected by the context in which the project operates. An evaluation matrix was designed to incorporate questions of relevance to the main evaluation criteria (relevance, effectiveness, efficiency, sustainability and impact). The allocation of budget resources and time (35 days and one evaluator) did not permit a statistically significant analysis, but was valuable in garnering inputs from an equity perspective to understand what impact the project has had on the most disadvantaged groups, including women. Semi-structured interviews were held with 45 stakeholders at national and district levels concerning their perceptions of the project results, and related priorities, challenges, and capacity gaps. Field visits were conducted in two of the ten districts supported by the project, recently affected by disasters.

The project had experienced major challenges, including funding shortfalls. At the 70% implementation mark, the project had raised approximately USD 3,709, 849 or 41.9% of its five-year budget, with a shortfall of approximately USD $5,138,881. This points to the need for a mature project pipeline with a higher degree of certainty the necessary resources will be available for the spectrum of envisaged activities and interventions and a corresponding tiered approach to implementation.

In category 1, UNDP Regular Resources, only 35.4% or USD $ 1,346,427 of the USD $ 3,808,548 planned had been raised to date, due to global declines in core UNDP funding. In Category 2, external resources raised for the project at USD $ 956,350 were only 25.1% of the USD $ 3,808,548 planned, leading to a shortfall of USD $ 2,847,198, due in part, to a major anticipated contribution from the World Bank (ACP-EU Natural Disaster Risk Reduction Programme failing to materialize as hoped (a smaller amount of USD $ 581,350 was raised); similarly, anticipated funding from the African Development Bank (AfDB) did not materialize as expected. While USD $ 1,407,472 had been raised in Category 3, Funds to be Mobilized, (USD $ 168,438 over

budget), these funds were mostly for activities that were not foreseen at the time the project was designed and that largely could not be used to finance planned outputs.

## 2. *Findings*

1. **The project is regarded as being highly relevant and nationally owned**. The project is well-aligned with national priorities as expressed in the EDPRS II 2013-2018, and the national vision of building a "disaster-resilient nation". Rwanda's "homegrown solutions," often associated with its tremendous momentum in development, have been well-assimilated into the project. The project also reflects UNDP's global mandate around the strategic pillar of resilience as expressed in its 2014-2017 Strategic Plan, and clearly demonstrates the principles of "Delivering as One" in its current joint approaches to human security and landslide disaster response. Positioning a Technical Advisor within MIDIMAR has facilitated these efforts. The project exhibits strong evidence of an explicit effort to promote gender equality and the empowerment of women in its leadership structures and delivery, and reaches the highly vulnerable.

2. **The prognosis of the project to contribute to institutional sustainability is evident and promising**. MIDIMAR is perceived as a solid and credible institution, and is valued by its stakeholders, including partner ministries and institutions on the National Platform for Disaster Risk Reduction, and by the communities it serves. It has produced a continuous stream of results, effectively and efficiently, during the implementation. Within the climate of budgetary challenges, MIDIMAR has assumed financial responsibility for project pilot components that were once financed by UNDP, a positive indicator.

3. **The project has had mixed success in attaining its planned outputs and outcomes in accordance with its 2013-2018 Project Document and its Results Framework.** The project has successfully provided normative policy support in such disaster risk governance areas as the implementation of global agreements, norms and standards, such as the Hyogo Framework for Action, and the MDGs. With the project's solid and sustained technical and normative support, MIDIMAR has had substantial success in achieving many of the pillars of the Hyogo Framework for Action in all five priority areas as demonstrated in its 2015 National Progress Report. This is a significant institutional achievement for a government ministry founded in 2010. Substantial architecture in such areas as national and local development planning, policy formation, law, risk assessment, contingency planning, and early warning systems has been created in this short period, and DRR has been mainstreamed into sectoral plans. Normative policy support will be an evolving process as the Sustainable Development Goals and the Sendai Framework for Disaster Risk Reduction become fully operational regarding health, development and climate change, resilience and human security.

4. **The project design itself could benefit from strengthening**. The theory of change expressed in the relevant sections of the UNDAP Results and Resources Framework and initial five-year project document and their respective hierarchies of results is limited. In specific, the outcomes are not well-elaborated, nor are the outcome level indicators "smart." Means of verification are also often absent, and indicators focused largely on activities. There is some degree of outcome/output confusion.

5. **The project lacks a strong foundation in terms of an initial capacity assessment and a capacity development plan; a key weakness in a capacity development project that likely limits its effectiveness.** Procurement delays, followed by an unsuccessful contracting attempt, impeded the realization of a systematic capacity assessment and capacity development plan, central to the first output. Moreover, the project did not undertake baseline surveys in key knowledge and practice areas related to public information and awareness which are critical to its fifth output. Consequently, the ability of the project to foster sustained capacities and sustained public information and awareness is unclear.

## *3. Recommendations*

1. **UNDP should continue to provide normative policy support to MIDIMAR in the 2030 Agenda and the Sendai Framework for Disaster Risk Reduction.** As a central activity, the project should continue to provide normative policy support for the implementation of the 2030 Agenda, its related Sustainable Development Goals, indicators and targets, as well as the Sendai Framework for Disaster Risk Reduction.

2. **Preparedness for health and transboundary emergencies should be mainstreamed into this project, in partnership with MINISANTE, and capacity for responses to volcanic eruptions increased, in keeping with the multi hazard components of the Sendai mandate.** This should include the incorporation of inter-disciplinary, all-of-society approaches to health emergencies, the use of tabletop and real time simulations, and health worker training in disaster risk reduction.

3. **UNDP should prepare for UN Sustainable Development Frameworks (UNSDF) (2018-2022) likely replacing UNDAP by strengthening staff capacity in Rights-Based Approaches, Results Based Management and joint Causality Analyses during the balance of the 2013-2018 cycle.**

4. **UNDP should improve upon the use of clear and well-defined outcome and impact level results and their indicators and means of verification which are critical to a system-wide strategic approach planning, monitoring and reporting**. Human rights standards should become an integral part of sustainable development strategies and policies. In line with the SDGs and the World Humanitarian Summit, humanitarian action will need to move beyond repeatedly carrying out short-term interventions year after year, and move towards contributing to longer-term development gains or, when there are operational constraints hindering their ability to do so in specific contexts, operate in synergy with other actors who ensure these long-term development outcomes are achieved.

5. **UNDP/MIDIMAR should reformulate the project logic/theory of change at the earliest opportunity (certainly prior to the 2018-2022 UNSDF.)** To do so will require the adoption of a theory of change and related SMART indicators at the outputs, outcomes and impact level, along with their relevant means of verification and baseline data. If "Reduced negative impact and improved recovery of populations due to humanitarian crises" remains the impact level result, reformulated specific, measurable, achievable, reliable and timely indicators should be defined so that the impact is indeed measurable. A variation of SDG Target 11.5 could also be used: "By 2030, significantly reduce the number of deaths and the number of people affected and substantially decrease the direct economic losses relative to GDP caused by disasters, including water-related disasters, with focus on protecting the poor and people in vulnerable situations." Targets specific to Rwanda could be adopted at the impact level. The work could also contribute to SDG Target 1.5: "By 2030, build resilience of the poor and those in vulnerable situations and reduce their exposure and vulnerability to climate-related extreme events and other economic, social and environmental shocks and disasters."

6. **UNDP should improve the conceptual clarity of its interventions, and adopt outcomes that are better-aligned to the current and evolving body of knowledge on disaster risk governance.** "Disaster risk governance refers to the way is which public authorities, civil servants, media, private sector and civil society coordinate at community, national and regional levels to manage and reduce disaster and climate related risks. This means ensuring that sufficient levels of capacity and resources are made available to prevent, prepare for, manage and recover from disasters. It also entails mechanisms, institutions and processes for citizens to articulate their interests, exercise their legal rights and obligations and mediate their differences. The institutional, policy and legal arrangements for managing disasters and risks are key areas where DRG is concerned."

7. **A capacity development assessment and related capacity development plan, as well as a Knowledge and Practices baseline survey should be implemented in the 2013-2018 implementation cycle if capacity development and public awareness are ongoing MIDIMAR project component**

## *Structure of the Report*

The first chapter of the report includes an overall description of the development and context, disaster risks and hazards. The second chapter discusses the organizational context, including national priorities, the UN Delivering as One in Rwanda and the Building National and Local Capacities for Disaster Risk Management Project. The third chapter describes the purpose, objectives and key questions of the Building National and Local Capacities Project evaluation, followed by the methodology, data analysis approach and limitations. The fourth chapter discusses challenges and key observations made during the evaluation. The fifth chapter presents key findings grouped by the key criteria relevance, effectiveness, efficiency and sustainability. The sixth chapter presents specific recommendations and lessons learned.…

The second volume of annexes includes the following:

1. Proposed Theory of Change/Framework

2. List of Interviewees

3. Methodology and Evaluation Matrix

4. Bibliography and References

5. Terms of Reference

# I. DEVELOPMENT CONTEXT AND DISASTER RISKS

## 1. *Rwanda's Development Context*

Rwanda, known as the "land of a thousand hills", is a small, fertile, landlocked country in the heart of Africa. Just south of the equator, it has an area of 26,338 km$^2$. With a population of 10,515,973 in Rwanda's last census in 2012, Rwanda had Africa's 3$^{rd}$ highest population density, with 415 inhabitants per square kilometre. With current growth rates, this puts the estimated population at 11, 821,752 and 451 inhabitants per square kilometre in 2016. (NISR, 2014b with projections). About 83% of the population is rural, occupying Rwanda's lush, sub-tropical hills at elevations of up to 3,500 meters. Many eke out a sustenance on the resources they can obtain in their immediate environments; any threat to that environment exacerbates their poverty. Administratively, the country is comprised of 30 districts, which are divided into sectors, cells (cellules), and 14,953 *umudugudus* (villages of 50–100 households).

Uganda is on Rwanda's northern border and Tanzania is to the east. Conflict in both the Democratic of Congo (DRC) to the west and Burundi to the south, with their porous borders, has resulted in a mass influx of refugees during the period 2012-2016; more could still arrive, given the unresolved nature of the conflict in these fragile states. The refugees, numbering 163,000 in October 2016, are located in six refugee camps, including 85,000 new arrivals from Burundi in 2015-2016. Many of these refugees are from extremely vulnerable and marginalized groups in their countries of origin, many with little schooling or routine access to health services or shelter.

Rwanda has taken impressive strides in implementing a broad-ranging and ambitious agenda of socio-economic change that has lifted a tenth of its population out of poverty, and is directed at achieving Middle Income Country (MIC) status by 2020. Between 2001 and 2015, real GDP growth averaged at about 8% per annum. Recovering from a 2012 aid shortfall, the economy grew 7% in 2014 and 7.5% in 2015, up from 4.7% in 2013, placing it in the world's ten top GDP countries in 2015 (WB). In the past decade, average real growth exceeded eight percent, one of the highest growth rates in the world. The UN ranked Rwanda at the top of the list of the world's fastest developing countries in its latest Human Development Index in 2015, which measures 25 years of data from 1990-2015. This is especially remarkable considering that Rwanda suffered one of the world's most brutal genocides; one that claimed the lives of an estimated 800,000 of its 5,728,000 citizens in 100 days in 1994. Rwandans can now expect to live almost 32 years longer than in 1990, and spend twice as long at school. Despite these impressive gains, Rwanda was still low on the Human Development Index at 163 out of 188 countries in 2015 and faces significant challenges as a low-income, landlocked and disaster-affected country.

In 2013/2014, the Rwanda Poverty Profile Report (EICV 4) established that 39.1% of Rwandans live in poverty (down from 56.7% in 2005/06) and that 16.3% live in extreme poverty (down from 35.8% in 2005/06) (EICV 4, NISR, 2015). Poverty and extreme poverty are concentrated in rural areas, with the highest incidence in Nyamasheke district where 62% and 39.2% of the population are poor and extremely poor respectively. Burera, Rutsiro, Gisagara and Gicumbi districts have poverty rates exceeding 50%. Female-headed households are common, constituting 29.2% of all households in 2014, and bear a disproportionate share of the burden of poverty. Forty-seven per cent of female-headed households live in poverty in comparison to 44.3% of households headed by males. Poverty is highest (76.6 %) among households, male or female-headed, which obtain more than half their income from work on others' farms and are often landless. The next poorest group (76.2%) is among income earners with diversified livelihoods who obtain more than 30% of their income from farm wage work (RoR, EDPRS, 2013).

Most Rwandans are employed in the agriculture sector, with about 72% employed in subsistence agriculture. Agriculture contributes to about 33% of the GDP and is critical to achieving food security, improving nutrition and reducing poverty. Poverty and food insecurity are highly correlated with demography, health and education indicators, and have direct links to life expectancy, maternal and child health and population growth. Large family size is a driving factor. While Rwanda's fertility rate has dropped dramatically from 8.6 in 1978 to 4.0 in 2012, larger families are the norm in rural areas (4.8 people), with the women in the lowest economic quartile having two more children on average than those in the richest economic quartile (NISR, 2012).

The 2013 SAS revealed that by far the largest land use (of all land uses) was intensive hillside cropland, covering 15,350 km2 or 1.5 million hectares (NISR, 2014b). As the population increases, not only has the size of landholdings fallen, but the landholdings have become increasingly fragmented into small plots (USAID, 2013). More marginal areas are now occupied, with farms perched on slopes as steep as 55 degrees. As families tend to build residences near their crops, there is a high incidence of dwellings built on precarious lands. One-half of the population currently holds less than 0.33 ha, which significantly restricts both land productivity and the ability of a large proportion of the rural population to escape poverty (RoR, 2013). A Rwandan household requires an average of 0.9 ha of productive land to feed a family without having to take a job off-farm. Over the past decade, there has been a trend towards men and youth moving to off-farm employment, leaving more women involved in agricultural subsistence production (RoR, 2013). Women now constitute a majority of agricultural workers (World Bank, 2014a).

The Comprehensive Food Security and Vulnerability Analysis (CFSVA) in 2015 found that among the 2,437,722 households in Rwanda, 80 percent (1,963,875) are food secure, meaning that they can meet essential food and non-food needs without engaging in atypical coping strategies, have acceptable diets and use a low share of their budget to cover food needs. However, 49.8% of these (979,045 households) are considered "marginally food secure" meaning they are at high risk of becoming food insecure, given any type of shock or unanticipated event. The remaining 20% (473,847 households) are food insecure; among these 63,696 (approximately 3% of total households) are severely food insecure. Poor rural households with very small plots of land or landless laborers are the most food insecure and are also the most vulnerable to shocks that disrupt food production.

Rwanda is pursuing an aggressive green agriculture strategy valued at $600 million by 2030 and has vowed to attain sustainable food security

## 2. Disaster Risks and Natural Hazards in Rwanda

Natural hazards in Rwanda can be divided into three main categories: (i) hydro-meteorological; ii) geological and (iii) biological and technological (UNDP, 2013). Rwanda's hydro-meteorological hazards include droughts, floods, storms (windstorms, rainstorms and thunderstorms) and lightning, all of which are intensified by climate change. The geological hazards consist of earthquakes and volcanic disruptions on national borders. Landslides can be triggered from either hydro-meteorological or geological events. Biological and technological hazards consist primarily of diseases and epidemics. Poor farming practices, deforestation and environmental degradation are human triggers that exacerbate the severity of many natural hazards (REMA, 2009).

Over the past decade, the frequency and severity of natural disasters, particularly floods and droughts, have significantly increased, resulting in higher human casualties, as well as increased economic and environmental losses. The disasters have had an array of impacts ranging from mortality and morbidity, the displacement of

populations, infrastructural damage (roads, bridges, houses, schools and other properties), crop destruction and serious environmental degradation.

## 2.1 HYDRO-METEOROLOGICAL HAZARDS

Hydro-meteorological hazards such as floods and droughts have affected the most people in Rwanda over the past two decades (UNDP, 2013). Over the 33-year period from 1974 to 2007, drought affected about four million Rwandans, whereas two million were affected by floods (Zimmerman & Byizigiro, 2012).

### 2.1.2 Droughts

Prolonged dry seasons or delays in the onset of the rainy season are the main triggers for droughts in Rwanda. Between 1998 and 2000 and annually from 2002 to 2005, there have been recurring drought incidences that have resulted in crop failure and serious food insecurity, malnutrition and famine in affected areas. Water shortages also hampered livestock production and the quality and quantity of pasture also declined (UNDP, 2013). The districts of Bugesera, Nyagatare, Gatsibo, Kayonza, Ngoma and Kirehe in the Eastern Province and the eastern parts of Nyanza and Gisagara districts in the Southern Province are most prone to drought. These districts suffer from a high frequency of rainfall deficit, late rainfall onsets, early rainfall cessations, and a significant number of dry spells (MIDIMAR, 2015). Drought conditions can contribute to the susceptibility to forest fires. There were major fire outbreaks in Nyungwe National Park in 2005 and Virunga National Park in 2009. The latter spread to the top of Mount Muhabura in the Volcanoes National Park, consuming 150 ha of the park. Recurrent droughts are likely to have a significant impact on long-term vegetation cover as well as on soil conditions (UNDP, 2013). With the continued change in climate and climate variability, droughts could occur more frequently and last longer, especially in the Eastern Province causing communities to suffer from the effects of destroyed crops, animals and livelihoods (MIDIMAR, 2015).

In 2016, Rwanda experienced its worst drought in 60 years in two consecutive planting seasons, associated with an increase in temperatures, delayed rains and floods and landslides, that are associated primarily with climate change. Some 78,000 households were affected by the drought in three primary districts in Eastern Province, due primarily to crop failure and the loss of at least 2,000 cattle, according to the Ministry of Agriculture. The government extended food support to households that faced acute food shortages, as well as some 160 tonnes of drought-resilient seeds.

### 2.1.2 Floods

Floods are the world's most common natural hazards affecting 80 per cent of the global population. It is estimated that more than one third of the world's land area is flood-prone. Floods alone killed 100,000 persons and affected over 1.4 billion people during the 20th century worldwide (Jankman, 2005). Due to its dense river network and large wetlands, Rwanda is threatened mainly by riverine floods, or floods caused by rivers running outside of their natural boundaries. According to the Stockholm Environment Institute (2009) and REMA (2010), major flood events occurred in 1997, 2006, 2007, 2008, and 2009, resulting in infrastructure damage, fatalities and injuries, landslides, loss and damage to agricultural crops, soil erosion and environmental degradation. Approximately 78,000 people were affected during this period, 130 of whom lost their lives.

### 2.1.3 Storms

Wind storms in Rwanda can reach up to 20-25 Knots, damaging roofs, banana plantations and other facilities such as schools that are mainly made of inferior materials, as well as downing electric lines and causing power

outages. Windstorms with heavy rain destroyed many houses and schools in low-lying districts of Eastern and Southern provinces, including Rwamagana, Kayonza, Kirehe, Gatsibo, Bugesera, Nyagatare, Ngoma and Gisagara, among others). In 2011 and 2012, heavy rainfall associated with storms also severely affected Rwamagana, Kayonza, Gatsibo, Ngoma, and Kirehe districts in the Eastern Province, damaging buildings and hectares of banana plantations, among other crops, affecting 3600 people. Generally heavy rains caused rivers to flood, with ensuing crop damage. The flat topography, with few wind breaks such as trees, contributed to the vulnerability to wind damage, as did the poor quality of construction materials.

### 2.1.4 Lightning

Rwanda is considered to have one of the world's highest prevalence of lightning, with the town of Kamembe, adjacent to Lake Kivu, experiencing 82.7 ground strikes per km2, one of the world's highest densities. This is attributable to two prolonged rainy seasons with heavy storms, and the proximity to the lake. Lightning kills an estimated 40-50 people per year, although all deaths may not be reported.

## 2.2 GEOLOGICAL HAZARDS

### 2.2.1 Volcanic eruptions

Located in the East African Rift Valley near the active Nyiragongo volcanoes, Rwanda is vulnerable to the effects of volcanic eruptions. This is a particular hazard in north-western Rwanda, around the city of Rubavu. Perched on Rwanda's north western border, about 20 km north of Goma in the DRC and Lake Kivu, Mount Nyiragongo is an active stratovolcano with an elevation of 3,470 metres (11,380 ft.) located inside Virunga National Park. Mount Nyiragongo, and nearby Mount Nyamuragira together are responsible for 40% of Africa's historical volcanic eruptions. Nyiragongo has erupted at least 34 times since 1884; the 2002 eruption killed 67 people and displaced approximately 400,000, an estimated 300,000 of whom fled into Gisenyi and Ruhengeri in Rwanda (UN-OCHA). Per UN-OCHA, the most likely contingency planning scenario for volcanic and seismic activity is catastrophic seismic activity producing lava flows very near to, or within Goma town, Gisenyi town, or Lake Kivu. Earlier this year, a new intra-crater flank vent opened at the north-eastern margin of the summit caldera's floor, which could be a precursor of a new flank eruption. Aside from a population influx, in quantities of 4-6 inches, volcanic ash could have serious detrimental effects on agricultural crops and livestock in Rwanda's northwest sector. Activity at the volcano has been intense over recent months and is being closed monitored.

### 2.2.2 Earthquakes

Rwanda straddles Africa's Kibaran and Western Rift zones. In western Rwanda lies the less prominent East Lake Kivu border fault, part of the Eastern African Rift System (EARS), which is the main source of seismic activity in Rwanda. Five earthquakes between 2002 and 2008, resulted in the death of 85 people, with many more injured and the widespread destruction of infrastructure, including houses, schools, clinics and hospitals. The three districts of Rubavu, Rusizi and Nyamasheke in Western Province are typically the most affected.

### 2.2.3 Landslides

Landslides are a major hazard in Rwanda, leading to significant levels of loss of life, shelter, livelihoods and injury. Both rotational and translational slides have been noted. Mass movements of land can be triggered by either hydro-meteorological or seismic events. Most often the recorded events are not well georeferenced and the inventory is challenging.

On May 7-8, 2016, Gakenke District was affected by a series of landslides that occurred in almost all sectors in the district. The landslides were triggered by torrential rains caused by the El Niño phenomenon. The sustained heavy rains also caused some flooding in Muhanga and Ngororero Districts on May 9th, 2016.

Gakenke District authorities reported that the landslides caused the death of 34 people and injured 19. Almost 1,500 houses were damaged, rendering approximately 6,031 people homeless, at least half of whom were children. About 1,632 hectares of agricultural land were destroyed, 180 hectares of marshland were destroyed and 777 livestock lost.

## 2.3 BIOLOGICAL HAZARDS

According to Rwanda's Ministry of Health, MINSANTE, Rwanda has often faced epidemics which include emerging and re-emerging infectious diseases, and is classified as a high-risk country. Rwanda's EID (Epidemics and Infectious Disease) Division is one of the organizational units in the Rwanda Biomedical Centre (RBC) supervised by the Ministry of Health, and has a key cross-cutting role in the areas of surveillance and response. The EID Division is comprised of four units: 1) Surveillance; 2) Avian Influenza and Highly Pathogenic Disease; 3) Food and Waterborne Disease; and 4) Outbreak Preparedness and Response. While Rwanda has been implementing an Integrated Disease Surveillance and Response (IDSR) system since 2000 and has developed guidelines and mechanisms to address health emergencies and epidemic preparedness in accordance with international health regulations, there are still challenges regarding timeliness, incompleteness of reporting and the linkage of IDSR to the Health Management Information System (HMIS) and other e-Health systems.

Rwanda reports on 19 infectious diseases, which can be clustered into the following groups: 1) Food or Waterborne Diseases; 2) Vector Borne Diseases, 3) Zoonotic Diseases; 4) Respiratory Diseases; 5) Diseases Acquired through Contact with Infected Soil. The latter two groups – respiratory illnesses and diseases acquired through contact with infected soil – are largely vaccine-preventable. Rwanda has made remarkable progress on vaccinations, with rates exceeding 95% in most cases, so related diseases, including diphtheria, influenza type b, measles, meningococcal meningitis, mumps, pertussis/whooping cough, pneumococcal disease, rubella/German measles, tetanus and varicella, along with Hepatitis B, polio, rotavirus, tuberculosis, and HPV have decreased in risk and incidence. While these diseases may still occur on a case by case basis, their potential for a pandemic or large outbreak is low, provided immunization rates are maintained, except for influenza, which has many strains.

However, the first three groups – food and waterborne diseases, vector borne diseases and zoonotic diseases - still pose significant threats for pandemics. Those threats are heightened by the presence of emerging and re-emerging infectious diseases in bordering countries, as well as globalization and air travel. While the surveillance efforts of the Ministry of Health are impressive, risks are still high around complex zoonotic and vector-borne diseases which can be introduced by wildlife or people. Newly-infected persons may also be asymptomatic or in an early incubation period crossing borders in the first days of infection, when the disease is not possible to detect, as happened when SARS was introduced in Canada in 2003, Ebola in the United States in 2014, and MERS in South Korea in 2015 (186 cases/36 fatalities), among others.

### 2.3.1 Food or Waterborne Diseases Acquired Through Eating or Drinking

**Cholera:** a bacterial disease most likely to be found and spread in places with inadequate water treatment, poor sanitation, and inadequate hygiene. Drinking infected water or even just using it to wash foods, kitchen utensils or culinary items can lead to transmission of the infection. In the aftermath of the Rwanda crisis in 1994, outbreaks of cholera resulted in 48,000 cases and 23,800 deaths within one month in Rwandan refugee

camps in Goma, considered the modern era's worst outbreak. Rwanda reported 1453 cases in 2007, incidence has subsequently declined, although at least 60 cases were reported in Rubavu in 2016, primarily among refugees. In 2015, 19,705 cases of cholera were reported in DRC (WHO).

**Typhoid fever:** a bacterial disease spread through contact with food or water contaminated by fecal matter or sewage; victims exhibit sustained high fevers; left untreated, mortality rates can reach 20%. As of 5th January 2016, 1,183 suspected cases had been reported and 23 blood and 15 stool samples taken from the suspected cases, of which 9 were tested positive for Salmonella Typhi, in Muhama Camp, housing Burundian refugees.

**Viral gastroenteritis**: a highly contagious viral disease that is commonly transmitted by people with unwashed hands. Transmission is associated by close contact with infected individuals by sharing their contaminated food, drink, or eating utensils.

### 2.3.2 Vector Borne Diseases Acquired Through Bites of Infected Arthropods

**Malaria**: a disease caused by single-cell parasitic protozoa Plasmodium; transmitted to humans via the bite of the female Anopheles mosquito; parasites multiply in the liver attacking red blood cells resulting in cycles of fever, chills, and sweats accompanied by anemia; death due to damage to vital organs and interruption of blood supply to the brain. Nineteen (63%) of the country's 30 districts are classified as epidemic-prone and the remaining 11 as endemic or high burden districts. These include: Bugesera, Gatsibo, Kabutare, Kamonyi, Kayonza, Kirehe, Muhanga, Ngoma, Nyanza, Ruhango, and Rwamagana., which account for 76% of all malaria cases. Following a decade of success in reducing malaria, in recent years Rwanda has seen a dramatic increase in reported malaria cases, from an estimated 225,176 cases in 2011 to 1,957,000 in 2015, almost a 10-fold increase, with 424 related deaths in 2015. A driver is thought to be climate change which creates new reservoirs and expands the geographical range, although social and trans-border issues may be compounding factors. The Ministry of Health and partners are supplying millions of treated mosquito nets countrywide, extending Indoor Residual Spraying practice to eight districts, and promoting fish farming that aims to plant a million tilapia in lakes to consume mosquito lava, as well as mass malaria drug inspection. To exacerbate matters, the US President's Emergency Plan for AIDS Relief and the Global Fund to Fight AIDS, Tuberculosis and Malaria have reduced assistance to Rwanda by 40% over the past three years, despite these alarming developments.

**Yellow fever:** a mosquito-borne viral disease; the severity of which ranges from influenza-like symptoms to severe hepatitis and hemorrhagic fever; occurs only in tropical South America and sub-Saharan Africa, where most cases are reported; fatality rate is less than 20%. Vaccine-preventable. While Rwanda has not reported any cases directly, there have been serious outbreaks of yellow fever in neighboring countries, with 2,987 notified cases in the DRC in all 26 provinces during the period Jan 1—Oct 20, 2016, of which 78 have been confirmed to date (WHO). A yellow fever outbreak was confirmed in Uganda on 8 April 2016. A total of 60 suspected yellow fever cases were reported between April and June, with seven cases testing positive in 3 districts (five in Masaka, one in Kalangala and one in Rukunqiri).

### 2.3.3 Zoonotic Diseases Acquired Through Contract with Affected Animals or Wildlife

**Crimean-Congo Hemorrhagic Fever (CCHF):** a widespread tick-borne viral disease that is endemic in Africa. The virus is a member of the Bunyaviridae family of RNA viruses. It is a zoonotic disease carried by several domestic and wild animals. While clinical disease is rare in infected animals, it is severe in infected humans, with a mortality rate of 10-40%. Outbreaks of illness are usually attributable to Hyalomma tick bites or contact with infected animals or people, with agricultural workers most at risk. CCHF is one of several viral

diseases identified by WHO as a likely cause of a future epidemic. Cases have been reported in both Uganda and DRC, the most recent being in Uganda in 2013, with three reported cases, two Fatalities.

**Ebola virus disease (EVD):** a complex viral zoonotic that is highly virulent in humans. Ebola, previously known as Ebola hemorrhagic fever, is a rare and deadly disease caused by infection with one of the Ebola virus species. Ebola can cause disease in humans and nonhuman primates (monkeys, gorillas, and chimpanzees). Ebola is caused by infection with a virus of the family Filoviridae, genus Ebolavirus**.** In 2014, 62 cases of Ebola hemorrhagic fever were reported in the DRC (14 confirmed, 26 probable and 22 suspect cases), leading to 35 deaths (WHO).

**Influenza:** There are 3 types of influenza viruses: types A, B, and C. Influenza A viruses infect humans and many different animals. Influenza B viruses only circulate among humans and cause seasonal epidemics. Influenza C viruses can infect both humans and pigs but infections are generally mild and are rarely reported. Rwanda's Penta 3 vaccination includes haemophilus influenza type B, and targets for 2016 are 96% of children. However, humans can be infected with avian and other zoonotic influenza viruses, such as avian influenza virus subtypes A(H5N1), A(H7N9), and A(H9N2) and swine influenza virus subtypes A(H1N1) and (H3N2), which are primarily acquired through direct contact with infected animals or contaminated environments. These influenza viruses pose the highest risk for pandemics.

**Marburg**: a severe and highly fatal disease caused by a virus from the same family that causes Ebola virus disease. Case fatality rates in Marburg outbreaks have ranged from 24% to 88%. *Rousettus aegypti*, fruit bats of the *Pteropodidae* family, are the national natural hosts of Marburg virus. Marburg can cause an outbreak like Ebola in West Africa. The last outbreak of MVD in Uganda occurred in 2012 in which 20 cases, including 9 fatal cases, were reported from Kabale District, Kampala, Ibanda, Mbarara, and Kabarole. In 2014, Uganda confirmed a case of Marburg viral haemorrhagic fever disease (MVD).

**Middle East Respiratory Syndrome (MERS)**: a viral illness caused by a virus (more specifically, a coronavirus) (MERS-CoV). Most MERS patients developed severe acute respiratory illness with symptoms of fever, cough and shortness of breath. Camels are likely the vector, although the disease is subsequently spread from human to human. The disease has a 30-40% case fatality rate and is considered of high concern for epidemics (WHO), As of 10 March 2016 the World Health Organization (WHO) global case count for MERS was 1,651 laboratory-confirmed cases, including at least 590 deaths (case fatality rate 36%) since the first cases were reported in September 2012. Qatar, with which Rwanda has direct flight service, is a directly affected country.

**Plague:** a zoonotic bacterial disease transmitted by fleas normally associated with rats. Direct person-to-person transmission does not occur except in the case of pneumonic plague, when respiratory droplets may transfer the infection from the patient to others in close contact. Recent plague epidemics occurred in areas of Asia, Africa, and South America associated with rural areas or small towns and villages; manifests as fever, headache, and painfully swollen lymph nodes; disease progresses rapidly and without antibiotic treatment leads to pneumonic form with a fatality rate exceeding 50%. 18 cases of the plague were reported in DRC in 2015, as were 3 cases in Uganda.

**Rabies:** a viral disease of mammals usually transmitted through the bite of an infected animal, most commonly dogs; the virus affects the central nervous system causing brain alteration and death; symptoms initially are non-specific fever and headache progressing to neurological symptoms; death sometimes occurs within days of the onset of symptoms. This disease is often under-reported, especially in remote areas.

**Rift Valley Fever (RVF):** a viral zoonosis that primarily affects animals but also has the capacity to infect humans. Infection can cause severe disease in both animals and humans. The disease also results in significant economic losses due to death and abortion among RVF-infected livestock. This acute fever is transmitted by mosquitoes during the rainy season and affects animals such as cattle, sheep, goals and buffaloes, as well as humans. Endemic to eastern and southern Africa where cattle and sheep are raised. During an outbreak of RVF, close contact with animals, particularly with their body fluids, either directly or via aerosols, has been identified as the most significant risk factor for RVF virus infection in humans. The case fatality rate for people infected by RVF is approximately 1%. Symptoms are generally mild with fever and some liver abnormalities, but the disease may progress to hemorrhagic fever, encephalitis, or ocular disease. Uganda reported two deaths in 2016 due to Rift Valley Fever

# II. THE ORGANIZATIONAL CONTEXT

## *1. Rwanda's National Development Priorities*

Rwanda's long-term development goals are defined in a strategy entitled "Vision 2020" that was adopted in 2000 and revised in 2011. This far-sighted strategy seeks to transform the country from a nation with a low-income agriculture-based economy to a knowledge-based, service-oriented economy attaining middle-income country status by 2020.

To achieve these ambitious, long-term development goals, the Government of Rwanda adopted two medium-term strategies. The first Economic Development and Poverty Reduction Strategy (EDPRS I) from 2008-2012 gave priority to accelerating growth, creating employment and generating exports. These were outlined in three flagship programmes: Growth for Jobs and The Exports, the Vision 2020 Umurenge (VUP), and Good Governance. The achievements under EDPRS 1 have been described as the perfect development "hat trick" of growth, poverty reduction and reduction in inequality which have put Rwanda on track to achieve the Millennium Development Goals (MDGs). Economic growth averaged 8.2% over the period while poverty reduced from 56.7% to 44.9% allowing more than 1,000,000 Rwandans to be lifted out of poverty in less than five years. Income inequality, as measured by the gini-coefficient, also reduced to 0.49 in 2011 below the level of 2001. (WB Gini Index, national data).

The EDPRS II aims to continue to implement Rwanda's Vision 2020, ensuring that the country achieves middle-income status by 2020 by accelerating economic growth to (11.5% average), reducing poverty to below 30%, and restructuring the economy towards services and industry. Its main targets relate to: strategic infrastructure investment for exports; more private sector financing to increase exports; urbanisation; and a green economy approach to sustainability. The approach is organized in four thematic areas: (i) economic transformation, (ii) rural development, (iii) productivity and youth employment, and (iv) accountable governance. By 2018, the EDPRS 2 aims to raise the gross domestic product (GDP) per capita to $1,000 and attain rates of less than 30% of the population living below the poverty line and less than 9% of the population living in extreme poverty. (EDPRS II)

The EDPRS II, unlike its predecessor, notes that Rwanda is no exception to the increased global impact of natural and other disasters, and requires a systematic strategy to address the effectiveness of preparedness, response and recovery (Sections 6.57 and 6.58). It states the success of EDPRS II as a conduit for development programmes cannot be assured when there are unpredictable disasters, unless such events are well mitigated. It states that the vision "to build a disaster resilient nation" will therefore require consolidated efforts and a good understanding of each actor's responsibilities.

The EDPRS II addresses the theme of disaster management and disaster risk reduction as crossing-cutting issues, for mainstreaming in all priority sectors, the most significant of which are specified as agriculture, infrastructure, education, environment and natural resources, private sector development, energy, urbanisation, information communication technology, health, youth and social protection. Measures include investment in rapid response disaster management equipment, early warning systems, and awareness campaigns directed to residents of vulnerable areas.

It acknowledges that disaster management is a complex development issue which requires political and legal commitment, public understanding, scientific knowledge, careful development planning, responsible

enforcement of policies and legislation, people-centered early warning systems, and effective disaster preparedness and response mechanisms.

It further confirms that the GoR has committed to internationally agreed conventions for acceleration of development such as the MDGs and the Hyogo Framework for Action 2005-2015.

## 2. Institutional Framework for Disaster Management in Rwanda

There is a decentralized institutional framework for Disaster Management in Rwanda. The National Disaster Management Executive Committee (NDMEC) is the highest Disaster Management decision-making body at the Cabinet level and is chaired by the Honorable Minister of Disaster Management and Refugee Affairs (MIDIMAR). The National Platform for Disaster Risk Reduction (NPDRR) has also been established, with stakeholders from both public and private agencies; MIDIMAR is the Secretariat. This platform engages international and national organizations including NGOs and donors.

The functions of the National Platform for Disaster Risk Reduction functions include:

- Networking and sharing information, experiences and technical expertise nationally, regionally and internationally;
- Developing and implementing the disaster management policy and mainstreaming Disaster Risk Reduction (DRR) in development processes such as policy formulation, socio-economic development planning, budgeting, and governance;
- Monitoring and analysis of hazard risk trends in the Country and establishment of baseline information for DRR, including disaster and risk profiles, national policies, strategies, capacities, resources and programmes
- Developing and reviewing relevant preparedness, contingency and response plans in Rwanda;
- Participating in the assessment of the impacts and needs arising from disasters in Rwanda;
- Collaborating with lead institutions to monitor and respond to disasters;
- Preparing and updating manuals, guidelines, plans or other procedures for the entry and coordination of Disaster Relief and Initial Recovery Assistance;
- Compiling and updating information on existing bilateral, regional and international coordination mechanisms applicable to Rwanda, and provide technical advice to the Ministry on further development of such mechanisms;
- Developing and maintaining a list of personnel nominated by the relevant Ministries to participate in Single Window International Facilitation Teams (SWIFTs) and to assist the Ministry to convene the SWIFTs immediately upon the commencement of an International Disaster Relief Period, if required for the volume of International Disaster Assistance expected;
- Developing technical quality standards for Disaster Relief and Initial Recovery Assistance;
- Adopting a disaster risk reduction approach that is holistic, comprehensive, integrated, and proactive in lessening the socio-economic and environmental impacts of disasters including climate change, and that promotes the involvement and participation of all sectors and all stakeholders concerned, at all levels, especially the local community; in ensuring that DRR measures are gender responsive and respectful of human rights;
- Strengthening the capacity of SDMC and DDMC for all aspects of disaster management through decentralized powers, responsibilities, and resources;
- Developing result-oriented work plans for DRR;

- Monitoring, recording and reporting on disaster management actions at national and community levels in Rwanda

At the district level, District Disaster Management Committees (DDMCs) are chaired by the mayor of the District, and Sector Disaster Management Committee (SDMCs) form the local structures of the framework at the district and sector levels respectively.

## 3. The United Nations in Rwanda Delivering as One

Rwanda is one of eight countries—Albania, Cape Verde, Mozambique, Pakistan, Rwanda, Tanzania, Uruguay, and Viet Nam—that volunteered to be "Delivering as One" (DaO) pilot countries for the UN system, to capitalise on the strengths and comparative advantages of the different agencies of the UN family. In Rwanda, this entails 22 UN organizations, which include FAO, IFAD, ILO, IOM, ITC, OHCR, UN-HABITAT, UN Women, UNAIDS, UNCDF, UNCTAD, UNDP, UNECA, UNEP, UNESCO, UNFPA, UNHCR, UNICEF, UNIDO, UNV, WFP and WHO. Collectively, the countries are experimenting with ways to increase the UN system's impact through more coherent programmes, reduced transaction costs for governments, and lower overhead costs for the UN system. The eight pilot countries are making UN reforms based on five principles: One Programme, Common Budgetary Framework (and One fund), One Leader, Operating as One, and Communicating as One.

In Rwanda, the DaO approach has been credited with helping to align UN programmes and funding more closely with national priorities. Its final evaluation found that it has strengthened government leadership and ownership and has ensured access to the experience and expertise of a wider range of UN agencies. The first piloting phase was from 2008-2013 and the corresponding joint plan and results were presented in a United Nations Development Assistance Framework (UNDAF) and subsequent evaluation report.

Rwanda is now in its second phase of DaO for the period 2013-2018. The Rwanda UNDAP supports the realization of the Millennium Declaration, related Millennium Development goals (MDGs) and other international development aspirations, the transition from the MDGs to the post-2015 framework, and the country's medium-term national development priorities as set out in the Economic Development and Poverty Reduction Strategy (EDPRS 2) for the period 2013-2018, as well as the Rwanda Vision 2020. The Rwanda United Nations Development Assistance Plan (UNDAP) was budgeted at $411,599,656 for 2013-2018. The overall governance structure and programmatic priorities of the UN System at country level in Rwanda, as expressed in its UNDAP 2013-2018, are aligned, both vertically and horizontally, with national priorities and plans. It focuses on three core programme focus areas through which the UN contributes to the national development agenda: I) Inclusive Economic Transformation (US $87,650,555); II. Accountable Governance (US $42,478,469) and III. Human Development/Foundational Issues (US $280,072,048) (with Humanitarian Response and Disaster Management as a sub-area, initially budgeted at $121,547,090).
While the UNDAP has three strategic areas, it is implemented through four Development Results Groups (DRGs). While some of the *Building National and Local Capacities for Disaster Risk Management in Rwanda* project's outputs were originally included in first Development Result, Inclusive Economic Transformation, because of their linkages to climate change, they were subsequently shifted to Humanitarian Response and Disaster Management, currently DRG 4.

## 4. The Building National and Local Capacities for Disaster Management Project

**Background**. The "*Building National and Local Capacities for Disaster Management in Rwanda"* project is a Disaster Risk Management (DRM) capacity development initiative initiated by UNDP in 2013. The five-year project built upon the Project Initiation Plan for a National Capacity Building for Disaster Risk Management Programme signed in 2011 by UNDP and Ministry of Disaster Management and Refugee Affairs (MIDIMAR), the implementation of which ended in 2013.

The project was designed to address several key capacity gaps in DRM in 2013. These included (1) a limited and weak capacity within MIDIMAR and other relevant national institutions to advance and operationalize a DRM agenda including multi-sectoral mainstreaming; .(2) a prevailing lack of coordination among relevant ministries and key stakeholders; (3) inadequate disaster risk knowledge at all levels of Government, with a corresponding lack of public awareness; (4) an absence of an end-to-end Early Warning Systems and disaster preparedness capacities at all levels. These gaps cut-across the tiers of enabling environment, organizational and individual capacities.

**Purpose**. The *Building National and Local Capacities for Disaster Management in Rwanda* project (July 2013-June 2018) aims to respond to the government's mandate of building a disaster-resilient nation as envisioned in the EDPRS II; by helping the Government of Rwanda strengthen its Disaster Risk Management capacity, enhance preparedness and reduce risks, and achieve its global commitment to the Hyogo Framework for Action (HFA) and the MDGs. MIDIMAR is the primary implementing partner of the project, which aims to build national capacities for disaster risk management through advisory, policy and technical support to render an effective disaster risk management system fully operational at the national and local levels. The Government also aimed to develop local disaster management bodies and local government capacity to stimulate grassroots DRR initiatives by establishing First Responder Teams in all sectors and deploying District Disaster Management Officers in all districts (MIDIMAR, 2013a).

**Budget** The 5-year project was budgeted at USD $ 8,845,459.77, with three primary designated sources 1) UNDP Regular Resources 43% (USD $3,803,548); 2) External Resources 43% (USD $3,803,548), including WB/EU/ACP approved funding/GFDRR (USD $581,350) and a soft pipeline under a proposal to AfDB of (USD $3,222,198), and 3) to be mobilized 14% (USD $1,238,364.26).

**Outputs.** The project has five inter-related outputs.

**Output 1:** Enhanced capacities of national and local institutions to manage disaster risks and recover from disaster events; including improved national and local coordination mechanisms (49% of budget or US$ 4,347,623)
**Output 2:** DRR mainstreamed into national/district/sectorial plans and policies; and capacities on DRM Planning enhanced. (2% of budget or US$ 190,000)
**Output** 3: A functioning national disaster risk assessment and monitoring system (DRAMS) established. (17% of budget or US $ 1,313,955).
**Output 4:** End-to-end early warning systems established and operational. (13.3% of budget or)
**Output 5:** Reduced community vulnerabilities and increased household resilience in selected high-risk districts and increased public awareness on DRR. (20.4% of budget or US $ 1,812,427).
The project document included 20 targets relating to these outputs and 52 activities. The current status of those targets in 2016 is discussed in Chapter IV.

**Monitoring and Evaluation Plan.** The project's monitoring and evaluation plan listed various standard UNDP policies and procedures outlined in the UNDP User Guide, including quarterly reports, issue logs, risk logs, project progress report, annual reports, lessons learned and annual work plans.

**Implementation Arrangements.** At the national level, MIDIMAR was designated as the main implementing partner of the project, in charge of overall project coordination and management under the guidance and oversight of the Project Board or the Project Steering Committee. As such, MIDIMAR was accountable for the project activities and the judicious use of project funds. The project was designed to be implemented over a period of 5 years in line with the current UNDAP (2013-2018).

A Project Board (Project Steering Committee) was composed of three roles within the project management structure namely, the Executive, Senior Beneficiary and Senior Supplier. The Executive role was assumed by the Honourable Minister or Permanent Secretary of MIDIMAR. The Senior Beneficiary was the Honourable Ministers or Permanent Secretaries of MINECOFIN and MINALOC (or any designated representative) representing the NPDRR. The Senior Supplier is the Country Director of UNDP or his designated representative. These three were to comprise the minimum required members of the Project Board (Project Steering Committee) and be the quorum for an official Joint Project Steering Committee (JPSC).

The JPSC was to review and approve project work plans and periodic reports including the results of mid-term and final project evaluation reports.

At District level, the District Governments were designated to provide technical assistance, coordination and support to the implementation of the project and ensure that it was consistently aligned with the District Development Plans and priorities including the District Performance Contract (*Imihigo*).

**Partnership Strategy.** The project sought to build on a strong pre-existing collaboration and partnership between MIDIMAR, REMA, and RMA including the Rwanda Red Cross, the Rwanda National Police (RNP) in establishing the early warning systems for effective disaster preparedness. It was planned that the partnership would be sustained and further strengthened under this project. The project also sought to build on the achievements of the UNDP supported project "Reducing Vulnerability to Climate Change by Establishing Early Warning and Disaster Preparedness Systems and Support for Integrated Watershed Management in Flood Prone Areas" which is implemented by REMA.

# III. THE MID TERM EVALUATION

## *1. Purpose, Objectives and Key Evaluation Questions*

### 1.1 PURPOSE

This Mid-Term Evaluation (MTE) 2013-2016 is an independent external assessment of the Government of Rwanda's and UNDP's progress in attaining the results of its 2013-2018 Project, MIDIMAR. The evaluation seeks to examine the results, achievements and constraints in the implementation of the project "Building National and Local Capacities for Disaster Management in Rwanda". The Project, which was initiated in June 2013 will end in June 2018, is at its 30th month of implementation. The findings and recommendations of the evaluation and lessons learned will inform any changes in the implementation of the project in its final thirty months. The Evaluation also seeks to assess UNDP's contribution to the achievement of UNDAP Outcome 3: "Rwanda has in place improved systems for: sustainable management of the environment, natural resources and renewable energy resources, energy access and security, for environmental and climate change resilience, in line with Rio+20 recommendations for sustainable development."

The primary users of the MTE are the Government of Rwanda, UNDP and other UN agencies in the Delivering as One Country Programme, donors, civil society organizations, academic institutions, and implementing partners. It is aimed primarily at decision-makers who need to know how to strengthen the role and contribution of the UN system to support national policies and strategies towards achieving development results.

The MTE is timed at a strategic moment following the 2015 international adoption of the Sendai Framework for Disaster Risk Reduction 2015-2030, which is the successor instrument to the Hyogo Framework for Action (2005-2015): Building the Resilience of Nations and Communities to Disasters. The Sendai framework places a stronger emphasis on disaster risk management, as opposed to disaster management, and defines seven global targets. Moreover, the nearly simultaneous adoption of the 2030 Agenda for Sustainable Development and the Sustainable Development Goals (SDG's) with its large number of targets and indicators, will have broad implications for both governments and the UN development system at country, regional and global levels. Considerable attention is now being invested in the harmonization and alignment of both at an international level. Both MIDIMAR and the UN in Rwanda will need to adapt their results, planning and reporting systems in the remaining implementation phase.

### 1.2 SPECIFIC OBJECTIVES OF THE MID-TERM EVALUATION

These objectives were defined in the Terms of Reference (See Annex 5)

- Assess the Project's implementation strategy;
- Assess the relevance, efficiency, effectiveness, sustainability, and impact of the interventions;
- Assess the Project's processes, including budgetary efficiency;
- Assess the extent to which planned activities and outputs have been achieved;
- Identify the main achievements and impacts of the project's activities;
- Identify the underlying causes and issues of non-achievement of some targets;

- Document lessons learned;
- Make recommendations for the project's remaining implementation period.

## 1.3 KEY EVALUATION QUESTIONS

The key evaluation questions were clustered in accordance with the following key evaluation criteria and preliminary questions were identified.

**a) Relevance** – defined as the responsiveness of the UN strategy and content, and its implementation mechanisms, to the needs and capabilities of the intended beneficiaries (including national institutions, communities, and policy frameworks);

**b) Effectiveness** – the extent to which UN project results are being achieved;

**c) Efficiency** – the return on investment of human and financial resources in terms of delivering the development results,

**d) Sustainability** – the extent to which results can be sustained over time.

These preliminary questions were cited in the ToR, and then further expanded and refined in the evaluation matrix. See Annex 3, MTE Evaluation Matrix.

| | |
|---|---|
| Relevance | Where is this project being implemented? How was the project site selected? What has been the main focus of the project implementation so far? Who are the main beneficiaries? How were they selected? How was the project aligned to the national development strategy (EDPRS II, Vision 2020?) |
| Effectiveness/ Efficiency | What have been the impacts of the project? Of the capacity building/training? Were qualified trainers available to conduct training? What has been the main impact of the project on the Disaster Management framework in Rwanda? What has been UNDP support towards the attainment of the outcome and outputs? How was the partnership strategy delivered by UNDP? Has the UNDP partnership strategy been effective and appropriate? What factors contributed to effectiveness or ineffectiveness? What were the synergies with other projects? |
| Sustainability | What was the original budget for the project? How have the project funds been spent? Were the funds spent as originally budgeted? How was the mobilization strategy conducted? Are there any management challenges affecting the effective implementation of the project? What are they and how are they being addressed? |
| | To what extent have the design, implementation and results of the project incorporated environmental sustainability? What should be done to improve environmental sustainability mainstreaming? |
| | To what extent have the design, implementation and results of the project incorporated gender equality and a human rights based approach? What should be done to improve gender equality and human rights mainstreaming? |

## 2. *Methodology*

### 2.1 PARALLEL, MULTI-LEVEL MIXED METHOD DESIGN

The evaluation was designed with a parallel, multi-level mixed-method design, aimed at combining the quantitative analysis of results and indicators with qualitative methods to understand how the programme and participants were affected by the context in which the project operates. While the allocation of budget resources and time (35 days and one evaluator) did permit a statistically significant analysis, nevertheless, this approach will facilitate a more in-depth understanding than a desk review in isolation and is particularly valuable in garnering inputs from an equity perspective to understand what impact the project has had on the most disadvantaged groups, including women.

"Parallel" refers to the quantitative and qualitative aspects of the analysis being performed at the same time, rather than sequentially.

"Multi- level" corresponds to the primary levels of intervention: national, and district. While most of work was directed at the national level, where UNDP's substantial "upstream" policy efforts are largely directed, the evaluation also examined implementation at the district level, where pilot project activities were focused.

Three of the ten districts supported by the project, with an emphasis on those recently affected by disasters, were chosen, including Gakenke in Northern Province, Ngororero in Western Province and Muhanga in Southern Province. However, due to competing demands on district officials' time, field work in Muhanga was not possible.

### 2.2 TRIANGULATION.

Triangulation, or the concept of validating data through cross-verification from two or more sources or research methodologies in the study of the same phenomenon, was used to the extent practicable within a short evaluation, to cross-check the reliability and validity of results, both within the qualitative and quantitative spheres of the evaluation. Illustratively, preliminary results from such techniques as a desk review or portfolio analysis were combined with key informant interviews and observational techniques to corroborate or dispel related findings, and to add perspective and richness to those findings.

### 2.3 GENDER ANALYSIS.

The evaluation employed a "gender lens," both at upstream and downstream levels. Recognizing that women and girls shoulder a disproportionate share of the burden of poverty and disasters, the evaluation looked specifically at how strategies are formulated to address gender inequities, and at how data are formulated and progress monitored through the consistent application of gender-sensitive approaches.

### 2.4 DONOR PERSPECTIVE.

Acknowledging the critical role donors have played in establishing the international platform for disaster risk reduction and resilient development, particularly the long-term contributions of the E.U. and Japan, donor perspective on the MIDIMAR experience and UNDP's performance will be key to formulating relevant findings for the MTE.

## 3. *Data Collection Methods*

Following a desk review and analysis of key documents in an eight-day preparatory phase from November 7-15, 2016 that culminated in the drafting of an inception report, a qualitative and quantitative analysis corresponding to key evaluation questions ensued. An evaluation matrix was drafted to incorporate areas of relevance to the main evaluation criteria (relevance, effectiveness, efficiency, sustainability and impact) in accordance with the criteria delineated in the Terms of Reference and the specific objectives of the evaluation. Both the inception report and the evaluation matrix were reviewed with a project evaluation committee from MIDIMAR and UNDP.

### 3.1 PORTFOLIO ANALYSIS.

A portfolio analysis was used to assess quantitative data pertaining to the results and resources matrix, regarding the baseline, indicators and targets established in the Common Country Programme Document (CCPD) and further iterations of various project components. This was combined with a quantitative review of the data contained within the project's quarterly and annual progress reports, financial reports, and Atlas records.

### 3.2 OUTCOMES MAPPING

An outcomes map was designed to further expand on the logic of the project, along with its expected outputs, intermediate results and expected progress toward achieving the outcome. Due to its relevance to the project, the Hyogo Framework for Action was utilized as a reference point. See Annex 6.

### 3.3 SEMI-STRUCTURED INTERVIEWS.

Semi structured interview guides were developed to gather information from key governmental officials, stakeholders and implementation partners concerning their perceptions of the project results, and related priorities, challenges, and capacity gaps, and to address the questions in the evaluation matrix. Three questionnaires were developed for the following groups: (1) National and local government officials and other key stakeholders; (2) UN agencies participating in joint programming efforts with UNDP in the Delivering as One effort; (3) Members of affected community populations. They were adapted selectively based on the informants being interviewed and the relevance of specific lines of inquiry. In total, 45 interviews were performed during the period November 21 – December 1, 2016. Of these, 25 were at national level and 20 at district or sector level.

### 3.4 OBSERVATION OF KEY MEETINGS.

Additionally, the consultant attended and observed key meetings, including a quarterly session of the DRG4 group with MIDIMAR and 5 UN agencies, and a Human Security workshop session and debriefing with the UN's Director of Human Security.

#### 3.4.1 National Level

**Government of Rwanda.** Interviews were held with nine national organisations, all of whom were members of the National Platform for Disaster Risk Reduction (NPDRR). Of primary focus was the Ministry of Disaster Management and Refugee Affairs (MIDIMAR), where six officials were interviewed. Three national organisations playing key roles in establishing early warning systems and reducing vulnerability to climate change in Rwanda, including the Rwanda Meteorology Agency (METEO) the Rwanda Environmental Management Authority (REMA) and the Ministry of Agriculture (MINAGRI), were interviewed. The Ministry of Local Government (MINALOC), the Ministry of Finance and Economic Planning (MINECOFIN), the

Ministry of Health (MINISANTE), and the Rwandan Housing Authority (RHA) all provided inputs. Finally, the Rwanda Red Cross was interviewed. Please see Annex 2 for the list of interviewees.

**United Nations.** Interviews were held with five United Nations organisations, all of whom were actively participating together in joint disaster response and disaster risk reduction activities in Gakenke and Ngororero districts, concerning the joint programming environment and harmonization and alignment of UN assistance, as well as challenges and programming gaps.

They included UNDP, the original and ongoing implementer of the *Building National and Local Capacities for Disaster Risk Reduction in Rwanda* project as well as *Reducing Vulnerability to Climate Change and Integrated Watershed Management in Flood Prone Areas (*among others)*;* UN-HABITAT, working on the relocation of households in hazard-prone villages, as well as the construction of disaster-resilient housing; FAO, working on the improvement of food security and nutrition and agriculture and livestock productivity through sustainable use of natural resource management, adapted to climatic change; IOM, working on the provision of shelter and related support to communities affected by floods and landslides, as off-farm livelihoods, skills development and livelihoods diversification to broaden income-generation options of vulnerable households; and WFP, working on emergency food assistance to the same communities, within a much broader framework of food and nutritional security to vulnerable households.

**Key Donors.** Political and Economic Officer, and the Coordinator for Economic Cooperation for the Government of Japan were interviewed to garner insight on the donor perspective.

### 3.4.2 District Level

**Government of Rwanda.** Interviews were held in two districts with a total of nine government employees (5 female, 4 male). These included interviews with three vice mayors, two district gender officers, two district disaster management officers, a social affairs officer, and a network and system coordinator. Eight of the nine were members of District Disaster Risk Management Committees ((DDMC's), and the interviews concerned their perceptions of programme results, priorities, opportunities, challenges, capacity gaps at the district level, including gender mainstreaming and human rights/equity components.

**Members of Affected Communities.** Eleven community members were interviewed, concerning the related fulfillment of their rights, the services provided, their current challenges and gaps in access. These local stakeholders consisted of 11 interviewees, six of whom were male and five female, ranging from 12 to 55 years of age. Two of the five women were illiterate, one having received no schooling due to exile in the Congo. All eleven were poor, or recent victims of a disaster in which they had lost significant assets and family members; two were extremely vulnerable.

## *4. Limitations*

The scope of the MTE was limited by both time and resource constraints. Within Rwanda's operating environment, with its multiplicity of actors, stakeholders and implementing partners, it is challenging to determine the attribution of results, both at upstream and downstream level and exceeded the scope of this evaluation. Therefore, results focus on where the project has made large contributions.

The parallel, mixed multi-methods evaluation approach was thus the foundation for rendering an independent and impartial opinion as to whether there is credible evidence that UNDP's programmatic contributions to Rwanda's development results are on track in successfully achieving results in disaster risk reduction.

The evaluation was further constrained by the absence of available baseline data for both its capacity development assessment and public information and awareness components, as well as a lack of a related

project management information system. Outcome mapping was attempted as a substitute way to obtain outcome-level evidence, and related attempts triangulate outcomes were made, with a degree of success.

Some available data at the district level were not disaggregated by gender or poverty levels, thus constraining analysis to an extent.

The short timeframe of the evaluation limited the number of possible site visits, thus decreasing the prognosis for representativeness. In particular, while MIDIMAR and UNDP attempted to organize a visit to a third district (Muhanga) which had not been disaster-afflicted, competing priorities limited district staff availability. Problems and experiences observed in Gakenke and Ngororero Districts may be of a localized nature and therefore of limited relevance to other implementation contexts.

# IV. DISCUSSION AND OBSERVATIONS

## 1. Major Challenges in Project Implementation

As became evident over the course of the evaluation, the project had faced major challenges in the areas of delays in projection implementation. These ranged from the failure to conduct initial baseline surveys for its Public Information and Capacity Development activities to delays in execution of such components as its risk atlas, which was completed in 2015. The latter was partly attributable to an initial lack of technical expertise in the fields of hydrology, structural engineering, geology and geophysics. A methodology based on primary data (proposed by the project document) was changed to adopt the methodology based on modelling (which is an internationally used model). The collection of raw data from different institutions were also challenges for the project, as no prior studies in risk assessment had been conducted in the country, so no data collection system had been developed. Therefore, proxy data and/or data from regional and international sources were used to solve the data constraints.

The project had struggled to raise the funds necessary to implement it, leading to the suspension or modification of key activities and perhaps underlining the need for a mature project pipeline with a higher degree of certainty the necessary resources will be available for the spectrum of envisaged activities and interventions.

Staff turnover in key positions at the national and district levels have also had adverse implications for capacity development and the development of sustainable institutional capacity, although this has been overcome to an extent. Controversial restructuring processes by the Rwandan Ministry of Labour in 2014/15, in which civil servants who scored less than 60% of routine performance evaluations for 2012/13 and 2013/14 were laid off across Rwanda, contributed to this turnover. These factors were outside of the manageable interests of the project, or MIDIMAR itself.

## 2. Financial Analysis

As of December 2016, or month 42 of 60, corresponding to 70% of the implementation timeline, the project had raised approximately $3,709, 849 or 41.9% of its five-year budget, with a shortfall of approximately USD 5,138,881. The current project is mainly financed by UNDP with some support from the European Union, the World Bank (ACP-EU Natural Disaster Risk Reduction Program) and the Government of Japan (Japan-UNDP Partnership Fund). The Category III “funds to be mobilized” includes funds raised for a newly-launched joint UN programme from the UN Trust Fund for Human Security ($394,937) in Ngororero District in 2016, a UN Central Emergency Response Fund allocation to landslides in Gakenke District ($728,135) in 2016 with a matching allocation of $54,000 from UNDP TRAC 1.1.3 funding, a Disaster Mitigation lightning risk assessment ($30,000) from the same source, and coordination funds in the amounts of $100,000 each for the expulsion of Rwandan refugees from Tanzania in 2013, and influx of Burundian refugees in 2015. None of these activities were anticipated at the time the ProDoc was drafted and thus were related indirectly to the original five outputs.

| | CATEGORY | FIVE YEAR BUDGET | FUNDS RAISED | VARIANCE (USD) | % 5 YR TARGET |
|---|---|---|---|---|---|

| | | (USD) | (USD) | | |
|---|---|---|---|---|---|
| I | UN Regular Resources | 3,808,548 | 1,346,427 | (2,457,121) | 35.4% |
| II | External Resources | 3,808,548 | 956,350 | (2,847,198) | 25.1% |
| III | Funds to be Mobilized | 1,238,364 | 1,407,472 | 168,438 | 113.6% |
| | Total | **8,846,460** | **3,709,849** | **(5,138,881)** | **41.9%** |

According to the resource framework, at the 70% mark, the resources available to the project should have been approximately $6,194,889. This is derived from adding the budgets for the first three years in the Project Document, together with 50% of year 4. Comparing preliminary expenditures at USD 3,709,849 for 2013-2016 (data as of December 20, 2016,), the overall expenditures were approximately 59.9% of those planned for the same 3.5-year period.

| | OUTPUT | 2013-2018 BUDGET (USD) | % OF BUDGET | BUDGET USD FIRST 3.5 YRS [2] | FUNDS EXPENSED (USD) 2013-2016 | VARIANCE 2013-2016 | % TOTAL EXP TO DATE | % EXP 3.5 YR PLAN |
|---|---|---|---|---|---|---|---|---|
| I | Capacity Development[1] | 4,347,623 | 49.1 | 3,276,239 | 1,705,157 | (1,571, 082) | 46.4% | 52% |
| II | DRR Mainstreaming | 190,000 | 2.1 | 133,000 | 457,909 | 324,909 | 12.5% | 344% |
| III | Disaster Risk Assessment | 1,313,955 | 14.9 | 1,238,955 | 562,960 | (675,995) | 15.3% | 45.4% |
| IV | Early Warning Systems | 1,181,455 | 13.4 | 573,768 | 500,833 | (72,935) | 13.6% | 87.2% |
| V | Community Resilience | 1,812,426 | 20.5 | 974,747 | 448,754 | (525,933) | 12.2% | 46% |
| | Total | **8,846,460** | **100%** | **6,194,889** | **3,709,849** | **(2,521,036)** | **100%** | 59.9% |

[1] Output 1 includes activities 6,7,8 and 9 in UNDP expenditure spreadsheet 2013-2016.
[2] The first 3.5 years is based on Years 1, 2, 3 in ProDoc pp 34, with 50% of Year 4 added.

There are two factors of serious concern that contributed to these serious budget shortfalls.

The external resources (Category 2) raised for the project at USD 956,350 were only 25.1% of the $3,808,548 planned, leading to a shortfall of USD 2,847,198 for the five-year period to date. This seems to be attributable, at least in part, to a major anticipated contribution from the World Bank-ACP-EU Natural Disaster Risk Reduction Programme failing to transpire as planned (a smaller amount of USD 581,350 was raised and expended; it is included in the totals); other anticipated funding from African Development Bank (AfDB) also did not materialize as expected. Rwanda's difficulties with declining OFDA may also be a factor.

The other major shortfall was in category 1, UNDP Regular Resources, where only 35.4% or USD 1,346,427 of the 3,808,548 planned for the five-year period had been raised to date. These shortfalls are in keeping with overall trends in UNDS funding since 1995, during which earmarked funds have quintupled, while core funding overall has continued to decline. UNDP has been particularly adversely impacted by these trends, declining from a level of USD 1,182,000,000 in 2007 to 842,000,000 in 2014, in its core funding, a decline of nearly 30%, not including inflation (QPCR 2016). These cuts have affected the entire organization, including its country programmes. The project budget allocation (Category 1) was cut by 8% in Year 3 and 25% in Year 4.

The project staff has responded to this budgetary environment by attempting to mobilize funds from other sources, although no funds are yet confirmed and may be considered on a 'soft' pipeline. In December 2015, a proposal in the amount of USD 500,000 was submitted to China Trilateral Cooperation. Another, in the amount of USD 3,633,660 was submitted in August 2016 to the Government of Japan, the appraisal of which is expected in January 2017. Additional funding from a regional/global project on resilient recovery is considered possible, but no specific amount has yet been earmarked. There is also another 'soft' commitment from UNDP HQ Bureau of Policy and Programme Support for an additional USD 270,000, subject to availability of funds.

## *3. Status of Project Outputs and Targets as of December 2016*

As could be expected, the funding shortfalls and ambiguities have adversely impacted the attainment of many of the targets elaborated in the original Project Document, as noted in the following table. This has been somewhat mitigated by new opportunities for programming for the disaster response in Gakenke, and the Human Security joint programme in Ngororero, although the latter were designed to benefit specific populations, and were not intended to finance national infrastructure, such as early warning systems.

| Output | Target | | Year | 2016 Status |
|---|---|---|---|---|
| **Output 1:** Enhanced capacities of national and local institutions to manage disaster risks and recover from disaster events; including improved national and local coordination mechanisms | 1. MIDIMAR's, DDMC's, SDMC's and NPDRR's capacities assessed and a capacity development strategy and plan developed | | 2013-14 | Not Achieved |
| | 2. Roll out and implementation of MIDIMAR's capacity development plan | | 2014-18 | Capacity development activities initiated without assessment and master capacity development plan, training has focused largely on DRM and DRR; scale up has not occurred due to funding constraints |
| | 3. DRM technical capacities of MIDIMAR, other relevant ministries, and local authorities developed (with up scaling of support to capacity building in the ensuing years | | 2014-18 | |
| | 4. Capacities for disaster recovery developed and national recovery framework and strategy developed | | 2014-18 | PDNA implemented, guidelines for relief, recovery in progress |
| | 5. Sustain support to operationalize and implement the DM Policy | | 2014-18 | DM and DRR remain under-funded in national and district budget |
| | 6. Set up the National Disaster Operations Center | | 2014-18 | Partially achieved but constrained by funding |
| | 7. The National Platform for DRR activated, fully functional and meets regularly | | 2014-18 | Achieved, in progress |
| | 8. 30 Districts with DRM Plans developed (@ 10 districts per year | | 2014-18 | Achieved, in progress |

| | | | | |
|---|---|---|---|---|
| **Output 2:** DRR mainstreamed into national/district/sectorial plans and policies; and capacities on DRM planning enhanced | 9. Sectorial plans/policies with DRR mainstreamed and integrated (3) | | 2014-18 | Achieved. Ministry of Health, Rwanda Civil Aviation Agency, and Ministry of Agriculture all have mainstreamed plans/policies on national level and majority of district plans |
| **Output 3:** A functioning national disaster risk assessment and monitoring system (DRAMS) established | 10. National Risk Assessment Framework (NRAF) developed to guide the development of national DRAM system | | 2014-18 | Achieved |
| | 11. Evidence-based national hazard risk profile developed through comprehensive National Risk Assessment | | 2014-15 | Achieved |
| | 12. A National Disaster Observatory (NDO) established within MIDIMAR for an integrated and systematic collection, storing, analysis and dissemination of disaster information | | | Largely unachieved/constrained by funding |
| | 13. National coordination and governance mechanism established to ensure the effective functioning of the integrated national disaster risk assessment and monitoring system (NDRAMS) and national institutional capabilities developed to ensure the sustainability of disaster risk assessment and monitoring in Rwanda | | | National policy and legal framework for disaster risk reduction exists with decentralised responsibilities and capacities at all levels |
| **Output 4:** End to end early warning systems established and operational | 14. Resources mobilized to support establishment of Early Warning Systems | | 2013-2014 | Under-funded |
| | 15. Comprehensive and systematic Inventory for EWS in Rwanda | | 2014-2018 | Partial systems exist in different agencies, have been identified and are operational |
| | 16. Core system implementation (include consensus on the nature and form of the early warning system, design its core elements, and commence initial strengthening and pilot testing EWS operations | | 2014-2018 | Core system constrained by funding to a large extent |

| | | | | |
|---|---|---|---|---|
| | 17.Integration of the EWS to the disaster risk management mechanisms | | 2014-2018 | Constrained by funding to a large extent |
| **Output 5**: Reduced community vulnerabilities and increased household resilience in selected high-risk districts and increased public awareness on DRR | 18. Resources mobilized to support implementation of pilot vulnerability and mitigation measures | | 2013-2014 | Achieved to an extent |
| | 19. Evidence-based research on suitable and cost-effective disaster mitigation measures produced | | 2014-2016 | Constrained by funding |
| | 20. Disaster-resilient community infrastructures and livelihoods | | 2014-2016 | Constrained by funding |
| | 21. Promote household resilience through incentive mechanisms and Cash-for-Work schemes | | 2014-2016 | Constrained by funding |
| | 22. The population are more aware of disaster risks and can articulate the basics of disaster risk reduction | | 2013-2018 | Cannot be evaluated due to lack of baseline |
| | 23. An engaged and involved media to stimulate public awareness and promote a culture of disaster resilience amongst the population | | 2014 | Achieved to an extent, media is engaged but may not be able to create a culture of disaster resilience per se |
| | 24. Strong community involvement in sustained public education and awareness campaigns including awareness building in schools | | 2013-2018 | Achieved to an extent, but is unlikely substantial or comprehensive |

# V. FINDINGS

The findings are organized into the following major categories, in accordance with the methodology employed and the evaluation matrix: a) Relevance, b) Effectiveness, c) Efficiency and d) Sustainability. Impact is discussed under efficiency due to its correlated nature.

## *1. Relevance*

1. **The project is well-aligned with national priorities.** The overall governance structure and programmatic priorities of the UN System at country level in Rwanda, as expressed in its UNDAP 2013-2018, both vertically and horizontally, with national priorities and plans, is explicitly linked to the government's priorities as expressed in the national Economic Development and Poverty Reduction Strategy, EDPRS, 2013-2018. Likewise, the UN's contributions to Disaster Risk Reduction and Management are well-aligned with the national vision of building a "disaster resilient nation" and its related mainstreaming across a wide expanse of priority sectors ranging from agriculture to education to environment and natural resources, and infrastructure, among others, as expressed in sections 6.58 and 6.59 of the EDPRS II.

2. **The project supports the UNDP global mandate.** There is a high degree of correlation between the UNDP Global Mandate as expressed in its Strategic Plan 2014-2017 Area of Work 3. Building Resilience and the UNDP Rwanda Disaster Preparedness Response, and Recovery activities in the following projects: 1) " Building Local and National Capacities for Disaster Risk Reduction in Rwanda" project, 2) "Preparedness for Resilient Recovery" funded by the Government of Japan, 3) "Enhancing Human Security and Resilience-Building in Rwanda" funded by the UN Trust Fund for Human Security" and ) 4) the Restoration of Critical Community Infrastructure and Emergency Off-Farm Livelihoods" funded by CERF as a joint programme response to landslides in Gakenke District in 2016.

3. **The project has been successful in providing normative policy support.** The role of the "Building Local and National Capacities for Disaster Risk Reduction in Rwanda" project has provided normative policy support in the implementation of global agreements, norms and standards, such as the Hyogo Framework for Action, and the MDGs. The need for normative policy support will continue, as the Sustainable Development Goals and the Sendai Framework for Disaster Risk Reduction become fully operational, provide more global coherence regarding health, development and climate change, and put resilience and human security at the center of the development agenda. This is an evolving and ongoing process.

4. **The project has an appropriate balance of upstream/downstream activities.** The project is directed at strengthening the synergies across the development and humanitarian sectors, and realizes that risk reduction is ultimately oriented at building resilience, sustaining and preventing the reversal of development gains. While main tenets of the project are focused upstream on various types of integrated policy support for national and district governments, the project also provides direct support and service delivery to districts and communities affected by disasters. The disaster risk reduction work, in ten of Rwanda's 30 very well-structured districts, is well-aligned to district development and multi-sectoral plans.

5. **The project has assimilated Rwanda's "homegrown solutions" comprehensively, demonstrating a good integration of local knowledge and practices.** Rwanda's "homegrown solutions" were adopted in 2006 and are often associated with its tremendous momentum in development. One example is "Imihigo"

which means to "vow to deliver", a pre-colonial cultural practice in Rwanda where an individual sets targets or goals to be achieved within a specific period. Development project results are incorporated into the performance plans of key government stakeholders, who are held personally responsible for their accomplishment and drive the process. Another example is "Umuganda" or 'coming together in common purpose to achieve an outcome'. In traditional Rwandan culture, members of the community would call upon their family, friends and neighbors to help them complete a difficult task; the process is now institutionalized countrywide and forms the basis of self-help. A third example is "Ubudehe," the poverty classification system previously described. "Gacaca" or the community courts, are used to resolve conflicts (especially related to the post-genocide period).

6. **The project exhibits strong evidence of an explicit effort to promote gender equality and the empowerment of women** and would correspond to a gender marker of "2" in the UNDP system, wherein activities that have gender equality as a significant objective are rated, but gender equality is not the explicit focus. Gender equality is evident at both the institutional level, where women occupy such leadership positions as Minister of Disaster Management and Refugee Affairs (MIDIMAR) and Director of the Special Project Implementation Unit and Early Warning Systems Specialist at the key national implementation level, as well as in Districts, where women occupy such positions as Deputy Vice-Mayor for Social Affairs, Social Protection Officer and Security Officer, among others. The UNDP office itself has achieved over 50% representation of women, including at management levels (drivers excepted), including both the Programme Specialist overseeing this project and Technical Advisor for Disaster Risk Reduction. Female-headed households, who tend to be among the poorest, are among the key participants and gender is mainstreamed. In collaboration with a strong district government, the UN Joint Programme in Gakenke has gone to great lengths to ensure that benefits of the disaster response, including cash for work, cash grants, food for work and housing, among others, benefit women and elicit their full involvement in decision-making. Despite these efforts, women still experience patriarchal attitudes, higher levels of poverty, lower levels of education and less access to livelihoods and markets, so gender requires sustained, long-term efforts as a cross-cutting strategy, as represented in the UN's ongoing five year plans beyond 2018. In Rwanda, this is especially true in the least geographically accessible areas. The systematic collection of gender-disaggregated data, while improving, could be further strengthened.

7. **The project is appropriately directed at vulnerable groups.** The UNDP project builds very successfully on the government's system of *ubudehe* by which people participate in classifying each household by the level and type of poverty in which they live, and capturing it in the national data base. UNDP directs its efforts primarily to those in Categories 1 and 2, or those directly impacted by disasters, who lose their assets. This is concordant with Rwanda's Human Development priorities. Illustratively, in Gakenke, among the 80,784 registered households, 8.4% (9,598) fell in Category 1, and 39.5% (31,208) in Category 2. The poorest, in Category 1, do not own houses, and can barely afford daily subsistence. The poor, in Category 2, have or rent a dwelling, but rarely have fulltime employment, and work as daily laborers or subsistence farmers. Category 3 includes those with small and medium enterprises, or excess cash crops, and houses. Category 4 includes those who own larger scale businesses, are NGO or government employees, or public servants.

8. **The project on whole does not adopt a human-rights based approach, but its recent CERF and UN Trust Fund for Humanity Security components show advancement.** While the UNDP activities support the attainment of human rights for groups experiencing the greatest humanitarian needs, including survivors of disasters and indirectly, refugees, and draw upon participation and voice, there was no clear evidence of an explicit human rights based approach in place aimed at determining causality and to inform

programme design from the inception of the project. At the end of 2016, the projects were exploring a human security approach that acknowledges the interlinkages between security, development and human rights; this might influence their future articulation. Human rights-based approaches are normatively based on international human rights standards, and emphasize accountability, equality, empowerment and participation. They are the operational expression of the link between development and human rights. They utilize "change language" and put changes in the lives of project participants at the impact level. For example, "26,000 people living in disaster-affected sectors will have access to clean water and hygiene by June 2017" or "1,425 households living in disaster-affected sectors who lost their homes will have disaster-resilient shelter by June 2017" are HRBA outcomes. HRBA approaches are generally used in tandem with results-based management, which is discussed under efficiency.

9. **The theory of change expressed in the relevant sections of the UNDAP Results and Resources Framework is limited and would benefit from strengthening.** The theory of change expressed in the relevant sections of the UNDAP Results and Resources Framework and initial five-year project document and their respective hierarchy of results is limited and would benefit from strengthening. In specific, the outcomes are not well-elaborated, nor are the outcome level indicators "smart." Means of verification are likewise often absent. A 'theory of change' should address causality and explain how activities are understood to produce a series of results that contribute to achieving the final intended impacts. It is essentially a hierarchy. A theory of change approach guides strategic planning or programme/policy planning to identify the current situation (in terms of needs and opportunities), the intended situation and what needs to be done to move from one to the other. This can help to design more realistic goals, clarify accountabilities and establish a common understanding of the strategies to be used to achieve the goals.

10. **Many of the indicators and means of verification in the UNDAP RRF are weak in sections related to this project and the necessary logic flow and results hierarchy are not manifest.** This is of relevance as the project itself lacks clear articulation and indicators at the goal and purpose levels and thus is dependent on the UNDAP, as stated in the evaluation strategy for the 2015 UN Trust Fund for Human Security proposal. While the logic in the UNDAP Results and Resources Framework identifies outcomes such as 3B1. "Reduced negative impact and improved recovery of populations due to humanitarian crises" the outcome indicators (% of population above the HH poverty level), is in fact, barely related and would not be a valid measure of either reduced negative impact or improved recovery. Moreover, the outcome is an impact related to changes in human fulfilment of rights. The outcomes should in fact, reflect changes in the performance of duty bearers, institutions and services, and the outputs should reflect related changes in capacity. With some tweaking and using a broader concept of capacity development, as the Government of Rwanda does, the project could reconceptualize Outputs 1 and 5 as outcome level results, and subsume Outputs 2 ,3 and 4 as outputs under Output/Outcome 1. See Recommendation 5. The output indicators (national preparedness and response strategy in place, yearly updated disaster map in place, etc.) could in fact become institutional outcome indicators, but need to be enhanced in terms of their SMART formulation. It is noted, however, that more recent project components, such as the CERF project for Gakenke and the UNTFHS joint programme, both initiated in 2016, demonstrate better logic.

## *2. Effectiveness*

1. **The project has had mixed success in attaining its planned outputs and outcomes in accordance with its 2013-2018 Project Document and its Results Framework.** On the positive side, MIDIMAR, with the project's assistance, has had substantial success in achieving many of the pillars of the Hyogo Framework for Action in all its five priority areas and related indicators, which is very significant for a government

ministry founded in 2010. The Hyogo Framework for Action "Building the Resilience of Nations and Communities in Disasters" was endorsed by the UN General Assembly in 2005. The framework, which represents a global consensus on the priorities for disaster risk reduction and management, is built around five key actions: 1. Ensure that disaster risk reduction is a national and a local priority with a strong institutional basis for implementation. 2. Identify, assess and monitor disaster risks and enhance early warning. 3. Use knowledge, innovation and education to build a culture of safety and resilience at all levels. 4. Reduce the underlying risk factors. 5. Strengthen disaster preparedness for effective response at all levels.

To attain key progress on the Hyogo Framework targets and indicators has required intensive institutional growth and commitment, as well as solid and sustained technical and normative support on the part of UNDP. Substantial architecture in such areas as national and local development planning, policy formation, law, risk assessment, contingency planning, and early warning systems has been created in a short period, as well as DRR mainstreaming into sectoral plans.

While it is inherent that to achieve such targets, capacity must have been developed, the supporting evidence is largely anecdotal, given the lack of a capacity assessment and clearly formulated capacity development plan. This is a substantial weakness in a capacity development project, and influences the attainment of Output 1. Explicit training efforts seem to have been largely directed at Disaster Risk Management and Disaster Risk Reduction, although cuts in UNDP core funding have reduced those efforts to a degree. Further, while substantial project resources were directed at public information and awareness, the lack of any baseline data hampers evaluation of related efforts, and leads to insufficient level of accountability for relatively large outlays of related funds.

2. **The lack of a capacity assessment and a capacity development plan are substantial weaknesses in a capacity development project.** The overall strategy of the five-year project describes capacity a relatively holistic manner across the three tiers of an enabling environment, organizational and individual capacities, and a variety of related outputs are described in the narrative. One of the key, preliminary output targets entailed conducting a DRR capacity development plan to undertake a baseline capacity assessment of MIDIMAR, the NPDRR and DDMC's and SDMC's in 2013. The work was delayed for nearly two years due to recruitment and procurement delays, and when it was undertaken, in 2015, by a firm named GreenWise, it was submitted late and was deemed that the technical quality of the report was unsatisfactory in a joint review process. Therefore, there is little evidence that a systematic capacity assessment and capacity development plan were ever adopted, both of which are fundamental to a capacity development project. Without them, strong evidence-based decision-making is difficult to achieve.

3. **The real impact of this project is that of a disaster risk governance initiative that is aligned with the priority actions in the Hyogo Framework, although it was not conceptualized per se.** The project has more characteristics of a disaster risk governance initiative rather than as a capacity development initiative, as its mandate has been focused on strengthening institutional systems and legal and policy mechanisms to govern the reduction and management of disaster risk, as well as supporting the foundational processes and facilitating effective implementation. Part of this may be attributable to the funding difficulties described under Efficiency, below.

4. **The achievement of this impact has been positively influenced by the strategic positioning of a Technical Advisor in MIDIMAR.** In the words of a national government stakeholder, the joint programming approach has greater facilitated the government's access to the UN; in the past, it was a

perplexing array of institutions with differing mandates. The positioning of the Technical Advisor in MIDIMAR has greatly facilitated communication and coordination, both in the eyes of national stakeholders and other UN agencies.

5. **The disaster response to the landslides in Gakenke, Muhanga and Ngororero Districts beginning in May 2016 was timely, effective and comprehensive**. The response by MIDIMAR and other government agencies occurred within 24 hours of notification, and comprehensive assistance was preceded by rapid assessments, in alignment with district authorities, five UN agencies, international and national NGOs and key donors. The disasters caused 54 deaths, 38 injuries, the destruction of more than 3,500 hectares of agricultural crops and the destruction of 2,317 houses, rendering 13,500 people (including children) homeless. This resulted in serious food insecurity and a lack of income in the next three months for about 4,000 families (or approximately 23,200 individuals). Key interventions included the immediate resettlement of families in dangerous zones to temporary shelter, distribution of food to affected people (maize, beans, vegetable oil and salt), as well as non-food assistance, repair and rehabilitation of 18 damaged community bridges, rehabilitation of water supply systems, restoration of marshlands through Cash for Work, temporary and permanent disaster-resilient housing, and alternate livelihoods, among other activities. There was substantial evidence of adopting the principles of "Building Back Better" in the response; through the construction of high quality, disaster resilient bridges and houses, which employ available green technologies, locally available materials and strong engineering standards.

6. **The area of health needs significant reinforcement at the district and local levels in terms of integration into the Disaster Management platform**. As recognized by the Sendai Framework, biological hazards such as epidemics and pandemics are a key area of focus for disaster risk management. Rwanda reports on nineteen major diseases that are linked with biological threats[1]; among these, food and waterborne diseases, vector borne diseases and zoonotic diseases still pose significant threats for pandemics. Those threats are heightened by the presence of emerging and re-emerging infectious diseases in other countries, as well as globalization and air travel. It is additionally threatened by the presence of these diseases on its borders, with reported cases of Yellow Fever, Rift Valley Fever, Marburg, and Crimean Congo Hemorrhagic Fever in both DRC and Uganda. While the Ministry of Health has extensive infrastructure through its 476 health centers, 42 district hospitals and 176 approved private hospitals, a whole-of-society approach is needed in the event of an outbreak. Therefore, preparation needs to involve table top exercises and simulations, as there is not a minute to waste in the event of an outbreak.

## *3. Efficiency*

1. **UNDP has been successful in recruiting and position high caliber technical staff.** UNDP has been successful in positioning high caliber staff with the skill sets to provide high quality policy and programmatic advice, and to work with key stakeholders on capacity, policy and organizational development efforts in the government-led MIDIMAR effort in a climate of trust and mutual respect over

[1] - Reportable diseases include: Acute flaccid paralysis (AFP), Bloody diarrhea, Cholera (where the disease is rare/ non endemic zone surrounding Kivu Lake), Epidemic Typhus, Measles (targeted for elimination), Neonatal Tetanus, Meningitis, Plague, Viral hemorrhagic fever, Typhoid fever, Yellow fever, Rabies, Pertussis and Diphteria, and summaries of incidents of Influenza- like Illness, non bloody Diarrhoea, Malaria and severe pneumonia among children under age 5 years, as well as any unusual health event of national or international concern (Minisante).

a sustained implementation period. This was evident in multiple, and unsolicited stakeholder comments during key stakeholder interviews in response to questions about the project's efficiency and utilization of resources, and included comments from key government counterparts, members of the NPDRR, and key district staff such as vice mayors. A majority of comments were centered on the role of the Technical Advisor.

2. **The project has not raised the levels of funds necessary to achieve its five-year scope of work with a shortfall of USD 2,521, 036 to date** (or 41.1% of planned resources). According to the resource framework, at the 70% mark (month 42 of 60), the resources available to the project should have been approximately $6,194,889. This is derived from adding the budgets for the first three years in the Project Document, together with 50% of year 4. Comparing preliminary expenditures at USD 3,709,849 for 2013-2016 (UNDP data as of December 20, 2016), the overall expenditures were approximately 59.9% of those planned. The project has both suffered from substantial cuts in UNDP core funding, (Regular Resources), where only 47.3% or USD 1,346,427 of the USD 2,847,198 planned for the 42-month period had been raised to date. The external resources (Category 2) raised for the project at USD 956,350 were only 35.9 % of the USD 2,665,983 planned, leading to a shortfall of USD 1,709,634 to date.

   The shortfalls have affected all outputs, but in a variety of ways, with some outputs financed at rates ranged from 45-52%, including capacity development, disaster needs assessment and community vulnerability/resilience, while others have fared better, with Early Warning Systems and DRR Mainstreaming at 87% and 344% of much smaller absolute budgets. Included in these totals are Category III, "funds to be mobilized" which includes funds raised for a newly-launched joint UN programme from the UN Trust Fund for Human Security ($394,937) in Ngororero District in 2016, a UN Central Emergency Response Fund allocation to landslides in Gakenke District ($728,135) in 2016 with a matching allocation of $54,000 from UNDP TRAC 1.1.3 funding, a Disaster Mitigation lightning risk assessment ($30,000) from the same source, and coordination funds in the amounts of $100,000 each for the expulsion of Rwandan refugees from Tanzania in 2013, and influx of Burundian refugees in 2015. None of these activities were anticipated at the time the ProDoc was drafted and accordingly do not respond directly to the original project design or directly support the intended outputs. Essentially, these funds are earmarked for specific activities and areas, and do not substitute for the cuts.

3. **The project implementation sequence was not optimal, particularly from a planning and evaluation perspective**. The project should have focused its early efforts in year one on an improved foundation for a five-year project. This would have included better baseline survey processes to improve the quality, quantity and disaggregation of data to guide subsequent policy-making, planning, implementation, monitoring and reporting. This would have allowed the project to adopt well-grounded targets and allow its impact to be measured. As mentioned previously, capacity assessments should have been undertaken. The project, in fact, had funding in this period (2013) to undertake baseline surveys, capacity development assessments and other foundational activities.

4. **The project does not make adequate use of results-based management.** RBM, uses "change language" instead of "action language" and emphasizes the change in the lives of participants (or the quality or coverage of a service), rather than an implementing agency's action or activity. It is a paradigm shift that puts affected communities as the subject of the change, particularly at the impact level and is closely related to the attainment of human rights. e.g. An additional 300,000 children will have access to safe water and hygiene facilities in their schools by 2017. This is a little curious given that the UNDAP document (2013) maintains that Results-Based Management (RBM) has been central to the development

of the UNDAP and will be at the heart of its implementation and monitoring and evaluation. In fact, in a debriefing session on December 5, the consultant asked the assembled colleagues (UN and Ministry) to raise their hands if they had been trained in RBM; only one of fifteen responded positively.

5. **The existence of a Single Project Implementation Unit in MIDIMAR has created an effective institutional framework to guide the process of fast track implementation of the development targets envisaged in 2020 and other strategic plans, as well as the UNDP assistance.** This management mechanism, which was adopted in Rwanda in 2011, is intended to manage ongoing projects from the UN, contributions, public financial entities, and other donors, through improved coordination and the creation of synergy, in so doing, realizing economies of scale and lowered transaction costs. Centering technical assistance in this unit allowed it to have a broad impact across projects and donors.

6. **The work being undertaken under DRG4 in Rwanda is an early and potentially strong example of Delivering as One.** The work being undertaken under DRG4 in Rwanda is a strong example of a unified and targeted response to disaster risk management and resilience issues that cuts across sectors and pillars, with strong national leadership, context-specific solutions and the adoption of a multi-stakeholder approach that is both upstream and downstream in nature. While modest in scale and still evolving, the initiative reflects a process of integrated thinking, planning and operating, to achieve collective outcomes and offers opportunities for subsequent scale up and replicability. As such, initiatives as those undertaken in Gakenke and Ngororero districts have the potential to become excellent examples of the UN Delivering as One. While modest in scale, the initiatives reflect a process of integrated thinking, planning and operating to achieve collective outcomes.

7. **The project has made a very good use of technology and social media.** Rwanda is one of Africa's most progressive countries in the use of social media, the internet and related technologies**,** and broad use of available government open data is practiced. Key officials, from the President to the Minister of Youth, Minister of Health, the Office of Immigration, and the head of the Rwanda Development Board, are all avid social media users. The media is used to announce and teach about government programs and to solicit inputs from the public. MIDIMAR and the project, among other public institutions, in addition to social media, make extensive use of SMS's sent to local leaders, NGOs, public institutions, church leaders, cooperatives and youth and women councils for early warning system alerts and reports of hazards and earthquakes. Mobile phones are distributed to the village level (50-100 households). This is an effort that has now been institutionalized by the government.

## *4. Sustainability*

1. **The prognosis of the project to contribute to institutional sustainability is evident and promising**. MIDIMAR is perceived as a solid and credible institution, and is valued by its stakeholders, including other institutions on the National Platform for Disaster Risk Reduction, and by the communities it serves. It has produced a continuous stream of results, effectively and efficiently, during the implementation period. Various project components, such as District Disaster Management Officer functions, and District Development Plans that incorporate disaster risk reduction, have been replicated in non-project districts. Likewise, the Ministry has assumed financial responsibility for project components such as emergency communications that were once financed by UNDP.

2. **The ability of the project to foster sustained public information and knowledge is unclear.** While attempts have been made to integrate DRR in platforms ranging from secondary school clubs to talk shows

and public service announcements, these areas have been affected by budget cuts, nor is there any baseline to be able to gauge changes in knowledge and practices.

3. **The project needs to practice a continuous cycle of training and retraining to compensate for high staff/stakeholder turnover at both local and national levels if it aims to sustain capacity.** There was significant evidence of high staff turnover, both at the district and national levels. In districts, this included the election of new mayors and vice mayors in February 2016. To sustain capacity, it will be necessary to institute a continuous cycle of capacity development. The project may also wish to conduct a staff survey to try to explore such issues as perceived job insecurity, limited career growth potential or non-competitive pay and benefits, etc. that might be driving the turnover, and take related measures to improve financial and non-financial benefits and rewards.

4. **The population growth rate in Rwanda, combined with its extremely high population density in rural areas, is likely to outpace resilience and risk reduction efforts in the intermediate term, unless more sustainable structural solutions are implemented.** While vulnerability and resilience are widely used concepts, they are subject to various interpretations, and there is a limited level of systematic data collection, especially with respect to resilience. The government fully recognizes this and is aggressively pursuing solutions such as secondary cities and urbanizatio

# VI. RECOMMENDATIONS

1. **UNDP should continue to provide normative policy support to MIDIMAR in the 2030 Agenda and the Sendai Framework for Disaster Risk Reduction.** As a central activity, the project should continue to provide normative policy support for the implementation of the 2030 Agenda, its related Sustainable Development Goals, indicators and targets, as well as the Sendai Framework for Disaster Risk Reduction. Lessons learned in Disaster Risk Reduction and Management in Rwanda can help inform the international agenda, and are of relevance to other countries in Sub-Saharan Africa.

2. **UNDP should prepare for UN Sustainable Development Frameworks (UNSDF) (2018-2022) likely replacing UNDAP by strengthening staff capacity in Rights-Based Approaches, Results Based Management and joint Causality Analyses during the balance of the UNDAP.** UNSDF will need to go beyond a mere compilation of agency-specific planning and be based on the principle of moving towards "one country, one UN framework", built on shared strategic sustainable development outcomes, common needs and root-cause analysis, risk assessment and management, and monitoring and reporting across the humanitarian, peacebuilding, human-rights and development dimensions. The UN in Rwanda is already well-positioned, but could evolve yet further in such areas as the common use of Human Rights-Based Approaches, Results Based Management, joint monitoring and evaluation systems, and the joint adoption of causality analyses, as well as more extensive, long term initiatives in joint programming demonstrate value-added synergies. Joint theories of change rooted in the Rwandan context should be adopted and reflected in the UNSDF. The period 2017-2018 could be used to advance these areas, which are especially important in advance of the iteration of a new programme framework.

3. **UNDP should improve upon the use of clear and well-defined outcome and impact level results and their indicators and means of verification which are critical to a system-wide strategic approach planning, monitoring and reporting**. Human rights standards should become an integral part of sustainable development strategies and policies. In line with the SDGs and the World Humanitarian Summit, humanitarian action will need to move beyond repeatedly carrying out short-term interventions year after year, and move towards contributing to longer-term development gains or, when there are operational constraints hindering their ability to do so in specific contexts, operate in synergy with other actors who ensure these long-term development outcomes are achieved. Conversely, development actors will need to plan and act with greater urgency to help build national systems and capacities for prevention and preparedness, tackle people's vulnerability, inequality and risk as they pursue the SDGs, including in crises settings wherever possible, by placing greater emphasis in early engagement and bold steps to reach those furthest behind.

4. **The project logic/theory of change should be reformulated at the earliest opportunity (certainly prior to the 2018-2022 UNSDF.)** To do so will require the adoption of a theory of change and related SMART indicators at the outputs, outcomes and impact level, along with their relevant means of verification and baseline data. If "Reduced negative impact and improved recovery of populations due to humanitarian crises" remains the impact level result, reformulated specific, measurable, achievable, reliable and timely indicators should be defined so that the impact is indeed measurable. A variation of SDG Target 11.5 could also be used: "By 2030, significantly reduce the number of deaths and the number of people affected and substantially decrease the direct economic losses relative to GDP caused by disasters, including water-related disasters, with focus on protecting the poor and people in vulnerable

situations." Targets specific to Rwanda could be adopted at the impact level. The work could also contribute to SDG Target 1.5: "By 2030, build resilience of the poor and those in vulnerable situations and reduce their exposure and vulnerability to climate-related extreme events and other economic, social and environmental shocks and disasters."

5. **The scope of any reformulated project should be commensurate with an assured and realistic level of resources available to implement it.** To do so will need a more refined pipeline analysis that combines well-defined development needs, with political will, substantive technical expertise on the part of UNDP, critical partners and solid donor support. The core elements of the project, including its central strategy, related outputs, key activities and targets should correspond to areas with a high degree of funding certainty or mature pipeline; the Project Document should be formulated around this core. While auxiliary components can be envisaged, if the related pipelines are soft, they should be offered as part of the formal programme of assistance until funding is awarded.

6. **UNDP should improve the conceptual clarity of its interventions, and adopt outcomes that are better-aligned to the current and evolving body of knowledge on disaster risk governance.** "Disaster risk governance refers to the way is which public authorities, civil servants, media, private sector and civil society coordinate at community, national and regional levels to manage and reduce disaster and climate related risks. This means ensuring that sufficient levels of capacity and resources are made available to prevent, prepare for, manage and recover from disasters. It also entails mechanisms, institutions and processes for citizens to articulate their interests, exercise their legal rights and obligations and mediate their differences. The institutional, policy and legal arrangements for managing disasters and risks are key areas where DRG is concerned."

   For example," By 2018, institutional, legal and policy mechanisms are strengthened at national and local levels to govern the reduction and management of disaster risk in Rwanda" would be one such possible outcome. Outputs related to planning frameworks, policies, laws and regulations, institutional systems (early warnings/communications, etc.) and mainstreaming efforts could be bundled under this outcome, as could capacity development. "By 2018, communities and households in 10 districts adopt disaster-resilient practices" could be another outcome. Public awareness and knowledge campaigns, adoption of model interventions such as land terracing, tree-planting and soil erosion, disaster-resilient housing, relocation to safer land, etc. could be incorporated either as indicators or as outputs, depending on how directly they are related to the project. (Only those activities which are under the direct control of the project should be used as outputs.)

7. **A capacity development assessment and capacity development plan are still critical to complete within the remainder of the 2013-2018 project cycle, particularly if capacity development is a core component of the 2018-2022 UNDP technical assistance**. Given access to the pool of expertise in capacity development assessment, it would probably be best if UNDP tendered this work from an established institution or individual. If properly conducted, it will also help project implementers to gain an understanding of the changes required to strengthen the enabling environment for DRR, along with increased familiarity with why and how key actors might buy into that change. Most sound capacity assessments would be organized by domains, such as 1. Governance, 2. Administration, 3. Human Resources, 4. Financial Management, 5. Organizational Management, 6. Program Management, 7. Project Performance Management, 8. Technical Capacities, each with their respective baselines and targets. An institutional-functional approach to DRR capacity development should have a clear focus on the coherence of institutional structures, clarity of mandates, rule of law, and adequacy of resources and capacities. Without such processes, the evaluability of a capacity development project is severely constrained. In lieu

of strategic interventions, the project is likely to become activities-driven, and the impact of those activities largely immeasurable.

8. **UNDP should develop a solid Knowledge and Practices baseline and implementation strategies in the next 18 months if public information and awareness remains a component of this project beyond 2018.** A stratified random sampling design could be utilized to design Knowledge and Practices surveys that could be self-administered among a relatively small number of participants on the basis of the project's training modules, materials, social media and public information outreach efforts.

9. **While the main impact of this project to date has been in risk governance, it is important that UNDP/MIDIMAR continue to roll out the components, such as contingency plans, and to continue to grow capacity in such areas as droughts, volcanic eruptions, earthquakes and epidemics.** Rwanda exhibits some characteristics of a conventional disciplinary fragmentation in terms of its response to disasters. For example, in 2015/16, the malaria epidemic that affected nearly two million people was the purview of the Ministry of Health, and the drought that affected nearly 200,000 people was primarily the purview of the Ministry of Agriculture. Meanwhile, the landslides that rendered nearly 6,000 people homeless were the purview of the Ministry of Disaster Management. A better practice is to enable the best synergies across multiple sectors and fields, rather than "silo-ing" the disaster risk domain as a competing scientific priority. Advancing disaster risk-related science should be viewed as catalytic and enabling, rather than competitive, and in society's best interests. To do so will require purposefully advancing cross-disciplinary disaster risk research in line with disaster risk capacity building for both decision-makers and professionals/practitioners. These will be important themes under the Sendai Framework, and both UNDP and MIDIMAR should participate in related trainings.

10. **UNDP should use Results Based Management for any future program development.** This series of "SMART" results and indicators in a way that addresses the analysis, employing a related theory of change, using change language, robust indicators and means of verification. Results-based management systems should be harmonized across UN entities.

11. **The project should continue to flesh out the full and equal participation, leadership and empowerment of women and girls**. Building on an excellent foundation, UNDP should continue to invest in women as agents of change, maintaining a strong focus on gender equality results and increasing investments in gender capacity and expertise of staff across the system.

12. **Preparedness for health emergencies and transboundary hazards should be mainstreamed into this project, in partnership with MINISANTE and other sectoral agencies**. This should include the incorporation of whole-of-society approaches to health emergencies in an inter-disciplinary manner and the use of tabletop and real time simulations within districts. Health workers also need to be trained in disaster risk reduction and management concepts at all levels of the system.

## *Lessons Learned*

1. The current Disaster Response work being undertaken in Gakenke is an interesting illustration of the World Humanitarian Summit's Core Responsibility 4: "Change people's lives from delivering aid to ending need." In the post-recovery period in Gakenke, building upon the successful platform established in the humanitarian response, there is an opportunity to build a long term sustainable development programme and to transcend the humanitarian-development divide. Working across sectors and

institutional boundaries, resilience could indeed be built through the adoption of green agriculture and crop intensification activities; the use of soil erosion, reforestation and terracing techniques, livelihoods diversification, and the construction of disaster-resilient housing, as well as supporting the green cities and population relocation efforts, particularly for those most vulnerable families inhabiting marginal, high risk dwellings, many of which are households headed by women.

2. To genuinely reduce risks in Rwanda's rural areas will require a very comprehensive effort that takes the reality of population growth into full consideration. With Rwanda's population growth rate, currently at 2.4% (down from 2.9% in 2000) and with its demography approximately 83% rural, in combination with such drivers as climate change and high rates of poverty, risks will likely continue to climb and outpace measures to reduce them, unless the root causes are addressed. If these demographic trends continue, in combination with longer life expectancy and lower rates of infant and child mortality, the density per square kilometer could climb from 415 inhabitants in 2012 (already Africa's highest) to 987 in 2050, with a projected population of 26 million, far exceeding the ecosystem's carrying capacity (2012, GoR). Related visions and strategies will need to adopt a very long-term perspective.

3. Rwanda's plans to Green Model Cities with Green Economic Opportunities and its ambitious Master Plans for Kigali that aim to make it a world-class sustainable city are prescient, viewed as they are as an opportunity for achieving proper use of the land and other natural resources, as well as catalyzing social and economic development. These are efforts that should be fully supported, and that could be of substantial relevance to other Sub-Saharan African countries that are dealing with similar challenges.

4. Ownership of the MIDIMAR by a range of stakeholders at national on the National Platform for Disaster Risk Reduction level has been a key factor of success, with integrated inclusiveness and sustainability as driving factors in elaborating the strategy.

# ANNEXES

# ANNEX 1: PROPOSED THEORY OF CHANGE/RESULTS FRAMEWORK

## EXPLANATION – LOGFRAME MATRIX

| Project Description | Performance Indicators | Means of Verification | Assumptions |
|---|---|---|---|
| Goal: The broader development impact to which the project contributes – at a national and sectoral level. | Measures of the extent to which a sustainable contribution to the goal has been made. Used during evaluation. | Sources of information and methods used to collect and report it. | |
| Purpose:<br>The development outcome expected at the end of the project. All components will contribute to this. | Conditions at the end of the project indicating that the Purpose has been achieved and that benefits are sustainable.. Used for project completion and evaluation. | Sources of information and methods used to collect and report it. | Assumptions concerning the purpose/goal linkage. |
| Component Objectives:<br>The expected outcome of producing each component's outputs. | Measures of the extent to which component objectives have been achieved and lead to sustainable benefits.. Used during review and evaluation. | Sources of information and methods used to collect and report it. | Assumptions concerning the component objective/purpose linkage. |
| Outputs:<br>The direct measurable results (goods and services) of the project which are largely under project management's control | Measures of the quantity and quality of outputs and the timing of their delivery. Used during monitoring and review. | Sources of information and methods used to collect and report it. | Assumptions concerning the output/component objective linkage. |
| Activities:<br>The tasks carried out to implement the project and deliver the identified outputs. | Implementation/work program targets. Used during monitoring. | Sources of information and methods used to collect and report it. | Assumptions concerning the activity/output linkage. |

MIDIMAR EXAMPLE FOR DISCUSSION

| Results | Performance Indicators | Means of Verification | Assumptions |
|---|---|---|---|
| **Goal:** Make cities and human settlements inclusive, safe, resilient and sustainable | (these will need to be customized for Rwanda in national planning and harmonized in UN documents)) | Dependent on indicators selected in Rwanda. | NB: SDG 11 – this should likely be an outcome in UNSDF…<br>• The Rwandan population will increase from 10.5 million in 2012 to 16.3 million in 2032.<br>• Population density will grow from 415/ sq. km in 2012 to 645 in 2032.<br>• Annualized births will stabilize at 393,000 by 2028.<br>• Life expectancy will increase from 64.5 to 71.6 years<br>• The urban population will increase from 1.7 m in 2012 to 4.9 m in 2032 with an urbanization rate of 30% |
| **Purpose** By 2030, significantly reduce the number of deaths and the number of people affected and substantially decrease the direct economic losses relative to GDP caused by disasters, including water-related disasters, with focus on protecting the poor and people in vulnerable situations | **Indicator 1.** Number of deaths, missing persons and persons affected by disaster per 100,000 people in Rwanda (see notes) | • National Data Loss Database | (nb: this is SDG target 11.5, Indicators 11.5.1 and 11.5.2 on which MIDIMAR/UN should report in any case; it is also linked to target B of Sendai); please also see 7 Sendai targets – these will be adopted by UNGA in early 2017 • I<br><br>Maximum and minimum monthly temperatures will increase from 1.5-2.7°C and 1.7-2.8°C, respectively. |
| | **Indicator 2:** Direct disaster economic loss in relation to global GDP, including disaster damage to critical infrastructure and disruption of basic services (see notes) | • National Data Loss Database | |

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| | | | Intensification of heavy rainfall will continue, thus increasing the risk of disasters such as floods and landslides. |
| **Outcome 1**: By 2018, institutional, legal and policy mechanisms are strengthened at national and local levels to govern the reduction and management of disaster risk and enhance preparedness in Rwanda. | Baseline data aggregated corresponding to the global targets of the Sendai Framework, including a national disaster loss database disaggregated by sex, age and ability by 2018 | • National Disaster Loss Database and methodology with current data ratified by NPDRR | (these assumptions should be drafted at each level to related external factors outside the project's control that could influence the attainment of the outcome/output. I am not familiar enough with the external environment to draft them) |
| | The role, mandate and main responsibilities of relevant national stakeholders in the established national disaster risk assessment and monitoring system in Rwanda are clarified and legalized by 2018 | • National disaster management law and related bylaws. | |
| | Engaged and active NPDRR in multiple sectors that understands and is committed to disaster risk reduction and community resilience as strategic approaches to achieve sustainable development by 2018 | • Multi-year plans in key sectors adopted in key national plans and strategies | |
| | Contingency plans and field simulations for epidemics, volcanic eruptions and lightning rolled out | • Field-tested contingency plans ratified by NPDRR | |
| | Common access to accurate, appropriate and applicable risk information and knowledge that is context-specific and takes regional and global threats into consideration by 2018 | • National Risk Atlas supplemented by district specific hazard information | |
| | Adoption of an all-of-society engagement and | • All of society approach ratified by | |

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| | partnership, guided by the principle that governments, parliamentarians, civil society and community groups, international organisations, the private sector, members of the science and technology community, and other key stakeholders jointly engage in disaster risk reduction by 2018 | the NPDRR and reflected in strategic documents within sectors.<br>(note: this is also called whole of society) | |
| | % of Rwandan districts with enhanced disaster preparedness plans, communication systems and designated responsibilities for Effective emergency response for multiple hazards by 2018 | • District Development Plans<br>• Sample Surveys | |
| | % of NPDRR institutions mainstreaming/ investing in operational disaster risk reduction and resilience strategies in their programming by 2018 | • Multi-year plans in key sectors at national and local levels<br>• Financial records<br>• Field monitoring sample surveys | |
| | % of NPDRR institutions investing in clear and operational "build back better" strategies in their programming by 2018 | • Multi-year plans in key sectors<br>• Financial records<br>• Field monitoring sample surveys | |
| **Outcome 2:** By 2018, communities and households in 10 districts adopt sustainable disaster-resilient practices. | % of identified disaster-susceptible households relocated to safer zones by 2018 | • District NASA database, disaggregated by sex and vulnerability | |
| | % of identified disaster-susceptible households using improved roofing by 2018 | • District NASA database, disaggregated by sex and vulnerability | |
| | % of disaster-susceptible households receiving DRR incentives and/or Cash-for-Work by 2018 | • District NASA database, disaggregated by sex and vulnerability | |
| | % of disaster-susceptible households | • District NASA database, | |

| | | | |
|---|---|---|---|
| | utilizing improved land use practices | disaggregated by sex and vulnerability | |
| | % of participants living in disaster-susceptible households able to identify hazards and resilient practices | • District NASA database, disaggregated by sex, age and vulnerability | |
| **Output 1.1** Capacities of national and local institutions to manage disaster risks and recover from disaster events; including improved national and local coordination mechanisms, are enhanced. | A multi-sectoral, multi-stakeholder National Platform for DRR is fully functional and meets quarterly | • Minutes of quarterly meetings | Retention of key staff will remain at 80% or above during the balance of the implementation period. |
| | Guidelines for relief, early recovery and reconstruction are adopted by the NPDRR. | • Ratified guidelines for relief, early recovery and reconstruction | |
| | National targets, indicators and baseline data requirements are clearly defined for the implementation of Sendai and the SDGs, ratified by the NPDRR and related resources are earmarked by 2018. | National targets and indicators for Sendai and SDG indicators | |
| | The adequacy of baseline data for Sendai and the SDGs is assessed and measures taken to address any gaps. | • Baseline data assessment and systematic data collection to cover identified gaps | |
| **Output 1.2** End-to-end early warning systems are established and functioning Effectively by 2018. | A comprehensive, systematic assessment of EWS in Rwandan districts is in place. | • Completed EWS assessment | |
| | Specific early warning criteria are adopted for each type of hazard in conjunction with other major stakeholders. | • Adopted list of early warning criteria endorsed by major stakeholders and implementation partners | |
| | Communication protocols, procedures and flow charts are functioning for each type of major hazard | • EWS communication protocols, procedures and flow charts | |
| **Output 1.3** An evidence-based national disaster risk assessment and monitoring system (DRAMS) is | Comprehensive National Risk Assessment Framework (NRAF) is finalized | • Finalized National Risk Assessment framework | |

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| established and working Effectively by 2018. | Evidence-based national hazard risk profile developed | • National Risk Atlas | |
| | The national hazard risk profile is used to formulate a National Risk Reduction Strategy and land-use planning | • Demonstrated applications of national hazard risk profile | |
| | A unified approach to compiling disaster damage and loss information is adopted by the NPDRR, including applications for rapid loss appraisal and response. | • Ratified applications for rapid loss appraisal and response | |
| **Output 2.1**. In selected high-risk districts, the community's knowledge of disaster risk reduction is increased and practices adopted to improve resilience to disasters by 2018. | % of households in high risk districts adopting evidence-based mitigation measures | • Randomized sample survey disaggregated by age, gender and socio-economic status | |
| | % of interviewees who can identify 2 relevant hazards and 2 disaster risk reduction practices | • Randomized sample survey disaggregated by age, gender and socio-economic status | |
| **Activity 1.1.1** A comprehensive capacity assessment of MIDIMAR and NPDRR, DDMCs and SDMCs is undertaken and results analyzed. | Comprehensive capacity assessment organized by domains (see below) | • Finalized capacity assessment | |
| **Activity 1.1.2.** A capacity development plan is adopted that reflects prioritized interventions in capacity gap areas of high relevance to the project purpose. | Finalized MIDIMAR capacity development plan organized by domains, such as<br><br>1. Governance,<br><br>2. Administration,<br><br>3. Human Resources, 4. Financial Management,<br><br>5. Organizational Management,<br><br>6. Program Management, | • Finalized multi-year capacity development plan with baselines and targets | |

| | | | |
|---|---|---|---|
| | 7. Project Performance Management,<br><br>8. Technical Capacities, each with their respective baselines and targets | | |
| **Activity 1.1.3.** The capacity development plan is rolled out and assessed in terms of institutional strengthening. | # of DRM training attended by 1) MIDIMAR Staff 2) NPDRR Focal Points 3) members of DDMCs and SDMCs | • Training rosters<br>• Training assessment<br>• Staff retention records | |
| | # of capacity development activities in per identified domain | | |
| **Activity 1.1.4** Training modules are developed for Community-Based Disaster Risk Reduction and Management (CBDRM) and Post Disaster Needs Assessment (PDNA) and Training of Trainers strategy developed and rolled out. | # of CBDRM and PDNA, DRM and Advanced DRM modules field-tested and refined | • CBDRM, PDNA modules and ToT strategy | |
| | # of participants trained in each module, disaggregated by age, gender and socio-economic status | • Training rosters/database disaggregated by age, gender and socio-economic status | |
| **Activity 1.1.5** An assessment is conducted as to the implications/adoption of the Sendai and SDGs for DRM/DRR in Rwanda, and national targets are adopted**.** | Draft list of national targets and indicators corresponding to the Sendai Framework and SDGs in the areas of DRM/DRR | • Draft list ratified by key stakeholders | |
| **Activity 1.1.6** The adequacy of current baselines for Sendai and the SDGs is assessed, and methods identified to fill any gaps. | Baseline assessment related to each target and indicator for implementation of Sendai and SDGS | • Baseline assessment report | |
| **Activity 1.2.1** Roles and institutional arrangements are clearly defined specifying roles, responsibilities and chain of command in early warning protocols. | # of early warning protocols specifying roles, responsibilities and chain of command | • EWS protocols ratified | |

| | | | |
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| **Activity 1.2.2** Standard Operating Procedures for Early Warning are adopted at all levels. | # of national stakeholders using EWS SOPs | • Sample survey | |
| | # of district governments using EWS SOPS | • Sample survey, field visits | |
| **Activity 1.2.3** Specific warning criteria are established for each type of hazard | # of national stakeholders using EW criteria for each type of hazard | • Sample survey | |
| | # of district governments using EW criteria for each type of hazard | | |
| **Activity 1.2.4** Communication/Information protocols, procedures and flow charts are used to produce early warning messages. | # of early warning messages produced using protocols, procedures and flow charts | • EWS protocols, procedures and flowcharts | |
| **Activity 1.3.1** A National Risk Assessment Framework (NRAF) developed to guide the development of national DRAM system | Completed national risk assessment framework approved | • National Risk Assessment Framework document | |
| **Activity 1.3.2.** An evidence-based national hazard risk profile is developed in a comprehensive National Risk Assessment | Rwanda national risk profile published | • Rwanda Risk Atlas | |
| **Activity 1.3.3.** An integrated national disaster database with unified methodologies, tools and guidelines for collecting and compiling disaster damage and loss data is developed | National database established | • Functioning database | |
| | Unified methodologies for disaster damage and loss documented | • Database tools and guidelines | |
| | # of national and district stakeholders trained in tools and guidelines for disaster loss | • Training rosters | |
| **Activity 2.2.1** Evidence-based, cost-effective disaster risk mitigation measures identified and piloted in selected high-risk districts in such areas as relocation, infrastructure, | 3 or more disaster risk mitigation measures for households are adopted and replicated | • Project reports<br>• Field visits | |

| | | | |
|---|---|---|---|
| alternative livelihoods and land husbandry | 2 or more disaster risk mitigation measures for public infrastructure are adopted and replicated | | |
| **Activity 2.2.2** Public knowledge and information programmes for DRR/DRM are designed and implemented in high-risk districts. | Knowledge and practices sample baseline survey is finalized. | • K & P baseline survey findings and recommendations | |
| | Media are trained on DRM, DRR and Climate Change Adaptation | • Workshop reports<br>• Training rosters | |
| | 4 or more types of public information materials are developed | • DRM TV and Radio Spots, brochures, banners, pamphlets, info boards, etc. | |
| | Public Information campaigns are undertaken in high-risk districts and school clubs are formed | • DRR school club records<br>• Curricula<br>• Media records and photos<br>• Special event records | |

**Notes: Definitions Indicator 1 per UNISDR-OEIWG (Nov 2016) pending General Assembly adoption**

**Death:** The number of people who died during the disaster, or directly after, as a direct result of the hazardous event

**Missing:** The number of people whose whereabouts is unknown since the hazardous event. It includes people who are presumed dead although there is no physical evidence. The data on number of deaths and number of missing are mutually exclusive.

**Affected:** People who are affected, either directly or indirectly, by a hazardous event. Directly affected: People who have suffered injury, illness or other health Effects; who were evacuated, displaced, relocated or have suffered direct damage to their livelihoods, economic, physical, social, cultural and environmental assets.

**Indirectly affected:** People who have suffered consequences, other than or in addition to direct Effects, over time due to disruption or changes in economy, critical infrastructures, basic services, commerce, work or social, health and psychological consequences.

* In this indicator, given the difficulties in assessing the full range of all affected (directly and indirectly), UNISDR proposes the use of an indicator that would estimate "directly affected" as a proxy for the number of affected. This indicator, while not perfect, comes from data widely available and could be used consistently across countries and over time to measure the achievement of the Target B of the Sendai Framework.

**Notes: Definitions Indicator 2 per UNISDR**

Definition: Direct economic loss: the monetary value of total or partial destruction of physical assets existing in the affected area. Direct economic loss is nearly equivalent to physical damage. [a] An open-ended intergovernmental expert working group on indicators and terminology relating to disaster risk reduction

established by the General Assembly (resolution 69/284) is developing a set of indicators to measure global progress in the implementation of the Sendai Framework. These indicators will eventually reflect the agreements on the Sendai Framework indicators.

**Rationale:** The disaster loss data is significantly influenced by large-scale catastrophic events, which represent important outliers. UNISDR recommends Countries to report the data by event, so complementary analysis can be done by both including and excluding such catastrophic events that can represent important outliers.

**Comments and limitations:** Not every country has a comparable national disaster loss database that is consistent with these guidelines (although current coverage exceeds 89 countries). Therefore, by 2020, it is expected that all countries will build/adjust national disaster loss databases according to the recommendations and guidelines by the OEIWG

# ANNEX 2: LIST OF INTERVIEWEES

| NATIONAL STAKEHOLDERS | NAME AND POSITION OF INTERVIEWEE | GENDER | DATE |
|---|---|---|---|
| **MIDIMAR:** | | | |
| Ministry of Disaster Management and REFugee Affairs (MIDIMAR) | Antoine RUVEBANA, Permanent Secretary | M | 18-Nov-2016 |
| | Philippe HABINSHUTI, Director, Response Recovery Unit | M | 25-Nov-2016 |
| | Veneranda INGABIRE, Director, Special Project Implementation Unit | F | 7 Nov and 18 Nov, partial |
| | Sabine UWAMALIYA, Early Warning Systems Specialist | F | 25-Nov-2016 |
| | Tite BIZIMANA, Disaster Recovery Specialist | M | 25-Nov-2016 |
| | Fernande NYIRASABIMANA, Risk Reduction and Preparedness Specialist | F | 1-Dec-2016 |
| Total MIDIMAR interviews = 6, 3 male and 3 female | | | |
| **Other NPDRR Stakeholders:** | | | |
| Ministry of Agriculture and Animal Resources (MINAGRI) | Innocent BISANGWA, Environment and Climate Change Specialist | M | 29-Nov-2016 |
| Ministry of Finance and Economic Planning (MINECOFIN) | Valens TUGIRIMANA, Sector Investment Officer | M | 28-Nov-2016 |
| Ministry of Health (MINISANTE) | Dr. Jose NYAMUSORO, Division Manager, Epidemic Surveillance and Response | M | 25-Nov-2016 |
| Ministry of Local Government (MINALOC) | Ignace KAYANGIRA, Sector Decentralization Coordination Specialist | M | 28-Nov-2016 |
| Rwanda Environment Management Agency (REMA) | Patrick MUGABO, Programme Analyst, Climate Change Adaptation | M | 24-Nov-2016 |
| Rwandan Housing Authority (RHA) | Haruna NSHIMIYANA, Division Manager in Charge of Regulations and Standards | M | 29-Nov-2016 |
| Rwandan Meterology Agency (Meteo Rwanda) | Anthony TWAHIRA, Divison Manager of Weather/Climate Services and Applications | M | 21-Nov-2016 |
| Rwanda Red Cross | Angelique MURUNGI, Head of Disaster Management | F | 21-Nov-2016 |

| | | | |
|---|---|---|---|
| Other national stakeholders = 8, 7 male and 1 female | | | |
| **UN AGENCIES** | | | |
| UNDP | Sophie NYIRABAKWIYE, Programme Specialist and Head of Poverty and Environment Unit | F | 25-Nov-2016 |
| | Gemma DALENA, Disaster Risk Reduction Technical Advisor | F | 22-Nov-2016, 2-Dec-2016 |
| | Nicolas SCHMIDS, Programme Officer (UNV), Poverty and Environment | M | 12-Nov-2016, partial |
| | Bernadin UZAYISABA, Climate Change Adaptation | M | 21-Nov-2016 |
| Food and Agriculture Organization (FAO) | Jeanne d'Arc MUKAMWIZA, Programme Associate | F | 28-Nov-2016 |
| International Organization for Migration (IOM) | Eriko NISHIMURA, Project Officer | F | 24-Nov-2016 |
| UN Habitat | Monique SEVUMBA, UN Habitat Programme Officer, Rwanda | F | 24-Nov-2016 |
| World Food Programme WFP | Mari Hassinen-Agoya, Head of Programme Unit | F | 28-Nov-2016 |
| | Jean-Paul DUSHIMUMUREMYI, National Programme Officer | M | 28-Nov-2016 |
| UN agency interviews = 9, 3 male and 6 female | | | |
| **DONORS** | | | |
| Embassy of Japan | Saori KISHI, Political and Economic Officer | F | 2-Dec-2016 |
| | Shinchi SAKUMA, Coordinator for Economic Cooperation | M | 2-Dec-2016 |
| Donors = 2, 1 male, 1 female | | | |
| **LOCAL STAKEHOLDERS** | | | |
| Gakenke District (disaster site affected by landslides in May 2016)<br><br>Total interviews = 11<br><br>3 female and 2 male government employees<br><br>2 female and 4 male project participants | Catherine UWIMANA Vice Mayor in charge of Social Affairs, Gakenke (0788453885) | F | 22-Nov-2016 |
| | Patience RUGAMBYA, Social Affairs Officer, Gakenke Sector | F | 23-Nov-2016 |
| | Jean HODARI, District Disaster Management Officer (on loan to Gakenke from Rubavo District) | M | 23-Nov-2016 |
| | Levis NSHIMIYIMANA, Network and System Coordinator, Gakenke District (NASA) | M | 23-Nov-2016 |

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|---|---|---|---|
| | Aline MPOIMBARA, District Gender Officer | F | 23-Nov-2013 |
| | Sylvestre NAENDOHOYO, church employee and participant who lost wife and 4 children in disaster, as well as house and crops, received cash grant, rehabilitated house, suffering PTSD | M | 23-Nov-2016 |
| | Angelique UZAMUKUNDA, 25 year old woman, M, mother of 2, whose house was destroyed, recipient of cow | F | 23-Nov-2016 |
| | Jean Chrisastrom MUNIGAPIRO, 54 year old man, day laborer, M with five children, house was total loss, receiving asset replacement for essential tools to continue trade | M | 23-Nov-2016 |
| | Alphonsine NZABARERERAKO, 32 year old temporary laborer, S, mother of 5, illiterate/1 yr of education, received house from MIDIMAR, food assistance withdrew 6 and 7 yr old children from school to help her care for 14 mo old twins | F | 23-Nov-2016 |
| | Felix HABAKINJE, Farmer, lost his crops, contracted to work on bridge repair for 20 days CFW at RFW 1,200 (US 1.40) per day | M | 23-Nov-2016 |
| | Samuel MPSONSWENIMANA, Farmer, lost grandmother, aunt and cousins, contracted to work on bridge repair for 20 days CFW at RFW 1,200 (US 1.40) per day | M | 23-Nov-2016 |
| Ngororero District<br><br>Total interviews = 9<br><br>2 female and 2 male government EMPLOYEES<br><br>3 female and 2 male project participants | Janvier KURADUSENGE, Vice Mayor for Social Affairs | M | 1-Dec-2016 |
| | Christine KANYANGE, Vice Mayor for Finance and Economics | F | 1-Dec-2016 |
| | Aimable RUTAGISHA, District Disaster Management Officer | M | 1-Dec-2016 |
| | Julienne NYIRIAHABIMANA, Gender Officer | F | 1-Dec-2016 |
| | Martin HATEGEKIMANA, 55 year old mason with 8 children | M | 1-Dec-2016 |
| | Lucie NZOKAMARWANIKI, 34 year old mother of 4, no schooling, returned rEFugee from Congo | F | 1-Dec-2016 |

| | | | |
|---|---|---|---|
| | Gloriose UWAMAHORO, 13 year old girl in 4th grade, with 3 year old child on back, wants to be a doctor | F | 1-Dec-2016 |
| | Joyeuse NYIRAKURAMA, single, 21 year old masonry helper, one of 7 children, 2 of whom died | F | 1-Dec-2016 |
| | Eric HENGISHA, 12 year old boy in 4th grade, father is blind, one of 5 children, struggles with hunger. Wants to become mayor. 2 siblings 17 and 21 out of school and "do nothing all day" | M | 1-Dec-2016 |

## TOTAL INTERVIEWS

| **National** | **Total Interviews** | **Male** | **Female** |
|---|---|---|---|
| MIDIMAR | 6 | 3 | 3 |
| Other NPDRR | 8 | 7 | 1 |
| UN | 9 | 3 | 6 |
| Donor | 2 | 1 | 1 |
| **Sub total** | **25** | **14** | **11** |
| **District** | | | |
| Officials | 9 | 4 | 5 |
| Participants | 11 | 5 | 6 |
| **Sub total** | **20** | 9 | **11** |
| **Total** | **45** | **23** | **22** |
| Percentage | | 51% | 49% |

# ANNEX 3: METHODOLOGY AND EVALUATION MATRIX

## MTE EVALUATION MATRIX: MIDIMAR/UNDP RWANDA

*Partially based on OECD/DAC Criteria: 'Results Based Management in the Development Cooperation Agencies: A Review of Experience.' 2000 and UNDP "Outcome Level Evaluations: A Companion Guide to the Handbook on Monitoring and Evaluating for Development Results for Programme Units and Evaluators.' 2011*

| | AREA | CRITERIA | RATINGS | | |
|---|---|---|---|---|---|
| | | | **1- Not at all (1)**<br>**2- To some extent/with constraints (2)**<br>**3- To a large extent/in progress (3)**<br>**4- Fully (4)**<br>**5- Strongly (5)**<br>**6- NA – Not Applicable** | | |
| **I** | **RELEVANCE** | | **RATING** | **POINTS** | **INFO SOURCES** |
| R1 | Outcomes Alignment | Does the intended programme impact align with international priorities (HFA, Sendai, SDGs, etc.) | To a large extent | **3** | • Desk Review HFA, Sendai, Post-2015 DRR Framework |
| R2 | Support of UNDP Global Mandate | Is the programme aligned with UNDP Strategic Plan 2014-17? | Fully | **4** | • Desk Review UNDP Strategic Plan 2014-2017 |
| R3 | Support of National Priorities | Is the intended programme impact aligned with national strategies and priorities (Vision 2020, EDPRS, etc.) | Strongly | **5** | • Desk Review National Planning Documents such as Vision 2020, EDPRS<br>• Interviews with government partners |
| R4 | Gender Strategy | Has a gender strategy has been mainstreamed in the programme design? | To a large extent | **3** | Desk review of key project documents and UNDAP<br><br>Interviews with UN and government partners |
| R5 | Vulnerable Groups | Is the programme relevant to vulnerable groups as identified in HDR, Vulnerability Assessment, Risk Atlas etc. | Fully | **4** | • Rwanda HDR 2015; Comprehensive Food and Vulnerability Analysis 2016; observations from field visits |
| R6 | Prioritization of Interventions | Have specific methods (e.g. bottleneck analysis or other) been used to prioritize interventions for the most vulnerable, including women? | To a large extent | **3** | • Desk review of secondary data<br>• Interviews with UN and government partners |

| | | | | | |
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| R7 | Disaster Risk Reduction and Humanitarian Response | Are the disaster risk reduction and humanitarian response strategies mainstreamed within the project of high relevance to the context? | To a large extent | **3** | • Desk review of key project documents (Risk Atlas, etc.)<br>• Interviews with UN and government partners |
| R8 | Human Rights Based Approach | Has a human rights-based approach been utilized to understand causality and inform programme design? | To some extent | **2** | • Desk review of key project documents and UNDAP<br>• Interviews with UN and government partners |
| R9 | Theory of Change | Is there a clear Theory of Change evident in the project logic? Are multiple outcomes complementary and so they support a logical theory of change? | To some extent | **2** | • Desk review of key project documents and UNDAP<br>• Interviews with UN and government partners |
| R10 | Upstream/<br><br>Downstream Strategy | Are there complementary upstream and downstream activities that seek to inform policy and law? | Fully | **4** | • Review of Rwanda Disaster Management Policy<br>• Interviews with UN and government partners |
| R11 | Participation | To what extent have participatory approaches been adopted in the planning and delivery of the project, and what stakeholders were involved? | Fully | **4** | • Review of project plan and reports<br>• Interviews with participants in programme planning/implementation |
| | **OVERALL RATING RELEVANCE** | | | **3-4** | Fully Achieved |
| **II** | **EFFECTIVENESS** | | | | |
| E 1 | Planned Outcomes/Outputs | To what extent is the project on track to delivering its intended outcomes and outputs at mid-term? | To some extent<br><br>Constrained | **2** | • Review of annual work plans, annual reports<br>• Interviews with UN and government partners |
| E2 | Site Selection Criteria | To what extent did the criteria for the select of project sites take vulnerability and marginalization into account? | To a large extent | **3** | • Review of annual work plans, annual reports, site selection criteria<br>• Interviews with UN and government partners |
| E3 | Delivering as One | To what extent is the project integrated into the UNDS's Delivering as One Approach in Rwanda? Are DaO structures manifest in its programming? | ,<br><br>In progress | **3** | • Review of midterm evaluation, UNDAP and new joint programme document<br>• Interviews with FaO, UNDP/CCA project, IOM, WHO, UN-Habitat |
| E4 | Disaster Response | To what extent has the project responded effectively | To a large extent | **3** | • Field visits to disaster-afflicted areas (landslides, droughts); |

| | | | | | |
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| | | to disasters during the 2013-2016 implementation cycle? | | | interviews with stakeholders and implementing partners |
| E5 | Management Mechanisms | To what extent do the primary stakeholders in the project understand its purpose and activities? | To a large extent<br><br>Primarily activities | **3** | • Interviews with project stakeholders, especially MIDIMAR staff and members of DDMOs |
| E6 | Governance Mechanisms | To what extent have project governance mechanisms such as steering committees at different levels been functioning Effectively? | Fully | **4** | • Review of steering committee minutes<br>• Interviews with key stakeholders |
| E7 | Adaptability | To what extent has the project adapted to contextual changes and emerging needs in the development environment? | To a large extent on particular priorities | **3** | • Interviews with project stakeholders, especially MIDIMAR staff and members of DDMOs |
| E8 | Gender Equality | To what extent has the project supported positive changes in terms of gender quality and were there any unintended Effects? | Fully | **4** | • Interviews with project stakeholders, especially MIDIMAR staff and members of DDMOs |
| E9 | Social Equity | To what extent has the project supported positive changes in terms of social equity and addressing the needs of disadvantaged and vulnerable groups? | Fully | **4** | • Interviews with project stakeholders, especially MIDIMAR staff and members of DDMOs |
| | **OVERALL RATING EFFECTIVENESS** | | | **3** | Achieved to a mixed extent |
| **III.** | EFFICIENCY | | | | |
| EF 1 | Timeliness | Has the project been implemented within its timelines? | To some extent | **2** | • Desk review of programme documents/annual work plan and reports |
| EF 2 | Utilisation Rate | To what extent is the project's utilisation rate from various funding sources on track? | To a large extent | **3** | • Desk review of data, including ATLAS<br>• Interviews with staff |
| EF **3** | Funding Level | Has the project raised the level of funds necessary to achieve its 5-year scope of work? | To some extent/constrain ts | **2** | • Desk review of data, including ATLAS<br>• Interviews with staff |
| EF<br><br>4 | Reporting | Has financial and project reporting been timely and accurate? | To a large extent | **3** | • Desk review of programme documents/annual work plan and reports |
| EF | Focus | Were UNDP resources focused on activities that | To some extent | **2** | • Interviews with project stakeholders, especially |

| | | | | | |
|---|---|---|---|---|---|
| 5 | | were expected to produce significant results? | | | MIDIMAR and UNDP staff |
| EF 6 | SPIU | How has the existence of the Special Project Implementation Unit assisted the EFficiency of project delivery? | Strongly | **5** | • Interviews with project stakeholders, especially MIDIMAR and UNDP staff |
| EF 7 | Project Audits | How has the project reacted to any recommendations made in Project or Programme audits? | N/A | **0** | • Interviews with project stakeholders, especially MIDIMAR and UNDP staff after audit review |
| EF 8 | Results Based Management | Are the project results clearly stated and expressed in change language (who, what, where) in an appropriate level of detail? | Not at all | **1** | • Assessment of key programme documents<br>• Interviews with project stakeholders, especially MIDIMAR and UNDP staff |
| EF 9 | Baseline Data | Are credible baseline data in place at the outcome level? | Not at all | **1** | • Review of indicators and baseline data |
| EF 10 | Outcome Targets | Are outcome targets clearly defined? | Not at all | **1** | • Assessment of key programme documents<br>• Interviews with project stakeholders, especially MIDIMAR and UNDP staff |
| EF 11 | Vertical Logic | Is the vertical logic of the results framework sound? | Not at all | **1** | • Assessment of key programme documents |
| EF 12 | Ratio to Outputs to Outcomes | Is the ratio of outputs to outcomes proportionate? | To some extent | **2** | • Assessment of key programme documents |
| EF 13 | Necessary and Sufficient | Are the inputs, activities, outputs and outcomes necessary and sufficient (in collaboration with other national and international partners) to positively impact the disaster risk reduction and response in Rwanda? | To some extent | **2** | • Assessment of key programme documents<br>• SWOT analysis with key stakeholders |
| EF 14 | SMART Indicators | Is the overall articulation of results and related indicators "SMART"? (specific, measurable, achievable, realistic, timebound)? | Not at all | **1** | • Assessment of key programme documents<br>• Discussions with key stakeholders |
| EF 15 | Validity | Do the indicators directly represent the results they are intended to measure? | To some extent | **2** | • Assessment of key programme documents<br>• Discussion with key stakeholders |

| | | | | | |
|---|---|---|---|---|---|
| EF 16 | Objectivity | Is the definition precise and unambiguous about what is to be measured? | To some extent | **2** | • Assessment of key programme documents<br>• Discussion with key stakeholders |
| EF 17 | Evidence-Based | Are the indicators recognizable as valid evidence-based measures of change? | Not at all | **1** | • Assessment of key programme documents and comparison with international norms/guidelines<br>• Discussion with key stakeholders |
| EF 18 | Utility | Are the data produced by the indicators used/ likely to be used for decision-making by MIDIMAR, UNDP, partners and stakeholders? What, if any, are the gaps? | Not at all | **1** | • Discussion with key stakeholders |
| EF 19 | Gender Considerations | Are the indicators and project data disaggregated by sex? | To some extent | **2** | • Assessment of monitoring system and indicators |
| EF 20 | Poverty Considerations | Are the indicators and project data disaggregated by economic quintile? | To some extent | **2** | • Assessment of monitoring system and indicators |
| EF 21 | Assumptions/ Risks | Have assumptions/risks within external environment been clearly identified and strategies adopted? | To some extent<br><br>Recently | **2** | • Assessment of key programme documents<br>• Discussion with key stakeholders |
| | **OVERALL RATING EFFICIENCY** | | | **2** | Achieved to some extent, constrained |
| **IV.** | SUSTAINABILITY | | | | |
| S1 | Sustainability Strategy | To what extent was the project designed to have sustainable impact given the identifiable risks? | To a large extent | **3** | • Assessment of key programme documents<br>• Discussion with key stakeholders |
| S2 | Exit Strategy | Has a multi-year exit strategy on the part of the UN been developed and are there related benchmarks established? | Not at all | **1** | • Assessment of key programme documents<br>• Discussion with key stakeholders |
| S3 | Capacity Development | To what extent is there evidence that the project has strengthened capacities at the national and local levels? | To some extent, inferred or observed | **2** | • Assessment of key programme documents<br>• Discussion with key stakeholders<br>• Participant interviews |
| S4 | Stakeholder Participation | To what extent have the mechanisms put in place by the project encouraged the meaningful participation of stakeholders? | Fully | **4** | • Assessment of key programme documents<br>• Discussion with key stakeholders<br>• Participant interviews |

| | | | | | |
|---|---|---|---|---|---|
| S5 | Government Institutionalization | To what extent are there examples concerning the institutionalization/adoption of specific project components by national, provincial and local governments? | , in progress, particularly national level | **3.5** | • Assessment of key programme documents<br>• Discussion with key stakeholders |
| S6 | Intersectoral Impact | To what extent are there examples of stakeholders from other Ministries and governmental units utilizing DRR concepts? | To a large extent/fully | **3.5** | • Discussions with selected stakeholders – e.g. Rwanda Housing Authority, MINAGRI, Education, etc. |
| S7 | Scaling Up | To what extent is there evidence of the government and other stakeholders scaling up initiatives piloted in this project? | To some extent | **2** | • Assessment of key programme documents<br>• Discussion with key stakeholders<br>• Donor and Progress Reports |
| S7 | Public Awareness and Knowledge | To what extent has the project developed public awareness and knowledge about disaster risk reduction and response? | To some extent/difficult to determine without baseline | **2** | • Field visits to DRR project sitesinterviews with stakeholders and implementing partners |
| | **OVERALL RATING, SUSTAINABILITY** | | | **2.5** | To some extent, especially institutional sustainability |
| V3 | 27Jan2017 | bcl | | | |

*Partially based on OECD/DAC Criteria: 'Results Based Management in the Development Cooperation Agencies: A Review of Experience.' 2000 and UNDP "Outcome Level Evaluations: A Companion Guide to the Handbook on Monitoring and Evaluating for Development Results for Programme Units and Evaluators.' 2011*

# ANNEX 4: BIBLIOGRAPHY AND REFERENCES


Aitsi-Selmi, A., Egawa, S., Sasaki, H., Wannous, C., & Murray, V. (2015). *The Sendai Framework for Disaster Risk Reduction: Renewing the Global Commitment to People's Resilience, Health, and Well-being*. International Journal of Disaster Risk Science, 6(2), 164–176. http://doi .org/10 .1007/s13753–015–0050–9

Bester, Angela. (2016). *Results-Based Management in the United Nations Development System*. A report for the 2016 Quadrennial Comprehensive Policy Review, United Nations Department of Economic and Social Affairs.

CESS Institute. (2016). *Rwanda: Mid Term Review (MTR) United Nations Development Assistance Plan (UNDAP). 2013-2015*. Draft evaluation in review stages.

Douglas, I., Alam, K., Maghenda, M., Mcdonnell, Y., Mclean, L., & Campbell, J. (2008). Unjust waters: climate change, flooding and the urban poor in Africa. *Environment and Urbanization*, 20 (1), 187–205. http://doi. org/10 .1177/0956247808089156

Few, R. (2003). Flooding, vulnerability and coping strategies: local responses to a global threat. *Progress in Development Studies*, 3(1), 43–58. http://doi .org/10 .1191/1464993403ps049ra

Gaillard, J.-C., & Cadlag, J. R. D. (2012). From marginality to further marginalization: Experiences from the victims of the July 2000 Payatas trashslide in the Philippines, *JAMBA: Journal of Disaster Risk Studies*, 2(3), 197–215. http://doi .org/10 .4102/jamba .v2i3 .27

Global Facility for Disaster Reduction and Recovery (GFDRR). (2012). *Managing Disaster Risks for a Resilient Future: A Strategy for the Global Facility for Disaster Reduction and Recovery 2013–2015*. Retrieved from https://www.gfdrr.org/sites/gfdrr/files/publication/GFDRR_Strategy_Endorsed_2012.pdf.

Global Facility for Disaster Reduction and Recovery (GFDRR). World Bank Group. (2016). Striving Toward Disaster Resilient Development in Sub-Saharan Africa: Strategic Framework 2016-2020. Retrieved from: http://www.preventionweb.net/english/policies/v.php?id=50632&rid=1

Guha-Sapir, D., Below, R., & Hoyois, P. (2015). EM-DAT: *International Disaster Database*– www.emdat.be. Brussels, Belgium: University Catholique de Louvain.

Intergovernmental Panel on Climate Change (IPCC). (2012). *Managing the Risks of Extreme Events and Disasters to Advance Climate Change Adaptation, A Special Report of Working Groups I and II of the Intergovernmental Panel on Climate Change*. (C. B. Field, V. Barros, T. F. Stocker, Q. Dahe, D. J. Dokken, K. L. Ebi, … P. M. Midgley, Eds.). Cambridge, UK, and New York, NY, USA: Cambridge University Press.

Intergovernmental Panel on Climate Change (IPCC). (2014). Summary for policymakers. In C. B. Field, V. R. Barros, D. J. Dock- ken, K. J. Mach, M. D. Mastrandrea, T. E. Bilir, … L. L. White (Eds.), Climate Change 2014: Impacts, Adaptation, and Vulnerability. Part A: Global and Sectoral Aspects. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change (pp. 1–32). Cambridge, UK, and New York, NY, USA: Cambridge University Press.

Jidenma, N. (2013). The real mobile revolution: Africa's smartphone future. Retrieved October 15, 2015, from http://www.cnn.com/2013/11/07/opinion/real-mobile-revolution-africa-smartphone

Kalman, I., & Glatz, M. H. (2015). Analyzing the Sendai Framework for Disaster Risk Reduction. *International Journal of Disaster Risk Science*, 6(2), 105–106. http://doi. org/10 .1007/s13753–015–0056–3 insert

Niang, I., Ruppel, O. C., Abdrabo, M. A., Easel, A., Lennard, C., Pad ham, J., & Urquhart, P. (2014). Africa. In V. R. Barros, C. B Field, D. J. Dokken, M. D. Mastrandrea, K. J. Mach, T. E. Bilir, … L. L. White (Eds.), *Climate Change2014: Impacts, Adaptation, and Vulnerability. Part B: Regional Aspects. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change* (pp. 1199–1265). Cambridge, UK, and New York, NY, USA: Cambridge University Press. Retrieved from https:// ipcc-wg2. go/AR5/images/uploads/WGI-IAR5-Chap22_FINAL .pdf

Ministry of Disaster Management, MIDIMAR Rwanda. (2014) *National progress report of the implementation of the Hyogo Framework for Action (2011-2013).*

Ministry of Disaster Management, MIDIMAR Rwanda. (2013) *National progress report of the implementation of the Hyogo Framework for Action (2011-2013).*

Ministry of Disaster Management, MIDIMAR Rwanda. (2013) *National progress report of the implementation of the Hyogo Framework for Action (2013-2015)*

Republic of Rwanda. (2000). *Vision 2020.* Strategic Framework. http://www.rdb.rw/uploads/tx_sbdownloader/Vision_2020_Booklet.pdf

Republic of Rwanda. (2013). *Economic Development and Poverty Reduction Strategy II, 2013-2018.* http://www.rdb.rw/uploads/tx_sbdownloader/EDPRS_2_Main_Document.pdf Kigali, Rwanda

Republic of Rwanda. (2014). Country Report: Inclusive Dialogue on the Post-2015 Development Agenda: Helping to *Strengthen Capacities and Build Effective Institutions.* Report prepared by Republic of Rwanda with support from the United Nations Development Programme (UNDP). Retrieved from http://www.ncbs.gov.rw/uploads/media/Inclusive_Dialogue.pdf

Republic of Rwanda. (2016). Rwanda 2015. *Comprehensive Food Security and Vulnerability Analysis*. Report prepared by the National Institute of Statistics (NISR) and the Ministry of Agriculture and Animals Resources (MINAGRI) with support from The World Food Programme (WFP) Rwanda, Nairobi and Rome. Retrieved from //www.statistics.gov.rw/file/4467/download? token=qz-ny1i0

Republic of Rwanda. (2014). Inclusive Dialogue on the Post 2015 Development Agenda – Helping to Strengthen Capacities and Build Effective Institutions. Retrieved from http://www.ncbs.gov.rw/uploads/media/Inclusive_Dialogue.pdf

Republic of Rwanda. (2013). Western Province Nyabihu District: District Development Plan 2013-2018. Report prepared by Republic of Rwanda with support from the United Nations Development Programme (UNDP).

Rwanda Environmental Management Agency (REMA). *The State of the Environment and Outlook Report 2015*. Report prepared by the Republic of Rwanda with support from Environmental Pulse International. Retrieved from: http://rema.gov.rw/fileadmin/templates/Documents/rema_doc/SoE/State%20of%20Environment%20and%20Outlook%20report%202015.

Sack, P., & Fuentes, R. (Eds.). (2010). Risk, Shocks, and Human Development: On the Brink. New York, USA and the UK: Palgrave Macmillan. Shepherd, A., Mitchell, T., Lewis, K., Leonhard, A., Jones, L., Scott, L., & Muir-Wood, R. (2013). The *geography of poverty, disasters and climate extremes in 2030.* London, UK: Overseas Development Institute (ODI).

The Interorganizational Committee on Principles and Guidelines for Social Impact Assessment. (2003). *Principles and guidelines for social impact assessment in the USA.* Surrey, UK: Report of the US principles and guidelines. Retrieved from http://www .nymphs . nova. gov/sfa/reg_svcs/social guid&pri .pdf

The World Bank. (2013). Turn Down the Heat: Climate Extremes, Regional Impacts, and the Case for Resilience. Washington DC: A report for the World Bank by the Potsdam Institute for Climate Impact Research and Climate Analytics. Retrieved from http://www .world bank .org/content/dam/ Worldbank/document/doc/FullReport_ Vol_2_Turn_Down_The_Heat_ Climate_ Extremes_Regional_Impacts_Case_for_ Resilience_Print version_FINAL .pdf

The World Bank. (2014b). Turn Down the Heat: Confronting the New Climate Normal. Washington DC: A report for the World Bank by the Potsdam Institute for Climate Impact Research and Climate Analytics. Retrieved from https://openknowledge.worldbank.org/handle/10986/20595

The World Bank. (2014c). World Development Report: Risk and Opportunity Managing Risk for Development. Washington DC. Retrieved from http://siteresources .world- bank .org/EXTNWDR2013/Resources/ 8258024–1352909193861/8936935–135601 1448215/8986901–/WDR-2014_1380046989056Complete_Report .pdf

The World Bank, & Global Facility for Disaster Reduction and Recovery (GFDRR). (2012). The Sendai report: managing disaster risks for a resilient future. Washington DC: Report was prepared by World Bank and GFDRR staff, with financial support from the Japan Policy and Human Resources Development (PHRD). Retrieved from https://www.gfdrr.org/sites/gfdrr/files/publication/Sendai_Report_051012_0.pdf

United Nations (2016). *Report of the Secretary-General on the Quadrennial Comprehensive Policy Review of operational activities for development of the United Nations* Bank and GFDRR staff, with financial support from the Japan Policy and Human Resources Development (PHRD). Retrieved from https://www. gfdrr. org/sites/gfdrr/files/publication/Sendai_ Report_051012_0 .pdf

U. S. National Infrastructure Advisory Council. (2009). Critical Infrastructure Resilience: Final Report and Recommendations. Retrieved from http://www. dhs.gov/xlibrary/assets/niac/niac_critical_infrastructure_resilience .pdf

United Nations (2005). *Hyogo Framework for Action 2005-2015: Building the Resilience of Nations and Communities to Disasters.* United Nations Office for Disaster Risk Reduction (ISDRR). Retrieved from: https://www.unisdr.org/we/coordinate/hfa. Geneva, Switzerland

United Nations (2016). *Report of the Secretary-General on the Quadrennial Comprehensive Policy Review of operational activities for development of the United Nations System: Recommendations.* United Nations Development Cooperation Policy Branch. Advance, unedited copy. Retrieved from: https://www.un.org/ecosoc/sites/www.un.org.ecosoc/files/files/en/qcpr/sgrup-advance-unedited.pdf

United Nations (2015). *Sendai Framework for Disaster Risk Reduction 2015-2030.* United Nations Office for Disaster Risk Reduction (ISDRR). Retrieved from: http://www.preventionweb.net/files/43291_sendaiframeworkfordrren.pdf. Geneva, Switzerland

United Nations (2016). *United Nations Plan of Action on Disaster Risk Reduction for Resilience.* United Nations Office for Disaster Risk Reduction (ISDRR). Retrieved from: http://www.preventionweb.net/publications/view/49076 Geneva, Switzerland.

United Nations Development Group (UNDG), (2016). *Commons Principles for Measuring Capacity.* Retrieved from https://undg.org/wp-content/.../UNDG-CD-Measurement-Brief-18-Mar-2016.docx

United Nations Development Programme (UNDP), (2013). *Changing with the World: UNDP Strategic Plan 2014-2017.* Retrieved from: http://www.undp.org/content/dam/undp/library/corporate/UNDP_strategic-plan_14-17_v9_web.pdf

United Nations Development Programme (UNDP), (2009). *Capacity Development: A UNDP Primer.* Retrieved from: www.undp.org/content/undp/en/.../capacity.../capacity-development-a-undp-primer.html

United Nations Development Programme (UNDP), (2016). *Concept Note: Restoration of critical community infrastructures and emergency off-farms livelihoods for landslide-affected populations in Gakende.* Request for CERF funding.

United Nations Development Programme (UNDP), (2011). *Rwanda Common Country Programme Document 2013-2018*. Kigali, Rwanda.

United Nations Development Programme (UNDP), (2013).*: A Guide Outcome-Level Evaluation Companion.* http://web.undp.org/evaluation/documents/guidance/UNDP_Guidance_on_Outcome-Level%20_Evaluation_2011.pdf

United Nations Development Programme, Rwanda (UNDP), (2013). *Building National and Local Capacities for Disaster Risk Management in Rwanda***.** Kigali, Rwanda. Signed document with MIDIMAR and MINECOFIN.

United Nations Evaluation Group (2011). *Integrating Human Rights and Gender Equality in Evaluation – Towards UNEG Guidance***.** http://www.uneval.org/document/detail/980

UNISDR. (2005). *Hyogo Framework for Action 2005-2015: Building the Resilience of Nations and Communities to Disasters.* Geneva, Switzerland: United Nations.

UNISDR. (2009). *2009 Global Assessment Report on Disaster Risk Reduction: Risk and poverty in a changing climate.* Geneva, Switzerland: United Nations.

UNISDR. (2011). *2011 Global Assessment Report on Disaster Risk Reduction: Revealing Risk, Redefining Development*. UK: United Nations.

UNISDR. (2013). *2013 Global Assessment Report on Disaster Risk Reduction: From Shared Risk to Shared Value – the business Case for Disaster Risk Reduction*. Geneva, Switzerland: United Nations Office for Disaster Risk Reduction (UNISDR).

UNISDR (2015*). Indicators to Monitor Global Targets of the Sendai Framework for Disaster Risk Reduction 2015-2030: A Technical Review.* Background paper from an expert group meeting of scientific and academic organizations, civil sector, private sector and United Nation Agencies.

United Nations Office for Disaster Risk Reduction (UNISDR). (2004). *Africa regional strategy for disaster risk reduction*. Retrieved from http://www .under .org/files/4038_africare- gionalstrategy1 .pdf

# ANNEX 5: TERMS OF REFERENCE

## MID-TERM EVALUATION: "BUILDING NATIONAL AND LOCAL CAPACITIES FOR DISASTER MANAGEMENT IN RWANDA"

### Background

The "Building National and Local Capacities for Disaster Management in Rwanda" project is a Disaster Risk Management (DRM) capacity development initiative initiated in 2013. The 5-year project builds upon the Initiation Project Plan for National Capacity Building for Disaster Risk management Programme signed in 2011 by UNDP and Ministry of Disaster Management and Refuge Affairs (MIDIMAR) and whose implementation ended in 2013.

The project started its implementation in June 2013 and is designed to end in June 2018. It aims to support the national development framework, the Economic Development and Poverty Reduction Strategy (EDPRS II 2013-2018) where disaster Management has been mainstreamed as a cross cutting issue.

The project is geared towards helping the Government of Rwanda strengthen its DRM capacity, enhance preparedness and reduce risks, and achieve its global commitment to the Hyogo Framework for Action (HFA) and the MDGs. It aims at building national capacities for disaster risk management through advisory, policy and technical support to render fully operational an Effective disaster risk management system at the national and local levels.

Furthermore, the project is in line with Outcome 3 of the United Nations Development Assistance Plan 2013 – 2018 (UNDAP): "Rwanda has in place improved systems for: sustainable management of the environment, natural resources and renewable energy resources, energy access and security, for environmental and climate change resilience, in line with Rio+20 recommendations for sustainable development."

**The project has five inter-related outputs.**

- Output 1: Enhanced capacities of national and local institutions to manage disaster risks and recover from disaster events; including improved national and local coordination mechanisms;
- Output 2: DRR mainstreamed into national/district/sectorial plans and policies; and capacities on DRM Planning enhanced;
- Output 3: A functioning national disaster risk assessment and monitoring system (DRAMS) established;
- Output 4: End-to-end early warning systems established and operational;
- Output 5: Reduced community vulnerabilities and increased household resilience in selected high-risk districts and increased public awareness on DRR.

Output 1 aims to support institutional capacity strengthening of MIDIMAR and local DDMCs to reinforce national coordination mechanisms for DRM. Output 2 aims to support mainstreaming of DRR in development plans and key relevant policies. Output 3 aims at building risk knowledge through a comprehensive risk assessment and development of the country's National Risk Profile. Output 4 aims to support the establishment of the end-to-end early warning systems and Output 5 aims at developing a risk reduction strategy based on vulnerability reduction and risk mitigation measures as well as at raising public awareness on DRR.

**The project is mainly financed by UNDP with some support from the European Union, the World Bank (ACP-EU Natural Disaster Risk Reduction Program) and the Government of Japan (Japan-UNDP Partnership Fund).** MIDIMAR is the primary implementing partner of the project. The total resources required for the implementation of the project are USD 8.8 million half of which has to be mobilized.

## Duties and Responsibilities

**Evaluation Purpose:**

The purpose of the Mid-Term Evaluation (MTE) is to examine the results, achievements and constraints in the implementation of the project "Building national and local capacities for Disaster Management in Rwanda". The Project, which was initiated in 2013 and supposed to end in June 2018, is coming to its mid-term point at the end of 2015. The findings and recommendations of the evaluation and lessons learned from the 2.5 first years of its implementation will inform for the implementation of the project in its 2.5 remaining years. The Evaluation also aims at assessing UNDP's contribution to the achievement of UNDAP Outcome 3.

The MTE is intended to identify weaknesses and strengths of the project design and implementation, and to come up with recommendations for any necessary changes in the overall design and orientation of the project and on the work plan for the remaining project period, after evaluating the adequacy, Efficiency, and Effectiveness of implementation, as well as assessing the progress towards achieving the project outputs and outcomes to date. The evaluation will also assess early signs of project success or failure and prompts adjustments. The results and recommendations of the evaluation would therefore help UNDP and MIDIMAR to adjust the project for its remaining period.

**Evaluation scope and objectives:**

**Objectives**

In line with the project's objectives, UNDP Rwanda, in collaboration with the project's implementing partner (MIDIMAR), plans to conduct a mid-term evaluation of the project. The evaluation aims to assess the state of progress towards the achievements of the planned outputs and outcomes. The mid-term evaluation main objectives are the following:

- Assess the Project's implementation strategy;

- Assess the relevance, Efficiency, Effectiveness, sustainability, and impact of the interventions;
- Assess the Project's processes, including budgetary Efficiency;
- Assess the extent to which planned activities and outputs have been achieved;
- Identify the main achievements and impacts of the project's activities;
- Identify the underlying causes and issues of non-achievement of some targets;
- Document lessons learnt;
- Make recommendations for the project's remaining implementation period;
- The evaluation's finding and results will serve as an information source for the 2015 UNDAP mid-term review.

**Scope**

The scope of the mid-term evaluation covers all activities undertaken in the framework of the project. This refers to:

- Planned outputs of the project compared to actual outputs and the actual results as a contribution to attaining the project objectives;
- Problems and necessary corrections and adjustments;
- Efficiency of project management, including the delivery of outputs and activities in terms of quality, quantity, timeliness and cost Efficiency;
- Likely outcomes and impact of the project in relation to the specified goals and objectives of the project.

**The evaluation comprises the following elements:**

- Assess whether the project design is clear, logical and commensurate with the time and resources available;
- An evaluation of the project's progress towards achievement of its overall objectives;
- An evaluation of project performance in relation to the indicators, assumptions and risks specified in the logical framework matrix and the Project Document; An assessment of the scope, quality and significance of the project outputs produced to date in relation to expected results; Identification of any programmatic and financial variance and/or adjustments made during the first 2.5 years of the project and an assessment of their conformity with decisions of the PSC and their appropriateness in terms of the overall objectives of the project;
- An evaluation of the project's contribution to the achievements of UNDAP's outcome and outputs;
- Identification and, to the extent possible, quantification of any additional outputs and outcomes beyond those specified in the Project Document;

- An evaluation of project coordination, management and administration. This includes specific reference to: Organizational/institutional arrangements for collaboration among the different stakeholders involved in project arrangements and execution;
- The Effectiveness of the monitoring and evaluation framework/mechanisms used by MIDIMAR in monitoring on a day to day basis, progress in project implementation;
- Administrative, operational and/or technical challenges and constraints that influenced the Effective implementation of the project.;
- An assessment of the functionality of the institutional structure established and the role of the Project Steering Committee (PSC);
- Financial management of the project, including the balance between expenditures on administrative and overhead charges in relation to those on the achievement of substantive outputs.
- A prognosis of the degree to which the overall objectives and expected outcomes of the project are likely to be met;
- Progress towards sustainability and replication of project activities;
- Assess the extent to which the design, implementation and results of the project have incorporated a gender equality perspective and human rights-based approach;
- Assess of the extent to which the design, implementation and results of the project have incorporated the environmental sustainability concerns and make recommendation accordingly;
- Lessons learned during project implementation. For more guidance on this, the consultants will be requested to use UNEG's Guidance in Integrating Human Rights and Gender Equality in Evaluation" http://uneval.org/document/detail/1616