Rwandan Forest Landscape Restoration Opportunity Assessment: Tracing the Influence

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For more information about the Restoration Opportunity Assessment Methodology (ROAM) contact the Global Partnership for Forest Landscape Restoration at IUCN gpflr@iucn.org.

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Acronyms

DFID	United Kingdom Department for International Development
EDPRS	Rwanda *Economic Development and Poverty Reduction Strategy*
FAO	United Nations Food and Agriculture Organisation
FLR	Forest landscape restoration
FONERWA	Rwanda's National Climate Change and Environment Fund
GEF	Global Environment Fund
GoR	Government of Rwanda
GPFLR	Global Partnership for Forest Landscape Restoration
Ha	Hectares
IUCN	International Union for Conservation of Nature
LAFREC	Landscape Approach to Forest Restoration and Conservation
MINAGRI	Ministry of Agriculture and Animal Resources
MINIRENA	Ministry of Natural Resources
ROAM	Restoration Opportunity Assessment Methodology
UNFF	United Nations Forum on Forests
WRI	World Resources Institute

1.   Executive summary

This report presents a study and account of the adoption of the *Forest Landscape Restoration (FLR) Opportunity Assessment for Rwanda* (the 'ROAM' assessment) recommendations by the Government of Rwanda (GoR) in partnership with the International Union for Conservation of Nature (IUCN) and the World Resources Institute (WRI). It has been prepared for IUCN on behalf of the United Kingdom Department for International Development (DFID) KNOWFOR programme[1] using an episode study[2] approach.

Influence of the Rwanda ROAM assessment

In 2015 the ROAM assessment was formally launched by the GoR who have committed to implementing all five of the reports recommendations to improve FLR coordination, seed supply, demand for the economic benefits of FLR, prioritisation of FLR projects and financing for FLR. With a strong commitment to FLR among senior elected officials and agency representatives the ROAM report recommendations have been adopted in full or are in the process of being adopted by the GoR. As a framework for informing national FLR decisions however the influence of the ROAM report does not extend beyond recommending actions for implementation.

Significance of the Rwanda ROAM assessment

The development and adoption of the ROAM report recommendations by the GoR in partnership with IUCN and WRI is significant because the assessment provides a roadmap for the GoR to deliver on its international commitment to FLR in the Bonn commitment of bringing 2 million hectares of land under forest landscape restoration as well as its domestic *Vision 2020* and the *Economic Development and Poverty Reduction Strategy* (EDPRS) target of achieving 30% forest cover by 2020. The ROAM assessment is significant, in short, because it marks both the "end and the beginning" of FLR in Rwanda. By answering some questions and raising others, it provides a framework for guiding future FLR. Politically, the ROAM assessment provides further mandate and assurance that Rwanda can deliver on its ambitious national and global targets.

Contribution of IUCN and WRI to the adoption of the Rwanda ROAM assessment

This study has found that there is a strong causal link between the adoption of ROAM assessment recommendations and the role of IUCN and WRI in collaboratively delivering the assessment with the GoR. By framing the assessment within the national context and working collaboratively with key actors at the ministerial and departmental level, IUCN and WRI have leveraged support for the ROAM report's findings. Early engagement and good relationships between IUCN, WRI and the GoR have been instrumental in leveraging support for assessment recommendations. In particular IUCN and WRI have directly contributed to institutional changes including the transfer of responsibility for the Tree Seed Centre. The ROAM assessment has also provided a basis for the implementation of FLR projects in the Eastern provinces by IUCN. It has also provided a key input into the design of the GEF-funded *Landscape Approach to Forest Restoration and Conservation* (LAFREC) in the Gishwati-Mukura corridor and surrounding forest landscapes. These actions are backed by a stabilisation and mobilisation of funds to support FLR via the nationally backed FONERWA funding mechanism. In summary, the ROAM assessment sits at the very centre of the GoR's commitment to FLR.

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[1] Also known as 'Improving the way knowledge on forests is understood, communicated and used internationally'

[2] Episode studies investigate the influence of research on policy (ODI, 2004). See Attachment Two for more detail.

2.   Context for the Rwanda ROAM Assessment

A timeline setting out the events leading up to the ROAM assessment is provided in Figure One and Attachment One.

2.1.   Background: forests in Rwanda

Forests perform key ecosystem services, such as cleaning water, reducing soil erosion, providing habitat for wildlife and sequestering carbon. These services, along with the wood and food provided by trees, underpin the economies of local communities. Rwanda's population is largely dependent on subsistence agriculture for its livelihoods, with an estimated 90% of the population practicing subsistence agriculture on 70% of the country's land area (GoR, 2014, 2). Approximately 96% of Rwandan's also depend on wood as their main source of energy (*National Forestry Policy* 2010, 7).

Under both the Belgian and early Rwandan administrations, regulations for the sustainable management of forests were minimal and enforcement of forest regulations was irregular. This, along with population growth and economic development, led to widespread deforestation (FAO 2002, 82-3). Population growth has placed further pressure on Rwanda's remaining forests. Between 2002 and 2012, the population increased from 8.1 to 10.5 million with more than 40% of the population living below the national poverty line. In turn, population density has increased from 321 to 426 persons per square kilometer in the same time period –the highest in Africa (EDPRS 2012, 6).

In the 1970s significant efforts were taken to reverse the historical loss and degradation of forests in Rwanda. The "Umuganda" community forestry program was launched by authorities in 1975. Along with the introduction of National Arbor Day in 1976 (held on the last Saturday in October or November), these interventions mobilized local communities in intensive replanting efforts. As a result, planted forest areas increased from 25,500 hectares in 1975 to 247,500 hectares in 1989 (FAO 2002, 83).

Policies were also put in place to protect existing forests, such as a 1984 action plan to conserve 85,200 hectares of forest in the Congo-Nile Crest. A broader National Forests Action Plan was released in 1987 which outlined among other actions the management of 50,000 hectares of gallery forests in eastern Rwanda (FAO 2002, 84).

In 1994 the Rwandan Genocide led to the suspension of all forestry management activities. In this tragedy it is estimated that more than one million Rwandans were killed. This human catastrophe in turn engendered a rapid decrease in forest cover due to a breakdown in law and order and widespread displacement, as well as reconstruction needs in the aftermath of the genocide.

2.2.   *National Forestry Policy*

Following the Genocide forestry activities were resumed on between 1995 and 1999. Managed forestry activities resumed on a small-scale in 1995. However, it was not until the mid-2000s and the adoption of a *National Forestry Policy* in 2004 that the previous efforts to sustainably

manage Rwanda's forest were fully resumed. The National Forestry Policy in 2004 is situated on the Timeline (Figure 1) as a significant event prior to ROAM.

The National Forestry Policy outlined a number of key principles that would govern forestry management, including:

- All forest resources should be managed sustainably
- Stakeholder involvement in decision-making
- Promotion of agroforestry on agricultural land
- Protection of endangered species.

These principles underpinned a nation-wide reforestation and afforestation program, along with the dissemination of strategies for the sustainable exploitation of non-timber products. In recognition of its progressive aims and ambitious scope, the policy was awarded Future Policy Award in 2011 by the World Future Council as an example of best-practice forestry policy.

In 2010 the National Forestry Policy was updated to reemphasize the key principles of the 2004 Policy with a stronger focus on "undertaking afforestation and reforestation initiatives to expand the countries forest cover" under the strategy for permanent forest estate keeping. Significantly the 2010 Policy included a 30% national forest cover target.

2.3. *Economic Development and Poverty Reduction Strategy* (EDPRS)

In 2008 the Rwandan government reinforced its commitment to sustainable forest management through the *Economic Development and Poverty Reduction Strategy (EDPRS) 2008-2012* by setting the target of 30% of Rwanda's land being forested by 2020. The targets were then re-iterated and committed to in the release of the second iteration of the EDPRS document in 2013. The 30% target set out in the EDPRS is identified both at 2008 and 2013 in the Timeline in Figure 1.

2.4. *Vision 2020*

Vision 2020 is a policy framework released by the GoR in the year 2000 by President Paul Kagame setting out targets for Rwanda to reach in order to become a middle-income country. *Vision 2020* is identified in the Timeline (Figure 1) as a key event prior to ROAM. In 2012 *Vision 2020* was updated to include a target to increase Rwanda's national forest land area coverage to 30%. This key event is identified in the Timeline in Figure 1.

While Rwanda is close to achieving its forest coverage target, there are still a number of significant challenges. Only 37.6% of forest cover is natural forests with the area of natural forests declining by 65% between 1960-2007 (GoR, 2014: 3; *National Forestry Policy* 2010, 7). Increases in forested land have predominately come from forest plantations. More than 80% of the species used in such plantations are *Eucalyptus*. The lack of species diversity not only limits the forest products available (compared to what can be harvested from more biodiverse natural forests), but increases the threat posed by pests or diseases.

In 2012, *Vision 2020* was also updated to reflect the growing importance of forests within Rwanda's development with the 30% target formally included.

The *National Forestry Policy*, EDPRS and *Vision 2020* are situated on the Rwandan ROAM timeline in Figure 1.

2.5.   The Bonn challenge

In February 2011, at the beginning of the Year of the Forests, Rwanda announced a commitment to the Bonn Challenge to restore 2 million hectares of degraded and deforested land. This commitment formalised pre-existing national "border to border" forest restoration commitments including the 30% target for national forest cover articulated in the *National Forestry Policy*, *Vision 2020* and the EDPRS.

FLR is a "long-term process of regaining ecological functionality and enhancing human well-being across deforested or degraded forest landscapes" (GoR, 2014: 1). As a global declaration of its commitment to FLR the Bonn Challenge functioned as impetus for the GoR to act. The Bonn commitment provided a measurable and time-bound target for Rwanda to aim towards.

> *The Bonn Challenge provides an implementation platform, so a combination of global profiling, bringing together of technical resources and financial resources helps to make programmes possible that may already be in policy and in statute but are not being implemented.*

Having made the commitment, the Bonn Challenge provided the impetus for the GoR to act and the subsequent ROAM assessment to take place. The Bonn Challenge also provided a measurable and time bound target for FLR in Rwanda but also symbolised Rwanda's commitment to FLR. Or, as one interviewee put it:

> *The numbers are less important than the ambition itself.*

To realise the aspiration set out in the commitment, the GoR approached the United Nations Forum on Forests (UNFF) secretariat in 2011 at the recommendation of a Chinese film-maker, John D Liu of the *Environmental Education Media Project*[3] (EEMP) who had incidentally been in Rwanda meeting with the GoR in 2010. As a result the GoR began a series of meetings with the IUCN as a representative of the UNFF secretariat on responding to the commitment. This led to an IUCN and UNFF technical workshop in 2011 with GoR to consider options for meeting the target. Refer to the timeline in Figure 1 to see a chronological depiction of these key events to mobilise support for ROAM.

During the same time period, IUCN and WRI were developing the ROAM approach based on the pressing need for national level FLR opportunities assessment.

> *ROAM was the next step between high level intent and technical detail without being an implementation plan...we help them figure out what the intent means.*

In its nascence at this time, ROAM was conceived as being a practical way or a "vehicle" for helping countries to realise their commitment made in the Bonn Challenge. Building on the commitment made by the GoR at the time IUCN was able to mobilise funding to undertake the ROAM assessment, which instigated the assessment.

The Bonn Challenge commitment is identified in the Timeline in Figure 1.

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[3] http://eempc.org/

2.6. The ROAM methodology

ROAM was developed by IUCN and WRI in response to a need for detailed information at a country level on FLR opportunities for decision makers that had been made explicit in the Bonn Challenge. It was developed through an iterative process of planning, doing and reflecting by a core team of IUCN and WRI representatives who drew on several years of FLR experience as well as the input of a wide range of stakeholders in Ghana, Mexico and Rwanda.

ROAM

ROAM is a framework that identifies landscapes where restoration is not only the most urgent, but where benefits are most immediate and success is more likely. ROAM is described by Julia Marton-Lefèvre, former Director-General of IUCN as (IUCN, 2014):

> *We know that there are over two billion hectares of deforested or degraded lands around the world where opportunities for restoration may be found. But before restoration can begin, clear decisions must be made about where the priority landscapes are, what the best mix of restoration interventions will be, and who will bear the costs – and reap the many gains – of long-term restoration and stewardship. The ROAM methodology helps countries answer these questions.*

The ROAM approach has been developed by IUCN and WRI over the course of several years of planning, piloting and review. The ROAM approach was developed by drawing on decades of FLR experience, technical input and expertise from a wide range of stakeholders as well as the practical lessons learned through implementation and piloting in Ghana, Mexico and Rwanda.

Application of ROAM delivers six main outputs (IUCN & WRI, 2014):

- A shortlist of the most relevant and feasible restoration intervention types across the assessment area

- Identified priority areas for restoration

- Quantified costs and benefits of each intervention type

- Estimated values of additional carbon sequestered by these intervention types

- A diagnostic of the presence of key success factors and identification of strategies to address major policy, legal and institutional bottlenecks

- Analysis of the finance and resourcing options for restoration in the assessment area.

These outputs are then used to inform further planning and implementation for restoration work that will be undertaken. Importantly, ROAM brings together different expertise including economic analysis, geographical information, agricultural and ecological, as well social and institutional analysis to take into account the range of values that underpin FLR.

Building on lessons learned

Prior to the ROAM study in Rwanda, IUCN and WRI undertook a ROAM assessment in Ghana which provided valuable lessons to inform the subsequent Rwanda assessment. The lessons from the initial Ghana study helped the team formalise the ROAM framework and approach. For instance, after piloting two initial workshops in Ghana the team realised that these workshops alone did not allow sufficient consultation time and stakeholder input. Stakeholders would need to be given more time and opportunities to provide input.

These early lessons from Ghana were learned through practical application by the IUCN and WRI team who "learned by doing" rather than "conceptualising in an office" or "retreating to the laboratory". There was a "very short loop action learning cycle" according to the IUCN team leader.

> *We would go in, we would do work, but then we would reflect: what was working well, where we were missing the point. Also looking at what we were trying to achieve overall, adjust, adopt and then from that move into the next thing.*

A key lesson to emerge from the Ghana study was the need to undertake an institutional analysis clearly identifying relevant organisations, individuals and networks. Moreover, Ghana reinforced the need to identify influential "knowledge uptake pathways". This analysis explicitly considered the needs of the "boundary partners", or the next users of ROAM outputs, taking into account their application. Moreover, it became important to engage the boundary partners in the planning to ensure that they knew that ROAM outputs would assist their decision making. Similarly, another key early lesson from Ghana applied to Rwanda was to include a strong economic component, which would inform a cost abatement analysis of potential carbon sequestration benefits.

These lessons and experience all contributed to the formalisation of the ROAM approach prior to the Rwanda study, which would further "crystallise" the methodology prior to the development of the ROAM guidebook in 2014. These early lessons on the ROAM approach from Ghana were then refined and further developed in application of the methodology in Rwanda between 2012 and 2014.

A timeline of events leading up to the Rwanda ROAM Assessment is provided in Figure 1 and Attachment One.

Limitations of ROAM

The ROAM approach provided the GoR and partners with an output (the ROAM assessment) to guide decision-making. ROAM does not actually provide a plan for undertaking FLR but rather a conceptual framework for making decisions on FLR at a national scale. The ultimate responsibility for adopting and implementing recommendations lies not with the ROAM team and partners but the users and audience for the report. The direct influence of ROAM is limited in that it can only at best inform decisions made on FLR. Any subsequent use and adoption of ROAM recommendations will therefore be influenced by factors beyond the control of ROAM such as the political, economic and institutional climate.
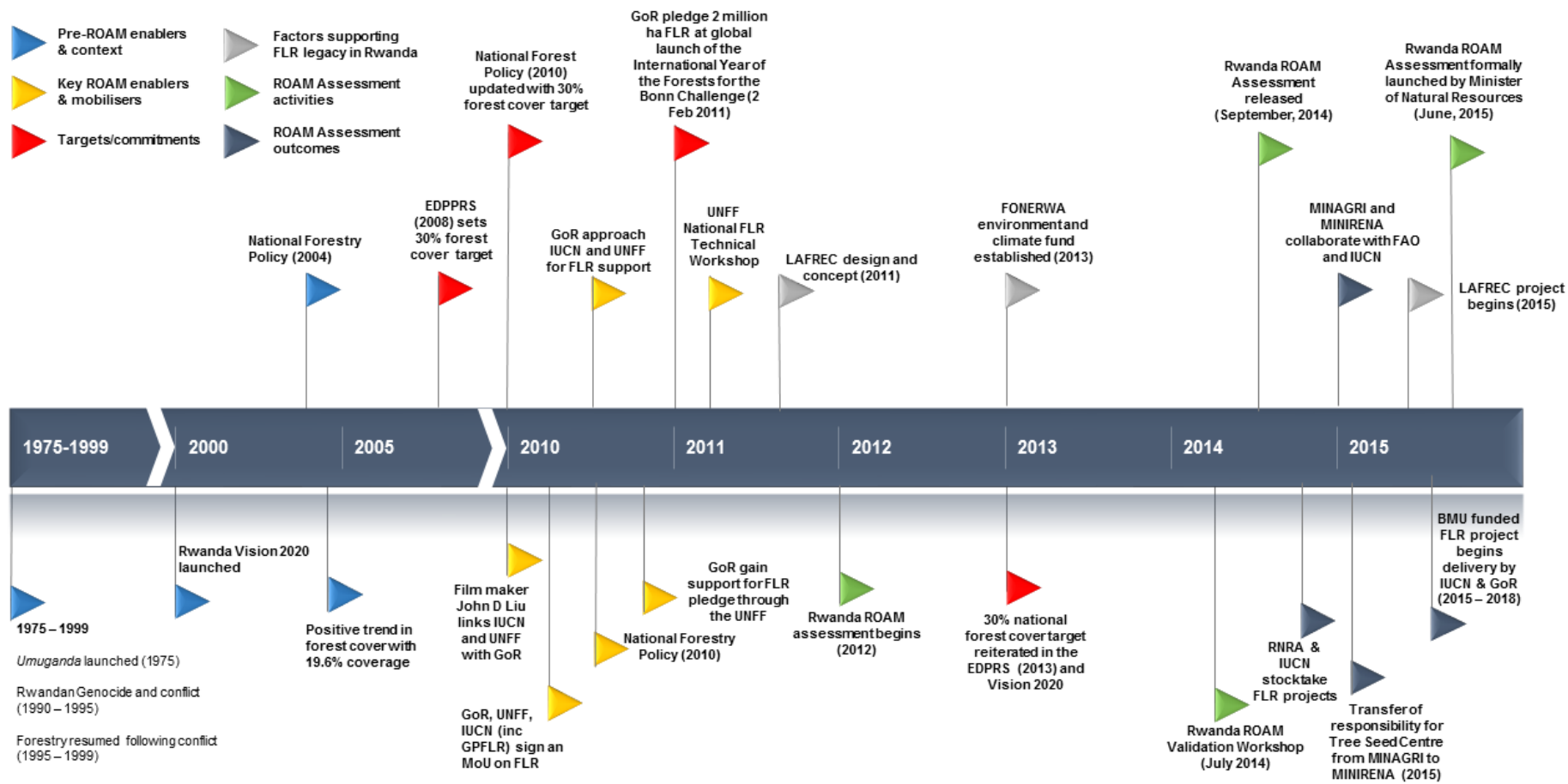
Figure 1. Timeline of events preceding and following the ROAM assessment

3. An episode study of ROAM in Rwanda

Published in September 2014, the *Forest Landscape Restoration Opportunity Assessment for Rwanda* report (the 'ROAM assessment') outlines an analysis and options for Forest Landscape Restoration (FLR) in Rwanda. The Rwanda Landscape Restoration Opportunity Assessment Methodology (ROAM) report represents the culmination of work by the Rwandan government in partnership with the IUCN and the WRI to undertake the ROAM assessment between 2012 and 2014. The report provides the findings of a (ROAM) analysis of Rwanda.

3.1. Adoption of the ROAM report recommendations

Since the release of the Rwanda ROAM assessment in 2014 the report has been adopted and endorsed strongly by the GoR, who formally launched the assessment nationally in June 2015. At this launch the GoR support for the report was reflected in the presence of the Minister of Natural Resources Dr Vincent Biruta. Key recommendations in the report are currently being implemented by the Rwandan government and development partners. This is significant because it represents an execution of the commitment made by Rwanda at the 2011 Bonn Challenge to restore 2 million hectares of forest. Adopting the recommendations in the ROAM report is just the beginning for the Government of Rwanda (GoR), or as an interviewee put it:

> *ROAM is the beginning and the end.*

The value and significance of ROAM to Rwanda is that it provides both a roadmap for restoration opportunities and a pathway to action.

Recommendations made in the Rwanda ROAM Assessment

The ROAM assessment identified 2.25 million hectares of land in Rwanda that could directly benefit from FLR. The report suggested that this could be achieved through interventions that target 1.5 million hectares and in particular targeting agroforestry on both flat and sloping land, as well as improved silviculture and establishment of protective forests on steep sloping land and in riparian zones (GoR, 2014: 31).

ROAM team members and stakeholders point to several opportunities that have arisen from the project in its aftermath.

> *It [ROAM] asked questions, it answered questions, it raised other questions, and therefore it gives us a good focus moving forward.*

> *[ROAM] provides a new lens. You start to see new things and old things differently.*

Drawing on the political will and commitment made to the Bonn Challenge there are now opportunities to capitalise on the momentum generated through the assessment. As highlighted in the above quotes, ROAM has opened up new possibilities and new ways of thinking about existing problems in Rwanda that the Government is now tackling with support from its partners.

In order to realise these opportunities for restoration, the ROAM assessment identified five main areas of action for the Rwandan Government focusing on:

1. Improved coordination among government agencies through such mechanisms as the Joint Sector Working Group
2. Improved delivery of high quality-planting stock, such as reconsidering the import controls on quality certified seeds
3. Increasing demand for FLR products through raising awareness among landholders and administrative officials of the economic benefits of FLR
4. Prioritising FLR projects within selected landscapes that possess a significant potential for a landscape approach to restoration, such as the Gishwati – Mukura corridor
5. Ensuring that there is adequate financing of these recommendations, particularly through making the business case for restoration and addressing the main barriers to investment such as enhancing operational and financial management expertise.

These recommendations have all been adopted in full, in part or are in the process of being adopted by the Rwandan government. More detail on the implementation of these recommendations is outlined below.

Tree Seed Centre

Improved delivery of high quality planting stock via the National Tree Seed Centre was a key recommendation of the ROAM report. Access to high quality tree seeds is recognised as a pre-condition for effective FLR and agroforestry. In early 2015 it was recommended by the GoR that the responsibility for the Tree Seed Centre moved from of the Ministry of Agriculture to the Ministry of Natural Resources. This move occurred as a direct result of the report recommendations, which strongly recommended a transfer of authority and management for the Tree Seed Centre in order to support higher-quality, diverse seed stock. Support for this recommendation was mobilised through direct engagement with the Minister for Natural Resources who took the report to cabinet who endorsed the move based on the recommendation in 2014. This move is regarded by IUCN and WRI representatives as significant because it represents an institutional change to a long-standing issue that was regarded by many people working in the country as intractable. It also provides an opportunity to diversify the seed base.

> *Having the Tree Seed Centre under a different institution allows [MINIRENA] to expand their scope in terms of what seedlings they're going to rear through the nurseries. If they can finally get a supply of agroforestry seedlings, that hopefully will allow farmers to access the market or otherwise and plant more of the agroforestry species on their land.*

As a result of this move the Tree Seed Centre is leading to much more attention being paid to and improvement in the diversity (native species), quality and quantity of seeds in Rwanda.

Improved coordination

Another key recommendation necessary for the implementation of FLR in Rwanda is to improve coordination among government agencies through such mechanisms as the Joint Sector Working Group. A lack of coordination between the Ministry of Agriculture and the Ministry of Natural Resources was identified as a barrier to undertaking the assessment due to existing structural constraints. There has been also been progress in this recommendation with the establishment of a Taskforce on FLR and SFA to function as a coordination mechanism between the two sectors.

> *Progress has already been made in terms of coordination of FLR and other sectors.*

Towards the common goal of agroforestry, MINAGRI and MINIRENA have held a joint workshop with IUCN and FAO to coordinate Forest Landscape Restoration and Sustainable Food and Agriculture programmes.

> *These two Ministries [MINIRENA and MINAGRI] are starting to talk together and say, look, this is not a discussion about uses of individual pieces of land. It's really about actually starting to really optimise decisions and programs at a landscape level.*

In the most recent meeting of the Working Group (Dec 2015) 13 institutions participated including the Ministry for Local Government (MINILOC) and several government, non-government and international technical agencies a work plan was produced and recommendations for future coordination.

While other nationally-specific factors are likely to be at play in improving the inter-sectoral relationship between agroforestry and landscape scale restoration, the ROAM assessment has undoubtedly been a major influence on the formalisation of the Working Group, which is an important step towards improved coordination.

Projects

As a result of the ROAM assessment the RNRA has leveraged donor support for a recent initiative funded by the German Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU) under the International Climate Initiative (IKI) 2015: "Piloting Multiple-Benefit Packages through forest/landscape restoration and REDD+ in Rwanda for scaling up in Africa". Under this project between 2015 and 2018 the RNRA will work with IUCN with the aim of verifying carbon stocks and other ecosystem services through landscape scale restoration in two Rwandan districts: one in the Eastern province and one in Northern province with the institutional and investment means in place to upscale nationally and promote regionally. The development of this project was seen as a second phase of a 2013 IUCN IKI project which part funded the ROAM. The output of ROAM and associated products were well received in IKI and by BMU. The ROAM assessment has played a direct supporting role in the development of this phase 2 BMU funded project.

In January 2015, following a four year design, appraisal and approval process the Landscape Approach to Forest Restoration and Conservation (LAFREC) project was launched by the World Bank. Funded by the Global Environment Facility (GEF), the LAFREC project has the overall aim of demonstrating landscape management for enhanced environmental services and climate resilience. LAFREC component One of Two directly addresses the application of the landscape approach to forest restoration and conservation for the improvement of ecosystem functions and services in the Gishwati-Mukura landscape as recommended by the ROAM assessment.

As sub-national FLR projects are developed and implemented a key challenge will be to continue the support from the national level (from ROAM) to the provincial and district scale, where different institutional structures are in place. Strong national support for FLR may not be reflected at the provincial and district level. There is, however, strong support from the GoR and Rwandan FLR stakeholders to continue FLR work at a sub-national scale, particularly to capitalise on the opportunities identified by the nation-wide ROAM assessment.

Resource mobilisation

Since the release of the ROAM assessment there has been progress on securing and mobilising funds for FLR both nationally and regionally. Mobilising funds will be critical to ensure that the

ambitious target of 2 million hectares is met. The BMU funded project noted above is explicitly considering options for sustainably financing FLR in the Eastern Province with the intention to upscale nationally and regionally.

In 2013 the GoR established the National Climate and Environment Fund (FONERWA) to support financing for environmental projects. This fund is now the primary financing mechanism for environmental and climate change projects in Rwanda. By centralising all funding for environment and climate change initiatives through this fund the GoR will be consistent with national priorities and targets for FLR. FONERWA has arisen independently of ROAM but will provide a critical mechanism for guiding and prioritising FLR investment:

> *These domestic, institutional and policy shifts are actually quite important. They're the things that will actually obviously ultimately lay the foundations irrespective of what additional donor money comes into the country.*

In addition, IUCN has produced a comprehensive national stocktake of all projects supporting FLR with the GoR.

3.2. Factors that led to the reform

The adoption of the ROAM report recommendations by the GoR was supported by a number of factors and causal mechanisms including the timing of the assessment, existing programs and policies including *Vision 2020*, the National Forestry Policy (2010) and the EDPRS (1&2), the political will and demand for action from key actors within the GoR and the role of 'champions' in the GoR. More broadly, the framing of the assessment in the national context by IUCN and WRI played a critical role in supporting adoption by the GoR. In this national context IUCN and WRI played a key role in instigating and promulgating the reform process and adoption of the report recommendations. This was achieved by targeted engagement with key actors in the GoR, with whom the team developed a strong and effective partnership. The adoption of the recommendations made in the report by the GoR can therefore be attributed in part to the role of IUCN and WRI, who explicitly framed the assessment in the national context and leveraged wider support by targeting and working with key actors in the GoR.

The ROAM process in Rwanda

In implementing ROAM, IUCN and WRI worked collaboratively with the Rwandan Department of Forestry and Nature Conservation, a unit within RNRA, in sharing resources and information to undertake the assessment. In the first stage of the assessment the team identified the environmental challenges, national priorities and landscape intervention options. IUCN and WRI worked closely with the Rwandan government both at a national level and closely with stakeholders at the district level to ensure that the right people were included in the district workshops.

After this initial assessment, geospatial, economic and rapid restoration diagnostic analyses were undertaken in order to determine the extent of opportunities for restoration, as well as institutional readiness. Existing datasets held by the RNRA were accessed and used by the ROAM team to perform spatial analysis. Meanwhile economic analysis considered the costs as well as the financial benefits of different restoration activities.

Analyses from these tools were then presented to more than 175 district-level stakeholders in a number of workshops held across the five provinces. Finally, a validation workshop was held in

July 2014 where the final results were presented to national stakeholders. As a result of this the "recommendations were built contextually around the people and the country". Based on these analyses and consultations, the ROAM team documented restoration opportunities and made a series of recommendations, which were documented in the report originally released in September 2014 and then formally launched by the Minister in June 2015.

Framing ROAM in the Rwandan national context

Existing policies and programs in Rwanda played a critical role in providing the enabling environment for ROAM when it was first suggested in talks between the UNFF and the GoR in 2011. As an IUCN delegate to the UNFF who was involved in these early discussions notes, ROAM was consistent with:

> *...the whole direction and spirit of where government policy was going in Rwanda...we weren't working with a reluctant audience.*

As noted above, the Bonn commitment extended and formalised existing commitments made by Rwanda through the EDPRS, the *National Forestry Policy* (2010) and the *Vision 2020* to increase national forest cover by 30% and the proportion of available land under agroforestry to 85%. Within the Natural Resources portfolio FLR also had a strong basis through the Forest Policy, which set out the overall direction for forest landscape restoration within the context of the country's overall development agenda.

These existing government policies in turn provided the basis for initial discussions about the application of ROAM in Rwanda between IUCN and WRI representatives with the GoR. Importantly, early discussions about the application of ROAM in Rwanda were framed by IUCN and WRI in the national rather than the international context. This in turn made the assessment relevant to the Rwandan context rather than being an externally led and imposed intervention.

> *We set aside what we might see as the immediacies of our own agenda or the international agenda and started to say, "look, this is only a conversation worth having if it actually makes sense in terms of your Vision 2020 and your comprehensive growth and economic development strategy. Let's now drill down into that and think where and when this actually might make sense, because then we can frame the questions we want to answer in terms of a contribution to that, rather than how much carbon is there out there for the international community or how can you now make your contribution to these international goals."*

This approach of nesting the study in the national context explicitly taken by IUCN and WRI therefore built on the lessons and experience from other recent international forest carbon interventions such as REDD+, which have faced difficulties in gaining national support and momentum in spite of a strong global movement and push for adoption. In Rwanda, this approach of building on existing policies (*National Forestry Policy*) and targets (*Vision 2020*, EDPRS) was received well by the Minister for Natural Resources, Stanislas Kamanzi, who was able to gain broader support within the cabinet from other Ministers by outlining the benefits of FLR within the national agenda.

In addition, prior to the ROAM assessment there was a range of existing forestry, agro-forestry, water husbandry, soil and water conservation and food security programs with complementary objectives. These programs, together with existing policies helped provide the enabling environment for the wider scale landscape approach taken by ROAM. Moreover, the fact that existing programs tended to be focused and limited to specific districts and/or sectors,

underpinned the need for a country-wide landscape approach to meet the needs of "border to border" forest restoration.

3.3. The role of 'champions'

A critical and arguably the most important factor in gaining support for ROAM and FLR in Rwanda was the role of "champions" in the GoR who provided the direction as well as technical expertise and institutional linkages necessary for the assessment: firstly to take place, and secondly, to be adopted by the Government. At a Ministerial level Stanislas Kamanzi provided the overall leadership for ROAM in Rwanda, particularly in advocating and gaining support for FLR within the cabinet. Minister Kamanzi's support for the assessment was matched by a proactive engagement with the actual process and final product, as evidenced by this anecdote from the IUCN team leader:

> *I went in to have a meeting with Stanislas Kamanzi and we had a draft of the report there and this is the first time I've sat in a minister's office, which I've done several times [before], talking about a piece of work we've done and he had personally red penned the whole report. He'd been right through it, circled areas, said he wanted the economics to be explained better. [He] had a whole load of suggestions.*

Ministerial engagement and support was underpinned by strong leadership at the departmental level by key players including senior officials in the Ministry of Natural Resources who were instrumental in sustaining the process of ROAM by providing technical inputs, contacts and day-to-day management. RNRA representatives as well as academic staff from the National University of Rwanda played a key role in providing technical inputs including national datasets as well as ground-truthing and verifying the analysis undertaken by the IUCN and WRI team, who all worked in partnership together to apply ROAM within the national context. According to a team member, this partnership between IUCN, WRI and the RNRA "gave confidence" to Minister Kamanzi that the ROAM Assessment was moving forward.

4.   Conclusion

In 2011, at the beginning of the Year of the Forest, the Rwandan Government made an ambitious commitment to bring a total of 2 million hectares of forest under restoration by 2020. Following the commitment, IUCN and WRI began a national ROAM assessment in close partnership with the GoR to determine pathways and options for achieving the FLR target declared in Bonn. In June 2015 the ROAM assessment was officially launched by the Rwandan government, who are currently in the process of implementing and enacting several of the recommendations made by the report. This episode study has found that IUCN and WRI played a key role in contributing to the adoption of ROAM recommendations and FLR actions by the GoR by working collaboratively with key GoR actors to leverage and promulgate support for FLR more widely in the GoR and by framing the assessment in the national context. The process also delivered the current 'road test' versions of the ROAM handbook (IUCN & WRI, 2014).

The adoption of the ROAM report recommendations by the GoR is significant because it provides a detailed roadmap and guiding framework for the countries commitment to restoring 2 million hectares of forest cover. The ROAM report was adopted by the GoR as a result of a number of factors including the timing of the assessment, existing programs and policies including *Vision 2020*, the *National Forestry Policy* (2010) and the *Economic Development and Poverty Reduction Strategy* (EDPRS), the political will and demand for action from key actors within the GoR as well as the role of 'champions' in the GoR. IUCN and WRI played an important role in supporting the adoption of the report recommendations by the GoR, by framing the assessment in the national context and making the links to existing national priorities including a 30% forest target set in *Vision 2020*, the *National Forestry Policy* and the EDPRS. Another critical factor in the GoR first, undertaking, and second, adopting the assessments recommendations was the role of key "champions" who IUCN and WRI worked collaboratively with at both the Ministerial and Departmental level to leverage and mobilise support for the assessment.

There are a number of recommendations currently being implemented by the GoR following the release of the ROAM report. These include improved coordination among responsible Government agencies; the transfer of responsibility for the Tree Seed Centre from the Ministry of Agriculture to the Ministry of Natural Resources; the implementation of several FLR projects including a BMU funded initiative supporting the national programme as well as pilot restoration in two districts in the Eastern province, and GEF funded Landscape Approach to Forest Restoration and Conservation (LAFREC) project. In addition, the report has supported resource mobilisation via the nationally-owned funding mechanism for all environment and climate change investment; the National Climate and Environment Fund (FONERWA). This study has found that the ROAM assessment has played a role in contributing towards all of these actions currently supporting FLR in Rwanda. For instance, there is a clear linkage between the ROAM process and the institutional transfer of the Tree Seed Centre. Likewise, the ROAM assessment has been instrumental in securing investment for establishing a BMU funded project aimed at verifying carbon stocks and other ecosystem services through landscape scale restoration in two Rwandan districts in the Eastern province. ROAM also influenced the design and formulation of the LAFREC project which is a large scale FLR project funded by GEF for the restoration of the Gishwati-Mukura forests landscape as evidenced in LAFREC project documentation. In summary, the ROAM assessment has played a pivotal role in mobilising a groundswell of support in Rwanda for the country to achieve its ambitious targets of "border to border" forest restoration.

Attachment One: Detailed timeline

Table 1. Timeline of Rwanda ROAM assessment events

Time	Event
1975	• Rwandan government begins a major replanting campaign that extends until 1990
1975	• *Umuganda* community-based forestry works programme launched to mobilise public support for forest restoration
1976	• *National Arbor Day* launched to mobilise public support for forest restoration (held annually in October/November)
1987 – 1997	• National Forests Action Plan released (ten years in scope)
1991	• National Environmental Strategy (SNER) launched
1991	• National Environmental Action Plan (NEAP) launched
1990 – 1995	• Rwandan genocide and civil conflict causes large scale of fatality, population displacement and ecological damage
1993 – 1995	• All forestry activities were suspended due to conflict
1995 – 1999	• Forestry activities resumed on a 'modest' scale
1995 – 2000	• IUCN work with film-maker John D Liu to document the Loess Plateau restoration project in China with the World Bank
1998	• National consultative process to define the future goals of Rwanda began
2000	• Rwanda *Vision 2020* launched by president Paul Kagame outlining vision for Rwanda setting relevant targets for agriculture, reforestation, energy, water and food
2004	• *National Forestry Policy* (2004)
2004	• Positive trend in forest cover with a total of 19.6% and a trend of 1% per year for decade
2010	• GoR, UNFF, IUCN (including GPFLR) sign an MoU setting out collaboration on FLR
2010	• GoR approach IUCN as secretariat of the United Nations Forum on Forests for support for FLR
2010	• Updating the 2004 policy the *National Forestry Policy* (2010) launched by Ministry of Forestry and Mines. Policy emphasises reforestation to reduce risks of desertification, erosion, climate change and degradation of water resources
2010 – 2011	• Film-maker John D Liu travels to Rwanda to make film 'Emerging in a Changing Climate' between August 2011 and March 2012 for the Climate Development Knowledge Network. John suggests that the GoR engage with IUCN and the UN Forum on Forests (UNFF) to mobilise support for FLR
2010 – 2011	• IUCN engage with GoR Ministers to gain support for FLR commitment through the UNFF
2011	• Rwanda makes commitment to restore 2 million ha of forest and agricultural land at the Global Launch of the International Year of the Forests (2 February 2011)
2011	• *National Forestry Policy* (2010) awarded the "Future Policy Award" by the World Future Council
2011	• IUCN conduct Technical Workshop in Rwanda to discuss the technical implications of the FLR commitment made by the GoR
2011 – 2014	• Design of the Landscape Approach to Forest Restoration and Conservation (LAFREC) commences. Funded by the World Bank in partnership with the Rwandan government
2011	• Ministry of Natural Resources and the Department of Forestry and Nature Conservation in Rwanda Natural Resources Authority begin a country-wide restoration opportunity assessment with IUCN and WRI
2013	• Rwanda establishes National Climate and Environment Fund (FONERWA) to support financing for environmental projects.
2013	• Rwanda sets target of 30% national forest cover in the *Economic Development and Poverty Reduction Strategy* 2013 – 2018 (EDPRS2) and the *Vision 2020*
2014 – 2019	• LAFREC project is implemented by the World Bank
2014	• ROAM Validation Workshop (July 2014)
2014	• *Forest Landscape Restoration Opportunity Assessment for Rwanda* released (September)

Time	Event
2014	• RNRA and IUCN generate a comprehensive stocktake of FLR projects in Rwanda
2015	• Rwanda ROAM Assessment launched by the Minister of Natural Resources (June)
2015 – 2018	• BMU funded Piloting Multiple-Benefit Packages through forest/landscape restoration and REDD+ in Rwanda for scaling up in Africa project begins implementation by GoR and IUCN
2015	• MINAGRI and MINIRENA collaborate with FAO and IUCN on a joint workshop to coordinate Forest Landscape Restoration and Sustainable Food and Agriculture programmes

Attachment Two: Episode study methodology

The methodology for this episode study is described in detail below. This study has taken an adapted, modified version of the 'episode study' approach developed by the Overseas Development Institute (ODI).

Scope

The scope of this study comprises:

- the adoption of the ROAM assessment recommendations by the Rwandan government,
- the processes of developing this report.

It will also consider the policy decisions that have occurred as a result of the ROAM. It will not consider the actual implementation of the actions recommended or arising from the ROAM assessment. The context of the ROAM assessment will be considered however it will not be examined exhaustively, focusing rather on the key events and factors that preceded the assessment.

Purpose

The purpose of this episode study is to document and share learnings; provide accountability to donors and to build on the knowledge base for the ROAM process and its effect on FLR. More specifically, this episode study has been conducted to:

- **Document and share learnings** of how the Rwanda report, recommendations and suggested actions came to be adopted. Considering the role of collaborative research efforts between WRI and IUCN were in this process, this study will seek to build on success internally, inform ongoing and future FLR processes and to maximise potential success/uptake of future FLR processes and to promote IUCN's FLR program/approach to donors and interested FLR-ready countries and implementing partners
- Meet **accountability** requirements and commitments made by IUCN during the current KNOWFOR phase 1 funding cycle
- Develop and **contribute to the broader ROAM and FLR knowledge** base.

These purposes are outlined below for the different audience groups below. The purpose for the study has also informed the development of a set of overall episode study questions.

Audience

The episode study is anticipated to be used primarily by IUCN and WRI to understand and share learnings from the Rwanda report with partners. The audiences for the episode study are outlined in Table 2 below.

Table 2: Audience information needs

Audience group	Anticipated use
DFID and KNOWFOR partners	• To understand the enabling and constraining factors for knowledge uptake using the ROAM methodology as a case study
IUCN GPFLR	• To understand what worked and why in the Rwanda ROAM assessment • To demonstrate accountability to funders
WRI	• To understand what worked and why in the Rwanda ROAM assessment

Episode study questions

Based on the purpose and information requirements two overarching questions were formulated for the episode study to address:

1. *How did the Rwanda report, recommendations and suggested actions come to be adopted?*

2. *What was the role of collaborative research efforts between WRI and IUCN in this process?*

These questions were addressed through the episode study data collection and analysis process, which is outlined below.

Episode study process

The episode study methodology and process was developed by the Overseas Development Institute (ODI) and is designed to investigate the influence of research on policy. Episode studies typically focus on a clear policy change and trace backward to establish what factors contributed to the outcome, event or episode under investigation. In contrast to most theory driven evaluation an episode study takes the policy change as the starting point for enquiry rather than the intervention itself. ODI argues that the crucial advantage of using an episode study is that the process of working backwards gives a more realistic view of the broad range of factors that influence policy (ODI, 2004).

This study draws on ODI's Research and Policy in Development (RAPID) framework. This framework guides investigation into three key dimensions that contribute to policy change including: the political context (politics and institutions), the role of linkages (networks and relationships that lead to the change) and the role of evidence (research or knowledge and its credibility and communication) that lead to the change.

The process for conducting this study entailed the following general steps:

1. The identification of an instance of **policy change** or influence and the development of key study questions: the adoption of the ROAM report recommendations by the Rwandan Government. Identified via consultation with IUCN and a scan of documentation.

2. The iterative development of a **historical timeline** of events, decisions or processes that lead to the ultimate policy change. Key events were identified and situated chronologically via a document review and through a series of interviews with ROAM assessment stakeholders.

3. The **exploration multiple perspectives** on how and why those policy decisions and practices took place (focusing on the political, relational and knowledge generation dimensions of the

process). Different perspectives on the ROAM process were sought via a series of interviews with the Rwanda ROAM team.

4. The remote **review and validation** of the narrative and identified factors. Following consultation, interviews and desktop review all information was synthesised, reviewed and verified iteratively through an iterative reporting process with key ROAM stakeholders.

Desktop review

The desktop review was undertaken to describe the context for the ROAM assessment, to develop a timeline of events, and to begin to look for commentary or evidence around the three dimensions of influence identified by RAPID (relationships, political influences and important knowledge or information). A list of documents reviewed for this study is provided in Attachment Four.

Remote consultation and interviews

The evaluation team undertook a series of six key stakeholder interviews consultations to collect data on the development and utilisation of the ROAM assessment. Interviewees included IUCN, WRI, RNRA and University of Rwanda representatives. The consultations were held via skype or phone by the evaluation team with informants, who were identified by IUCN and through a process of snowballing (referral by other interviewees). During consultations the evaluation team confirmed the timeline as well as events, decisions and processes that lead to the adoption of the Rwanda ROAM report recommendations. Each consultation was documented and transcribed. An interview guide with a series of set questions was used to structure interviews (see Attachment Three).

Attachment Three: Interview guide

We ['Clear Horizon'] have been contracted by DFID on behalf of IUCN to provide monitoring and evaluation support to the Global Forests and Climate Change Programme.

As part of this support we are conducting an 'Episode Study' of the development of the *Forest Landscape Restoration Opportunity Assessment for Rwanda* (the 'assessment') produced by the Rwandan Government in partnership with IUCN and WRI in 2014. The purpose of this study is to understand the events that lead up to the development of this assessment and the role that different actors played in bringing it about. The overarching objective is to identify lessons from the successful development and uptake of the assessment to inform IUCN's future work.

To better understand the development of the assessment we would like to interview you as part of this study. It should take around 30 minutes to do so. The information that you provide will be recorded, transcribed and used in the Episode Study report which will be submitted to IUCN and DFID. Your name won't be used in the report but if it's ok with you we may associate your comments with your position and organisation.

Is this ok?   Yes/No

1. What is your role?

2. Can you describe to me your role in the development of the *Forest Landscape Restoration Opportunity Assessment for Rwanda*?
3. What was the FLR situation in Rwanda before the development of the assessment?

4. What were the main events that lead up to the development of the assessment?

5. What were the main factors that enabled the Rwandan government to adopt and endorse the assessment?

6. In your opinion, which of the contributing factors was the most significant to achieving policy influence? What was it about this factor/s that lead to the change?

7. What are next steps for the implementation of the assessment?

Thanks for your time. We appreciate your input and will use it to develop a report to IUCN on the development and influence of the assessment.

Attachment Four: References

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