



# RUSUMO FALLS HYDROELECTRIC PROJECT – DAM & POWERPLANT COMPONENT

## **RESETTLEMENT ACTION PLAN (RAP)**

VOLUME 1 : MAIN REPORT

**FINAL REPORT** 

#### **ARTELIA EAU & ENVIRONNEMENT**

ECHIROLLES 6, Rue de Lorraine 38130 Echirolles, France Tel.: +33 (0)4 76 33 40 00 Fax: +33 (0)4 76 33 43 32



NILE BASIN INITIATIVE (NBI) / NILE EQUATORIAL LAKES SUBSIDIARY ACTION PROGRAM (NELSAP)

 $\mathbf{4}^{\text{th}}$  Floor, Kigali City Tower, Boulevard du Commerce, Kigali, Rwanda

DATE: MARCH 2013 REF: 1770050

Coteba & Sogreah, same team, enhanced expertise

## EXECUTIVE SUMMARY

## PREAMBLE

This document presents the Resettlement Action Plan (RAP) for the Rusumo Falls Hydro-electric Power Development Project (= the Project). The Project will affect communities in Rwanda and Tanzania in the vicinity of the Project site, the Kagera river immediately upstream of the Rusumo Falls, on the border between the two countries. The RAP has been established in order to ensure that any economic or physical displacement resulting from the Project, whether permanent or temporary, is undertaken in a socially responsible manner and according to good international practice. Through the RAP, the Project will apply the relevant national legislations of Rwanda and Tanzania as well as the relevant World Bank and AfDB Policies:

- WB OP 4.12 "Involuntary Resettlement" (December 2001, revised February 2011);
- AfDB (2003): Involuntary Resettlement Policy

## STRUCTURE OF THE RAP

The RAP has been developed as <u>one</u> consolidated document, covering the affected communities in both countries, Rwanda and Tanzania. Some of the relevant topics need to be dealt with under consideration of the respective country specific aspects, as the legal framework information or the socio-ecomic baseline information. For these cases, specific sub-sections have been prepared.

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#### **Overview: Contents of the RAP**

## THE PROJECT

The Nile Basin Initiative (NBI) is a partnership of the riparian states of the Nile. The NBI seeks to develop the river basin resources in a cooperative manner, share substantial socioeconomic benefits, and promote regional peace and security. Within the framework of the NBI, the Governments of Burundi, Rwanda and Tanzania have received financial support from various donors for preparation of the proposed Regional Rusumo Falls Hydroelectric Project (RRFHP), prepared through the Nile Equatorial Lakes Subsidiary Action Program (NELSAP). RRFHP is a key project that is part of an overall Kagera Basin Integrated Development Framework, which is part of the Nile Basin Initiative.

The proposed project is a joint development undertaking by the Governments of Burundi, Rwanda and Tanzania. The agreed project preparation management arrangements consist, at the regional level, of a Council of Ministers in charge of electricity in the three countries; a Project Implementation Committee (PIC) consisting of the Managing Director/Director General of the Electricity Utility, Director General/ Commissioner/Director of Energy in each country; and a Project Manager at the NELSAP Coordination Unit (NELSAP-CU). NBI/NELSAP will also have fiduciary responsibility and oversee donor grants to the project. In March 2006 in Kigali, the Ministers of Energy of the three countries signed a Joint Project Development Agreement, reconfirming their commitment to jointly develop the Project.

The feasibility and design studies as well as the Environmental and Social Impacts Assessments and Resettlement Action Plans conducted by the Consulting Firm SNC Lavalin since 2007, were interrupted several times as the scope of the studies were modified, due to the findings related to magnitude of the environmental and social impacts, especially those associated with the involuntary resettlement of local communities in the three countries. Thus, since 2007, the Feasibility and Design studies as well as the ESIA&RAP studies have shifted from the Full Development Scheme (FDS) to the Intermediate Development Scheme (IDS) and finally to the Run of the River Scheme (RoR). Following the recommendation of the Project Implementation Committee in March 2012, the RoR option was retained as the best option.

The dam reservoir and power plant is planned to be situated at the Rusumo Falls where the Kagera River forms the boundary between Tanzania and Rwanda, and about 2 kilometres downstream of the river's confluence with the Ruvubu River.

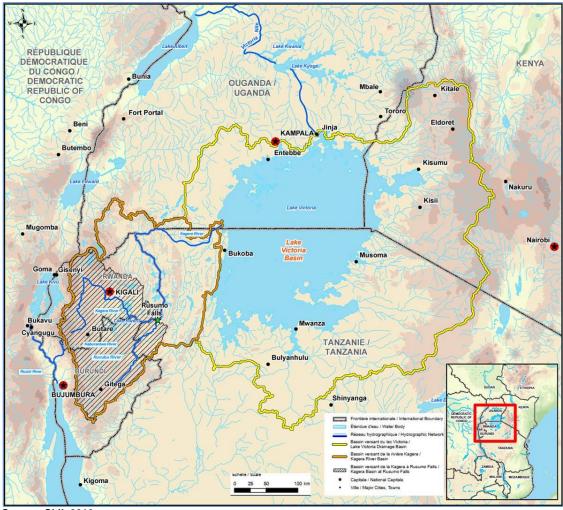
In general, the project civil works will consist of the following:

- Dam about 15 meters high creating hydraulic head of about 32 meters at maximum water level estimated at 1,320 masl;
- Fixed crest overflow weir (four openings of 15 m each);
- A 4 x4 sluice gate for minimum flow releases ;
- A 13 m wide gated pass (that may be installed to make back water profiles similar to natural conditions in flood period);
- Transmission lines connecting the hydroelectric power plant of Rusumo Falls to the national grids of Rwanda, Burundi, and Tanzania, and the related project area development: 220 kV transmission lines: Rusumo Falls Gitega (Burundi), 161

km; Rusumo Falls – Birembo/Kigali (Rwanda), 109 km; and Rusumo Falls – Nyakanazi (Tanzania), 98 km, and

 Substations in Muyinga, and Gitega, for Burundi; Birembo and Kigali/Bugesera for Rwanda; and Nyakanazi for Tanzania.

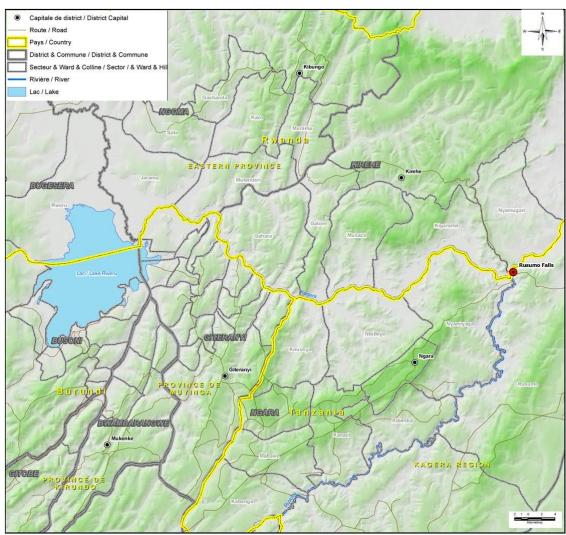
Current estimates show that the Rusumo Project will create up to about 1,000 temporary jobs during the construction period. About 10% of the workforce is expected to be Third Country Nationals. The overall duration of the construction period is estimated to be about 4 years. There will be in total 2,400,000 person-hours divided into two main contracts: the civil works contract and the electrical and mechanical works contract.



Source: SLII, 2012

**Project Situation Map – Country Scale** 

DAM & POWERPLANT COMPONENT RESETTLEMENT ACTION PLAN (RAP)



Source: SLII, 2012

**Project Situation Map – Regional Scale** 

## LEGAL AND POLICY BACKGROUND

The RAP has been prepared in compliance with the requirements of the relevant national legislation of the Republic of Rwanda and the United Republic of Tanzania.

Articles 29 and 30 of the 2003 Constitution of the Republic of Rwanda establish the fundamental principles of right to and protection of private property. In addition to the overarching principles stated in the Constitution, key legislation applicable to land management and expropriation in Rwanda includes:

- Organic Law N° 08/2005 of 14/07/2005 determining the use and management of land in Rwanda;
- Law N° 18/2007 of 19/04/2007 relating to expropriation in the public interest;
- Law N°17/2010 of 12/05/2010 establishing and organizing the real property valuation profession in Rwanda

In Tanzania, it is a constitutional right that if private property is either acquired or nationalized, the individual affected must be fully, fairly and promptly provided with compensation. The procedures for valuation are set out in the

- Land Act No.4, and
- Village Land Act No.5 of 1999.

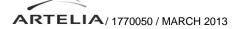
The World Bank Group is the potential lender for the project. This document has therefore been prepared in accordance with WB requirements as stated in OP 4.12 "Involuntary Resettlement".

## **SUMMARY OF PROJECT IMPACTS**

Compared to the previous Project designs, the RoR is resulting in a significant reduction of impacts, concerning the types as well as the magnitude and extent.

#### **Construction Impacts**

Impacts on land resulting from construction are limited to the dam site. Affected land will be residential land, land used for business and small areas of agricultural land. Land take will result in the permanent change of land use and the termination of the present use of the land. Land take due to construction will affect a total of 223 households, in Rusumo East and Nyakwisi villages in Rwanda and in Rusumo village, Tanzania.



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Description of Project Impacts Construction; Impacts on Land (Dam Site)	Number of	f affected Ho	ouseholds
Land loss due to construction of dam	Rwanda	Tanzania	Total
Residential structures, associated with agricultural land plots		8	8
Agricultural land		10	10
5	Subtotal	1	18
Land loss due to establishment of concrete bashing and rock crushing and contractors work area, future residential area for operation staff			
Residential structures, associated with agricultural land plots		33	33
Residential structures		21	21
	Subtotal		54
Land loss due to establishment of concrete bashing and rock crushing area			
Business structures		13	13
Brick making businesses		26	26
Arable marshland		2	2
fish hatching ponds (1 cooperative)	Ortheast	6	6
	Subtotal		47
Land loss due to establishment of construction contractor's area			
Business structures: owners	17		17
Business structures (business tenants in affected structures as per row above)	36		36
residential structures (as annex of affected business structure as per row above)	3		3
	Subtotal		56
Land loss due to establishment of borrow areas (borrow area 2)			
Sand digging and brick making businesses (including 1 cooperative with 21 members)	34		34
	Subtotal		34
Temporary loss of access to resources due to construction activities			
Loss of access to the river due to construction of dam structure: <b>fishing business downstream of dam site</b>		14	14
			14
Total			223

## Overview on Project Impacts and affected households: Construction

#### Impacts from Project Operation

The project will function as a Run-of-River scheme and will not create a water storage reservoir upstream from the dam. However, there will be a 40 cm increase in the average water level at the dam compared to the natural situation to maintain the water level needed for operation (1,320 m asl).

As a result, areas of seasonally flooded marshland up to 5 km on both sides of the Kagera river, upstream the dam, will become permanently flooded.

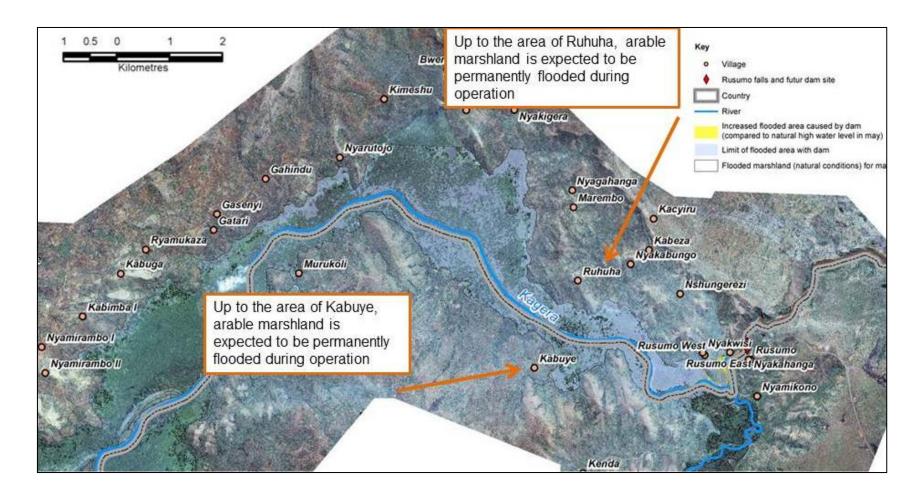
In Rwanda, the arable marshland of 6 villages will be affected: Rusumo East, Rusumo West, Nyakwisi, Nshungeruzi, Nyakabungo and Ruhuha. In Tanzania, two sub-villages of the village Nyakiziba will be affected: Kabuye and Kyenda.

Impacts from Project operation will be limited to marshland and no private agricultural land will be affected by permanent flooding.

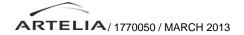
Description	Area (hectares)			No. of Households		
-	Rwanda	Tanzania	Total	Rwanda	Tanzania	Total
<ol> <li>Land Acquisition in Dam Site</li> <li>Agricultural Land</li> <li>Natural Vegetation</li> <li>Residential Structures</li> <li>Business Units</li> </ol>	14.34 1.84 1.03	15.75 26.97 0.88		3 87	45 29 59	45 32 146
Sub-Total	17.21	43.58	60.79	90	133	223
<ul><li>2. Affected Marshland (flooded)</li><li>Arable Marshland</li></ul>	107.6	79.6	187.2	351	90	441
Sub-Total	107.6	79.6	187.2	351	90	441
TOTAL	124.81	123.18	247.99	441	223	664

#### Summary: Project Impacts and Project Affected People

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**Overview on Project Affected Area** 



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## **RESETTLEMENT AND COMPENSATION**

## **Overall Approach**

The RAP aims to ensure that all affected parties are compensated and assisted in restoring their livelihoods.

Overall objectives of the RAP are:

- Avoid or at least minimize involuntary resettlement
- Mitigate adverse social and economic impacts from land acquisition by:

   providing compensation for loss of assets at replacement cost; and
   ensuring that resettlement activities are implemented with appropriate disclosure of information, consultation, and the informed participation of those affected, and
- Improve or at least restore the livelihoods and standards of living of affected people.
- Provide additional targeted assistance (e.g., credit facilities, training, or job opportunities) and opportunities to improve or at least restore their incomeearning capacity, production levels, and standards of living to economically displaced persons whose livelihoods or income levels are adversely affected;
- Provide transitional support to affected people, as necessary, based on a reasonable estimate of the time required to restore their income earning capacity, production levels, and standards of living.

## Principles for Compensation and Resettlement

The key principles of this RAP are the following

- Compensation and resettlement of project affected people will be carried out in compliance with Rwandan and Tanzanian legislation and WB OP 4.12;
- Where Rwandan and Tanzanian legislation is less favourable to PAPs than WB OP 4.12 requirements or does not apply at all, these latter shall apply;
- All physically and economically displaced people will be offered an option between either a full resettlement package, including the provision of replacement residential land and a house, or cash compensation; The option for land-for-land exchange will be given priority and will be explored before cash compensation;
- Where farmers are economically displaced, they will be offered a resettlement option including the provision of agricultural land of potential equivalent to that of the land they have lost; the land for land option will be offered as primary option before cash compensation;
- The Project will provide for measures to support sustainable use of cash compensation (money management training) and for mechanisms within the overall monitoring framework to follow up the use of cash compensation;
- The Project will assist PAP in restoring their affected livelihoods and will provide transitional assistance in order to restore livelihoods to at least their previous level

- The Project aims to turn PAP to Project beneficiaries; targeted livelihood restoration programs will be implemented as part of this RAP in order to achieve this goal
- The RAP implementation and –outcomes will be monitored and evaluated as part of a transparent process
- PAP (and host communities) were, are and will be informed, consulted and involved in decisions making during the course of RAP development, implementation and evaluation
- In addition to the RAP, A Local Area Development Plan (LADP) will be designed and implemented, aiming to support the overall sustainable social and economic development of the wider Project area; the LADP will complement the mitigation measures proposed in the ESMP and the livelihood restoration measures of this RAP.

#### General Approach for Compensation and Resettlement

	Loss of residential structure and residential land
Option 1	
•	Cash compensation at replacement value for loss of residential house;
•	Cash compensation for loss of residential land at replacement value;
•	Cash compensation at replacement value for loss of other structures;
•	Cash compensation at replacement value for permanent crops in home garden
•	Plus: all necessary transaction costs
•	Money management training
Option 2	
•	Allocation of residential plot an agreed resettlement site, with secure tenure;
•	Reconstruction of a resettlement house of at least the same quality as the affected house;
•	and cash compensation at replacement value of any specific features that would not be included in the resettlement house, and
•	Resettlement assistance.
	ording to the results of the field surveys in November and December 2012
	nuary 2013, project affected people entirely prefer cash compensation
	and for land or the house for house approach. There was not a single
exception	to the cash preference.

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Loss of business structure
<ul> <li>Immovable business structure</li> <li>Compensation at full replacement value for immovable assets (including commercial land associated to the structure);</li> <li>Plus: all necessary transaction costs;</li> <li>Compensation for loss of income for the period of time required to reestablish the business and restore associated income - typically three month income, with a maximum of one year income.</li> <li>Money management training</li> <li>If business cannot be re-established: livelihood restoration program (see section 7.6)</li> </ul>
<ul> <li>Movable business structure (e.g.kiosk)</li> <li>Moving allowance (covering moving costs/transaction costs)</li> <li>Transition allowance to cover the period until the business is fully operational again after moving (typically 3 month income, with a maximum of 1 year income)</li> <li>Money management training</li> <li>If business cannot be re-established: livelihood restoration program (see section 7.6)</li> </ul>
Loss of Income due to Loss of Employment
<ul> <li>Compensation for lost income for employees of displaced business is the responsibility of the business owner (salaries of employees are part of the compensation amount for lost income); PIU will facilitate respective arrangements between owners and employees, based on the results of field work Dec 2012 – Jan 2013 and on the results of the exit survey;</li> <li>In the case that a displaced business does not reopen elsewhere, former employees are entitled to participate in the livelihood restoration program (see section 7.6);</li> </ul>
Loss of Other Immovable Structures
Compensation at full replacement value;
Plus: all necessary transaction costs;



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	Loss of Agricultural Land
•	Compensation at full replacement value or allocation of a land plot in an acceptable distance to residence of at least equivalent productivity; Compensation for loss of perennial crops and trees and full replacement value
•	Compensation for loss of seasonal crops at market value
•	Compensation for developments on land at full replacement value
•	Plus: all necessary transaction costs; Participation in livelihood restoration program (see section 7.6)
•	Participation in money management training
this land preference	small areas of private agricultural land will be affected during construction; is entirely located in Rusumo, Tanzania; affected people stated their for cash compensation; according to a rapid land availability survey, I land close (less than 5 km) to Rusumo is available for purchase
	Loss of Access to Agricultural Land (Sharecropper, Tenant)
ac Co no (be Co do Pa	ocation of compensation for permanent crops (full replacement value) cording to the formal contract (between owner and sharecropper/tenant) ompensation for annual crops at market value (only if annual crops could t be harvested prior to date of loss) according to the formal contract etween owner and sharecropper/tenant) ompensation at full replacement value for improvements on land to the cumented owner of the improvement articipation in livelihood restoration program (see section 7.6) articipation in money management training
<ul> <li>PII</li> <li>colinitie</li> <li>Colinitie</li> <li>Colinitie</li> <li>Colinitie</li> <li>Colinitie</li> <li>Colinitie</li> <li>Colinitie</li> <li>Colinitie</li> <li>Colinitie</li> <li>Pai</li> </ul>	ere is no formal contract/agreement with share cropper or tenant U will seek to facilitate agreement between with owner on allocation of mpensation for permanent crops (full replacement value) according to the ormal arrangements (between owner and sharecropper/tenant) ompensation for annual crops at market value hly if annual crops could not be harvested prior to date of loss) according to a informal arrangements (between owner and sharecropper/tenant) ompensation at full replacement value for improvements on land to the cumented owner of the improvement articipation in livelihood restoration program (see section 7.6) articipation in money management training
	Loss of Permanent Crops
•	Compensation at full replacement value of the lost crop
•	Participation in money management training

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#### Loss of Production from Marshland

- Compensation for loss of income from marshland production at market value of crop (most important crop on affected marshland plot for the 3 years prior to cut-off date)
- Compensation for labor costs to develop the marshland;
- Compensation for developments on land at full replacement value
- Participation in livelihood restoration program (see section 7.6)
- Participation in money management training

**Note**: Marshland is under government ownership. Hence, the loss of marshland will not be compensated for the land as such, but under consideration of the loss of production/income from marshland.

**Note:** In order to provide for livelihood restoration, compensation will be paid for a period equivalent to 3 years of income from marshland production. For affected households who entirely depend on marshland, compensation will be paid for a period equivalent to 5 years of income from marshland production.

**Final calculation of compensation:** The rationale for final calculation of compensation rates is based on factual information that marshland cultivation is only possible every second year, due to flooding of marshland every other year. Hence, income from marshland only occurs every second year. Consequently, a 3 - year period of income from marshland is compensated by cash compensation at market value for lost crop with the factor 1.5. A 5 - year period of income from marshland is corporated by cash compensation at market value for lost crop with the factor 2.5.

Reference information on marshland cultivation was obtained from local resettlement committees, from district agronomists and from affected people; the information was confirmed during the consultative workshop in Kigali on 4 Feb 2013.



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Loss of Access to Resources
<ul> <li>Brick Making – and Sand Digging Businesses on Marshland</li> <li>Assistance in finding a new business site</li> <li>Restoration allowance (costs for moving and re-establishment of business site plus all transaction costs)</li> <li>Compensation for loss of income for the period of time required to re-establish the business and restore associated income - typically three month income, with a maximum of one year income.</li> </ul>
<ul> <li>Money management training</li> <li>In case the business cannot be restored: participation in livelihood restoration program (see section 7.6)</li> <li>Fish Hatching Ponds on Marshland</li> </ul>
<ul> <li>Assistance in finding a new business site</li> <li>Restoration allowance (costs for moving and re-establishment of business site plus all transaction costs)</li> <li>Compensation for loss of income for the period of time required to re-establish the business and restore associated income - typically three month income, with a maximum of one year income.</li> <li>Money management training</li> </ul>
<ul> <li>In case the business cannot be restored: participation livelihood restoration program (see section 7.6)</li> <li>In case that the displaced business cannot be restored : participation in livelihood restoration program (see section 7.6)</li> <li>Note: some of the affected businesses are organized as co-operatives (see entitlement matrix below)</li> </ul>

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	Loss of Access to Resources during Construction
Access to	the Kagera river for fishing
•	Assistance in finding alternative fishing sites upstream during construction period Re-establishment of access to original fishing sites immediately after construction (2 month period after completion of construction) severance allowance equivalent to a 2-month income from fishing)
assistance a Note: actua rates for res Note: entitle some house household t	erable people, in addition to entitlements as listed above, are entitled to special as needed to participate effectively in the resettlement process al land market assessments will be done prior to determination of final replacement sidential land, commercial land and agricultural land. ements are presented separately for each category of affected household/entity; eholds may qualify for entitlements in more than one category (for example, a that is physically and economically displaced may qualify for the entitlements for categories. e.g. households losing their residential structure and losing agricultural
affected peo carried out I survey is to 2012 to Jan	to the start of the compensation payment process, compensation agreements with ople will be set up and signed. This will be done through an exit survey, to be by the official valuers of the land offices of the districts of Kirehe and Ngara. The exit confirm the results of the surveys for validation of losses carried out November nuary 2013 (see section 7.3) through the performance of the respective legal The resettlement committees and PIU officers will participate in the exit survey

## Livelihood Restoration Program

Affected households are entitled to participate in and to benefit from the targeted set of livelihood restoration programs, which were developed for this RAP:

- Financial training for the sustainable use of cash compensation (including training on the maintenance of a bank account, on small household investments, saving strategy and financial planning on the household level);
- Agricultural extension training for intensification of production;
- Livestock keeping extension training, and
- Business skills training: facilitation of access to alternative income generating activities.

#### Priority Access to Construction Employment

Affected households will be provided with priority consideration for construction employment.

#### Local Area Development Plan

Affected households will be entitled to priority assistance through the LADP.

## Cut-off Date

The cut-off date for this RAP was communicated to the affected communities during the field work in November 2012 – January 2013. The cut-off dates are the respective dates of self-validation meetings in the affected communities in November 2012, December 2012 and January 2013. The cut-off dates were signed by the affected people, by the village heads and resettlement committees (see section 7.3.2).

## **GRIEVANCE MANAGEMENT**

In practice, in similar compensation and resettlement activities, grievances arise from misunderstandings of the Project policy, or result from conflicts between neighbours, which can usually be solved through adequate mediation using customary rules or local administration at the lowest level. Most grievances can be settled with additional explanation efforts and some mediation using customary dispute settlement mechanisms.

The Project provides a simple and accessible, extra-judicial mechanism for managing grievances and disputes based on explanation and mediation by third parties. Each of the affected persons will be able to trigger this mechanism, while still being able to resort to the judicial system.

Procedures within the grievance management process are explained in detail in the full report below. Grievance management will provide two tiers of amicable review and settlement, with the first one on the village level. The second level will integrate a mediation committee in case the grievance cannot be solved on the first level. Finally, there will be the option for each complainant to resort to court (third level), in case there is no solution within the Project's grievance mechanism.

## VULNERABLE PEOPLE

Vulnerable groups/people are defined as individuals, groups, households, or communities who by virtue of gender, locality, age, physical or mental disability, economic disadvantage, or social and cultural status who may require additional support or assistance and will need help adjusting to changes introduced by the Project.

Assistance will take the following forms, depending on vulnerable people's requests and needs:

- Assistance in the compensation payment procedure;
- Assistance in the post payment period to secure the compensation money;
- Assistance in moving: providing vehicle, driver and facilitation at the moving stage, providing ambulance services for disabled or infirm persons during moving, and
- Health care if required at critical periods: moving and transition period.

In the context of the Project, vulnerable people include:

- Households whose heads are children;
- Households whose heads are female, particularly widowed or repudiated and divorced women having to take care of their children, and who live with limited resources;
- Landless people having to work on others' land;
- Households who have no or very limited resources, including those who are marginalized due to their social status.
- Disabled persons, whether mentally or physically;

- Refugees, internally displaced people;
- People with serious medical conditions, particularly people living with HIV, AIDS and other chronic illnesses;
- Elderly people, particularly when they live alone.

Under the provisions of the RAP, vulnerable households will provided with targeted assistance.

## CONSULTATIONS

The overall goal of consultation and stakeholder engagement is to establish an ongoing, accessible and constructive dialogue with potentially affected parties and other interested organizations and individuals, so that their views and concerns can be taken into account in decisions about the Project in accordance with international good practice.

The consultation and stakeholder engagement activities of the RAP are entirely interwoven with the Project's Stakeholder Public Consultation and Disclosure Plan (PCDP). The PCDP is attached to the RAP as an alone standing document.

In line with the relevant international requirements, consultation with and participation of affected communities and individuals are key elements of the RAP development and implementation process. One essential aspect of this approach is the establishment of a robust process to redress the grievances of affected people (see above). Consultation with the affected population and with officials of local government, civil society and other representatives of the affected population is essential in order to achieve an in-depth understanding of types and extents of Project impacts as well as of required measures for mitigation and enhancement (= livelihood restoration measures).

Between 2007 and 2008, a total of 270 individual and group interviews with stakeholders were conducted in eleven survey areas.

Similar individual and group interviews were subsequently conducted with 75 selected stakeholders in Tanzania (Nyamiaga, Kasharazi, Rusuzo and Nyakiziba in the Ngara District). These interviews were conducted with the following stakeholder groups:

- Administrators and local elected representatives;
- Representatives of agricultural extension services or of social education and health care services;
- Representatives of trade associations (farmers, fishermen, small traders etc);
- Representatives of local civil society associations (women, youth, etc.).

These interviews aimed to identify: (i) the status and recent developments in local economic conditions (agriculture, fishing, trade, crafts, industry, tourism, etc.); (ii) status and recent developments in infrastructures and services; (iii) project's key stakeholders and representatives and on-going programs and local priorities.

In 2011, a comprehensive government stakeholder consultation process was developed in order to obtain authorizations for Consultants to conduct field work, as well as to engage as soon as possible with government authorities in obtaining their

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views, advice and participation in defining the socio-economic and environmental impacts of the project and the most adequate mitigation measures to apply. This was also a particularly important step in terms of gaining a better understanding of resettlement impacts and planning possible synergies with rural development projects to find available land and propose restoration strategies.

During November and December 2012 and in January 2013, consultations with communities in Rwanda and Tanzania along the Kagera river, amongst them the affected communities, were performed.

Consultations were conducted after preparatory meetings with authorities of Kigarama sector in Rwanda and the district of Ngara in Tanzania. Sector authorities in Rwanda and Ngara district authorities in Tanzania facilitated the performance of the field program. Affected local communities were visited in order to validate the affected assets (= marshland plots) in a participatory manner. Village leaders, resettlement committees and affected households participated in the self-validation process. Self- validation was aiming to obtain information on marshland use on the individual/household level.

In the context of the consultations, communities were provided with updated information about the Project in the frame of community meetings.

An overview on the consultation activities in the context of the Project so far is provided in the full text below.

Consultation activities in the frame of this RAP have a focus on:

- Consultation in the context of the RAP approach to compensation:
  - o self -validation of affected land by local communities
  - o consultation with resettlement committees on compensation approach
- Consultation of local communities/focus groups on marshland use and marshland user and on how to best compensate the loss of marshland;
- Consultation of local communities on needs and aspirations with regard to the design of livelihood restoration measures;
- Consultation in the context of RAP disclosure;
- Routine consultation of local resettlement committees in the context of the RAP monitoring program;
- Public consultation on the context of the RAP monitoring program;
- Continuous information of the affected population and other project stakeholders about Project progress and upcoming relevant activities:
  - One important information campaign in the context of the Project's overall consultation program is the information of Ex-PAPs (people who were considered as affected due to previous project designs, but are not affected by the RoR) about the actual status of Project design and the respective impact on their status as project affected people; this campaign has been implemented as part of the PCDP
- Continuous update of stakeholder list of the RAP.

## MONITORING AND EVALUATION

Monitoring, evaluation and auditing are key components of the RAP and are an integral part of the Project Owner's responsibilities. These components have the following general objectives.

## Monitoring

Monitoring looks at progress of resettlement and compensation and at specific situations of economic or social difficulties arising from the implementation of the compensation and resettlement process.

## Auditing

Auditing looks at compliance and completion of the resettlement process.

## Evaluation

Evaluation looks at outcomes, through an assessment of the short- mid- and long term impacts of the compensation and resettlement process on affected households, their incomes and standards of living, the environment, housing etc.

The following monitoring and evaluation approach will be used, whereby different levels of monitoring and evaluation are used:

- Internal progress (Input/Output) monitoring: measures whether inputs are delivered on schedule and as defined in the RAP, and their direct measurable results, for instance:
  - Amounts of compensation paid in a given month
  - Completion of cash payments and follow up of self-resettlement of affected people, prior to any construction activity
  - Completion of physical relocation prior to any construction activity
  - People completing livelihood restoration training courses

Monitoring will also seek to document and investigate specific conflict or hardship situations arising from the implementation of the RAP. Monitoring keeps track of RAP implementation efficiency and indicates whether changes have to be made to make the program work more efficiently. Progress monitoring is done internally by the Project at a frequency determined by the RAP for every indicator (in general every three months)

Outcome evaluation: Defines the extent to which the project is achieving or likely to achieve the objectives of the RAP. Re-establishment of businesses and earning acceptable returns over a reasonable period is an example of outcome. Outcome evaluation, combined with output monitoring results, will indicate whether the program is genuinely working and should continue to be implemented as planned, or whether some fundamental changes need to be made. Outcome evaluation looks beyond numerical compliance to the longer term impacts of program inputs and outputs, do determine what works and what does not work, and what needs to be changed. Outcome evaluation will be done by an independent entity.

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Outcome evaluation often uses proxy indicators (indirect indicators): for example, many people are reluctant to talk about their actual income. Proxy indicators can be used to help determine whether affected people are re-establishing or improving their livelihoods and standard of living. Indirect indicators may include status of nutrition, school attendance, or the purchase of "luxury" items such as motorbikes, sat TVs.

Outcome evaluation reports will be publicly disclosed.

• Audit of compliance and completion: Defines whether the RAP and applicable requirements have been complied with, and if the implementation can be deemed complete (external audit).

## **IMPLEMENTATION ARRANGEMENTS**

The RAP, the ESMP and the LADP will be implemented within one overall organizational set up, by multi-disciplinary teams on different levels.

The implementation of the Project will require the participation of several key players, including, but not limited to,

- the Project Owner and the Project Implementing Unit
- the Governments of Rwanda and Tanzania
- the relevant local and regional authorities of each national government
- as well as during construction the Owner's Engineer and the Construction Contractor (for details see ESMP).

## Project Owner – SPVPC

As required by the Tripartite Agreement between Burundi, Rwanda and Tanzania; the role of the Project Owner is delegated to a *Special Purpose Vehicle Project Company* (SPVPC).

The Project Owner (SPVPC) is responsible for overseeing and monitoring overall project implementation and for ensuring compliance with the environmental and social requirements of government authorities and funding agencies.

## Project Implementing Unit

NELSAP will serve as project implementing unit (PIU) for the RAP, ESMP and LADP, with a team dedicated to carrying out the respective activities, and coordinating with the two governments.

The PIU will operate on site, in interaction with the project affected people and direct cooperation with the district authorities. PIU will operate under and report to the SPVCP management.

The PIU as regional implementation unit will operate from Kigali (PIU headquarters) as well as directly at the Project site, with a local Project office.

The key implementation processes of the RAP require continuous presence in the project area and continuous communication with district authorities (Task Forces), resettlement committees and affected people.

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A project office at the Project site (location yet to be determined, in the Rusumo villages) will maximise efficiency and accessibility of the PIU staff. The present NELSAP team, already operating on the RAP, PCDP and ESMP preparation will be reinforced by additional staff.

To properly deliver its mandate, the PIU must be fully established and operational as soon as the decision to go ahead with the Rusumo project has been made. This is in order to timely initiate and manage those key RAP implementation activities, which will have to be performed prior to the start of construction (i.e. the compensation process for people affected by construction).

With regard to the implementation of the RAP and the PCDP, the PIU has the following responsibilities

## Communication and Coordination

- Overall coordination with national governments and with authorities and funding agencies with regard to the Project's social and environmental issues
- Implementation of the PCDP and establishment of good and operational relations to affected communities
- Communication and cooperation with local resettlement committees as key actors with implementation processes (i.e. compensation process, monitoring, identification of vulnerable people)

#### Management of RAP Implementation

- Ensure and monitor overall social and environmental due diligence within RAP, ESMP and LADP implementation (national requirements, lenders requirements)
- RAP Key Implementation Processes
  - Compensation process
  - Grievance Mechanism
  - Monitoring
- Manage staff recruitment processes and contracting processes of external service providers
- Design of overall training plan for implementation staff, oversee implementation of plan

#### Management of ESMP and LADP implementation

 PIU will also be responsible for ESMP – and LADP implementation. For further details, see ESIA and LADP.

#### Change Management

• Communicate necessary changes of approach, particularly where substantial and material changes to the RAP (ESMP, LADP, PCDP) might be envisioned

or necessary (i.e. as consequence of monitoring results) to SPVPC manager and PIC (see below) for final decision making

#### Capacity building

• Facilitate and guide capacity building for authorities on different levels with regard to due diligence of Project management and due consideration of environmental and social safeguards

#### District Task Forces

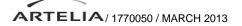
The District Task Forces act as implementing bodies for RAP related activities on the district level, in Kagera District in Rwanda and in Ngara District in Tanzania. They operate as direct partners to the PIU.

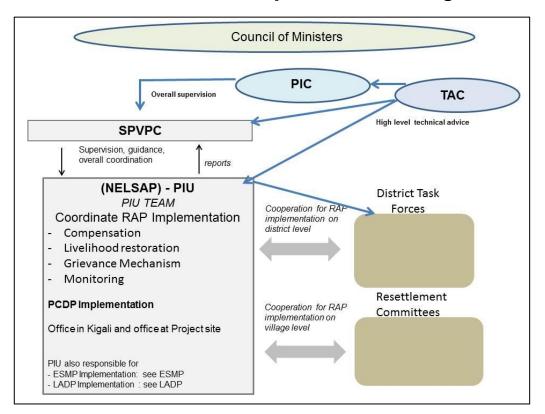
District executive administration staff shall contribute with their expertise, their capacity and competence to the implementation of the RAP, corresponding to the different technical areas they represent (i.e. agriculture, social assistance, land bureau).

#### **Resettlement Committees**

The resettlement committees are partners on the local level for RAP implementation, especially for

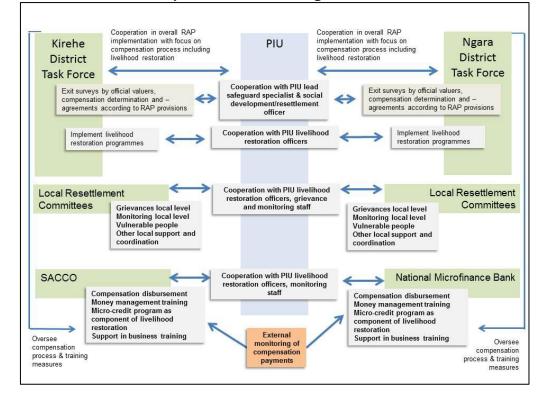
- Compensation process
- Involvement into the grievance mechanism on the village level
- Involvement into monitoring procedures, especially in monitoring of marshland dynamics, of progress of livelihood restoration measures and of compensation disbursement
- Identification of vulnerable people on the household level, information of PIU on special concerns of vulnerable people in their community, organise meetings and with and visits of vulnerable people





## **General Overview on Implementation Arrangements**

## **Overview on Implementation Arrangements – District Level**



## Budget

## **Overview on Budget for RAP and LADP Implementation**

Item		Total Costs USD
	eparation and Construction Pe r ₀, Year ₁- Year₄ (= 5 years)	riod
Project Implementation Unit	for RAP Implementation y <sub>0</sub> and y <sub>1</sub> -y <sub>4</sub>	
		1,220,200
Compensation, construction impacts	Due in Year <sub>0</sub>	
		2,236,645
Livelihood restoration PAP affected by	Due Year 0 – Year 2/Year	2,230,043
construction impacts, including assistance	3	
to vulnerable people		711,612
External Monitoring and external Coordination	for RAP Implementation y <sub>0</sub>	
	and $y_1 - y_4$	555,000
Sub-Total, Preparation period and construction period	for RAP Implementation $y_0$ and $y_1$ - $y_4$	4,723,457
	Project Operation	
0	/ear $_5$ – Year $_9$ ) (= 5 years)	
Compensation, operation impacts	Due in year $_4$	
Compensation, operation impacts		1,155,700
Livelihood restoration PAP affected by	Due Year 3 – Year 6	1,133,700
operation impacts		
		1,180,476
External Monitoring and external Coordination	for RAP Implementation	
Coordination	year <sub>5</sub> – year <sub>9</sub>	
Sub Total Operation David		310,000
Sub-Total, Operation Period	for RAP Implementation year 5 – year 9	
	year 5 – year 9	0.040.470
		2,646,176
Grand Total, RAP Imple	mentation	
		7,369,633
Summary Budget, LADP		.,000,000
		15,000,000
Total, RAP and LADP Implementation		
		22,369,633

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- Annex 2 Local Area Development Plan (LADP)
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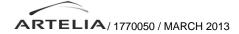
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## ACRONYMS

AfDB	African Development Bank
BCR	Benefit Cost Ratio
CDC	Community Development Committees
D.A.	Drainage area
DEM	Digital Elevation Model
EIA	Environmental Impact Assessment
ESIA	Environmental and Social Impact Assessment
FDS	Full Development Scheme
FSL	Full Supply Level
GIS	Geographical Information System
GPS	Global Positioning System
На	Hectares
HEC	Hydrologic Engineering Centers – US Corps of Engineers
IC	Installed Capacity
IDF	Inflow Design Flood
IDS	Intermediate Development Scheme
IGEBU	Geographic Institute of Burundi
LIDAR	Light Detection and Ranging
MOL	Minimum Operating Level
MPLD	Local Development Master Plan
NBD	Nile Basin Discourse
NBI	Nile Basin Initiative
NEL	Nile Equatorial Lakes
NELSAP	Nile Equatorial Lakes Subsidiary Action Program
NELSAP-CU	NELSAP Coordination Unit
NGO	Non-Governemental Organization
NPV	Net Present Value
OP 4.12	World Bank Operational Policy Involuntary Resettlement
PAP	Project Affected People
PCDP	Public Commutation and Disclosure Plan
PIC	Project Implementing Committee
Q	Discharge (flow)

#### DAM & POWERPLANT COMPONENT RESETTLEMENT ACTION PLAN (RAP)

RAP RFP ROR	Resettlement Action Plan Regional Rusumo Falls Hydroelectric Project Run-of-river Scheme
RSSP SI	Rural Sector Support Project International System of Units ("Système International d'Unités")
SLII SPV	SNC-Lavalin International Inc. Special Purpose Vehicle (company manage the RFP)
Sta.	Station, established by metric chainage along centerline alignment from a zero reference
STn	Station
TAC	Technical Advisory Committee
TIU	Tanzania Implementation Unit
UTM	Universal Transverse Mercator (coordinate)
WB WGS 84	World Bank World Geodetic System 1984



## **Glossary of Terms**

Some key terms found in this document are defined below.

Compensation	Payment in cash or in kind for loss of an asset or a resource that is acquired or affected by the project.
Affected person	Person or enterprise affected by Project impacts, i.e. experiencing either physical or economic displacement.
Economic displacement	Loss of assets (including land) or access to assets that leads to loss of income sources or means of livelihood as a result of project-related land acquisition or restriction of access to natural resources. People or enterprises may be economically displaced with or without experiencing physical displacement.
Involuntary resettlement	Involuntary resettlement refers both to physical displacement (relocation or loss of shelter) and to economic displacement (loss of assets or access to assets that leads to loss of income sources or means of livelihood) as a result of project-related land acquisition or restriction of access to natural resources. Resettlement is considered involuntary when affected individuals or communities do not have the right to refuse land acquisition that results in displacement. This occurs in cases of: (i) lawful expropriation or restrictions on land use based on eminent domain; and (ii) negotiated settlements in which the buyer can resort to expropriation or impose legal restrictions on land use if negotiations with the seller fail.
Land acquisition	Land acquisition includes both outright purchases of property and purchases of access rights, such as rights-of way.
Physical displacement	Loss of dwelling or shelter as a result of project-related land acquisition which requires the affected person(s) to move to another location.
Project	A project to build and operate a dam and hydro power generation facilities at Rusumo Falls on the border between Rwanda and Tanzania. The Project does not include transmission facilities from the main Rusumo switchyard to the grids of the respective three countries
Project Affected Household	All members of a household, whether related or not, operating as single economic unit, affected by the Project
Relocation	Change of place of residence
Replacement Value	Market value of the asset plus transaction costs (e.g. taxes, stamp duties, legal and notarization fees, registration fees, travel costs and any other such costs such as may be incurred as a result of the transaction or transfer of property). In applying this method of valuation, depreciation of structures and assets should not be taken into account.

#### **RUSUMO FALLS HYDROELECTRIC PROJECT**

DAM & POWERPLANT COMPONENT RESETTLEMENT ACTION PLAN (RAP)

Vulnerable groups Vulnerable or "at-risk" groups includes people who, by virtue of gender, ethnicity, age, physical or mental disability, economic disadvantage or social status may be more adversely affected by displacement than others and who may be limited in their ability to claim or take advantage of resettlement assistance and related development benefits. Vulnerable groups in the context of displacement also include people living below the poverty line, the landless, the elderly, women- and children-headed households, ethnic minorities, natural resource dependent communities or other displaced persons who may not be protected through national land compensation or land titling legislation.

#### **RUSUMO FALLS HYDROELECTRIC PROJECT**

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# UNITS

¢	U.S. Cent
bbl	Standard oil barrel of 42 U.S. gallons (159 l)
GWh	Gigawatt hour
GWh/yr	Gigawatt hour per year
h	Hour
ha	Hectare (10,000 m <sup>2</sup> )
kg	Kilogram
kg/m <sup>3</sup>	Kilogram per cubic meter
4 km <sup>2</sup>	Square kilometer
kV	Kilovolt
kWh	Kilowatt hour
m	Meter
M\$	Million dollars
m.a.s.l.	Meters above sea level
m³/s	Cubic meter per second
MVA	Megavolt ampere
MW	Megawatt
MWh	Megawatt hour
t	Ton (1,000 kg)
USD	U.S. Dollar

# 1. INTRODUCTION

This document presents the Resettlement Action Plan (RAP) for the Rusumo Falls Hydro-electric Power Development Project (= the Project). The Project will affect communities in Rwanda and Tanzania in the vicinity of the Project site, the Kagera River immediately upstream of the Rusumo Falls, on the border between the two countries. The RAP has been established in order to ensure that any economic or physical displacement resulting from the Project, whether permanent or temporary, is undertaken in a socially responsible manner and according to good international practice. Through the RAP, the Project will apply the respective relevant national legislations of Rwanda and Tanzania as well as the relevant World Bank and AfDB policies.

- WB OP 4.12 "Involuntary Resettlement" (December 2001, revised February 2011)
- AfDB (2003): Involuntary Resettlement Policy

# 1.1 STRUCTURE OF THE RAP

The RAP has been developed as <u>one</u> consolidated document, covering the affected communities in both countries, Rwanda and Tanzania. However, some of the relevant topics need to dealt with under consideration of the respective country specific aspects. One example is the legal and institutional context, presented in chapter 3 (see Table 1 below). In these cases, country specific sub-sections have been prepared.

Chapter No	Main Heading			
0	Executive Summary			
1	Introduction			
2	Project Description			
3	International Policies and Requirements			
4	Legal and Institutional Context			
5	Project Impacts on Affected Communities			
6	Socio-Economic Baseline of Affected Communities			
7	Valuation and Compensation			
8	Grievance Mechanism			
9	Consultations			
10	Budget and Costs			
11	Implementation Arrangements			
12	Monitoring and Evaluation			

Table 1 – Contents of the RAP

# 2. THE PROJECT

# 2.1 **GENERAL**

The Nile Basin Initiative (NBI) is a partnership of the riparian states of the Nile. The NBI seeks to develop the river basin resources in a cooperative manner, share substantial socioeconomic benefits, and promote regional peace and security. Within the framework of the NBI, the Governments of Burundi, Rwanda and Tanzania have received financial support from various donors for preparation of the proposed Regional Rusumo Falls Hydroelectric Project (RRFHP), prepared through the Nile Equatorial Lakes Subsidiary Action Program (NELSAP). RRFHP is a key project that is part of an overall Kagera Basin Integrated Development Framework, which is part of the Nile Basin Initiative.

The proposed project is a joint development undertaking by the Governments of Burundi, Rwanda and Tanzania. The agreed project preparation management arrangements consist, at the regional level, of a Council of Ministers in charge of electricity in the three countries; a Project Implementation Committee (PIC) consisting of the Managing Director/Director General of the Electricity Utility, Director General/ Commissioner/Director of Energy in each country; and a Project Manager at the NELSAP Coordination Unit (NELSAP-CU). NBI/NELSAP will also have fiduciary responsibility and oversee donor grants to the project. In March 2006 in Kigali, the Ministers of Energy of the three countries signed a Joint Project Development Agreement, reconfirming their commitment to jointly develop the Project.

The feasibility and design studies as well as the Environmental and Social Impacts Assessments and Resettlement Action Plans conducted by the Consulting Firm SNC Lavalin since 2007, were interrupted several times as the scope of the studies were modified, due to the findings related to magnitude of the environmental and social impacts, especially those associated with the involuntary resettlement of local communities in the three countries. Thus, since 2007, the Feasibility and Design studies as well as the ESIA&RAP studies have shifted from the Full Development Scheme (FDS) to the Intermediate Development Scheme (IDS) and finally to the Run of the River Scheme (RoR). Following the recommendation of the Project Implementation Committee in March 2012, the RoR option was retained as the best option.

# 2.2 **PROJECT LOCATION**

The dam reservoir and powerplant is planned to be situated at the Rusumo Falls where the Kagera River forms the boundary between Tanzania and Rwanda, and about 2 kilometres downstream of the river's confluence with the Ruvubu River. The reservoir is expected to extend up the Kagera River.

# 2.3 **PROJECT FEATURES**

In general, the project civil works will consist of the following:

- Dam about 15 meters high creating hydraulic head of about 32 meters at maximum water level estimated at 1,320 masl;
- Fixed crest overflow weir (four openings of 15 m each)
- A 4 x4 sluice gate for minimum flow releases, and
- A 13 m wide gated pass (that may be installed to make back water profiles similar to natural conditions in flood period).

# 2.4 **CONSTRUCTION PERIOD**

#### 2.4.1 Construction Areas

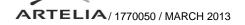
The construction area will affect land in Rwanda and Tanzania. The substation and the diversion tunnel will be built on the Rwandan Site, the power generation facilities will be located in Tanzania. The following table summarizes land area required for the construction site;

	Description	Area (ha)	Status	Country
1	Sub-station	2.5	Permanent	Rwanda
2	Operators accommodation	1.3	Permanent	Rwanda
3	Diversion channel and dam construction area	3.0	Permanent	Rwanda
4	Deposit area (soil, rock)	3.0	Permanent	Rwanda
5	Construction camp	1.9	Temporary	Rwanda
6	Borrow area 1 & 2 and quarry	7	Temporary	Rwanda
	TOTAL RWANDA	18.7		
7	Power Station and all facilities (tunnel, surge, tail race canal, spoil deposit)	28.0	Permanent	Tanzania
8	Administration and operators city	4.4	Permanent	Tanzania
9	Dam and water intake construction area	3.0	Permanent	Tanzania
10	Spoil disposal area (rock, soil)-to be reused for vegetation control	3.0	Permanent	Tanzania
11	Concrete basting and rock crushing	0.5	Temporary	Tanzania
12	Construction workers camp	4.4	Temporary	Tanzania
	TOTAL TANZANIA	43.3		
	TOTAL	62.0		

#### Table 2 - Areas Needed for Construction

In Rwanda, from the 18.7 ha land needed for construction, 8.9 ha will be needed temporary and 9.8 ha will be permanently acquired.

In Tanzania, from the 43.3 ha land needed for construction, 4.9 ha will be needed temporary and 38.4 ha will be permanently acquired.



### 2.4.2 Construction Methods

The construction of the Project does not involve unusual or special construction methods. It deals mainly with rock excavation, back filling or disposal of excess materials, crushing and screening various types of aggregates, formwork placing and dismantling, reinforced steel placing, supplying and placing concrete, structural steel erection, architectural works and finishing.

For the electrical and mechanical works, it mainly consists in fabrication, supply and installation of standard equipment (Kaplan turbines, 30 MW generators, 70 MVA transformers, 220 kV equipment, LV equipment, etc.).

#### 2.4.3 **Construction Workforce**

Current estimates show that the Rusumo Project will create up to about 1,000 temporary jobs during the construction period. About 10% of the workforce is expected to be Third Country Nationals. The overall duration of the construction period is estimated to be about 4 years. There will be in total 2,400,000 person-hours divided into two main contracts: the civil works contract and the electrical and mechanical works contract.

# 3. INTERNATIONAL POLICIES AND REQUIREMENTS

This document has been prepared in accordance with WB requirements as stated in OP 4.12 "Involuntary Resettlement". Furthermore, the policy and respective requirements of the African Development Bank are considered (AfDB (2003): Involuntary Resettlement Policy).

The overall policy approach and concept is guided by the following basic principles for social development:

- People who are physically or economically displaced by the Project should not be worse off after the Project than before the Project, and
- The number of people whose livelihoods are improved as a result of the Project should be maximised.

# 3.1 WORLD BANK

## 3.1.1 **OP 4.12 Involuntary Resettlement**

The World Bank recognizes that involuntary resettlement may cause severe long-term economic, social and environmental damage unless appropriate measures are carefully planned and implemented. The main objective of OP 4.12 is therefore to avoid involuntary resettlement when possible, by exploring all viable options before any action is taken to resettle people. In cases where involuntary resettlement cannot be avoided, the policy aims to minimize and mitigate its adverse social and economic impacts by providing sufficient investment resources to enable affected parties to share in project benefits. The policy promotes the participation of displaced people in resettlement planning and implementation. The policy requires that displaced persons be assisted in their efforts to improve or at least restore their incomes and standards of living to pre-displacement levels or to levels prevailing prior to the beginning of project implementation, whichever is higher.

More specifically, OP 4.12 requires that the following measures be taken in the event of involuntary resettlement:

- A Resettlement Action Plan (RAP) should be prepared;
- Prompt and effective compensation at full replacement cost should be provided for losses of assets attributable directly to the project;
- Affected people (including residents of "host communities") should be consulted and fully informed of their rights under the resettlement process;
- Affected people (including residents of "host communities") should be allowed to express their preferences regarding housing, infrastructure and services and agricultural land provided as compensation;
- Physically displaced people should be provided with assistance such as a moving allowance during the relocation process;

- Economically displaced people (including residents of "host communities") should be provided with development assistance in addition to compensation measures, such as credit facilities, training and job opportunities;
- Vulnerable persons among the displaced people (such as the handicapped, the elderly, women, widows, children, members of disadvantaged minority groups, etc.) should be provided with specific social assistance;
- Ensuring that the relocation of affected people (and subsequent start-up of project construction) does not occur until all necessary measures for compensation and resettlement are fully in place.

In terms of eligibility to resettlement benefits, OP4.12 makes a distinction between three categories of Project Affected People (PAP):

- a. Those who have formal legal rights to land (including customary and traditional rights recognized under the laws of the country);
- b. Those who do not have formal legal rights to land at the time the census begins but have a claim to such land or assets--provided that such claims are recognized under the laws of the country or become recognized through a process identified in the resettlement plan (see Annex A, para. 7(f)); and
- c. Those who have no recognizable legal right or claim to the land they are occupying.

According to OP 4.12, persons covered under para. (a) and (b) are provided compensation for the land they lose, and other assistance. Persons covered under para. (c) are provided resettlement assistance in lieu of compensation for the land they occupy, and other assistance, as necessary, to achieve the objectives set out in the policy, if they occupy the project area prior to the cut-off date. OP 4.12 also mentions that where affected peoples' livelihoods are land based, land for land solutions should always be preferred to cash compensation.

# 3.1.2 **OP 4.10 Indigenous People**

OP 4.10 is not deemed applicable in the context of the Rusumo Falls project. This is based on findings from social surveys in the context of the ESIA for the IDS (SNII, 2011), which found no presence of indigenous people as defined in OP4.10.

# 3.2 AFRICAN DEVELOPMENT BANK

The AfDB Involuntary Resettlement Policy (2003) refers to involuntary displacement of people caused by Bank funded operations in the public and private sector. It applies when a project results in relocation due to loss of shelter of project affected people, when assets are lost due to the project or livelihoods are affected.

Key objectives of the policy are:

- to avoid involuntary resettlement where feasible, or minimize resettlement impacts where population displacement is unavoidable, exploring all viable project designs. Particular attention must be given to socio-cultural considerations, such as cultural or religious significance of land, the vulnerability of the affected population, or the availability of in-kind replacement for assets, especially when they have important intangible implications;
- To ensure that displaced people receive resettlement assistance, preferably under the project, so that their standards of living, income earning capacity, and production levels are improved;

The primary goal of the involuntary resettlement policy is to ensure that displaced people are treated equitably, and that they can share the benefits of the project that involves their displacement.

The lending agency has the primary responsibility for planning, implementing and monitoring resettlement issues. The client will be required to prepare a full resettlement plan (FRP) for any project that involves a significant number of people (200 or more persons) who would need to be displaced with a loss of assets, or access to assets, or reduction in their livelihood.

The resettlement plan should be prepared and based on a development approach that addresses issues of the livelihood and living standards of the displaced person as well as compensation for loss of assets, using a participatory approach for all stages of project design and implementation.

Compensation at the full replacement cost for loss of lands and other assets should be paid prior to project implementation with the view to improve the former living standards, income earning capacity and production levels of the affected people. The needs of disadvantaged groups must be at the centre of the development approach. Particular attention should be given to disadvantaged groups, especially those below the poverty line.

Provisions should also be made for counselling and dispute settlement.

Project planners should work to ensure that affected communities give their demonstrable acceptance to the resettlement plan and the development program, and that any necessary displacement is done in context of negotiated settlements with affected communities.

The resettlement plan will be made accessible to the displaced population and relevant NGOs and CSOs in a form, manner and language that are comprehensible to them.

During the implementation of the resettlement plan, the borrower is responsible for the monitoring and evaluation of all activities outlined in the plan.

# 4. LEGAL AND INSTITUTIONAL FRAMEWORK

# 4.1 **RWANDA**

## 4.1.1 **The Constitution**

Articles 29 and 30 of the 2003 Constitution of the Republic of Rwanda establish the fundamental principles of right to and protection of private property.

#### Article 29

Every person has a right to private property, whether personal or owned in association with others. Private property, whether individually or collectively owned, is inviolable. The right to property may not be interfered with except in public interest, in circumstances and procedures determined by law and subject to fair and prior compensation.

#### Article 30

Private ownership of land and other rights related to land are granted by the State. The law specifies the modalities of acquisition, transfer and use of land.

## 4.1.2 **Relevant Legislation**

In addition to the overarching principles stated in the Constitution, key legislation applicable to land management and expropriation in Rwanda includes:

- Organic Law N° 08/2005 of 14/07/2005 determining the use and management of land in Rwanda;
- Law N° 18/2007 of 19/04/2007 relating to expropriation in the public interest;
- Law N°17/2010 of 12/05/2010 establishing and organising the real property valuation profession in Rwanda.

# The Organic Land Law

#### Key principles

In 2005, a new Organic Land Law was enacted by Parliament. This new law defines land ownership, the rights and duties of land owners, and rules applicable to land transactions and registration. It was complemented by Presidential Order No 54/01/ dated October 12, 2006 establishing the structure, responsibilities, operation and composition of Land Commissions and by Ministerial Order No. 001/2006 dated October 26, 2006 establishing the structure of Land Registers and the responsibilities and operation of the District Land Registrar's office.

The Organic Land Law establishes certain key principles in respect of land ownership and management, including most prominently the following:

• The State has supreme power to manage all national land in the public interest aimed at sustainable economic development and social welfare (Article 3);

- The State guarantees the right to own and use land (Article 3);
- Any legal person can exert rights over land. Any discrimination either based on sex or origin in matters relating to ownership or possession of rights over the land is prohibited. The wife and the husband have equal rights over the land (Article 4);
- Any legal person that owns land either through custom, or who acquired it from competent authorities or who purchased it, is allowed to own it on long term lease (Article 5);
- The law protects equally rights over land acquired from custom and rights derived from written law. Owners of land acquired from custom include all persons who inherited the land from their parents (Article 7), and
- Lastly, the law establishes land commissions, amongst others at District level (Article 8).

## Land categorization

Organic Land Law provides for a categorization of land:

- According to categories of land use, and
- According to categories of land ownership.

Land use categories include urban land and rural land (Article 9). Urban land is defined as "confined within the legal boundaries of towns and municipalities", as well as other land that may defined as urban by presidential order, for instance in suburbs and collective settlements of towns and municipalities. Any other land is rural land.

Land ownership is divided into individually owned lands and State lands (whether urban or rural). Article 11 provides that individual land is comprised of land acquired through custom, written law, acquisition from competent authorities, purchase, gift, exchange and sharing. State lands are further categorized into two sub-categories: public domain and private State owned land (Articles 12 and 13). State land for public domain comprises land reserved for public use, for use by organs of state services or for environmental protection. Private State owned land consists of all other state owned land not considered to be part of public domain.

#### Land tenure

The Organic Land Law also provides for two types of formal land tenure:

- full ownership (or freehold)
- long term leasehold.

Lands previously considered as State land are in the process of being allocated to private persons, in practice those who use such land. For example in Kirehe District, this process is almost complete, with all landowners registered and a full cadaster established. This process uses the decentralized District Land Bureau, Sector Land Committees and Cell Land Committees in conformance with the provisions of Ministerial Order N° 001/2006 of 26/09/2006 determining the structure of Land Registers, the responsibilities and the functioning of the District Land Bureau.

## Swamp land

Swamp land is specifically addressed in Article 29 of the Organic Land Law, which states the following:

"Swamp Land belongs to the State. It shall not definitively be allocated to individuals and no person can use the reason that he or she has spent a long time with it to justify the definitive take over of the land. In order for the swamp land to be efficiently managed and exploited, the order of the Minister having Environment in his or her attributions shall determine a list of swamps and their boundaries. Such a list shall clearly indicate the structure of the swamps, their use, how they can be organized so that they can be beneficial to Rwandan nationals on a sustainable basis. The Minister having Environment in his or her attributions shall institute an order certifying the modalities of how swampland shall be managed, organized and exploited."

In the Project area, marshland is often subdivided in allotments, which tend to have a more or less permanent character. From a tenure standpoint, usage right is recognized (as an usufruct right), but individual informal users have no prospect of registration or ownership. Where irrigated schemes are developed, the local cooperative which handles the scheme will generally obtain a leasehold right from the District authorities or the relevant Land Commission.

## Role of Land Commissions

The Land Commissions established at the national and district levels (Art. 8) are to monitor the effective use of land (Articles 52 and 73), consider the implementation of land division and reorganization (Art. 22) and inform the Minister in charge of vacant lands whether such can be exploited (Art. 15).

#### Law on Land Expropriation (Law No. 18/2007 dated 19/04/2007)

The 2007 Law on Land Expropriation establishes provisions on expropriation, including the following:

- Compensation: Compensation equivalent to the value of a piece of land and operations carried out thereon shall be paid to the expropriated person and shall be calculated according to current market rates (Article 2);
- Available funds: Any project at any level, considering expropriation for public utility purposes, must set aside funds in its budget for the assessment of compensation for expropriation and the payment of fair compensation (Article 4);
- Consultative meeting: When the competent Land Commission establishes the actual public interest of the project, it requires in writing the district authorities concerned to convene a consultative meeting with the people living where the piece of land is located. This has to take place not less than thirty (30) days after receiving the request for expropriation (Article 12);
- Expropriation procedure's period: The expropriation procedure may not exceed a period of four months from the date the decision to expropriate was taken by the bodies mentioned in Article 10 of the Expropriation Law (Article 16).
- Resettlement: Through mutual arrangement, both parties can determine the mode of payment. Article 23 (2) of the Expropriation Law provides that through an

agreement between the person to expropriate and the one to be expropriated, just compensation may either be monetary, alternative land or a building equivalent as long as either option equates to fair and just monetary compensation. In case the determination of 'just' compensation exceeds in value the alternative land given to the expropriated person, the difference will be paid to the expropriated person.

# Law N°17/2010 of 12/05/2010 (valuation)

The Law on Valuation is mostly addressing issues related to certification and organization of the valuators' profession. However, it also includes a number of useful definitions (market value) and methodological elements to arrive at fair compensation.

Market value is defined as "the estimated amount for which a property should exchange on the date of valuation". Valuation methodologies are addressed in Articles 27 to 31 of the Valuation Law. Specifically, the following methods are described:

- Comparable prices methods: the valuator is to compare prices by referring to the prices recently assigned to a real property that is similar or comparable to the real property subject to valuation;
- Comparison of land values countrywide: where comparable prices are not available for land in a particular area, the valuator may use comparable prices of similarly classified land from other areas of the country, with variations depending on the quality and location of the land;
- Replacement cost method: Where sufficient comparable prices are not available to determine the value of improved land, the replacement cost approach shall be used to determine the value of improvements to land by taking real property as a reference.

Lastly (Article 31), the Valuation Law recommends that several methods be used concurrently and that all premises to valuation be clearly explained in the valuation report.

# 4.1.3 Institutional Context

Responsibility for ensuring that all aspects of resettlement and compensation planning and implementation are taken into consideration falls to project proponents or project implementation bodies.

The main institutions and departments involved in land management, compensation and resettlement are briefly described below:

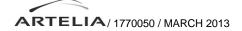
 <u>The Ministry of Natural Resources (MINIRENA3)</u>: This Ministry is responsible, amongst others, for land management throughout the Rwanda territory, through the implementation and enforcement of the Organic Land Law and the Land Use Master Plan. As a result of the decentralization policy, the responsibility for implementing these laws is now also devolved to decentralized land registry offices, district commissions and committees. Where needed, the Ministry works directly with implementing bodies or project proponents to develop resettlement lands;

- <u>Land Valuation Offices:</u> Following the promulgation of the Land Valuation Law in 2007, independent Land Valuation Offices were given the responsibility for providing "fair and just" valuations of land and affected assets in the event of expropriation. To date, such offices are not in place in the Project affected Districts of Kirehe and Ngoma;
- <u>District level authorities</u>: District authorities concerned by resettlement activities are those normally responsible for allocating resettlement funds and for overseeing, coordinating and facilitating the implementation of resettlement activities across local governments in the sectors and units placed under their jurisdiction. As part of the implementation of the new land legislation, district land registry offices overseen by the District Authority have been given the responsibility of ensuring that resettlement activities are in line with current national and district land use plans.
- <u>District Development Committees</u>: These Committees oversee and monitor all activities at district level. They are represented by members of each of the key ministries and bodies at district level, including the District Land Registry Office. They are responsible for developing a district development strategy and for ensuring that all activities, including resettlement and compensation activities are consistent with this strategy.
- <u>District Land Commissions:</u> As part of the implementation of the new land legislation, district land commissions have been assigned the responsibility to act as consultative institutions to monitor and assess the work of district land offices. The committees are also responsible for setting up sector and unit level land committees.
- <u>District Land Registry Offices:</u> The process for establishing these offices is currently underway. These offices will be responsible for the following:
- setting up and guiding resettlement and compensation committees at sector/unit levels;
- establishing standards for unit rates applied to affected assets and compensation rates, tailored to local conditions where necessary;
- assessing the validity of the land tenure rights of project-affected people and eventually providing land use permits for relocated activities;
- ensuring that effective grievance mechanisms are in place;
- coordinating and supervising the implementation of resettlement activities carried out by resettlement and compensation committees with a view to ensuring compliance with national/district guidelines.
- <u>Resettlement and Compensation Committees:</u> In line with the national decentralization policy, the responsibility for developing and implementing resettlement and compensation activities lies with these resettlement and compensation committees to be established at the sector/unit levels by the District Land Registry Offices. These committees would be responsible for planning, coordinating and monitoring resettlement and compensation activities as well carrying out public consultations with project-affected parties.

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- <u>Sector/Unit Land Committees</u>: These committees would also be established to monitor the role of the District Land Registry Offices in their relevant sectors/units, through the provision of field information relating to land use, land tenure and land expropriation permits and land use changes. They would also be responsible for coordinating individual land registrations and for ensuring that appropriate compensation payments have been made for expropriated land. Such committees are a traditional legal institution implemented only when there is a conflict over land ownership.
- <u>Other institutions:</u> The following institutions may have a role to play in some aspects of the resettlement process: the Ministry of Agriculture (MINAGRI) the Ministry of Finance and Economic Planning (MINECOFIN), the Ministry of Local Government, Community Development and Social Affairs (MINALOC), the Ministry of Infrastructure (MININFRA) and the Ministry of Commerce, Industry, Investment Promotion, Tourism and Cooperatives (MINICOM).



# 4.1.4 Gap Analysis Rwanda

The following table identifies gaps in Rwandan legislation against the World Bank's OP 4.12.

#### Table 3 – Gap Analysis - Rwanda

World Bank OP 4.12	Rwanda Legislation	Recommendations to address gaps
Involuntary resettlement should be avoided wherever possible, or minimized, exploring all alternatives.	Rwanda has no involuntary resettlement policy per se. RAPs are prepared when required by funding agencies. Expropriation law does not stipulate that displacement should be avoided wherever possible.	Ensure that resettlement issues are fully recognized and dealt with at the project planning and design stages in order to avoid or minimize displacement. This is particularly important in a context of land scarcity.
Resettlement programs should be sustainable, include meaningful consultation with affected parties, and provide benefits to the affected parties.	There is no requirement in legislation that resettlement programs should provide sustainable benefits to affected parties (although this is inferred in the Land Use Master Plan).	Ensure that resettlement plans are integrated into long term regional development plans (as well as the Land Use Master Plan in Rwanda).
Displaced persons as well as "host communities" should be assisted in improving their livelihoods, or at least in restoring them to their previous levels.	There is no stipulation that displaced persons have livelihoods improved or at least restored to former levels (though this corresponds to a key objective of the National Poverty Reduction Strategy).	Ensure that levels of compensation, assistance and benefits are in line with international standards.
Displaced persons that are eligible to assistance include those affected by loss of shelter, those affected by loss of land and those affected by the loss of access to resources that support their livelihoods.	Displaced persons that are eligible to assistance are limited to titled and customary landholders rather than to all land users.	Ensure that all affected land users receive appropriate assistance and benefits, including unauthorized occupants ("squatters"), laborers and persons affected by the loss of access to resources that support their livelihoods.
Eligibility criteria: Criteria are defined as follows: a) those who have formal rights to land, including legally recognized customary or traditional rights; b) those who do not have formal rights to the land but have a claim to such land or assets that can be recognized through a process identified in the resettlement plan; c) those who have no recognizable right or claim to the land they are occupying or the assets they are using. Eligibility of affected parties is determined on the basis of a census. The cut-off date for eligibility is based upon the date of the census.	Expropriation law defines eligibility as both formal (legal) and informal (customary) owners of lands to be expropriated. However, it does not recognize the eligibility of all occupants or users of the land. Eligibility of affected parties is determined on the basis of a socio- economic census. There is no provision for a cut-off date for eligibility.	Ensure that all users of affected lands (including unauthorized occupants or users, laborers or persons affected by the loss of access to resources) are included as affected parties in the census survey. Implement cut-off procedures based upon the date of the census survey.

# Table 3 – Gap Analysis - Rwanda

World Bank OP 4.12	Rwanda Legislation	Recommendations to address gaps
Consultation: Displaced persons should be informed of their rights and meaningfully consulted and should have opportunities to participate in planning and implementing resettlement programs, including the selection of appropriate relocation sites and compensation and/or assistance packages.	There is no provision for affected persons to participate in resettlement planning and implementation. Expropriation law provides for displaced persons being informed of the process underway and for negotiations if necessary between the expropriated and the expropriating party.	Implement resettlement consultation procedures in conformance with international standards. Displaced persons are informed of their rights and consulted during RAP preparation and implementation
Grievance mechanisms: Appropriate and accessible grievance mechanisms must be established.	Ministerial order No. 001/2006 and Article 53 of the Organic Land Law both outline grievance mechanisms in relation to physical and economic displacement which meet OP 4.12 requirements.	Ensure that informal and easily accessible grievance mechanisms are in place and that affected parties benefit from efficient processes for addressing grievances.
Compensation and relocation: Preference should be given to land- based compensation and relocation options for displaced persons whose livelihoods are land-based. Displaced persons to be provided with at least equivalent housing, housing sites and/or agricultural land PRIOR TO project implementation and to be assisted during and after relocation. For cash compensation, displaced persons to be provided with compensation at full, not depreciated, replacement cost for losses of assets attributable to the project.	There is no requirement under Rwandan law to place preference on non-cash based compensation. There is no requirement that affected parties be fully compensated and relocated prior to project implementation. There is no requirement that cash compensation be provided at full, non-depreciated, replacement cost for losses of assets attributable to the project.	Preference to be given to land- based compensation and relocation options for displaced persons whose livelihoods areland-based. Affected parties to be fully compensated and relocated PRIOR TO project implementation. Cash compensation to be provided at full, non-depreciated, replacement cost for losses of assets attributable to the project. The valuation process will be performed through the district land offices, with official valuers; the final determination of compensation rates will be done according to the approach of the RAP; actual land and property market assessments will be done prior to determination of final replacement rates
Vulnerable persons: Special assistance must be provided to vulnerable persons in the resettlement process. These may include the handicapped, the elderly, women, widows, children, members of disadvantaged minority groups or indigenous peoples, etc.	There is no requirement under Rwandan law to provide special assistance to vulnerable persons in the expropriation process	Special assistance to be provided to vulnerable persons as per provisions of the RAP, with the assistance of Kirehe district and resettlement committees
Monitoring and evaluation: Adequate monitoring and evaluation of resettlement activities and outcomes must be undertaken. This should be based on performance indicators and must be carried out over a reasonable length of time (typically at least 5 years). In the event where the livelihoods of affected parties have not improved or at least been restored to their former levels, measures must be taken to address identified deficiencies.	There is no requirement under Rwandan law to undertake monitoring and evaluation of the outcomes of the expropriation process (though this corresponds to a key objective of the National Poverty Reduction Strategy). Monitoring is limited to ensuring that displaced persons have been compensated as required under the law.	Independent monitoring and evaluation of resettlement activities and outcomes to be undertaken on the basis of performance indicators and over a reasonable length of time (at least 5 years). In the event where the livelihoods of affected parties have not improved or at least been restored to their former levels, measures to be taken to address identified deficiencies. Trust fund to be set up to finance such measures.

## 4.2 TANZANIA

#### 4.2.1 **The Constitution**

There is no specific law or legal provision on resettlement in Tanzania. It is a constitutional right in Tanzania that if one's property is either acquired or nationalized, the individual affected must be fully, fairly and promptly provided with compensation. The procedures for valuation are set out in the Land Act No.4 and Village Land Act No.5 of 1999.

#### 4.2.2 **Relevant Legislation**

#### The Village Land Act (No. 5 of 1999)

The Village Land Act (No. 5 of 1999) came into effect on May 1, 2001. It affirms that all land in Tanzania is public land and vested in the President as trustee on behalf of all citizens. The Act states that an interest in land has value and requires this value to be taken into consideration in any transaction affecting that interest. The Act distinguishes two categories of land

- General/public land, on which socio-economic activities are permitted; and
- Reserved/restricted lands for national parks, protected areas, and forest/wildlife reserves.

Tanzania underwent a massive '*villagisation*' process in the 1970s that was designed to provide 'rural economic and social communities' where people would live and work together for the good of all (Nyerere 1968:348). The Village Land Act recognizes land allocated during the villagisation process at any time between the first day of January 1970 and the thirty-first day of December 1977 as a valid allocation subject to rights and obligations in the party to whom the allocation was made. Village communities are therefore allowed to hold and manage land, although they do not formally own it.

Holdings of individuals can be in two categories:

- By leasehold right of occupancy for varying periods;
- By customary lands.

Management of village land is the responsibility of the Village Council as a trustee on behalf of the villagers and other residents of the land, who are beneficiaries of the land. The occupiers of the land do not have title deeds as the village administration is said to have records of each granted right of occupancy and/or customary rights; this tenure is therefore rarely disputed.

The Village Land Act contains a gender clause declared to be law which affirms that the right of every women to acquire, hold, use, and deal with land shall, to the same extent and subject to the same restriction be treated as the right of any man.

# The Land Act No 4 of 1999

The Land Act No 4 of 1999 came into effect on 1 May 2001. The Land Act categorizes Land into three main groupings:

- General Land ;
- Village Land ;
- Reserved Land.

The government can assign general or reserved land through a granted right of occupancy of derivative of rights.

A right of occupancy is granted by the President in surveyed general or reserved land and is required to be registered under the Land Registration Ordinance Cap-334 to be valid and subject to the provision of that Law and the Land Act. Occupancy can be for periods not exceeding 99 years. Such land is also liable, subject to the prompt payment of compensation, to compulsory acquisition by the state for Public Purposes.

# Land Act No 4

The Land Act places value on land and thus introduces consideration for land as well as improvements, and the obligation to pay fair and reasonable compensation (through) proper valuation and Government determined compensation rates) for land acquired by the government or public bodies and institutions. The Land Policy, related to the Land Act, required that the value in land is taken into consideration in any transaction affecting that interest. It provides for the payment of full, fair, and prompt compensation to any person whose right of occupancy or recognized long-standing occupation or customary use of land is revoked or otherwise interfered with to their detriment by the State or is acquired under the Land Acquisition Act. According to the Act, assessment for compensation for land acquired in the manner provided for in the Act should be based on market value of the real property. It also provides for additional compensation, which includes:

- Disturbance allowance;
- Transport;
- Loss of profits;
- Accommodation allowance;
- Cost of acquiring or getting the subject land;
- Any other loss or capital expenditure incurred in the development of the subject land.

# Land Acquisition

The Land Act 1999 validated the clause in the Land Acquisition Act, 1967 which states that 'All Land in Tanzania is public land vested in the President as trustee on behalf of all citizens.' The Act grants power to the president to acquire lands for public purposes.

# Assessment of Compensation

The Act (which) imposes upon corporations conditions under which land may be acquired which includes requirements to provide security for the payment for, acquisition of the land and dictates the terms under which the public shall be entitled to use and derive benefit from the work and to deal with the corporation in connection therewith.

As in the Land Act (1999), this regulation sets market value as the basis for assessment of the value of any land, but includes compensation for unexhausted improvements on the land. It requires the market value to be arrived at through one of three possible methods:

- By use of comparative method evidenced by recent actual sales of similar properties
- By use of income approach, or
- By replacement cost method where the property is of special nature and not saleable

Assessments and payment of compensation are to be prepared by a qualified valuation expert and verified by the Chief Valuation Officer of the government or his/her representative. Compensation for loss of interest in land includes:

- The value of unexhausted improvements ;
- Disturbance allowance;
- Transport allowance;
- Accommodation allowance;
- Loss of profits.

The regulations detail how each of these aspects are to be calculated. Transport, accommodation and loss of profit allowances are not payable for unoccupied land at the date of loss of interest in land. Interest payment is required where compensation payment is not prompt i.e. if not paid within six months of acquisition or revocation of the land.

#### Land Compensation Claims Regulations

The Land Compensation Claims Regulations, 2001 under the Land Act no. 4 of 1999 applies to applications or claims for compensation against the government, local government authorities or any other public body or institution. The regulations allow holders of granted rights of occupancy in village land or holders of customary right of occupancy whose land is acquired under section 60 of the Land Act to claim compensation. The Land (Assessment of Value for Compensation) Regulations of 2001 (see above) provides the guidelines for claimants. Of note is the fact that the Land Compensation Claims Regulations includes interest in grazing land as compensable.

Compensation should be verified by the commissioner or authorized officer, and rejected or paid within no more than thirty days from the date that the claim for

compensation and the compensation schedule is received. It is required to be in monetary form or a combination of any of:

- A plot of land of comparable quality, extent and productive potential to the land lost;
- A building or buildings of comparable quality extent and use comparable to the building (s) lost;
- Plants and seedlings ;
- Regular supplies of grain and other basic food stuffs for a specified time.

Compensation under Section 156 of the Act applies to non-government corporate bodies, organizations, associations or groups of persons in whose favor a public right of way is created. In effect, this regulation makes provision for compensation on land and assets acquired both by the State and by private parties, including mining companies. It also presents opportunity for compensation in kind, including replacements land of equal quality and productive potential, preferred by International Standards for compensation for displaced persons whose livelihoods are land based.

# The Grave Removal Act (1969)

A grave and any dead body buried therein to be removed from the land and reinterred elsewhere if the land is required for a public purpose. The law required that a notice is served to the interested parties or to the members of a particular religion which may be controlling the cemetery. The law allows the interested party-(ies) to object in writing to the intention, and to themselves undertake the removal, as long as they are deemed to have lawful authority to do so.

The law allows for compensation for the removal act, limited to reasonable expenses incurred in the removal, transportation, reinstatement, or re-interment of the grace or dead body and any placatory or expiatory rites or other ceremony accompanying such removal and reinterment. It also imposes penalty that includes payment of a fine or imprisonment for anyone who willfully hinders or obstructs those authorized to remove a grave or dead body.

# 4.2.3 Institutional Context

The following ministries would have responsibilities in the resettlement context:

- Ministry of Energy and Minerals: responsible for gas, oil, and mineral extraction and electrification;
- Ministry of Natural Resources and Tourism: responsible for national parks, forestry, and fisheries;
- Ministry of Lands, Housing and Human Settlements Development: responsible for land surveys and registration, town planning, regional physical planning and housing policy. The Commissioner of Lands, appointed by the President, is the principal administrative and professional officer and advisor to the government on all matters connected with the administration of land. Land Allocation Committee are established by the Minister and advise the Commissioner in determining applications for rights of occupancy;

- Ministry of Agriculture, Food Security and Cooperatives: responsible for agriculture and land use planning, extension services and cooperatives, savings and credit societies;
- Ministry of Infrastructure Development: is responsible of the construction industry, transport, electrical and mechanical services. Its Authorities cover airports, civil aviation, ports, and public works such as roads, bridges and ferries. Relevant agencies include the Architects and Quantity Surveyors Registration Board, Engineers Registration Board, National Board for Materials Management, National Construction Council, Tanzania National Roads Agency and the Tanzania Building Agency;
- Ministry of Finance and Economic Affairs: manages government revenue, expenditure and fiancé, and the Ministry provides government with advice on the financial and economic affairs in support of the Government's economic and social objectives. It works closely with officials in other ministries, agencies and departments to ensure that the Government's overarching poverty reductions strategy is implemented and objectives attained. The Ministry also actively engages in public consultations with the view that an open and accessible budget planning process is important for effective and responsible decision making. *Ministry of State in the Prime Ministers' office responsible for Regional Administration and Local Government is* responsible for creating conditions for local government authorities to deliver quality services and effectively manage the interface between it and other Ministries as well as development partners, regional secretariats and local government authorities;
- Ministry of Home Affairs: core function is to maintain law and order and to protect life and property. Its departments include the Police Force, Prisons Service, Immigration Force, Fire Rescue Force, Refugees Service, Community Service and a Complaints Division;
- Ministry of Health and Social Welfare: is responsible for health, hospital services, and welfare programs;
- Ministry of Community Development *Gender and Children*: is responsible for community development programs related to women and children;
- Ministry of Water and Irrigation: Is responsible for ensuring that water resources are managed in an integrated manner and that water is adequately supplied with acceptable quality to meet the requirements of different sectors;
- Ministry of Education and Vocational Training: responsible for management of schools and teachers from pre-primary through teachers' colleges and technical and vocational training programs and colleges/institutes, and
- Ministry for Labour, Employment and Youth Development: responsible for trade unions, human resource development programs, vocational training and youth development.

The primary purpose of local government, according to article 146(1) of the Constitution is "to transfer authority to the people" by participating and involving people in the planning and implementation of development programs within their respective areas and throughout the country. In the sub-article, the enforcement of law and public safety is stated as one of the functions of the local authorities. The

articles further states that "local government shall be entitled and competent to participate and to involve the people in planning and implementation of development"

# Local Government Level

Local Government Authorities are classified into two categories: urban authorities, responsible for the administration and development of urban areas, and rural authorities. All Local Government Authorities are responsible for administration of law and order, and economic and development planning in their respective areas of jurisdiction. Several laws were enacted in 1982 and 1983 to establish and give legal power to the local authorities. Local government administration politically involves the election of and control by councillors (madiwani) in and of districts, municipalities and townships. At the level of social and economic management, the affairs of the council concerned are handled by technical personnel appointed by the President, ministers or functionaries responsible for local government.

# Regional Level

Act No. 15 of 1984 s.9 provides for "a Regional Commissioner (RC) for each region who subject to sub-article (3), shall be a leader in the Government of the United Republic." Regional Commissioners in Mainland Tanzania are appointed by the President with the advice of the Prime Minster, under whose office the Regional and Local Government portfolio is placed. Regional administration forms part of the central government and represents it from the level of the region down to the villages.

# District Level

The situation in the Regional government is replicated at the level of the district (wilaya). Here, the District Commissioner (DC) is the officer in charge of the administrative area. A District Administrative Secretary (DAS) assists him/her. The DC is the representative of the central government. He/she is the local governor of the district and reports to the RC, who in turn reports to the president. The DC is responsible for preserving peace and security in the district so that citizens can go about their social and economic activities in a secure environment. He/She acts as the Justice of the Peace of the district and in this regard, has to work very closely with the officer in charge of the police in the district and other officers responsible for security. The DC is also a political and social mobilize in their jurisdiction and is responsible for mobilizing people to contribute financially or physically towards projects or other relevant causes.

The Chief Executive Officer of a District Council is known as a District Executive Director (DED) The DED overseas the functioning of a variety of services provides by Government Ministries and Departments at the regional level i.e. District Officers for land, agriculture, livestock, forestry, education, community development, roads, health, planning, water, and energy, etc. The DED also oversees implementation of any projects that are not directly implemented by the central government.

# Local Level

At Ward and Village levels, Central Government remains the principle operating authority through appointed officers and the power of the purse.

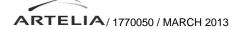
In the resettlement context, Ward Executive Officers (WEOs), Village Executive Officers (VEOs) and Village Chairpersons have key functions. The WEOs and VEOS are appointed positions, and the Village Chairs are elected by the Village Council. Hamlet chairperson are responsible for sections of villages and operate under village chairpersons.

The structure of the Village Administration is characterized by Village Assemblies and Councils, Village Executive Officers and Chairpersons, all of which are extensions of central government operating authority's at local levels. The Village Assembly of all adults 18 years and older conduct meetings at least once a quarter. The Assembly elects a Village Council with management responsibility. The Council meets at least once a month. The Council ideally draws up an implements land use plans, land use regulations, and a development program.

The basic administrative unit of the Local Government is the Kitongoji (Hamlet). Key Kitongoji responsibilities are provision of planning and voluntary serves for development projects; security; birth; and death registration, and dealing with topical issues such as HIV/AIDS. The Kitongoji Chairperson represents the Hamlet in Village government.

## 4.2.4 Gap Analysis Tanzania

The following table identifies gaps in Tanzanian legislation against the requirements of WB, OP 4.12.



Resettlement Topic	National Legislative	WB Policy	Gap	Strategy & Responsibility
Timing of Compensation Payment	Requirements Prompt payment within 6 months after land has been acquired	Compensation to be paid prior to project implementation, before the impact occurs	Standard Operating Procedure (SUST006) has guided the compensation process, and details the valuation and payment schedule process, which typically (assuming there are no disputes, and govern't valuers and village officials are available) can process payments promptly.	Affected parties to be fully compensated prior to project implementation (PIU, districts to manage compensation process in line with WB requirements)
Calculation of Compensation	Mining Act (1998) requires 'fair and reasonable compensation for crops, trees, buildings, stock or works ' Land Act (1999) says that comp. for land should be based on market value of the real property. It also provides for additional compensation, inclu: Disturbance allowance, loss of profits, accommod. allowance, cost of acquiring or getting land, and any other loss or capital expenditure incurred	Cash compensation should be sufficient to replace the lost land and other assets at full replacement cost	Recent land cost study has been completed, and indicates that replacement land costs have risen. Crop rates for 2010 released in January. Compensation rates for other assets (i.e. structures) are calculated by a Registered Valuer, and are by law, to reflect current market value.	Preference to be given to land- based compensation and relocation options for displaced persons whose livelihoods are land-based. Affected parties to be fully compensated and relocated PRIOR TO project implementation. Cash compensation to be provided at full, non-depreciated, replacement cost for losses of assets attributable to the project The valuation process will be performed through the district land offices, with official valuers; the final determination of compensation rates will be done according to the approach of the RAP; actual land and property market assessments will be done prior to determination of final replacement rates
Livelihoods & Resettlement Assistance		Provide additional targeted assistance (e.g. credit facilities, training, or job opportunities) and opportunities to improve or restore income earning capacity, production levels and standards of living to displaced persons whose livelihoods or income levels are adversely affected.	Not required by national legislation	Final design and implementation of livelihood restoration programs by Ngara district; RAP will provide budget for livelihood restoration

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# 5. PROJECT IMPACTS ON AFFECTED COMMUNITIES

# 5.1 **GENERAL INFORMATION**

Compared to the previous Project designs, the RoR is resulting in a significant reduction concerning the types as well as the magnitude and extent of impacts.

The dam will function as a Run-of-River scheme and it will not create a water storage reservoir upstream from the dam. However, because there will be an 40 centimetre increase in the average water level at the dam compared to the natural situation to maintain the water level at 1,320 metres above sea level (asl), areas of seasonally flooded marshland will become permanently flooded.

Under natural conditions, at the end of the wet season (May) the marshland is flooded and the water is at its highest level. Then during the period May – October, (dry season) the water slowly recedes and reaches its lowest level in October. For an average year the water recedes to the main river bed and the marshes are dry. Agricultural cultivation is then possible.

The physical presence of the dam and the maintaining of the water level at 1,320 metres (asl) will cause the marshlands near the dam and about 5 kilometres upstream the Kagera valley to remain flooded. According to modelling results, for the areas further upstream, permanent flooding of arable marshland is not expected.

Impacts in general can be distinguished into

- Impacts from Project construction, and
- Impacts from Project operation.

The RAP is covering the project impacts resulting from land acquisition during construction and from the permanent flooding of presently seasonally flooded marshland areas from Project operation.

Other socio-economic impacts, i.e. impacts from construction activities such as noise, vibrations, construction traffic, presence of a large number of workforce, population influx, are covered by the ESMP.

<u>Note:</u> This chapter provides a description of the structures and operating modes based on the feasibility study for the IDS carried out by SLII in 2011/12. The structures and activities for the RoR scheme will be much the same as for IDS, and environmental and social impacts for the RoR scheme can be accurately predicted from the design of the structures for the IDS. The

ESIA study has confirmed that there will be no need to revise the design of the facilities due to the findings of the study.

# 5.2 AFFECTED COMMUNITIES: OVERVIEW

The Project will affect households in local communities upstream of the dam structure, up to a distance of about 5 km on both sides of the Kagera river. The Table below provides an overview on affected villages in Rwanda and in Tanzania\*. All affected villages in Rwanda are located in Kirehe district, All affected villages in Tanzania are located in Ngara district.

#### Table 5 – Affected Villages in Rwanda

Village	Cell	Sector	Total population (Census 2012)
Rusumo East	Kiyanzi	Nyamungari	204
Rusumo West	Nyankurazo	Kigarama	163
Nyakwisi	Nyankurazo	Kigarama	89
Nshungerezi			118
Nyakabungo			124
Ruhuha			148

\* Figures and other information on villages from SNII RAP Tanzania,, Phase III;

#### Table 6 – Affected Villages\* Tanzania

Village	Sub-Village	Division	Ward	Total population of Nyakiziba village
Nyakiziba	Kabuye			2,309
	Kyenda			

\*Figures and other information on villages from SNII RAP Tanzania,, Phase III;

# 5.3 LAND IMPACTS FROM CONSTRUCTION

#### 5.3.1 **Overview**

The impact on land during construction is limited to the dam site.

Affected land will be residential land, land used for business and small areas of agricultural land. Land take will result in the permanent change of land use and the termination of the present use of the land.

Description	Natural vegetation	Agricultural land	Residential areas	Total
Borrow Area No 1		2.06		2.06
Borrow Area No 2		4.89		4.89
Operation Base Camp sub-station		1.26		1.26
Sub-station Area		1.79		1.79
Construction Base camp (Rwanda)		1.02		1.02
Construction Area	1.84	0.62	1.03	3.50
Spoil Deposit Area		2.70		2.70
TOTAL RWANDA	1.84	14.34	1.03	17.21
Power plant Building	21.51	6.69		28.19
Operation Base Camp (power and dam)	2.73	1.71		4.44
Construction Workers Permanent Camp		1.84	0.05	1.89
Construction Workers Temporary Camp	0.22	3.72	0.42	4.36
Water Intake	2.51	1.79	0.41	4.70
TOTAL TANZANIA	26.97	15.75	0.88	43.58
TOTAL for the Project (ha)	28.81	30.09	1.91	60.80

#### Table 7 Changes in Land Use from Dam Construction Activities

The map on the page below presents the spatial setting of areas required for construction with the indication of losses.

#### **RUSUMO FALLS HYDROELECTRIC PROJECT**

DAM & POWERPLANT COMPONENT RESETTLEMENT ACTION PLAN (RAP)

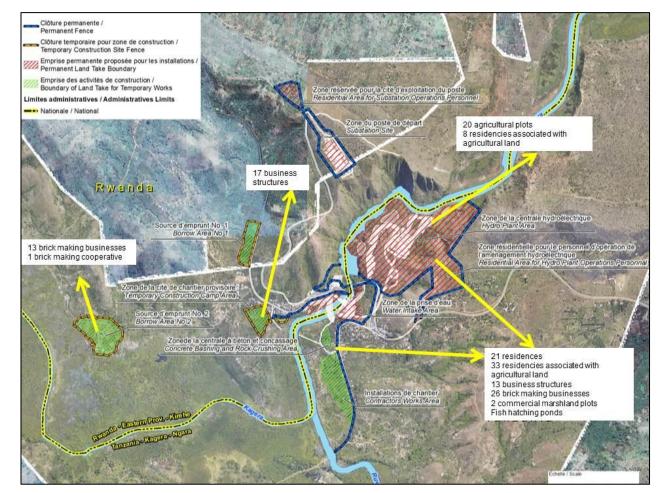


Figure 1 Components of Project during Construction and losses resulting from impacts on land

FINAL REPORT

# 5.4 CONSTRUCTION IMPACTS AND PROJECT AFFECTED PEOPLE

Project affected households were identified during field surveys between November 2012 and January 2013. In total, 90 households will be affected in Rwanda and 133 households will be affected in Tanzania. The following tables (Table 8 and Table 9) provide an overview on the types of project impacts and the corresponding numbers of affected households.

 Table 8
 Overview on Project Impacts due to Construction

Description of Project Impacts Construction; Impacts on Land (Dam Site)	Number of affected Households			
Land loss due to construction of dam	Rwanda	Tanzania	Total	
Residential structures, associated with	Manda			
agricultural land plots		8	8	
Agricultural land		10	10	
	Subtotal		18	
Land loss due to establishment of concrete bashing and rock crushing and contractors work area, future residential area for operation staff				
Residential structures, associated with agricultural land plots		33	33	
Residential structures		21	21	
	Subtotal		54	
Land loss due to establishment of concrete bashing and rock crushing area				
Business structures		13	13	
Brick making businesses		26	26	
Arable marshland		2	2	
fish hatching ponds (1 cooperative)	Subtotal	6	6 47	
Land loss due to establishment of construction contractor's area	Subtotal		47	
Business structures: owners	17		17	
Business structures (business tenants in affected structures as per row above)	36		36	
residential structures (as annex of affected business structure as per row above)	3		3	
	Subtotal		56	
Land loss due to establishment of borrow areas (borrow area 2)		1		
Sand digging and brick making businesses	34		34	
	Subtotal	•	34	
Temporary loss of access to resources due to construction activities				
Loss of access to the river due to construction of dam structure: fishing business downstream of dam site		14	14	
			14	
Total			223	

Table 9	Project Construction: Overview on Affected Households
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Construction Period - Overview on affected households	Rwanda	Tanzania
Households affected by loss of agricultural land and loss of residency		41
Households affected by loss of residency: owners		21
Households affected by loss of agricultural land		10
Households affected by loss of arable marshland		2
Households affected by loss of business: commercial structures	17	13
Households affected by loss of residential structures (as annexes to affected business structures)	3	
Households affected by loss of business premises as part of affected business structures (tenants)	36	
Households affected by loss of business: brick making/sand digging structures	34	26
Households affected by loss of business: fish hatching pond		6
Households affected by temporary loss of access to resources: fishers		14
Total	90	133

#### Loss of Residence

21 households (Tanzania) will be affected by a loss of their residence and 3 households will be affected by loss of a residential premise they are renting. Types of affected residences were documented during the field surveys from Nov 2012 to Jan 2013 (see lists of affected residences in Annex 4).

#### Loss of agricultural land

10 households in Tanzania will be affected by the loss of agricultural land. This land is intermediate land (private land). Areas of affected agricultural land and the overall cultivation pattern were documented during the field surveys from Nov 2012 to Jan 2013 (see documentation of affected residences in Annex 4).

#### Loss of residence plus loss of agricultural land

41 households in Tanzania will be affected by the loss of residential structures plus the loss of the associated agricultural land (private land). Types of affected residences and areas of affected land were documented during the field surveys from Nov 2012 to Jan 2013 (see documentation of affected residences in Annex 4).

#### Loss of arable marshland

2 households in Tanzania will be affected by loss of arable marshland plots. Affected plots and cultivation patterns were documented during the field surveys from Nov 2012 to Jan 2013

#### Loss of business

17 commercial structures are affected and Rwanda and 13 in Tanzania. 36 businesses in Rwanda will lose their rented business premises in affected commercial buildings. 34 brick making businesses in Rwanda and 26 brick making businesses in Tanzania will lose their fabrication sites in the marshland. A fishing cooperative with 6 members in Tanzania will lose the area of their fish hatching ponds.

Affected businesses are of different types

- Permanent built business structures ;
- Kiosks of small traders ;
- Rented premises in business structures ;
- Brick making businesses in marshland, and
- Fish hatching businesses in marshland.

Affected businesses were described and documented during the field surveys from Nov 2012 to Jan 2013 (see documentation of affected assets Annex 4), comprising names of owners and cooperative members and names of tenants of business premises.

#### Loss of access to resources

14 fishers, who practice fishing as a seasonal economic activity, will temporary lose the access to their present fishing sites/mooring locations of their boats.

Names of affected fishers were documented during the field surveys from Nov 2012 to Jan 2013 (see documentation of affected assets Annex 4).

**Note:** all impacts on marshland of Rusumo village, Tanzania, are considered under construction impacts; no HHs in Rusumo village in addition to those HH affected by construction, will be affected by operation

# 5.5 IMPACTS FROM PROJECT OPERATION

## 5.5.1 General

The project will function as a Run-of-River scheme and it will not create a water storage reservoir upstream from the dam. However, there will be a 40 cm increase in the average water level at the dam compared to the natural situation to maintain the water level needed for operation (1,320 m asl). As a result, areas of seasonally flooded marshland up to 5 km on both sides of the Kagera river, upstream the dam, will become permanently flooded (see Figure 2 below).

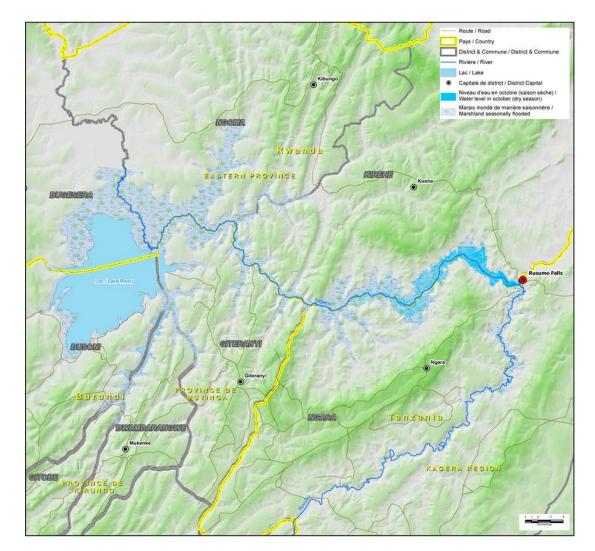


Figure 2 Project Operation: Permanently flooded marshland areas up to 5 km from Dam site

## 5.5.2 Land Affected by Operations

#### Arable Marshland

In the area extending upstream from the dam site, impacts from Project operation will be limited to marshland and no private agricultural land will be affected by permanent flooding (see ESIA, chapter 6).

The hydrological changes will have effects on flooding conditions of the marshlands on both sides of the Kagera river and will hereby affect the narrow strip of arable marshland, stretching inland of the papyrus marshlands.

The strip of flooded arable marshland as per interpretation of maps with modelling results will extend up to 5 km upstream of the dam site. Arable marshland will be flooded up to the areas of Ruhuha village in Rwanda and Kabuye sub-village in Tanzania (see Figure 3 below).

A total of 107.6 ha of arable marshland will be affected in Rwanda, see Table below.

Village	Total area cultivated by marshland users (ha)	Marshland cultivated (ha)
Rusumo East	8.56	5.06
Nyakwisi	99.29	37.33
West Rusumo	42.68	16.24
Nshungeruzi	65.77	26.52
Nyakabungo	22.71	4.33
Ruhuha	100.54	18.1
Total	339.55	107.58

 Table 10
 Rwanda: Affected marshland as per village self-validation

\*self-validation Nov 2012

The affected marshland encompasses about 31% of the total land available to marshland users in the affected communities.

A total of 79.6 ha of arable marshland will be affected in Tanzania, see Table below.

Village	Sub-Village	Total area cultivated by marshland users (ha)	Marshland Cultivated (ha)
Nyakiziba	Kabuye	37.75	18.25
Nyakiziba	Kyenda	258.46	61.37
	Total	296.21	79.62

\*self-validation Nov 2012

The affected marshland encompasses about 26% of the total land cultivated by marshland users in the affected communities.

#### **RUSUMO FALLS HYDROELECTRIC PROJECT**

DAM & POWERPLANT COMPONENT RESETTLEMENT ACTION PLAN (RAP)

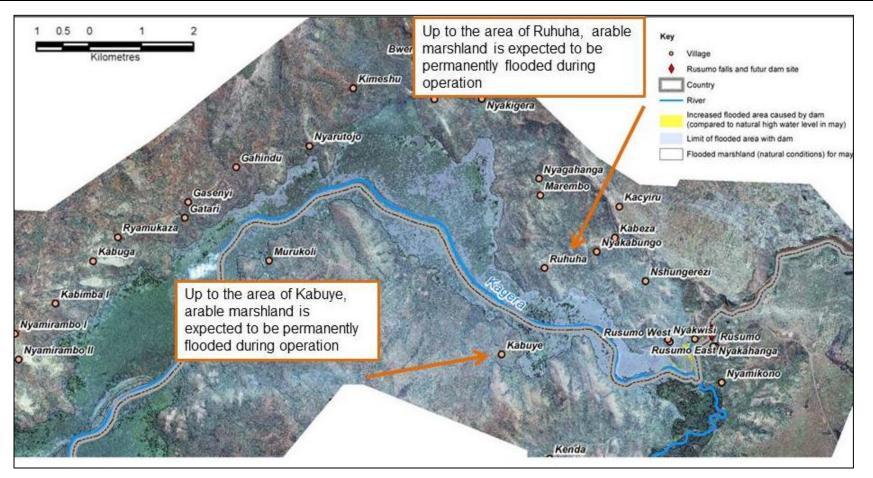
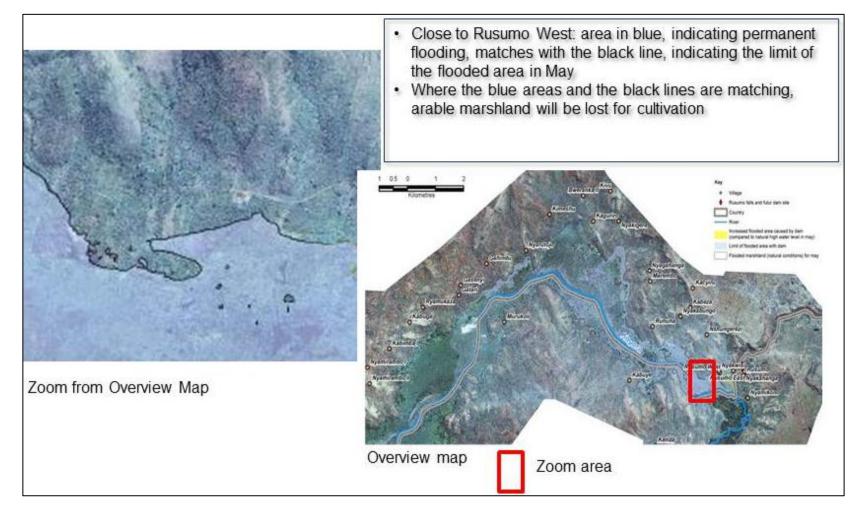


Figure 3 Overview with area of Ruhuha and Kabuye villages

**DAM & POWERPLANT COMPONENT** RESETTLEMENT ACTION PLAN (RAP)





#### 5.5.3 **Project Affected People – Project Operation**

#### Households cultivating arable marshland

Households affected by the permanent flooding of arable marshland plots will permanently lose the agricultural production from their marshland plots.

In Rwanda, households cultivating arable marshland in the following villages are considered as affected

- Rusumo East
- Nyakwisi
- West Rusumo
- Nshungeruzi
- Nyakabungo
- Ruhuha

In Tanzania, households cultivating arable marshland in the following villages are considered as affected

- Rusumo
- Nyakiziba Village, sub villages Kyenda and Kabuye

Validation of arable marshland in the affected villages was undertaken in November 2012, through a self-validation by marshland users, with confirmation from village heads and resettlement committees.

Information from self-validation comprises

- Names and contact details of affected households
- Size of marshland plots/household
- Size of total land cultivated/household
- Most important crop cultivated on marshland plot over past 3 years prior to cut-off date (see chapter on baseline conditions/marshland cultivation above)

Each affected household signed the cut – off date (date of self-validation in village).

For documentation of self-validation, see Annex 3.

Amongst the affected households, a total number of 4 households are entirely depending on marshland cultivation, with no land uphill (private land). They make up about 4.35% of the marshland users.

DAM & POWERPLANT COMPONENT RESETTLEMENT ACTION PLAN (RAP)

	HH using marshland			HH entirely depending on marshland			HH using marshland for agriculture – average sizes of land of different types/HH				
Village	Total No. of HH*	No.	%of total HH	No.	%of marshland users	% of total HH	Average size of total land (marshland plus private, ha)	Average size of private land (ha)	Average size of marshland (ha)	Average size for users entirely depending on marshland (ha)	
Rusumo East	204	12	5.9	5	41.7	2.5	0.71	0.5	0.42	0.37	
Nyakwisi	89	84	94.4	14	16.7	15.7	1.18	0.89	0.44	0.28	
West Rusumo	163	48	29.4	11	22.9	6.7	0.89	0.49	0.71	0.33	
Nshungeruzi	118	57	48.3	5	8.8	4.2	1.13	0.75	0.47	0.25	
Nyakabungo	124	28	22.6	3	10.7	2.4	0.39	0.73	0.15	0.08	
Ruhuha	148	122	82.4	5	4.1	3.4	0.82	0.7	0.15	0.28	
Total	846	351	41.5	43	12.3	5.1	0.9	0.7	0.4	0.3	

#### Table 12 Affected marshland users - Rwanda

\*Source: SLII , other figures : village self validation, Nov 2012

**DAM & POWERPLANT COMPONENT** RESETTLEMENT ACTION PLAN (RAP)

#### HH using marshland for agriculture - average HH using HH entirely depending on marshland marshland sizes of land of different types/HH Average Total No. size of total Average Average Village $%_{of}$ Subof HH\* % of total land size of size of Village No. ‰of total HH No. marshland marshland ΗH (marshland private land plus private) (ha) (ha) users (ha) Kabuye 24 1.57 Nyakiziba 1 4.2 0.84 0.76 n.a. Nyakiziba Kyenda 66 3 4.5 3.91 3.12 0.92 n.a. 90 4.35 Total 4 2.74 1.98 0.84

#### Table 13 Affected marshland users - Tanzania

\*Source: SLII, other figures : village self validation, Nov 2012

Average size

users

0.5

1.66

1.08

for

on

(ha)

entirely

depending

marshland

In the six affected villages in Rwanda, a total number of 351 households will be affected. Amongst the affected households, a total number of 43 households are entirely depending on marshland cultivation, with no land uphill (private land). They make up 12.3% of the marshland users. Marshland users make up between 5.9% (Rusumo East) and 82.4% (Ruhuha) of the total population of affected villages. In the two affected sub-villages in Tanzania, a total number of 90 households will be affected.

# 5.6 SUMMARY: AFFECTED PEOPLE FROM PROJECT OPERATION

The table below summarizes project impacts from operation and project affected households.

# Table 14 Summary: project impacts and project affected households

Project Impact from Operation	No of Affected Households			
	Rwanda	Tanzania		
Permanent flooding: Loss of arable marshland	351	90		
Total	441			

Source: village self-validation, Nov 2012, hydraulic modelling results

# 5.7 SUMMARY OF PROJECT IMPACTS AND AFFECTED PEOPLE

# Table 15Overview: Project Impacts and Project Affected Households,<br/>Construction and Operation

Description	Ar	ea (hectares)	)	No. of Households			
	Rwanda	Tanzania	Total	Rwanda	Tanzania	Total	
<ol> <li>Land Acquisition in Dam Site</li> <li>Agricultural Land</li> <li>Natural Vegetation</li> <li>Residential Structures</li> </ol>	14.34 1.84 1.03	15.75 26.97 0.88		3 87	45 29 59	45 32 146	
Business Units Sub-Total	17.21	43.58	60.79	90	133	223	
<ul> <li>4. Affected Marshland (flooded)</li> <li>Arable Marshland</li> </ul>	107.6	79.6	187.2	351	90	441	
Sub-Total	107.6	79.6	187.2	351	90	441	
TOTAL	124.81	123.18	247.99	441	223	664	



# 6. SOCIOECONOMIC BASELINE OF AFFECTED COMMUNITIES

# 6.1 **GENERAL BACKGROUND**

The area affected by the Project is located towards the South-East of the Rwandan capital of Kigali, within the District of Kirehe (capital: Kirehe) of the Eastern Province (capital: Rwamagana).

The morphology of the landscape is characterized by gentle hillsides gradually converging into marshlands. The villages are usually established on the hilltops, often with scattered houses on the slopes. All available land is intensively used by agriculture, extending over the hillsides to the edge of the marshlands. A transitional zone ("the intermediate zone") between marshlands and hillside lands is usually observed in much of the study area. The intermediate zone can be occasionally flooded in the rainy or high water season. The existence and extension of this zone depends on the slope of the hillside lands bordering the marshland. It is a critically important area for agriculture as the soil is better drained than in marshlands and the issues that impede agriculture on hillsides do not exist (erosion, poor fertility). The extension of agricultural cultivation to the seasonally flooded marshlands was often a response to food and fodder shortages in the dry seasons or to drought periods as the population levels increased. Successive government policies have had a direct influence on wetland agricultural use. The use of marshland has therefore been influenced more by political and socio-economic factors than by individual farmers. The Rwandan Government currently sees marshland as providing an important opportunity for improving food security and income through the production of rice. In the Rwandan context, 'marshland' is defined as all lowland and comprises the entire valley bottom, which includes both areas that are permanently under some water and areas that are inundated on a temporary basis only. Marshland is colonized by a specific type of natural vegetation such as Cyperus papyrus and Echinochloa pyramidalis, associated with other species.

In Tanzania, due to the availability of hillside land, the cultivation of marshland is not such a frequent phenomenon.

East Rusumo in Rwanda and Rusumo in Tanzania are border villages and the closest ones to the construction site. Separated by the Kagera River, the two villages share a similar lifestyle, even including a common language. However, trade is not significant enough to generate opportunities in trade-related services. These villages are similar to other villages along the Kagera River, all relying on subsistence agriculture economy.

Yet Rusumo on the Rwandan side and Rusumo on the Tanzanian side differ from other communities of the study area in their relation to this project, since they are located in the immediate area of the construction site. Baseline information was mostly gathered from District development plans and household surveys. Household surveys included Rusumo (Kirehe, Rwanda), Rusumo and Mitako (Ngara, Tanzania).

# 6.2 ADMINISTRATIVE SUBDIVISIONS

#### 6.2.1 Overview on Administrative Units-Rwanda

#### District

District is an autonomous administrative structure with a legal status and financial autonomy. The District Council elaborates the District policy, approves the District budget, mobilizes the population for development, and controls the activities of the Executive Committee of the District.

#### Sector

Sector is the next level of the democratic local government, and it includes, several Cells. Cells development plans are coordinated by the Sector Development Committees, who have been elected by members of the Cell Community Development Committees (CDCs). Members of the Sector CDCs elect their representative in the District CDC.

#### Cell

Cell is the grass-roots local government organization, administered by a freely elected Executive Committee. Each Cell elects a Cell CDC responsible for planning social and economic development activities. Cells are usually comprised of 100 to 200 households.

#### Umidugudu

Villages in the project area have been created and settled relatively recently following a villagisation program (*Umidugudu*) launched by the government in 1996. The overall objective of this program was to overcome the traditional disperse settlement pattern and to enhance the development of coherent settlements in order to be able to provide easier access to social infrastructure. Today, Umudugudu represent grassroots administrative unit under the cell, comprising at least 50 households.

#### Affected Villages – Administrative Units

The affected area in Rwanda is entirely located in Kirehe District.

Except Rusumuo East, which belongs to Nyamungari Sector, all the other affected villages are part of Kigarama Sector.

#### 6.2.2 Overview on Administrative Units - Tanzania

Tanzania has 26 regions or administrative divisions. The levels below the regions are

- Districts ;
- Divisions ;
- Wards ;
- Villages.

Rural areas in Tanzania have a two-tier system for local government with local government councils operating at both the district and the village levels. In addition, the Tanzanian local government system has administrative committees at both the ward, street (mtaa) and sub-village levels. Local government authorities have a broad spectrum of responsibilities, including primary education, primary health care, rural water supply, local government roads.

In addition to these local government structures, Tanzania also has a network of decentralized Regional Administrations, which include secretariats at the regional level and staff at the district and divisional levels. The Regional Secretariats have oversight over matters like local budgets, and monitoring responsibilities with regards to local government authorities.

# Affected Villages-Administrative Units

The Kagera region of Tanzania is comprised of six districts. Rusumo Village is part of Ngara District, which is itself divided into 4 divisions, 17 wards, and 72 villages. Ngara is further divided into 359 sub-villages. Rusumo village belongs to Kiyanzi Division and to Rusumo Ward.

Demographic Aspect	Rwanda	Tanzania
Population Density	Kirehe District is one of the most densely populated districts in Rwanda, with 320 people/km2.	The Kagera Region has a population of over 2 million and a population density of 71 people/km2, much lower than the Kirehe District in Rwanda.
Population Growth	Over the past ten years, average population growth was 2.3%/year, which is slightly below the national average of 2.7%.	The Ngara district, which contains the impacted area, had a population of 334,409, and an annual population growth rate of 5.3%. Ngara's population constitutes approximately 16% of the Kagera region's population.
Age Structure	The age structure is that of a young population, characterized by high fertility and high mortality. A decline in the age groups 20-24 and 25-29 for both sexes is due to the circumstances of the mid- nineties.	The age pyramid structure is that a roughly equal number of males and females and is typical of a young population age structure characterized by high fertility and mortality.
Gender Ratio	In general, male population figures are lower that of female population. The ratio of male per 100 females was already low in 1991 (95.1 males for every 100 women in rural Rwanda), but dropped consistently after the genocide. The ratio is particularly low among the population subgroup aged over than 20-24 years, what can be attributed to higher male mortality during the genocide. Single-parent households are frequent in the wider Project Affected Area, whereby 20% of the households in the Project Affected Area are headed by women.	The Ngara Poverty Survey (2006) indicates that approximately 4 out of 5 households of the district are headed by males. 2011 survey data also indicated that 75% of the households in the survey area were headed by men, and only 25% by women.
Household Size	The average household size for Kirehe District is 4.3 individuals per household. The age of most of the heads of households is between 18 and 55 years.	According to the Ngara Poverty Survey (2006), the mean household size is 5.1 individuals. SNII's household survey indicated that most households have 5 or more members. Only 9% of the households had only one member.
		2011 household survey (SNII)indicated that the average age of male heads of households is 41years and the average age of female heads of households is 40 years. According to the Ngara Poverty Survey, most heads of households fall within the 50-59 age

# 6.3 **DEMOGRAPHIC CHARACTERISTICS**

#### DAM & POWERPLANT COMPONENT RESETTLEMENT ACTION PLAN (RAP)

Demographic Aspect	Rwanda	Tanzania
		group and the 60 and above group.
Education Levels and Access to Education	<ul> <li>2011 household survey results (SNII) suggest that the literacy rate of the heads of household in the project area is generally low: 33% of the male heads of households indicated not to have any formal education, while 44% had not finished primary school and 4% had not finished secondary school. Out of the surveyed woman headed households, 26% had not finished primary school and 61% did not have any formal education.</li> <li>According to the survey results, 52% of the heads of households are illiterate and only 48% of children (both sexes) aged 5 years or older are enrolled in primary school.</li> <li>Generally, the highest education level completed by both heads and other members of households is primary school. Access to secondary education is impeded by long distances between most villages from secondary schools (usually from 3 to 7 km).</li> <li>Access to primary education is easier, with primary schools relatively close to residential areas (max 2 km).</li> </ul>	2011 household survey results (SNII) suggests a low education level of males in the study area . 14% of males in the sampled households seem to have started but not completed primary education, but 61% have and 17% are currently attending primary school. Only 5% have completed secondary schooling. Although 1% have graduated from university and 1% have completed some form of vocational-technical training. In general, the highest education level completed by males is primary schooling.
Migration	A noticeable characteristic of the villages in the Project Affected Area is that only 41% the affected households had been living in their actual village for more than 10 years. After 1994, large numbers of returning families, especially from Tanzania and Uganda, settled in the Kirehe District.	The majority of the individuals from the surveyed households in Ngara district were originating from the same district; only 4% had migrated from other districts within Tanzania, and 3% were from other countries in East Africa. There is a refugee population in Ngara district, mainly from Burundi, and according to the 2002 census, 30% of Ngara's population was comprised of refugees (SNII RAP Tanzania, p. 32).

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# 6.4 AGRICULTURE AND LAND TENURE

### 6.4.1 Rwanda: Agriculture and Animal Husbandry in the Project Area

#### General

The prevailing farming system in the Project area is a livestock based mixed farming system based on family labour on small plots, using traditional tools (hoe and machetes). Agricultural production is essentially by smallholder farmers who cultivate on average 1 ha of land with simple farm implements and very low inputs use, growing traditional food crops primarily for self-consumption and secondarily for marketing, and keep small numbers of livestock. Production is characterized by an intensive organic system and involves the combination of food, fodder and tree crops.

Food crops account for 92% of the cultivated area and 95% of affected household source their food primarily from their own cultivation. High value crops such as tea and coffee are grown by only a small number of farmers.

Bananas and beans are the main crops on hillside plots. Banana is the key staple as in other areas of Rwanda. In the Project area, bananas are typically grown around homesteads and on the foot of slopes in the "intermediate zone". In addition to banana, a large variety of crops is cultivated on hillsides (beans, maize, sweet potatoes, sorghum, and cassava). Intercropping is widespread, allowing for minimization of risks and for a flexible mix of subsistence and commercial production. Such systems also allow households to synchronize household labor requirements, access food for household consumption, and generate small income with sales throughout the year.

# 6.4.2 Rwanda: Land Tenure in the Project Area

#### General

In the Project area, land tenure can be formal, customary and informal.

Formal tenure corresponds to land that was allocated by the State. There is no standard size for formally allocated plots. Since many of the returning families resettled after 1994 were livestock keepers, plot sizes were allocated according to herd size. Other formal tenure holders hold land for agricultural use.

More recently, there has been a large effort to sanction customary occupation by a formal, registered title and corresponding cadastral mapping. This process is now completed in the Kirehe District and all customary land owners have now been turned into formal holders under a lease hold regime.

District authorities have also awarded lease hold titles to cooperatives, particularly to a number of cooperatives operating irrigated schemes in the marshland for rice cultivation. In this case, cooperatives are the entities that hold the title, while cooperative members are registered at the cooperative level but do not hold title as such.

Leasehold tenure involves a contract and a grant of an estate in land for a specific period of time; plots of land are leased out to the public by the government. In

freehold tenure, the interest in land goes on in perpetuity; the advantage of this type of tenure lies in the fact that it encourages investment, due to security of the holding.

Informal holders include two categories: people encroaching informally on individual land belonging to others, and people using state-owned land without formal permission to do so. This situation appears to be of marginal significance in the Project area, where an overwhelming majority of the land is held either formally under a registered leasehold title.

The Table below shows information on land ownership, plot sizes, and their spatial distribution in Kirehe District. Most of the plots are located on the hillside and intermediate zone areas which have historically been obtained as a result of distribution by the government following the Imidugudu process in the late 1990s. Few local farmers have bought additional land but some farmers came from outside the region and bought land for settlement.

Land Issue	Description	Situation in Kirehe District
Total Land Size/Household	Average (ha)	1,1
No. Plots/Household	Average No	3
Ownership	Owners %	93
	Tenants %	7
Tenure Type	Inherited	11
	Allocated by State	21
	Purchased	61
	Rented	7

Table 16 – Characteristics of Household Land Holdings in Kirehe Dist	rict

Source: SNII, Household Survey (2011); SNII Land Tenure Focus Groups (2011)

Some people, such as younger couples and women, lease land because they cannot afford to purchase land. It is important to notice that 11% of the surveyed households did not own any land for cultivation at all, including many youth who cannot obtain any land partly because the law abolished land subdivision into plots of less than one hectare. Members of these households typically work for others as casual laborers, or they rent land for cultivation from those with larger landholding. These households often have no livestock at all. They are bound to be food insecure during certain periods of the year.

# Average Size of Household Land Holdings

Land distribution and tenure in the Project affected area have been constrained in the last decade by a combination of local demographic dynamics, historical context, legal framework, market situation and institutional capacities. The land holding sizes are on average of 1,0 ha of arable land per household. The density of the rural population has increased significantly in the last couple of decades; and as a result the average size of household agricultural land holdings decreased by 32 % between 1990 and 2012 in the Kirehe district (SNII, 2012: RAP Rwanda, p. 46).

Plots in marshlands are usually of small dimension, with an average of 0.05 ha.

# Marshland Tenure

While much agricultural land is held by individuals in leasehold, the exception is marshland, which according to the Organic Land Law (see section 4.1.2 above) is vested in the State and administered by District authorities. The agricultural use of marshland has significantly increased in the last decades, as result of demographic pressure and gradual deterioration of hillside lands.

Apart from use by cooperatives (see para below), most if not all marshland cultivation is essentially informal and tolerated by authorities in spite of an environmental prohibition to harvest wetlands and to keep a buffer zone of 20 to 50 meters from the riverbank or the lake shore.

Informally held and traditionally farmed marshland is managed either by individuals or by families, and each farmer chooses which crops to plant. In the Project area it was observed that, during cultivation and sowing periods, when labor demand is high, informal groups are formed within which farmers help each other.

# **Cooperatives Using Marshland**

To cultivate marshlands, farmers should in theory obtain a specific authorization from District authorities. According to information from field surveys (SNII 2012), this appears to be the case for cooperatives, which usually apply for a long term leasehold title. 15 agricultural cooperatives have been observed in Kirehe district, mainly cultivating vegetables for sale in local markets. Cooperatives have to agree on a planting, regime, weeding and harvesting schedule and on the application of agricultural inputs such as fertilizers and pesticides.

A cooperative is aiming to facilitate access to specific services that meet a common need of the members. Advantages for farmers from joining a cooperative are:

- Access to markets;
- Managing irrigation systems and securing access to land, and
- Obtaining technical support from government or private service providers.

#### Gender Aspects of Marshland Use

For Kirehe District, it has been observed that female heads of households generally cultivate more plots in the marshland and less on hillside as compared to men (SNII: 2012, RAP, Rwanda, p. 47). However, for the marshland areas visited during the field work for the RAP in November 2012, this observation could not be confirmed. In the visited villages, young couples with no or limited access to hillside land due to inheritance practises, were the most frequent group of marshland users.

The table below presents the situation in the villages along the Kagera river in Rwanda, that were visited during consultation and self-validation in Nov 2012. The Project affected villages are shaded in blue. The share of female headed households who cultivate marshland in the affected villages ranges between 18% and 36%.

	-	•		•		
Village	total no. HH cultivating marshland	female headed HH	% of total	No HH entirely depending on marshland	No. female headed HH entirely depending on marshland	% of total
Rusumo East	12	4	33	5	2	40
Nyakwisi	84	30	36	14	5	36
West Rusumo	48	12	25	11	3	27
Nshungeruzi	57	10	18	5	1	20
Nyakabungo	28	6	21	3	0	0
Ruhuha	122	42	34	5	2	40
Marembo	104	38	37	3	0	0
Nyagahanga	31	10	32	1	0	0
Nyakigera	51	13	25	2	1	50
Kaguriro	82	20	24	2	1	50
Bweranka II	41	13	32	4	4	100
Kimeshu	94	18	19	5	0	0
Nyarutojo	76	22	29	8	4	50
Gahindu	89	25	28	10	4	40
Gasenyi	77	21	27	15	3	20
Gatari	95	24	25	5	2	40
Ryamukaza	71	19	27	8	1	13
Kabuga	98	25	26	14	7	50
Kabimba I	43	20	47	5	3	60
Nyamirambo I	147	41	28	27	9	33
Nyamirambo II	284	66	23	44	20	45

# Table 17Female headed households: marshland cultivation along theKagera river up to 15 km upstream the dam site, Rwanda

Source: village self-validation Nov 2012

In the villages along the Kagera river in Rwanda (up to 15 km upstream of the dam site), on average 28% of marshland users are female headed households. From those households entirely depending on marshland, an average of 21% is female headed. More than a quarter of marshland using households are female headed, but the average portion of female headed households who are entirely depending on marshland is lower than the average share of female headed households in the total of marshland using households.

# Marshland Utilization

In the last decade, land scarcity on hillsides has led to broader resorting to wetland cultivation. Marshlands play a crucial role in the provision of household food security and income, they are used for additional food production during the dry seasons, usually on small to very small plots using traditional farming methods. Maize and

sorghum are cropped in rotation with legumes or root tubers (Irish potato, sweet potato, yam and cocoyam).

In general, marshlands are utilized in three different ways:

- vegetables and other crops, such as sweet potato and beans, grown on raised on mounds to avoid submersion of the root system;
- for small-scale rice cultivation, single or double cropped according to water availability;
- for larger-scale rice cultivation within gravity schemes, including cultivation of other crops after the harvest of the rice

The dry season from June to August is dedicated to marshland cultivation.

Households are usually engaged in agriculture activities in the three zones concurrently (hill, intermediate and marshland). However, 19% of affected households engage only in marshland cultivation, essentially because they hold no land in other zones.

Starting from 2000, the Government of Rwanda has been developing marshlands in Kirehe District for cultivation of rice, with large gravity schemes.

#### Animal Husbandry

The Government has been promoting stronger agriculture-livestock integration to improve both farmers' livelihood and soil fertility management. A program called "Gir'inka project" ("one poor family – one cow") was implemented throughout Rwanda. This program aims at enabling every poor household to own and manage an improved dairy cow which would help the family to improve their livelihood through increased milk and meat production and to improve soil fertility of their land for their crops using the available manure. The program is based on a zero-grazing policy (the cow should be kept in a stable and fed with fodder gathered either from cultivation or in the bush or marshland and crop stubble).

71% of surveyed households (SNII household survey 2011) in the project area own livestock, higher than the national average of 60%. Since 2006, there has been a noticeable increase in the proportion of households owning livestock. 43% now own goats, 35% poultry, 15% pigs and 7% cows. Kirehe is the lead district in Rwanda for goats and sheep possession (about 30% of the total goat population in Rwanda).

#### 6.4.3 Tanzania: Agriculture and Animal Husbandry in the Project Area

#### General

The SNII Household Survey (2011) highlighted that the main crops cultivated in the Project area are yam, plantain banana, cassava, sugarcane, sweet potato, Irish potato, sorghum, and coffee.

Rain fed agriculture depends on short vuli rains from October to December, and long masika rains from March to May. The vuli rains provide a minor cropping season with planting in usually November and harvesting in late January/February. The masika

rains provide the main cropping season with planting in late February/March and harvesting in July/August.

# Utilization of Marshland

Different from the situation in the Project area in Rwanda, there is no shortage of land in Ngara District in Tanzania. Hence, there is no intensive marshland use (see more information on marshland use in sections below).

#### Gender Aspects of Marshland Use

# Table 18Female headed households: marshland cultivation along the<br/>Kagera river up to 15 km upstream the dam site, Tanzania

Village	Sub-Village	total no. marshland users	total no. female headed HH on marshland	% of total	no. HH entirely depending on marshland	no. Female headed HH depending on marshland
Ntobeye	Burambira	64	0	0	0	
Ntobeye	Kumurenge	47	5	11	1	0
Ntobeye	Mukatokatoke	70	5	7	0	0
Ntobeye	Mukirarama	42	8	19	0	0
Ntobeye	Rwintuku	29	8	28	4	1
Nyakiziba	Kabuye	24	8	33	1	0
Nyakiziba	Kagali	143	10	7	1	0
Nyakiziba	Kyenda	66	3	5	3	0
Nyakiziba	Ruhembe	122	6	5	17	0

\*source: self-validation in affected villages (No 2012)

In the villages along the Kagera river in Tanzania (up to 15 km upstream), on average 13% of marshland users are female headed households. From those households entirely depending on marshland, less than 1% of the total households is female headed.

The share of female headed households in the total of marshland users is lower than in Rwanda. Only 1 female headed household in the affected area is entirely depending on marshland (affected sub-villages shaded in blue in the table above).

These results, compared to the figures from Rwanda, reflect the overall land scarcity in Rwanda.

# Animal Husbandry

51% of the livestock owned by households in the area consists of goats, followed by cows at 21% and fowl at 20%. Pigs are owned by only a few households.

According to the Ngara Poverty Survey, 85% of households did not own any cattle, and only 2% of households owned more than 10 heads of cattle. Households in remote villages and poor households were less likely to own cattle. Conversely, large households (seven or more members) were more likely to own between 2 and 10

heads of cattle at 21% compared to households with only one or two members at 14%.

# Agricultural Infrastructure

Under the District Agriculture Sector Investment Project (DASIP) being executed by the Ngara District Council, efforts are underway to rehabilitate Ngara district's agricultural infrastructure. For instance, in 2009-2010, eight cattle dips were rehabilitated and one dip was constructed. In several villages within the district, large numbers of cattle are brought in for dipping at regularly scheduled intervals each month. Another example is that more feeder roads have been constructed in villages, and existing roads in villages have been rehabilitated, making the trip between the villages and the main market easier. Vehicles can also now pass on these roads to carry products from the community. Two market sheds were also constructed in Keza and Mugoma, which can accommodate 85 people and 100 people, respectively. The DASIP commenced in 2006/2007, and is expected to conclude in 2011-2012. The social benefit of this project includes improved food security, human nutrition and income, which will contribute to the reduction of poverty.

# 6.4.4 Tanzania: Land Tenure in the Project Area

# Average Size of Household Land Holdings

According to the Ngara Poverty Survey, around 37% of all households own less than 2 acres of land (including 4% of landless households). However, 41% own between 2 and 4 acres, and 23% own 4 or more acres.

The Ngara survey states that landless households tend to be more common in accessible villages, while the reverse holds true in remote villages; there, households owning large portions of land are more common. As well, larger households tend to own larger pieces of land than households with fewer members. Finally, male-headed households tend to have larger holdings of land than female-headed households.

### Land Tenure – General

All land in Tanzania is state property, but customary rights are respected under new land laws, with the responsibility of land allocation of district administrations and villages. The Land Act (1999) confirmed land tenures that were introduced under colonial rule, such as customary tenure, which applies to village land and other forms of land like urban land and peri-urban areas.

Village councils administer village land, they have to ensure that village land administration is maintained with effective participation of villagers and that gender balance in land administration and ownership is secured.

It is the Ministry of Land that is responsible for overseeing implementation of the National Land policy and the Village Land Act, with Local Government playing a role in implementation of the Village Land Act.

A number of initiatives have been taken to formalize land tenure in Tanzania, including the Commission for the Legal Empowerment of the Poor, and the Strategic Plan for the Implementation of the Land Laws.

# 6.5 MARSHLAND CULTIVATION IN THE PROJECT AREA

Information on marshland use up to 15 km upstream the dam site on both sides of the Kagera river use was obtained during village consultations in November 2012. Village consultations were conducted in 21 villages in Rwanda and 9 sub-villages in Tanzania.

Marshland cultivation is described with reference to the results of village consultations. The six affected villages in Rwanda and the 2 affected sub-villages in Tanzania were part of the consultations. The description of marshland use in this baseline section, however, is not limited to marshland use in the affected villages, but refers to a broader context (= 21 villages and 9 sub-villages) in order to establish a representative description, based on

- interviews with resettlement committees (see questionnaire in Appendix 1)
- community meetings in the context of self-validation of affected marshlands (see records of meetings in Appendix 2)
- on the spot interviews with affected people (in Dec 2012)
- interviews with district authorities (Kirehe and Ngara districts) (Dec 2012)

In Rwanda, farmers in the Project area had been allocated land from the government under the 'Land sharing policy' as confirmed by the agronomist of Kigarama sector. Hence, the majority of households own one hectare of uphill land (private land). In the villages up to 15 km upstream from the dam site in Rwanda, almost all young people have very small plots of hillside land which they received from their parents as an inheritance once they got married. As a consequence of this inheritance practise, the original one hectare plots owned by parent households, is being reduced according to the separation of plots. People who own small plots of uphill land aim to supplement their production through development and cultivation of marshland.

According to information from residents, marshland is cultivated on the principal of "whoever initially cultivates a plot in a marshland owns it". The plot sizes are determined by the capacity of the household to allocate labour for cultivation.

Specific information was obtained on the reliability of income from marshland from

- resettlement committees
- affected people
- agronomists of Kirehe district

According to information from sources as indicated above, every other year marshland cultivation is not possible due to flooding of the arable marshland strip.

Hence, production from marshland is not a reliable source of income. This was confirmed by several on the spot interviews with marshland users in the affected area in Dec 2012. Interviewees even indicated longer periods (several years) when marshland cultivation was not possible over the past decade.

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According to interviews with resettlement committees, about three quarters of marshland users sell their marshland products on the market. The range of income from market sale of marshland production in a good year was indicated to be between 200,000 RWF and 3,000,000 RWF respectively (resettlement committees during self-validation). Whilst a range between 200,000 RWF up to 300,000 RWF, with 500,000 RWF in exceptional years was confirmed during interviews in the affected area in Dec 2012, the amount of 3,000,000 is considered significantly exaggerated and not realistic. Participants of the Consultative workshop in Kigali on 4 Feb 2013 considered the 200,000 to 300,000 RWF range as realistic.

Tanzanian resettlement committee members indicated the marshland income in RWF, too, because farmers use to sell their marshland produce in Rusumo East, Rwanda.

It is noted that the income indicated for sale of production from marshland, significantly exceeds the total annual income of households in the project area as obtained by SNII (2011/2012).

Main coping strategies for the loss of marshland income in wet years are

- borrow cash (less than a quarter to a quarter of households)
- purchase of additional food at the market (less than a quarter to a quarter of households)

For less than a quarter of the marshland users, loss of income from marshland is not indicated as a serious problem. From all resettlement committees it was indicated that at present there are still remaining marshland areas in their villages which would be available for cultivation. However, it was pointed out, that development of marshland needs considerable input of labour. As per information from on the spot interviews with marshland users in Kimeshu village (Dec 2012), marshland cultivation in the area is constantly decreasing since 2004, due to increased flooding of arable marshlands.

Only on two villages in the area, the average size of total land of marshland users exceeds 1 ha, in Nyakwisi and Nshungeruzi. The average size of private land of marshland users is 0.64 ha. The average size of marshland plots is 0.24 ha. The average size of plots of people entirely depending on marshland, is 0.21 ha, smaller than the average marshland plots.

Households entirely depending on marshland, are characterised by

- dependency on a non-reliable source of livelihood (flooding of arable marshland every other year)
- cultivation of extremely small plots, resulting in amounts of annual income likely to be below the average indicated by the resettlement committees.

In the villages visited for self-validation in Tanzania, users generally had more land available for cultivation from both categories of land, private land and marshland.

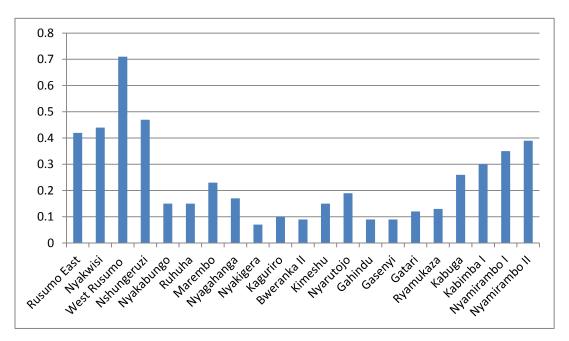
DAM & POWERPLANT COMPONENT RESETTLEMENT ACTION PLAN (RAP)

	HH using marshland			HH entirely depe	nding on marshlan	d	HH using marshland for agriculture – average sizes of land of different types/HH				
Village Total No. HH*		No.*	%of total HH	No.	%of marshland users	% of total HH	Average size of total land (marshland plus private) (ha)	Average size of private land (ha)	Average size of marshland (ha)	Average size for users entirely depending on marshland (ha)	
Rusumo East	204	12 (15)	7.4	5	33	16.2	0.71	0.5	0.42	0.37	
Nyakwisi	89	84 (92)	>100	14	15.2	15.7	1.18	0.89	0.44	0.28	
West Rusumo	163	48 <sub>(64)</sub>	39.3	11	17.2	6.7	0.89	0.49	0.71	0.33	
Nshungeruzi	118	57	48.3	5	8.8	4.2	1.13	0.75	0.47	0.25	
Nyakabungo	124	28	22.6	3	10.7	2.4	0.39	0.73	0.15	0.08	
Ruhuha	148	122 (134)	90.5	5	3.7	3.4	0.82	0.7	0.15	0.28	
Marembo	93	104	>100	3	0.33	3.2	0.85	0.62	0.23	0.18	
Nyagahanga	185	31	16.7	1	3.2	0.5	0.92	0.78	0.17	0.05	
Nyakigera	94	51 <sub>(59)</sub>	62.8	2	3.4	2.2	0.34	0.26	0.07	0.27	
Kaguriro	131	82 (87)	66.4	2	2.2	1.5	0.82	0.72	0.1	0.31	
Bweranka II	100	41 <sub>(43)</sub>	43	4	9.3	4	0.59	0.65	0.09	0.03	
Kimeshu	118	94(95)	80.5	5	5.3	4.2	0.83	0.67	0.15	0.09	
Nyarutojo	101	76	75.2	8	10.5	7.9	0.77	0.65	0.19	0.3	
Gahindu	121	89	73.6	10	11.2	8.3	0.65	0.62	0.09	0.07	
Gasenyi	120	77 (79)	65.8	15	19	12.5	0.72	0.78	0.09	0.05	
Gatari	147	95 <sub>(97)</sub>	66	5	5.1	3.4	0.71	0.63	0.12	0.25	
Ryamukaza	66	71	>100	8	11.3	12.2	0.81	0.77	0.13	0.04	
Kabuga	123	98 (101)	82.1	14	14.3	11.4	0.68	0.5	0.26	0.21	
Kabimba I	124	43 (55)	44.4	5	9.1	4	0.94	0.73	0.3	0.4	
Nyamirambo I	134	147(151)	>100	27	18.4	20.1	0.72	0.45	0.35	0.23	
Nyamirambo II	177	284 (287)	>100	44	15.5	24.9	0.9	0.6	0.39	0.36	

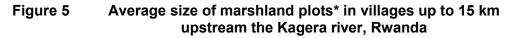
#### Table 19 Marshland Use along the Kagera River, Rwanda (villages up to 15 km u/s the dam site)

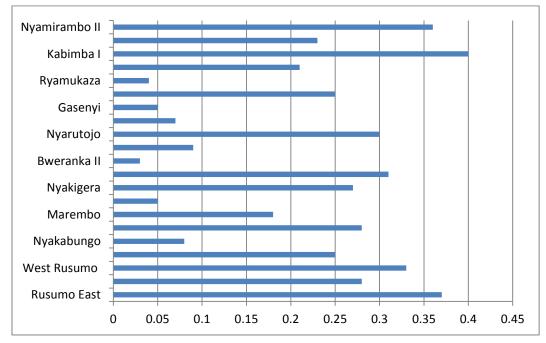
\*the figures indicated in parenthesis are referring to the total number of marshland users, including users who were absent during self-validation

DAM & POWERPLANT COMPONENT RESETTLEMENT ACTION PLAN (RAP)



\*indication in ha, source: village self-validation Nov 2012





\*indication in ha, source: village self-validation Nov 2012

Figure 6 Average size of plots\* of users entirely depending on marshland, in villages up to 15 km upstream the Kagera river, Rwanda

DAM & POWERPLANT COMPONENT RESETTLEMENT ACTION PLAN (RAP)

	HH using marshland			HH entirely	depending on	marshland	HH using marshland for agriculture – average sizes of land of different types/HH				
Village	Sub-Village	Total No. of HH*	No.*	% <sub>of total</sub> HH	No.	%of marshland users	% of total HH	Average size of total land (marshland plus private) (ha)	Average size of private land (ha)	Average size of marshland (ha)	Average size for users entirely depending on marshland (ha)
Ntobeye	Burambira		64		0	0	0	1.46	0.74	0.72	
Ntobeye	Kumurenge		47		1	2.1		1.67	0.81	0.86	
Ntobeye	Mukatokatok e		70		0	0	0	3.22	2.5	0.72	
Ntobeye	Mukirarama		42		0	0	0	2.29	1.26	1.03	
Ntobeye	Rwintuku		29		4	13.8		1.47	0.91	0.69	0.49
Nyakiziba	Kabuye		24		1	4.2		1.57	0.84	0.76	0.5
Nyakiziba	Kagali		143		1	0.7		2.36	1.71	0.65	0.35
Nyakiziba	Kyenda		66		3	4.5		3.91	3.12	0.92	1.66
Nyakiziba	Ruhembe		122		17	13.93		1.71	0.95	0.88	0.73
Ntobeye		1,111	252	22.7	5	2.0	0.5	2.02	1.24	0.8	
Nyakiziba		2,309	355	15.4	22	6.2	1.0	2.38	1.65	0.8	
		3,420	607	17.7	27	4.4	0.8	2.2	1.45	0.8	0.8

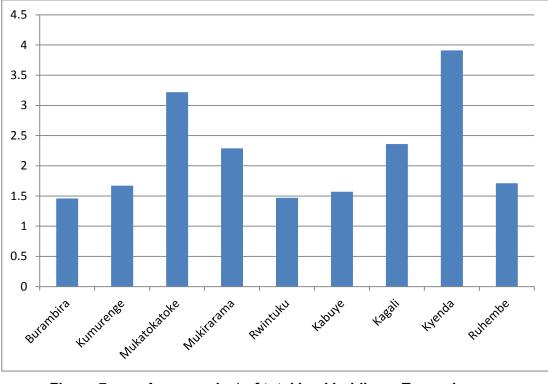
# Table 20 Marshland Use in villages along the Kagera river up to 15 km upstream the dam site, Tanzania

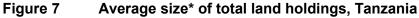
Source: village self-validation Nov 2012

In all villages visited for consultation in Tanzania, the average size of total land of marshland users exceeds 1 ha. This corresponds to the land scarcity in Rwanda and the availability of land for agriculture in Tanzania.

The average size of private land of marshland users is 1.42 ha. The average size of marshland plots is 0.8 ha. The average size of plots of people entirely depending on marshland, is 0.74 ha, smaller than the average marshland plots.

Despite the larger areas of marshland under cultivation per household in Tanzania, resettlement committees indicated a range of income from marshland which corresponds to the income from smaller plots in Rwanda. It was not possible to get additional information on this issue up to present.



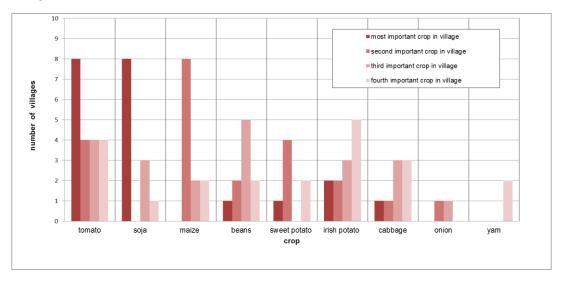


\*indication in ha, source: village self-validation Nov 2012

#### Most important crops on marshland

Marshland in the visited villages is exclusively cultivated with annual crops.

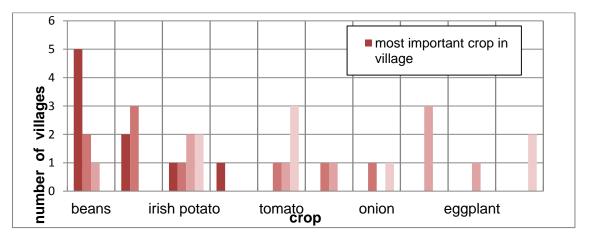
Resettlement committees were asked for the four most important crops in their village.



source: village self-validation Nov 2012, 21 villages

#### Figure 8 Most important marshland crops, Rwanda

In 8 villages, tomato, soja and maize are the most important crop respectively. Beans, irish potato and cabbage are most important in 1 village respectively.



source: village self-validation Nov 2012, 9 sub.villages



Most important marshland crops, Tanzania

In 5 of the 9 villages, beans were indicated as the most important crop, in 2 villages irish potato is the most important crop. Tomato and onion are most important in 1 village respectively.

Different from Rwanda, soja, sweet potato and maize are not amongst the most important crops. Tomato is much less important than in Rwanda.



Figure 10 Tomato cultivation, Nyakwisi marshlands, Rwanda



# 6.6 **LIVELIHOODS**

The Table below presents an overview on livelihoods in the Project area.

#### Table 21 – Livelihoods in the Project Area

Livelihood Aspect	Rwanda	Tanzania
Agriculture	Agriculture is the main activity for both male and female head of households, with 95% of male adults and 92% of female adults engaging in some form of smallholder farming.	Agriculture is the main activity for both male and female head of households, with 76% of male adults and 89% of female adults engaging in smallholder farming According to the Ngara Poverty Survey, agriculture is the main livelihood for both male and female heads of households; approximately 4 out of 5 households are dedicated to agriculture.
Livestock	4% of the male and 3% of the female heads of households engage in livestock breeding	19% of the male and 5% of the female heads of households engage in livestock breeding
Casual Labor	1% of the male heads of households engage in casual labour, with two peaks corresponding with the agricultural season	
Other Economic Activities	Almost one third of the heads of households engages in secondary occupations to provide income during the lean season before the harvest. Activities such as pastoral work or commercial activities are pertained during the year. Handcraft activities (including brewing local beer) for female heads of households and fishing and artisanal work for male heads of households are the only activities undertaken as income replacement for agricultural work	19% of individuals are engaged in occupations such as in mining, manufacturing, energy, construction, and private/public service. The Ngara poverty survey states that in the case of those self-employed in non-agricultural activities, the predominant economic activity is the provision of services. For the Tanzanian part of the Project are, all the petty traders identified in the SNII survey (2011) were located in Nyakahanga subvillage within Rusumo village. Petty trading as economic activity was indicated by 5% of both, the male and the female heads of households (SNII survey, 2011) A small portion of the female demographic (3%) also makes handicrafts for a living. Fishing as economic activity was indicated by 2% of the male heads of household

Source: SNII 2012: RAP Rwanda and RAP Tanzania, Section 5

Most of the livelihood activities in order to provide additional income rely on marshland resources, such as:

- Fish stocks in marshland
- Clay for brick-production or other handcraft products
- Reed for artisanal handcraft production

Fishing activities are mainly practiced in marshlands. Fishing as a primary activity is performed by a tiny minority of rural dwellers in the Project area. Small-scale fish hatching is currently practiced near East Rusumo village and in two cooperatives in Kigarama sector. However, most of the households in the District practice some fishing during low agricultural seasons as a supplement to their livelihood. According to the Village Level Survey (SNII,2011), 78% of the fish harvested is sold and 28% is consumed by producers. This indicates that the primary goal of fish production is to earn income.

A considerable number of brick making businesses are using the marshlands of Rusumo East village and Nyakwisi village in Rwanda and of Rusumo, Tanzania, as fabrication sites, 55 in Rwanda and 26 in Tanzania.

These businesses are either run by cooperatives or by private owners, with the support of casual workers. According to the flooding dynamics of marshland brickmaking is a seasonal activity.



Figure 11 Brick maker, Nyakwisi village marshlands



Figure 12 brick making site, Nyakwisi, Rwanda

Field survey results (SNII, 2012) conform brick making as a seasonal activity intended to complement livelihoods during low agricultural season and an economic opportunity for landless households. They supply materials to local markets or to rural small business people in East Rusumo.

All facilities for brick making are located on marshland and not on privately owned intermediate zones. The brick kilns are the only permanent structure, while other structures, such as shields and workstations, are temporary and rebuilt each season.

# 6.7 **POVERTY AND VULNERABILITY**

# 6.7.1 Situation in Rwanda

#### Monetary Income

**Note:** According to interviews with resettlement committees, about three quarters of marshland users sell their marshland products on the market. The range of income from market sale of marshland production in a good year was indicated to be between 200,000 RWF and 3,000,000 RWF respectively (resettlement committees during self-validation). Whilst a range between 200,000 RWF up to 300,000 RWF, with 500,000 RWF in exceptional years was confirmed during interviews in the affected area in Dec 2012, the amount of 3,000,000 is considered significantly exaggerated and not realistic. Participants of the Consultative workshop in Kigali on 4 Feb 2013 considered the 200,000 to 300,000 RWF range as realistic.

Tanzanian resettlement committee members indicated the marshland income in RWF, too, because farmers use to sell their marshland produce in Rusumo East, Rwanda.

Secondary data gathered from the Comprehensive Food Security and Vulnerability Analysis (CFSVA, 2006) show that for households that derive more than 75% of their income from agriculture, the average yearly cash income is around RWF 60,000 (USD 100) As more than 97% of the affected households in the study area rely on agriculture to sustain their livelihood, they would belong in this category.

Annual income is slowly higher (RWF 70,000) for the remaining 3% of households who have supplemental earnings from trade, daily labour (cash and in kind) and agriculture activities (CFSVA, 2006).

Food expenditure represents more than 71% of total expenditure. Maize, beans and peas alone accounts for more than 31% of total expenditures. Education and health expenditures represent respectively 14% and 11% of the total expenditure. The largest percentage of non-food items is soap (2%) and fuel (1%). In terms of mode of payment, 98% of the expenditures are made in cash and 2% through barter (SNII, 2012).

# Poverty

Poverty is widespread in the Project area. Based on the 2012 national survey, some 43% of households live below the poverty threshold and 20 % below the extreme poverty line, which means they could not afford the basic food consumption basket even without spending anything on non-food items.

Indicator	Group 1 Wealthier Household	Group 2 Average Household	Group 3 Poorer Household	
Cow ownership	>2 1 or sharing		none	
Land size (ha)	>1	0,4-0,9	>0,4	
Hire/Sale of Labor	Hire labor	Sell labor against cash income	Exchange labor for crops	
Household Assets	Bicycle, motorcycle, cellphone	Shared with other households	Poor housing	
Non agricultural income	Most of the year (>50%)	seasonally	Agricultural labor for others	
Production orientation	Production orientation Surplus for market and/or commercial crops for sale (e.g. coffee, tea, rice)		Only food for subsistence	

#### Table 22 – Definition of Poverty Status

Source: SNII, 2012: RAP Rwanda, p. 58, based on results of social survey 2011/2012

Based on these categories, 51% of surveyed households fall into the average category while 43% are poor and 6% in the "wealthy" category. The distribution is different if only female head of households are considered. Here, 77% are poor and 23% are average.

There is also widespread food insecurity as a large majority of farmers in Kirehe District report facing occasional periods of food shortages.

The largest group of rural poor is made up of households who have less than 0,4 ha of land (including the landless) and whose agricultural production does not cover the food needs of the family during the lean season. Within this category, the following specific groups can be distinguished:

- Female heads of household, who have no autonomous economic activity;
- Young landless people, who have little chance of obtaining land because of the prohibition to subdivide land into small pieces;
- Households with chronically ill members.

Virtually all affected marshland users who are entirely depending on marshland, cultivate plots smaller than 0.4 ha (see Table 12 Affected marshland users - Rwanda).

#### Coping Strategies

In addition to on-farm work, the poor part of the population goes for work in nearby mines, towns and across the border in Tanzania. Also, poorer households that lack the land and agricultural resources to produce and sell high value crops, opt to produce food crops selling a portion of their harvest to finance essential non-food items or preferred food items.

Poorer households also do not source all of their food from their own production alone. They also receive beans, cassava and maize as in-kind payment for working on better-off household's farms.

### 6.7.2 Situation in Tanzania

**Note:** According to interviews with resettlement committees, about three quarters of marshland users sell their marshland products on the market. The range of income from market sale of marshland production in a good year was indicated to be between 200,000 RWF and 3,000,000 RWF respectively (resettlement committees during self-validation). Whilst a range between 200,000 RWF up to 300,000 RWF, with 500,000 RWF in exceptional years was confirmed during interviews in the affected area in Dec 2012, the amount of 3,000,000 is considered significantly exaggerated and not realistic. Participants of the Consultative workshop in Kigali on 4 Feb 2013 considered the 200,000 to 300,000 RWF range as realistic.

Tanzanian resettlement committee members indicated the marshland income in RWF, too, because farmers use to sell their marshland produce in Rusumo East, Rwanda.

The economy of Ngara is heavily dependent on small-scale farming. Accordingly the estimated average income of rural households is very low and is estimated at TShs 165,000 – 170,000 (equivalent to less than USD 110.00) per annum compared to the district average income of TShs 750,000 (equivalent to USD 475.00, SNII, 2012, RAP Tanzania).

# Poverty

In Tanzania, poverty tends to be a rural phenomenon. In rural areas, incomes tend to be lower and poverty more widespread and intense than in urban centers. The poor tend to be concentrated in the subsistence agriculture sector.

Tanzania faces severe income poverty, with the country having one of the world's lowest per capita national incomes. During the 1990s, there was virtually no economic growth in Tanzania, coupled with an increase in the number of people who fell below the national basic needs poverty line. In the same vein, hunger, malnutrition, and lack of food security are all serious problems in Tanzania, with many children under the age of 5 being malnourished and underweight. Declining soil nutrient quality and very low rates of mechanization have left agricultural productivity at a stagnant level. Since the majority of Tanzania's small-scale farmers rely on rain, annual agricultural output is highly variable and thus periodically leads to food shortages in parts of the country.

Administrative Divisions	Population	Surface (km <sup>2</sup> )	Density <sup>1</sup>	Poverty Levels <sup>2</sup>
Tanzania	45,039,573	947,300	48	
Kagera Region	2,033,888	29,241	70	29%
Ngara District	334,939	3,744	89	58%
Rwanda	10,227,212	26,340	388	
Eastern Province	2,141,174	9,	226	50%
Kirehe District	292,215	1,119	261	

#### Table 23 – Poverty Levels in the Project Area

Sources: National Census (Tanzania 2002), MINALOC (Rwanda, 2006-2009), World Bank. Note (1) Total population per square kilometers.

Note (2) Percentage of households living under the poverty line.

#### 6.7.3 Vulnerable Groups

People who by virtue of gender, ethnicity, age, physical or mental disability, economic disadvantage, or social status may be more adversely affected by the project/ by displacement than others and who may be limited in their ability to claim or take advantage of resettlement assistance and related development benefits. Vulnerability is considered with regard to the Project context.

#### Identification of Vulnerable Groups in the Project Area

Vulnerable groups were identified based on

- Consultations by SNII (2011/2012), aiming at the identification of vulnerable people
- Reference to the KWAMP Project Design Report (with a focus on Kirehe district), 2008
- Interviews with district officials in Kirehe district and Ngara district
- Interviews during the consultation period December 2012

**Note:** Individual support measures for vulnerable people will be identified early in RAP implementation (start of year<sub>0</sub>). The respective consultations will be undertaken under the lead of PIU, through local resettlement committees.

#### Female headed households

20 % of heads of household are women, and of these, 68 % are widows; another 26 % are divorced or living apart. Other than land related issues, female-headed households face additional constraints, such as difficulties to engage in certain farming operations because of lack of physical strength and inadequate representation of their interests in community structures and farmers' organizations. They are likely to be among the poorest households (SNII 2011/2012).

For information on female headed households, see information above (gender aspects on marshland use).

Female headed households with small land holdings (less than 0.2 ha) are considered as especially vulnerable by the KWAMP Project Design Report. The social officer of Kirehe district also indicated female headed households as vulnerable. This information was confirmed during the Consultative Workshop in Kigali on 4 Feb 2013.

Amongst the affected marshland users in Rwanda, there are 104 female headed households, 13 of them entirely depending on marshland. These 13 households are considered as especially vulnerable to the loss of marshland plots.

Female headed households amongst the households affected by construction yet have to be identified.

For Tanzania, there is only a limited number of female headed households depending on marshland (3). Furthermore, availability of land is not a problem in Tanzania.

RESETTLEMENT ACTION PLAN (RAP)

# Household heading orphans

Household heading orphans are considered as vulnerable. They usually have no access to education, due to family obligations. Hence, their capacity to benefit from training measures, is considered to be limited as is their capacity to develop alternative livelihoods. The vulnerability of household heading orphans was confirmed by the social officer of Kirehe district and is also stated in the KWAMP report.

According to the results of the village self-validation in the project affected area, no orphans heading households were documented as affected. However, during RAP implementation, special attention will be given to the identification of orphan headed households.

Orphans heading households can be expected to be amongst affected people in Rwanda.

#### Households with limited access to land, landless households

9% of all households in the Project area do not own land for cultivation, including many young people who have failed to obtain any land partly because the law prohibits land subdivision into plots of less than one hectare.

Young people relying on small marshland plots are making up a large group within the affected marshland users in Rwanda. They entirely rely on marshland or they only have very small hillside plots. They would be vulnerable in the project context, due to the loss of marshland and hereby the loss of their main livelihood asset.

The vulnerability of young households with limited access to land was confirmed by the social officer of Kirehe district.

This category of vulnerable people is an issue for Rwanda. In Tanzania, there is no limited availability of land for young households.

#### HIV- and AIDS affected households

HIV- and AIDS affected households are an important subset of households with chronically ill members, who can face moderate to severe labour constraints, fall sick often and face high medical bills, are under threat to lose household assets and access to factors of production, and are often stigmatized in their community. Almost 11% of the affected households in the Project area fall into this category, with a "hot spot" in the area of the Rusumo villages, where HIV-and AIDS incidence in the households is 28%. Vulnerability of HIV/AIDS affected households in the Rusumo area was highlighted during the Consultative Workshop in Kigali on 4 Feb 2013. The KWAMP report as well as district officers in Ngara- and Kirehe districts indicate people with HIV- and AIDS as especially vulnerable. In the project context, HIV-and AIDS affected households are expected to have a limited capacity to fully benefit from livelihood restoration programs, unless they are provided with special assistance.

#### Elderly, Disabled or infirm Persons

Elderly, infirm or ill people might have limited access to project related information, unless they are considered with specific measures.

### Women and children

Women and children might be at risk of being dispossessed of their immovable and productive assets as a result of the compensation process that may solely benefit the male household head.

From the representatives of Ngara district, it was indicated that especially in polygamous settings, partners would be at risk not to have access to the compensation money of the household. Polygamous settings occur in Tanzania.

# 6.8 **INFRASTRUCTURE**

Two main asphalted roads cross the Project area. The first road goes eastward from Kigali and then turns southward from Kayonza, continues near Kibungo, before crossing the Akagera and the Rwanda -Tanzania border at the Rusumo Falls Bridge. The road then proceeds to the South-East of Tanzania towards the town of Nyakahura. The second road, which is being rehabilitated, also starts in Kigali and follows a north-south axis through Nyabarongo and then the Bugesera district near the town of Kirundo in Burundi. There is also an extensive and well distributed network of dirt tracks that link all public services and most villages. Many tracks, however, are poorly maintained. In addition, the transportation of goods and people by water is well developed, particularly on Lake Rweru between certain Burundian and Rwandan villages.

### 6.8.1 Health

With a life expectancy of about 45 years, the population's overall health in the Project area is very poor. The most common diseases are malaria, respiratory infections, diarrhoeal diseases, AIDS and diseases caused by malnutrition and nutrition deficiency.

# Rwanda

In Rwanda, access to the nearest health center is 7 km on average, which is a long distance for the rural population considering the poor condition of the roads and the lack of transport. About 75% of childbirths occur at home, and the infant mortality rate in the district is 126 per 1000 live births.

# Tanzania

According to the Ngara Poverty Survey, households in remote areas have lower access to medical services (28%) than households in villages that are more accessible (59%). Both show similar ratings for use and satisfaction, but households in remote villages report higher need rates (31%) than households in accessible villages (27%). While Tanzania has made progress towards reducing infant and children mortality, and child malnutrition, maternal mortality is still an issue as well as the percentage of births attended by trained personnel. Positive contributing factors have included strengthened immunization and micronutrient supplementation, improved diagnosis and treatment of malaria among children, improved diagnosis and treatment of malaria among children, and improved availability of drugs. Factors limiting progress in the health sector include continued shortages of

qualified health workers, inadequate infrastructure, shortages of drugs and other medical supplies, and poor transport.

#### 6.8.2 Education

The project area is characterised by insufficient teaching premises and personnel and above normal student-per-teacher ratios. Secondary and vocational education is very weak.

#### Rwanda

Access to primary school in affected communities is in line with national standards. Primary school can be found in a range of maximum 2 km from the residence village. Classes are usually overpopulated, with as many as 80 pupils per class and a teacher/student ratio of 1 to 74. Secondary schooling is less distributed and at further distance, from 5 to 10 km from the affected villages.

# Tanzania

With regards to schools, the Ngara Poverty Survey states that almost two-thirds of primary school age children live within 30 minutes of a primary school. Primary school access is obviously significantly higher in accessible clusters than in remote clusters. Significantly more children aged 7 to 13 living in non-poor households lived within 30 minutes of the nearest primary school, when compared to children living in poor households. Interestingly, primary school access tended to be higher among children from female-headed households (70%) than that of children from male-headed households (57%). In terms of satisfaction, more than three quarters of all primary school pupils were satisfied with their schools. A higher share of pupils living in poor households reported satisfaction than those living in non-poor households; however, there was no marked difference in satisfaction rates between pupils living in remote and accessible areas.

#### 6.8.3 Markets

#### Rwanda

Domestic markets for crops are generally underdeveloped. Marketing chains are informal and often fragmented, with produce changing hands several times as it moves from farm gate to the final consumer. Farmers sell produce to rural assemblers at the farm gate or to rural traders located in local markets, who then transport it to urban wholesalers. In turn the latter supply urban retailers, who break loads down into small lots for resale in market stalls or small neighbourhood shops. Marketing margins for domestically produced food crops are high compared with those of other countries in Africa, reflecting both a certain lack of competition among intermediaries and high transport costs.

During consultations in affected villages (Dec 2012), participants in on the spot group discussions raised the issue of lack of access to markets for affected communities, due to

- Distance to markets and lack of means of transport

- Overall bad maintenance and quality of rural roads
- Lack of storage facilities
- Overall lack of capacity to get organized for group based marketing of products

#### Tanzania

In order to support trade and business transactions at the village level, each village in the Tanzanian part of the Project area has a central market square. On one day each week, a market day is held where agricultural product and other commodities are traded. These market days occur on rotation such that on every day of the week, there is an open market somewhere in the neighbourhood.

During consultations in affected villages (Dec 2012), participants in on the spot group discussions raised the issue of lack of access to markets for affected communities, due to

- Distance to markets and lack of means of transport
- Overall bad maintenance and quality of rural roads
- Lack of storage facilities
- Overall lack of capacity to get organized for group based marketing of products

#### 6.8.4 Summary

#### Table 24 – Access to Services and Means of Transport in the Project Aea

Country	District	No. Bicycles per Household	Distance to Hospital (km)	Distance to Electricity Line (km)	Distance to Secondary School (km)
Rwanda	KIREHE	0.2	15.6	21	4.8
Tanzania	NGARA	0.1	13	13	15

# 6.9 HOUSING AND OTHER ASSETS

#### 6.9.1 **Rwanda**

The vast majority of houses observed in the affected area are made from local material, including locally extracted earth or clay for walls without cement or plastering and local timber for the structure. Most roofs, however, are covered in corrugated iron sheets.

None of the residential structures has modern features such as an inside bathroom or toilet, or running water. Concrete floors are absent compared with clay floors which are found in 99% of the surveyed households. More than half the population use non-potable water from water springs, rivers, lakes or ponds. A small proportion of the population has access to public water taps.

The most common toilet facilities are traditional pit latrines (70%) and open pits (22%). Source of fuel for cooking is nearly exclusively charcoal (97% of households) and source of lighting is most frequently kerosene, oil or gas lamp (74%) or firewood (21%). In East Rusumo, where many shops, restaurant and offices are located, 20% of households use charcoal and electricity while firewood still is the main source of energy for 80% of the residents in the village. Information and communication equipment are still limited. Those households who own a radio are almost a quarter of the total number of households in the Project Affected Area. Cellular phone is pretty common with one head of households out of three owns at least a mobile phone.

#### 6.9.2 Tanzania

According to the Ngara Poverty Survey, households in remote villages are more likely to use thatch as a roof building material than households in accessible villages, which would tend to use iron sheets. Poor households are also more likely to use thatch, and non-poor more likely to use iron sheets. As well, smaller households tend to use thatch, and bigger households more likely to use iron sheets. Those self-employed in agriculture are also most likely to use thatch for their roofs. Female-headed households use iron sheets more often than male-headed households.

With regards to building materials for the rest of the house, 95% of houses are built with mud or mud bricks. Burnt bricks take second place. Households in remot villages have a higher share of mud and mud bricks than households in villages that are more accessible. Likewise, poor households use mud or mud bricks more often than non-poor households.

With regards to the floor, households in accessible villages have more houses with concrete floors than households in remote villages. Poor households have a higher share of houses with mud or dirt floors than non-poor households, which have a higher share of houses with concrete flooring than poor households.

Overall, 59% of households have a safe source of water (such as treated pipes, boreholes, hand pumps, and protected wells), wheras 30% get it from an unprotected well. 70% of households in accessible villages have a safe source of drinking water, whereas the share of households in remote villages in merely 37%. With regards to unprotected wells, the numbers are 25% of households in accessible villages, and 41% of households in remote villages. Poverty status seems to be a key indicator.

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67% of non-poor households use safe sources of water, compared to 35% of poor households. As well, 54% of poor households get their drinking water from unprotected well, compared with only 23% of non-poor households. With regards to toilets, only 27% of households have safe sanitation, whereas up to 69% use a covered pit latrine.

# 7. VALUATION AND COMPENSATION

# 7.1 COMPENSATION AND RESETTLEMENT STRATEGY

### 7.1.1 **Overall Approach and Key principles**

### **Overall Approach**

The RAP aims to ensure that all affected parties are compensated and assisted in restoring their livelihoods.

Overall objectives of the RAP are:

- Avoid or at least minimize involuntary resettlement;
- Mitigate adverse social and economic impacts from land acquisition by:

   providing compensation for loss of assets at replacement cost; and
   ensuring that resettlement activities are implemented with appropriate disclosure of information, consultation, and the informed participation of those affected;
- Improve or at least restore the livelihoods and standards of living of affected people;
- Provide additional targeted assistance (e.g., credit facilities, training, or job opportunities) and opportunities to improve or at least restore their incomeearning capacity, production levels, and standards of living to displaced persons whose livelihoods or income levels are adversely affected, and
- Provide transitional support to displaced persons, as necessary, based on a reasonable estimate of the time required to restore their income earning capacity, production levels, and standards of living.

## **Principles for Compensation and Resettlement**

The key principles of this RAP are the following

- Compensation and resettlement of project affected people will be carried out in compliance with Rwandan and Tanzanian legislation, WB OP 4.12 and AfDB Involuntary Resettlement Policy;
- Where Rwandan and Tanzanian legislation is less favourable to PAPs than WB OP 4.12 and/or AfDB requirements or does not apply at all, these latter shall apply;
- All physically and economically displaced people will be offered an option between either a full resettlement package, including the provision of replacement residential land and a house, or cash compensation;
- Experience has shown that cash compensation, although very sought after by many household heads, could be detrimental in the medium term, to other household members, particularly the females and the children; the Project will provide for measures to support sustainable use of cash compensation and for

mechanisms within the overall monitoring framework to follow up the use of cash compensation;

- Where farmers are economically displaced, they will be offered a resettlement option including the provision of agricultural land of potential equivalent to that of the land they have lost;
- The Project will assist PAP in restoring their affected livelihoods and will provide transitional assistance as necessary as long as livelihoods are not restored to their previous level;
- The Project aims to turn PAP to Project beneficiaries; targeted livelihood restoration programs will be implemented as part of this RAP in order to achieve this goal;
- The RAP implementation and –outcomes will be monitored and evaluated as part of a transparent process;
- PAP and host communities will be informed, consulted and involved in decision making during the course of RAP development, implementation and evaluation;
- A grievance mechanism will be accessible to all affected people at all times during preparation, implementation and monitoring of the RAP; this mechanism will include the possibility to resort to court resolution;
- In addition to the RAP, A Local Area Development Plan (LADP) will be designed and implemented, aiming to support the overall sustainable social and economic development of the wider Project area; the LADP will complement the mitigation measures proposed in the ESMP and the livelihood restoration measures of this RAP, and
- Removal of assets, displacement or restriction of access will not occur before necessary measures for compensation are agreed and in accordance with Rwandan and Tanzanian Law and in conformance with International Requirements. Measures will include all kinds of compensation and of other assistance prior to, during or after displacement/physical relocation.

In this RAP, these key principles apply to all people and businesses affected by involuntary land take and loss of other assets resulting in:

- Relocation or loss of shelter;
- Loss of assets or access to assets, and
- Loss of income sources or means of livelihood, whether or not the affected persons must move to another location.

**Note:** The Project has presented the two options "resettlement option" and "cash compensation" to affected households with the respective entitlements. All PAP expressed a strong preference for cash compensation. This overwhelming preference is due to the specific setting of the project site with the Rusumo East, Rusumo West and Rusumo villages. These villages are economic hubs in a rural environment and offer respective opportunities for the establishment of alternative or additional sources of income, with strong perspectives for restoration of livelihoods and overall improvement of living standards. Hence, affected people entirely prefer to stay directly at the Project site, establish new residences and benefit from the local

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economic dynamics. Affected businesses want to stay at the project site and benefit from the dynamics for the re-establishment of their affected businesses or for the development of new businesses. Households at the Project site affected by loss of agricultural land due to construction (only occurs in Tanzania) also prefer cash compensation. This is due to the fact that livelihoods in the Rusumo villages are not mainly land based but more business oriented. Hence, affected households rather would intensify their business activities with the support of the compensation money than to relocate to a rural environment with less options for diverse economic activities. Affected households in the Rusumo villages are experienced to manage cash money. However, money management training will be offered to all households who receive cash compensation. Affected marshland users who will also receive cash compensation, are not used to manage relatively large amounts of cash. Money management training through the districts will have a focus on this group of affected people.

# 7.2 LIVELIHOOD RESTORATION

The RAP is entirely designed to meet the provisions of Rwandan and Tanzanian Law as well as the requirements of International Standards, namely WB OP 4.12., in the context of the Project's anticipated impacts. In this respect, livelihood restoration measures provide a wide range of support measures to affected populations in addition to compensation (see measures in 7.6 below).

The livelihood restoration measures aim to ensure that no PAP suffers hardship due to the Project as set out in the International Requirements. Therefore, the overall purpose is to achieve the restoration of affected livelihoods at least to the level prior to the Project or even the improvement of affected livelihoods and the special consideration of affected vulnerable groups.

The livelihood restoration measures have been developed under consideration of the results of consultations of PAP and of other stakeholders performed 2011/2012 (SNII) and in November/ December 2012.

For more information on the livelihood restoration measures see section 7.6 below.

# 7.3 ELIGIBILITY

## 7.3.1 Census and Asset Assessment

## SNII Census for Phase III RAPs

In order to capture all households affected by the IDS, SNII conducted a census in the format of a questionnaire based socio-economic household survey in 2011/2012.

The census questionnaires in general comprised two parts, with a third part addressing businesses

- Part A: socio-economic household information, inventory of affected assets
- Part B: results of topographic survey of affected plots area of plots and crops grown on plots – (GPS-based)

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• Part C: assessment of affected cooperatives and businesses

Heads of households were interviewed on the overall situation of their household, their affected assets were assessed; their land under cultivation as well as the respective crops were recorded.

Businesses were surveyed focused on the inventory of expected losses and the establishment of revenue losses due to the Project.

About 2,100 households were covered with the 2011/2012 census in Rwanda and Tanzania respectively.

In November and December 2012 and in January 2013, additional field work was carried out in order to cover information gaps in the census database. For more information on the field work for RAP preparation, see section 9.4 below.

Field work in potentially affected villages along the Kagera River in Rwanda and Tanzania was carried out in order to

- Establish arable marshland use at household level using a self-validation approach
- Establish for each village a list of households and area of land used through consultations with the cell and village leaders, and
- Conduct village meetings and ask individual households to validate the obtained marshland use information and sign acknowledgement of the new cut-off date.

Consultations of households in the Rusumo (Tanzania) and Rusumo East (Rwanda) villages which will be affected by dam construction activities were undertaken in December 2012 and in January 2013, aiming to:

- Meet affected households in order to document the assets that would be lost, and
- Confirm preferred options for compensation (land for land or cash compensation) and acknowledge the cut-off date.

**Note:** For this RAP, the approach of a village self-validation was adopted, due to a requirement of the WB social safeguard specialist. This requirement was one of the outcomes of a meeting in October 2012 with the WB and NELSAP in order to discuss the most efficient strategy to finalize the RAP within the given very limited time frame.

Results from previous census activities had been proven as not correct at the time of the meeting in October. In order to exactly determine affected households and respective losses within the very short time period available, the self-validation was deemed the appropriate approach.

## 7.3.2 Cut-off Date

The cut-off date is the respective date of the community self-validation meeting or consultation meeting with affected households (November and December 2012, January 2013).

No structure or field established in the Project area after the cut-off date shall be eligible for compensation. This has been explained during the field work period to all interested parties:

- Project affected people, who were taking notice of the information by individual signature;
- Resettlement committees;
- Village leaders, and
- Cell authorities.

It was also explained that cut-off dates which were set during previous design phases of the Project are no longer valid. This information was also communicated to ex-PAPs (see section 9 below).

Cut of dates as dates of signatures by PAP

Rusumo Village, Tanzania

22.12. 2012: owners of residential structures, business structures and land

23.12. 2012: brick-making businesses, fish-pond cooperative

13.1. 2013: fishermen cooperative

Nyakwisi, Rwanda:

27.12. 2012: brick making businesses

Rusumo East, Rwanda:

23.12. 2012 and 27.12. 2012: business structures, residential structures

Kyenda sub-village and Kabuye sub-village, Tanzania

20.11. 2012: marshland users

Nshungeruzi, Nyakabungo, Nyakwisi, Rusumo, Rwanda:

14.11. 2012: marshland users

Ruhuha, Rwanda:

10.11. 2012: marshland users

**Note:** The cut – off date related to the RoR scheme was communicated in about 30 villages in Rwanda along the Kagera river and in 9 sub-villages in Tanzania. This was prior to the availability of the final results of hydraulic monitoring. Based on the final modelling results, from the 30 villages consulted in Rwanda, only 6 villages are affected (see section 5.5.3). In Tanzania, from the 9 sub-villages consulted, only 2 sub-villages are affected. The marshland users in the remaining villages will be informed and consulted as ex-PAPs in the frame of the PCDP. Consultations will start during the disclosure period of the RAP.

## 7.3.3 Speculative Structures

Opportunistic structures established for the sole purpose of compensation pose a specific eligibility problem, which will be addressed through the following methods to ascertain the validity of the claim:

- Visual inspection of the structure to determine whether it is really a residential- or business structure or not;
- Consultation with the local resettlement committee whether the contested structure indeed was established prior to the cut -off date.

### 7.3.4 Eligibility

Assets, including structures and fields, that were surveyed in the project affected area at the cut-off-date are eligible for compensation, if these assets, structures and fields are determined as project affected by the mapping of the hydraulic modelling results (see section 5 above). People residing or holding affected assets in the project affected area at the cut-off date are eligible for compensation.

The types of impacts identified as eligible for compensation are:

- Loss of crops;
- Loss of land and loss of improvements on land
- Loss of structures;
- Loss of access (to resources);
- Loss of business ;
- Loss of employment

# 7.4 **OVERVIEW OF ENTITLEMENTS**

**Note:** Entitlements were approved by local resettlement committees in February 2013 (see Annex 3).

### 7.4.1 General Approach

- Entitlements for compensation will refer to the affected household as a joint entity rather than to the head of household considered as an individual.
- In a bi-parental family, both spouses will be considered as entitled to cash compensation and both are intended to be beneficiaries of livelihood restoration measures; respective procedures, i.e. exit survey with the signature of compensation agreements, will be performed in the presence of and with the signatures of both spouses; bank transfers will be made to accounts held by both spouses.
- Where the household is headed by a single person, entitlements will be in the name of this individual only. In case the head of household is a child (under 14 years), the household head would be entitled to a special support program in order obtain the capacity to manage compensation money. Where possible, an adult relative would be asked to act as trustee.
- The cash compensation process will be subject to monitoring (see 11.4 below) in order to track if the entire affected household will benefit from compensation and that compensation money is used in a meaningful manner.
- Cash compensation disbursement will be complemented by money management training (to both spouses in a bi-parental family) as part of the livelihood restoration program (see chapter 7.5.10 below). For provisions for polygamous partnership settings see section 7.7 (vulnerable people) below.

The following paragraphs provide an overview on the different types of losses and the respective entitlements.

## 7.4.2 Loss of Residential Structure /Residential Land

	Loss of residential structure and residential land			
Option 1				
•	Cash compensation at replacement value for loss of residential house;			
•	Cash compensation for loss of residential land at replacement value;			
•	Cash compensation at replacement value for loss of other structures;			
•	Cash compensation at replacement value for permanent crops in home garden			
•	Plus: all necessary transaction costs			
•	Money management training			
Option 2				
•	<ul> <li>Allocation of residential plot an agreed resettlement site, with secure tenure;</li> </ul>			
•	<ul> <li>Reconstruction of a resettlement house of at least the same quality as the affected house;</li> </ul>			
•	<ul> <li><u>and</u> cash compensation at replacement value of any specific features that would not be included in the resettlement house, and</li> </ul>			
•	Resettlement assistance.			
and in Jan over the la exception to <b>Note</b> : Salv calculation	ording to the results of the field surveys in November and December 2012 uary 2013, project affected people <b>entirely prefer cash compensation</b> and for land or the house for house approach. There was not a single to the cash preference. aging of materials is permitted and will not be taken into account for of compensation. Actual land market assessment will be done prior to determination of final			

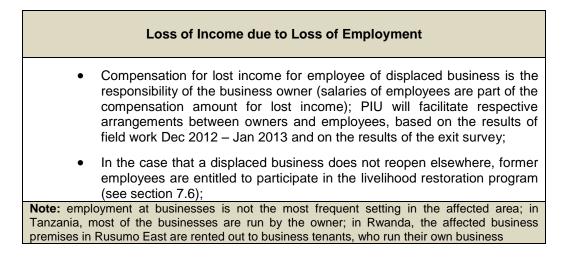


### 7.4.3 Loss of Business Structure

Loss of business structure		
Immovable business structure		
<ul> <li>Compensation at full replacement value for immovable assets (including commercial land associated to the structure);</li> </ul>		
<ul> <li>Plus: all necessary transaction costs;</li> <li>Compensation for loss of income for the period of time required to re- establish the business and restore associated income - typically three month income, with a maximum of one year income.</li> </ul>		
Money management training		
<ul> <li>If business cannot be re-established: livelihood restoration program (see section 7.6)</li> </ul>		
Movable business structure (e.g.kiosk)		
<ul> <li>Moving allowance (covering moving costs/transaction costs)</li> </ul>		
<ul> <li>Transition allowance to cover the period until the business is fully operational again after moving (typically 3 month income, with a maximum of 1 year income)</li> </ul>		
Money management training		
<ul> <li>If business cannot be re-established: livelihood restoration program (see section 7.6)</li> </ul>		
<b>Note</b> : Salvaging of materials is permitted and will not be taken into account for calculation of compensation. <b>Note:</b> An actual land market assessment will be done prior to determination of final		

replacement rates.

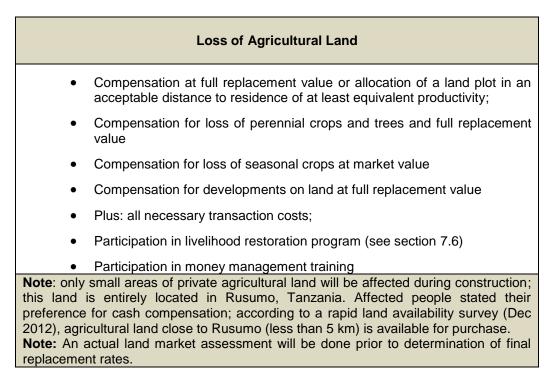
## 7.4.4 Loss of Income Due to Loss of Employment



## 7.4.5 Loss of Other Structures

Loss of Other Immovable Structures			
•	Compensation at full replacement value;		
•	Plus: all necessary transaction costs;		
<b>Note</b> : Salvaging of materials is permitted and will not be taken into account for calculation of compensation.			

### 7.4.6 Loss of Agricultural Land



## 7.4.7 Loss of Access to Agricultural Land

Loss of Access to Agricultural Land (Sharecropper, Tenar	it)		
<ul> <li>In case there is a formal contract/agreement with share cropper or tenant</li> <li>Allocation of compensation for permanent crops (full replacement value) according to the formal contract (between owner and sharecropper/tenant)</li> <li>Compensation for annual crops at market value (only if annual crops could not be harvested prior to date of loss) according to the formal contract (between owner and sharecropper/tenant)</li> <li>Compensation at full replacement value for improvements on land to the documented owner of the improvement</li> <li>Participation in livelihood restoration program (see section 7.6)</li> <li>Participation in money management training</li> </ul>			
<ul> <li>In case there is no formal contract/agreement with share cropper or</li> <li>PIU will seek to facilitate agreement between with owner on allocated compensation for permanent crops (full replacement value) accordinformal arrangements (between owner and sharecropper/tenant)</li> <li>Compensation for annual crops at market value</li> <li>(only if annual crops could not be harvested prior to date of loss) the informal arrangements (between owner and sharecropper/tenant)</li> <li>Compensation at full replacement value for improvements on land documented owner of the improvement</li> <li>Participation in livelihood restoration program (see section 7.6)</li> <li>Participation in money management training</li> </ul>	ation of ding to the ) according to ant)		

## 7.4.8 Loss of Permanent Crops

### Loss of Permanent Crops

- Compensation at full replacement value of the lost crop
- Participation in money management training



### 7.4.9 Loss of Marshland for Cultivation

### Loss of Production from Marshland

- Compensation for loss of income from marshland production **at market value of crop** (most important crop on affected marshland plot for the 3 years prior to cut-off date)
- Compensation for labor costs to develop the marshland;
- Compensation for developments on land at full replacement value
- Participation in livelihood restoration program (see section 7.6)
- Participation in money management training

**Note**: Marshland is under government ownership. Hence, the loss of marshland will not be compensated for the land as such, but under consideration of the loss of production/income from marshland.

**Note:** In order to provide for livelihood restoration, compensation will be paid for a period equivalent to 3 years of income from marshland production. For affected households who entirely depend on marshland, compensation will be paid for a period equivalent to 5 years of income from marshland production.

**Final calculation of compensation**: The rationale for final calculation of compensation rates is based on factual information that marshland cultivation is only possible every second year, due to flooding of marshland every other year. Hence, income from marshland only occurs every second year. Consequently, a 3 year period of income from marshland is compensated by cash compensation at market value for lost crop with the factor 1.5. A 5 year period of income from marshland is compensated by cash compensation at market value for lost crop with the factor 2.5.

Reference information on income from marshland cultivation was obtained from resettlement committees during the village self-validation exercise, from district agronomists and from affected people; the information was confirmed during the consultative workshop in Kigali on 4 Feb 2013.

### 7.4.10 Loss of business sites in marshland

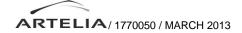
Loss of Access to Resources			
Brick Making – and Sand Digging Businesses on Marshland			
Assistance in finding a new business site			
<ul> <li>Restoration allowance (costs for moving and re-establishment of business site plus all transaction costs)</li> <li>Compensation for loss of income for the period of time required to re-establish the business and restore associated income - typically three month income, with a maximum of one year income.</li> <li>Money management training <ul> <li>In case the business cannot be restored: participation in livelihood restoration program (see section 7.6)</li> </ul> </li> </ul>			
Fish Hatching Ponds on Marshland			
Assistance in finding a new business site			
<ul> <li>Restoration allowance (costs for moving and re-establishment of business site plus all transaction costs)</li> <li>Compensation for loss of income for the period of time required to re-establish the business and restore associated income - typically three month income, with a maximum of one year income.</li> <li>Money management training <ul> <li>In case the business cannot be restored: participation in livelihood restoration program (see section 7.6)</li> </ul> </li> </ul>			
<ul> <li>In case that the displaced business cannot be restored : participation in livelihood restoration program (see section 7.6)</li> </ul>			
<b>Note</b> : some of the affected businesses are organized as co-operatives (see entitlement matrix below)			

### 7.4.11 Temporary Loss of Access to Resources (Severance)

### Loss of Access to Resources during Construction

### Access to the Kagera river for fishing

- Assistance in finding alternative fishing sites upstream during construction
   period
- Re-establishment of access to original fishing sites immediately after construction (2 month period after completion of construction)
- severance allowance equivalent to a 2-month income from fishing)



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### Table 25 – Entitlement Matrix

	PAP Affected Asset/Type of Loss		Entitlement	
#			Compensation	Livelihood Restoration and Training
1	Owner	Residential Structure	Option 1: Cash Compensation         Compensation at replacement value for loss of residential house ;         Compensation for loss of associated residential plot at replacement value;         Compensation at replacement value for loss of other structures associated to affected structure ;         Compensation at replacement value for permanent crops in home garden;         Plus: all necessary transaction costs         Option2: Resettlement         Allocation of residential plot at agreed resettlement site, with secure tenure ;         Reconstruction of a resettlement house of at least the same quality as the affected house ;         and cash compensation at replacement value of any specific features that would not be included in the resettlement house ;         Resettlement assistance : moving allowance, payment of any transaction costs	Money management training In case PAP is affected by loss of agricultural land/arable marshland: livelihood restoration
			Note: according to results of consultations in Nov/Dec 2012 and January 2013 there will be no resettlement program under the Project, since all PAP opted for cash compensation and self - resettlement	

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		Affected Asset/Type	Entitlement		
#	PAP of Loss		Compensation	Livelihood Restoration and Training	
	Tenant	Tenancy in affected residential building Residential use	Moving allowance (all costs related to moving plus all transaction costs) Transition allowance to cover time needed to restore place of residency usually three months tenancy rate, with a maximum of six months rate)	In case PAP is affected by loss of agricultural land/arable marshland: livelihood restoration program (see section 7.6)	
2		Tenancy in affected residential building Residential use and commercial use	Moving allowance (all costs related to moving plus all transaction costs) Transition allowance to cover time needed to restore place of residency/business usually three months tenancy rate, with a maximum of six months rate) Compensation for loss of income for the period of time required to re-establish the business – typically three month income, with a maximum of one year income	In case PAP is affected by loss of agricultural land/arable marshland: livelihood restoration In case business cannot be re- established: livelihood restoration program (see section 7.6) Money management training	
3		Permanent Business Structure	Compensation at full replacement value for immovable assets (including commercial plot associated to the structure); Plus: all necessary transaction costs; Compensation for loss of income for the period of time required to re-establish the business – typically three month income, with a maximum of one year income	Money management training If business cannot be re-established: livelihood restoration program (see section 7.6)	
4	<b>Owner</b> (private owner, cooperative as owner)	Movable Business Structure	Moving allowance (costs for moving and re-establishment of business plus all transaction costs) Compensation for loss of income for the period of time required to re-establish the business – typically three month income, with a maximum of one year income	Money management training If business cannot be re-established: livelihood restoration program (see section 7.6	
5		Business Site on marshland Brick making, sand digging, fish hatching ponds	Assistance in finding a new business site Restoration allowance (costs for moving and complete re-establishment of business site plus all transaction costs) Compensation for loss of income for the period of time required to re-establish the business – typically three month income, with a maximum of one year income	(in case cooperative is affected: participation of all members registered at cut-off date) Money management training In case business cannot be re- established: livelihood restoration program (see section 7.6	

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	Affected Accel/Tyme		Entitlement	Entitlement	
#	PAP	Affected Asset/Type of Loss	Compensation	Livelihood Restoration and Training	
6	Owner	<b>Agricultural land</b> (hillside land, intermediate land)	Compensation for land at full replacement value Assistance in finding new land for purchase Compensation for permanent crops at full replacement value Compensation for annual crops at market value (only if annual crops could not be harvested prior to date of loss) Compensation at full replacement value for improvements on the land Plus: all necessary transaction costs	Money management training livelihood restoration program (see section 7.6	
			In case there is a formal contract/agreement with share cropper or tenant Allocation of compensation for permanent crops (full replacement value) according to the formal contract (between owner and sharecropper/tenant) Compensation for annual crops at market value (only if annual crops could not be harvested prior to date of loss) according to the formal contract (between owner and sharecropper/tenant) Compensation at full replacement value for improvements on land to the document owner of the improvement	Money management training livelihood restoration program (see section 7.6	
7	Share cropper or tenant	<b>Agricultural Land</b> (hillside land, intermediate land)	In case there is no formal contract/agreement with share cropper or tenant PIU will seek to facilitate agreement between with owner on allocation of compensation for permanent crops (full replacement value) according to the informal arrangements (between owner and sharecropper/tenant) Compensation for annual crops at market value (only if annual crops could not be harvested prior to date of loss) according to the informal arrangements (between owner and sharecropper/tenant) Compensation at full replacement value for improvements on land to the document owner of the improvement	Money management training livelihood restoration program (see section 7.6	

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		Affected Asset/Type of Loss	Entitlement	
#	PAP		Compensation	Livelihood Restoration and Training
8	User	Marshland, used for agriculture or pasture	For marshland users who have uphill land Compensation for loss of income from marshland production at market value of affected crops (= most important crop for three years prior to cut-off date); Compensation will be paid at factor 1.5 Compensation for labor costs to develop the marshland Compensation for developments on the land at full replacement value For marshland users who have no uphill land	Money management training livelihood restoration program (see section 7.6
			Compensation for loss of income from marshland production at market value of affected crops (= most important crop for three years prior to cut-off date); Compensation will be paid at factor <b>2.5</b> Compensation for labor costs to develop the marshland Compensation for developments on the land at full replacement value	Money management training livelihood restoration program (see section 7.6
9	Owner	Other immovable structure	Compensation at full replacement value	
10	Employee	Loss of income due to loss of employment at affected businesses	Compensation for loss of income for employee of displaced business is part of the compensation for loss of income for business owner (see above) In case there is no contractual arrangement between employer and employee, PIU will seek to facilitate agreement between business owner an employee on allocation of compensation to employees	If employment cannot be re- established livelihood restoration program (see section 7.6
11	PAP active in fishing	Temporary loss of access to fishing sites	Assistance in finding alternative fishing sites during construction period Re-establishment of original fishing sites immediately after construction (2 months) Severance allowance (equivalent to a 2 month income from fishing)	
Note:	Vulnerable people,	in addition to entitlements	as listed above, are entitled to special assistance as needed to participate effectively	y in the resettlement process
Note:	actual land market	assessments will be done	prior to determination of final replacement rates for residential land, commercial land	l and agricultural land.
examp		at is physically and econom	h category of affected household/entity; some households may qualify for entitlemer ically displaced may qualify for the entitlements for both these categories. e.g. house	

# 7.5 DETERMINATION OF COMPENSATION RATES

Note: Compensation rates were approved by local resettlement committees.

### 7.5.1 Residential Structures

### Approach

Loss of residential structures will affect households in the Rusumo East and Rusumo villages close to the Project site.

Rates for the replacement value of residential structures were established with the support of local enterprises for construction, during 2011/2012 field work of SNII for the Phase III RAPs.

However, the rates presented in Table 14 below refer to generalized types of houses. They indicate different levels of housing which will be reflected by different compensation rates in order to meet the respective replacement values.

The compensation rates for residential structures were consulted with the resettlement committees in Rusumo East and Rusumo village. The committees signed off the compensation approach. Some of the committee members considered the rates for residential structures as too low.

Each affected structure will be individually validated during the exit survey, by an official valuer on behalf of the district land bureaus (Ngara District, Kirehe District), under consideration of the compensation approach and the respective rates of the RAP (see compensation process, below).

**Note:** according to consultations with Ngara – and Kirehe district officials, there are no official compensation rates for land, residential structures or businesses on the district levels. Officers stated that determination of compensation depends on the respective property to be expropriated and is done on a case by case basis. Compensation is based on market value, not on replacement value.

Compensation rates from other projects (e.g. the One Stop Border Post) could not be obtained during RAP preparation.

Actual assessments will be performed prior to the determination of final replacement rates.

Compensation will comprise all necessary transaction costs related to the purchase of land and residential sites.

Appendix 5 presents the reference figures for the rates indicated in the tables below.

### Table 26 – Compensation Rates for Residential Houses, Rwanda

Type of house	Replacement value (RWF)	Replacement value (USD)
Traditional, improved, small 2 room house, 40m2 in surface, raw clay bricks with cement finish, corrugated iron roof	3,090,000	5,100
Improved, small 2 room house, 40m2 in surface, baked clay bricks with cement finish, concrete pillars, corrugated iron roof	6,479,000	10,700
3-4 room house, 70m2 in surface, cement bricks with cement finish, concrete pillars, corrugated iron roof	9,709,000	16,000

Source: SNII, RAP Phase III, Rwanda

### Table 27 Compensation Rates for Residential Houses, Tanzania

Type of house	Replacement value (TZS)	Replacement value (USD)
Improved, small 2 room house, 40m2 in surface, baked clay bricks with cement finish, corrugated iron roof	2,767,840	8,020

Source: SNII, RAP Phase III, Tanzania

## 7.5.2 Residential Land, Rusumo East and Rusumo Villages

Loss of residential land connected to the loss of residential structures will affect households in the Rusumo East and Rusumo villages close to the Project site.

Costs for the purchase of land in and around Rusumo East are determined by overall land scarcity in Rwanda and by the function of Rusumo East as economic hub. Furthermore, the implementation of large projects (i.e. the construction of the One Stop Border Post) with land acquisition and the forthcoming implementation of additional projects (RoR, road, railway) contribute to the increase of purchase costs/to land speculation.

In 2011/2012, village heads were consulted on costs for residential land in Rusumo East (SNII, RAP Phase III), resulting in the determination of 800 RWF/m2 of residential land as compensation rate for the Phase III RAP (= 8,000,000 RWF/ and 13,000 USD/ha).

In November 2012, a rapid land availability appraisal was conducted in Rusumo East and it's vicinity.

For example, for plots along the Rusumo-Kyanzi-Rwanteru road, interviewees during the rapid appraisal indicated prizes of about 7.5 - 8.00 USD/m2 (= 4,500 - 5,000 RWF). This is by six times higher than the prizes determined for the RAP Phase III.

The table below indicates the higher rates as per rapid appraisal Nov 2012. In order to meet replacement value for residential land, a land market update will be performed prior to the exit survey, at the start of RAP implementation (see below under Compensation Process).

# Table 28 – Compensation Rates for Residential and Commercial Land in Rusumo East, Rwanda

Compensation/ha	RWF	USD
	50,000,000	83,921
Compensation/m2	RWF	USD
	5,000	8.3

For Rusumo village, Tanzania, the overall setting is similar – an economic hub, characterized by ongoing and expected major construction projects and rising prizes for land in and around the village.

In 2011/2012, village heads were consulted on costs for residential land in Rusumo village (SNII, RAP Phase III), resulting in the determination of 1,145 TZS/m2 of residential land as compensation rate for the Phase III RAP (= 11,145.000 TZS/ = 7,000 USD/ha).

Interviews in the frame of the rapid appraisal for land availability indicated a current market price of 2,000,000 - 3,000,000 TZS /ha for land in the area of Kahaza, close to Rusumo.

For example, for plots along the Rusumo-Kyanzi-Rwanteru road, interviewees during the rapid appraisal indicated prizes of about 7.5 - 8.00 USD/m2 (= 4,500 - 5,000 RWF). This is by six times higher than the prizes determined for the RAP Phase III.

The table below indicates the higher rates as per consultations in 2011/2012. In order to meet replacement value for residential land, a land market update will be performed prior to the exit survey, at the start of RAP implementation (see below under Compensation Process). The update of land prizes prior to the start of the compensation process is necessary, because civil works are not expected to commence immediately after Project approval (see implementation schedule Figure 20). Furthermore, the Rusumo villages are a highly dynamic environment with regard to the land market, as they are functioning as economic hubs in the wider area and because different large Projects are currently implemented or going to be implemented (i.e. One Stop Border Post). Hence, land prizes are rising constantly.

### Table 29 – Compensation Rates for Residential and Commercial Land in Rusumo, Tanzania

Compensation/ha	TZS		USD	
	11,145,000		7,000	
Compensation/m2	TZS		USD	
	1145		0.7	

Source: SNII, RAP Phase III, Tanzania

### 7.5.3 Business Structures

Business structures will be validated on case by case base during the exit survey. Replacement costs then will be calculated based on actual cost of construction/reestablishment of a structure of at least equal quality as the affected structure.

## 7.5.4 Agricultural Land

Rates for agricultural hillside land were established through consultation of local agronomists and other key staff within district authorities, village heads and village residents in the Project area (Rwanda and Tanzania), during 2011/2012 consultations (SNII, RAP Phase III).

In addition to compensation, all transaction costs will be paid to the affected household.

### Table 30Compensation Rates – Agricultural Land

	Rwai	nda	Tanzania		
Compensation Rate, Hillside land	RWF/ha	USD/ha	TZS/ha	USD/ha	
	3,000,000	5,000	4,000,000	2,500	

**Note:** According to the findings of the field survey at the Project site (Rusumo East and Rusumo West in Rwanda) no household in Rwanda will be affected by loss of agricultural land. Loss of agricultural land due to construction will only occur in Rusumo, Tanzania (see Table 8).

According to a rapid land availability appraisal in Rusumo, Tanzania, agricultural land is available for purchase in the vicinity of Rusumo (Kahaza area). Affected people will be assisted by the district land offices in finding alternative agricultural land to purchase from their compensation money.

### 7.5.5 **Permanent Crops**

The calculation of the full replacement value requires consideration not only of the product of the crop, but also the cost of re-establishing the crop (seedlings, soil preparation, fertilizers, others), as well as the lost income during the period needed to re-establish the crop up to the degree of maturity of the lost crop.

Compensation rates were calculated in compliance with the full replacement value principle, based on the following:

- V: Average market value of the produce;
- **D**: Average period of time required to re-establish the tree to a mature production level, in years;
- **CP**: Cost of planting (seedling, soil preparation, initial fertilization);
- **CL**: Cost of the labor required to maintain the crop during the period of time needed to re-establish it to its previous production level.

The compensation amount **C** is determined by application of the following formula:

## $C = V \times D + CP + CL$

The parameters in the compensation formula have been obtained as follows:

	Parameter	Information Sources		
the c	V       product of the market value of the fruit by the yield       • FAO statistics         National Statistics       • National Statistics         • survey of regional markets       • direct interviews with affected farmers         • confirmation by local agronomists         Note: figures from national and international statistics were obtained for the past three years the cut-off date (2009-2012) as far as available; the highest figure was taken for calculation compensation rates			
D	Average period of time required to re- establish the tree to a mature production level, in years	<ul> <li>secondary sources of information, publications</li> </ul>		
СР	cost of initial planting and cost of	local agronomists		
CL	labor	affected farmers		

For more information on compensation rates , see Appendix 4.

## 7.5.6 Annual Crops

Compensation of annual crops is according to the market value of the crop. Market values were established under consideration of the following sources:

 Table 31
 Information Sources – Market Price of Annual Crops

Level of Information	Details
International Level	FAO Statistics ( <u>http://faostat.fao.org/site/703/DesktopDefault.aspx?PageID=703#ancor</u> ) Producer prices 2009 and 2010 for Rwanda Figures for Tanzania are not available
National level	National agricultural statistics Rwanda: Ministry of Agriculture and Animal Resources, Annual Reports http://www.minagri.gov.rw/ Tanzania: Ministry of Agriculture and Food Security http://www.tanzania.go.tz/agriculture.htm
Regional level	Consultation with national agronomists (2011/2012)
District level	Market research in Kirehe and Ngara Districts (2011/2012)
Local level	Information from resettlement committees of affected villages (2012) = yields of 4 most important crops/ha in a good year

Market prices were obtained for the past three years prior to the cut-off date (if available).

As reference for the calculation for compensation, the respective highest reference prices were taken into account (see list below).

The formula for the loss of seasonal crops is

## $C = V \times A$

To calculate the compensation for losses of production from annual crops, the market value (V) is multiplied with the area of the affected plot or the affected part of the plot (A).

For affected plots with mixed crops, the most important crop is considered.

For affected plots, the most important crop for the last three years prior to the cut-off date is considered.

**Note:** In some cases, research of market prizes delivered quite different results for the same crops for Tanzania and Rwanda. For the RAP, compensation rates were matched with regard to their USD value, with the respective higher values obtained from price research taken into account.

This is due to the spatial proximity of the respective affected areas (marshland areas along the Kagera river) and the resulting similar conditions for production. Furthermore, during the interviews with the resettlement committees of the affected villages in Tanzania, interviewees indicated that local farmers use to market their products in Rusumo East, Rwanda.

Type of Crop	Reference Price for Compensation (TZS/t)	Reference Yield for Compensation (t/ha)	Compensation Rate/ha (TZS)	Compensation Rate/ha (USD)
Tomato	695,881.87	9.00	6,262,936.80	3,946.40
Soya	888,720.00	2.00	1,777,440.00	1,120.00
Irish Potatoes	435,631.50	12.00	5,227,578.00	3,294.00
Sweet Potatoes	522,652.00	9.00	4,703,868.00	2,964.00
Beans	871,263.00	5.00	4,356,315.00	2,745.00
Maize	726,052.50	4.00	2,904,210.00	1,830.00
Onions	3,047,040.00	12.00	36,564,480.00	23,040.00
Yam	1,258,491.00	7.00	8,809,437.00	5,551.00

Table 32Compensation Rates Annual Crops\* - Tanzania

\*most important marshland crops as per self-validation of affected villages, 2012

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Type of Crop	Reference Price for Compensation (RWF/t)	Reference Yield for Compensation (t/ha)	Compensation Rate/ha (RWF)	Compensation Rate/ha (USD)
Tomato	268,389.88	9	2,415,508.92	3,964.40
Soya	341,208.00	2	682,416.00	1,120.00
Irish Potatoes	167,252.85	12	2,007,034.20	3,294.00
Sweet Potatoes	200,662.80	9	1,805,965.20	2,964.00
Beans	334,505.70	5	1,672,528.50	2,745.00
Maize	278,754.75	4	1,115,019.00	1,830.00
Onions	1,169,856.00	12	14,038,272.00	23,040.00
Yam	483,174.90	7	3,382,224.30	5,551.00

### Table 33 Compensation Rates Annual Crops\* - Rwanda

\*most important marshland crops as per self-validation of affected villages, 2012

### Table 34Reference figures for harmonization as per market price research

Turne of Cron	Rwanda	Tanzania
Type of Crop	USD/ha	USD/ha
Tomato	3,946.40	3,776.00
Soya	1,120.00	170.12
Irish Potatoes	2,718.00	3,294.00
Sweet Potatoes	2,880.00	2,964.00
Beans	1,600.00	2,745.00
Maize	1,280.00	1,830.00
Onions	23,040.00	12,444.00
Yam	n.a	5.551.00
Cabbage	n.a	n.a

## 7.5.7 Determination of Compensation for Loss of Production from Marshland

### Step 1: Market price of lost crops

Marshland is government owned land. Hence, the loss of marshland will not be compensated for loss of land as such, but with reference to the loss of production from marshland.

Loss of marshland will be compensated via the loss of crops produced from this marshland and via the labour put into the development of the land.

According to the self- validation of the affected villages and the interviews with the resettlement committees, marshland plots are without exception cultivated with annual crops.

The loss of annual crops will be compensated at the market value of the lost crop (see paragraphs above).

### Step 2: Labour costs for development of marshland

In addition, the labour input for the preparation of marshland for cultivation is considered for the calculation for compensation.

Labour costs for marshland clearing are calculated under consideration of:

- Labour needed for clearing of marshland: 1 day/0.01 ha = 100 days/ha
- Costs for labour: UDS 5/day

Information on marshland clearing costs were obtained during 2011/2012 consultations in the Project area.

Table 35Sample calculation of labour costs for average plot sizes

	Rwa	inda	Tanzania			
Plot sizes	size (ha)	labour costs (USD)	size (ha)	labour costs (USD)		
All users						
Average Plot	0.24	120	0.65	325		
Sverage Max. Plot	0.71	355	1.03	515		
Åverage Min. Plot	0.07	35	0.8	400		
users depending on marshland						
Average Plot	0.21	105	0.74	370		
Averag Max. Plot	0.4	200	1.66	830		
Average Min. Plot	0.03	15	0.35	175		

Final Calculation of Compensation

In order to provide for livelihood restoration, compensation will be paid for a period equivalent to 3 years of income from marshland production.

For affected households who entirely depend on marshland, compensation will be paid for a period equivalent to 5 years of income from marshland production.

This approach for final calculation of compensation rates is based on information that marshland cultivation is only possible every second year, due to flooding of marshland every other year. Hence, income from marshland only occurs every second year. Consequently, a 3 year period of income from marshland is compensated by cash compensation at market value for lost crop with the factor 1.5. A 5 year period of income from marshland is compensated by cash compensation at market value for lost crop with the factor 1.5.

Reference information on income from marshland cultivation was obtained from

- resettlement committees during the village self-validation exercise
- district agronomists
- affected marshland users
- information and overall approach were confirmed during the consultative workshop in Kigali on 4 Feb 2013.

Note: District officials in Rwanda during consultations in December 2012 stated that in the context of land scarcity in Rwanda, it would not be possible to allocate

alternative land of at least similar quality (land for land compensation) to affected marshland users in appropriate distance to their place of residence (acceptable walking distance/about 5 km). This was confirmed during the Consultative Workshop in Kigali on 3 Feb 2013. For affected marshland users in Tanzania, it would be difficult to allocate alternative marshlands within acceptable distance. However, there is no general land scarcity in the affected area in Tanzania like it is in Rwanda.

## Calculation

The formula for the calculation of compensation for affected marshland users who have uphill land is

C= (V/ha x A (ha)) x 1.5 + (L/ha x A (ha))

The formula for the calculation of compensation for affected marshland users who have no uphill land is

C = Compensation

V/ha = crop market value per ha

L/ha = labour cost per ha

A = affected area (in ha)

## 7.5.8 Compensation Rates vs Income of PAP from Marshland Crops

Compensation rates as per international requirements need to fully replace the loss they are referring to. Affected people must be able to restore their livelihoods and to re-establish living standards they had prior to the impact.

In this context, the loss of marshland is a special issue with regard to compensation. Affected marshland users will permanently lose access to marshland plots and hence, will permanently lose income from these plots. Marshland is under government ownership and therefore marshland users will not be compensated for the marshland as such.

For the full restoration of livelihoods and living standards, cash compensation for the loss of crops for only one season is not considered sufficient as explained above. Affected people would need to bridge a longer period of time until they will have restored their livelihoods/living standards. For the RAP approach to address this issue, see paragraph above "Step 3: Final Calculation of Compensation". In addition,

the livelihood restoration programs will support the restoration process and aim to provide capacity to establish alternative sources of income.

During consultations in villages in the Project area to up 10-15 km along the Kagera river upstream the Project site (including affected villages) in Nov 2012 and from interviews with the local resettlement committees, average amounts of income from marshland were obtained. Income from marshland in a good year was indicated to range between 200,000 RWF and 3,000,000 RWF per year per household (330 USD-500 USD), see also discussion of incomes in baseline chapter above.

The following paragraphs present compensation amounts for typical crops on marshland and for average marshland plot sizes. This is in order to assess if estimated compensation rates as per entitlements above would meet the income amounts people get from marshland at present.

The table below presents average plot sizes in villages in the project area, up to 15 km upstream the project site, as obtained during the self-validation field visit in Nov 2012.

	Marshland Plots	Rwanda	Marshland Plots Tanzania			
Average = Average of 21 villages			Average = Average	ge of 9 sub- villages		
Average "	nax = highest figure of	21 village averages	Average max = hig	hest figure of 9 sub-villa	ge averages	
Average "	nin: lowest figure of 21	village averages	Average min: lowe	est figure of 9 sub- village	e averages	
All marshlan						
Average (ha)	Average <sub>Max</sub> (ha)	Average <sub>Min</sub> (ha)	Average (ha)	Average <sub>Max</sub> (ha)	Average <sub>Min</sub> (ha)	
0.24	0.71	0.07	0.8	1.03	0.65	
	Use	ers entirely dependin	g on marshland (n	o private land)		
Average (ha)	Average <sub>Max</sub> (ha)	Average <sub>Min</sub> (ha)	Average (ha)	Average <sub>Max</sub> (ha)	Average <sub>Min</sub> (ha)	
0.21	0.4	0.03	0.74	1.66	0.35	

### Table 36Overview on average plot sizes on marshland

Source: village self-validation Nov 2012

For all types of plots, average sizes in Tanzania are higher, what is not surprising in the context of land scarcity in Rwanda. Marshland plots are normally very small, only in exceptional cases exceeding 1 ha. Average sizes of marshland plots for users who entirely depend on marshland in Rwanda are extremely small indicating that from these plots, despite the high productivity of marshland only small incomes can be generated.

Marshland users with small plots and no other agricultural land uphill are considered especially vulnerable to the loss of marshland, as they would entirely depend on the successful establishment of alternative livelihoods after the loss.

The following tables present examples for annual compensation amounts (factor 1.5 to the rates will be applied to PAP who have hillside land, factor 2.5 will be applied to PAP who entirely depend on marshland). Calculations are for average plot sizes as derived from the village self - validation exercise in Rwanda (21 villages) and Tanzania (9 sub-villages). The red cells in the tables below highlight those situations, where annual compensation amounts would <u>not</u> meet the minimum of incomes from marshland of affected people.

Logically, people who cultivate small plots would not meet the minimum of the average incomes drawn from marshland cultivation (200,000 RWF/year). In addition to the plot size, the cultivated crop determines the compensation amount.

In addition, the tables indicate that

- only in Rwanda there are setting where minimum income amounts would not be met by compensation (due to small plots)
- tomato as one of the most important crops in Rwanda would be compensated with rates achieving cash amounts which exceed by far average incomes (except for the very small plots)
- Soja as one of the most important crops in Rwanda would not be compensated with rates that would meet average annual income amounts
- Beans as one of the most important crops in Tanzania, according to relatively high market prizes and to relatively large plots, would be compensated by amounts which significantly exceed the indicated average annual income

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Type of Crop	Compensation (RWF/year): average marshland plot	Compensation (USD/year): average marshland plot	Compensation (RWF/year): max. average marshland plot	Compensation (USD/year): max. average marshland plot	Compensation (RWF/year): min. average marshland plot	Compensation (USD/year): min. average marshland plot
Tomato	579,722.1	951.5	1,715,011.3	2,814.7	169,085.6	277.5
Soja	163,779.8	268.8	484,515.4	795.2	47,769.1	78.4
Irish Potatoes	481,688.2	790.6	1,424,994.3	2,338.7	140,492.4	230.6
Sweet Potatoes	433,431.6	711.4	1,282,235.3	2,104.4	126,417.6	207.5
Beans	401,406.8	658.8	1,187,495.2	1,949.0	117,077.0	192.2
Maize	267,604.6	439.2	791,663.5	1,299.3	78,051.3	128.1
Onions	3,369,185.3	5,529.6	9,967,173.1	16,358.4	982,679.0	1,612.8
Yam	811,733.8	1,332.2	2,401,379.3	3,941.2	236,755.7	388.6

### Table 37 Rwanda: Annual Compensation Amounts: average-size marshland plots – all marshland users

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### Table 38 Rwanda: Annual Compensation Amounts: average-size marshland plots of marshland dependents

Type of Crop	Compensation (RWF/year): average marshland plot	Compensation (USD/year): average marshland plot	Compensation (RWF/year): max. average marshland plot	Compensation (USD/year): max. average marshland plot	Compensation (RWF/year): min. average marshland plot	Compensation (USD/year): min. average marshland plot
Tomato	507,256.9	832.5	966,203.6	1,585.8	72,465.3	118.9
Soya	143,307.4	235.2	272,966.4	448.0	20,472.5	33.6
Irish Potatoes	421,477.2	691.7	802,813.7	1,317.6	60,211.0	98.8
Sweet Potatoes	379,252.7	622.4	722,386.1	1,185.6	54,179.0	88.9
Beans	351,231.0	576.5	669,011.4	1,098.0	50,175.9	82.4
Maize	234,154.0	384.3	446,007.6	732.0	33,450.6	54.9
Onions	2,948,037.1	4,838.4	5,615,308.8	9,216.0	421,148.2	691.2
Yam	710,267.1	1,165.7	1,352,889.7	2,220.4	101,466.7	166.5

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			-			
Type of Crop	Compensation (TZS/year): average marshland plot	Compensation (USD/year): average marshland plot	Compensation (TZS/year): max. average marshland plot	Compensation (USD/year): max. average marshland plot	Compensation (TZS/year): min. average marshland plot	Compensation (USD/year): min. average marshland plot
Tomato	5,010,349.44	3,157.12	6,450,824.90	4,064.79	6,262,936.80	2,565.16
Soya	1,421,952.00	896.00	1,830,763.20	1,153.60	1,777,440.00	728.00
Irish Potatoes	4,182,062.40	2,635.20	5,384,405.34	3,392.82	5,227,578.00	2,141.10
Sweet Potatoes	3,763,094.40	2,371.20	4,844,984.04	3,052.92	4,703,868.00	1,926.60
Beans	3,485,052.00	2,196.00	4,487,004.45	2,827.35	4,356,315.00	1,784.25
Maize	2,323,368.00	1,464.00	2,991,336.30	1,884.90	2,904,210.00	1,189.50
Onions	29,251,584.00	18,432.00	37,661,414.40	23,731.20	36,564,480.00	14,976.00
Yam	7,047,549.60	4,440.80	9,073,720.11	5,717.53	8,809,437.00	3,608.15

### Table 39 Tanzania: Annual Compensation Amounts: average-size marshland plots – all users

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Type of Crop	Compensation (TZS/year): average marshland plot	Compensation (USD/year): average marshland plot	Compensation (TZS/year): max. marshland plot	Compensation (USD/year): max. marshland plot	Compensation (TZS/year): min. marshland plot	Compensation (USD/year): min. marshland plot
Tomato*	4,634,573.23	2,920.34	10,396,475.09	6,551.02	2,192,027.88	1,381.24
Soya*	1,315,305.60	828.80	2,950,550.40	1,859.20	622,104.00	392.00
Irish Potatoes	3,868,407.72	2,437.56	8,677,779.48	5,468.04	1,829,652.30	1,152.90
Sweet Potatoes	3,480,862.32	2,193.36	7,808,420.88	4,920.24	1,646,353.80	1,037.40
Beans	3,223,673.10	2,031.30	7,231,482.90	4,556.70	1,524,710.25	960.75
Maize	2,149,115.40	1,354.20	4,820,988.60	3,037.80	1,016,473.50	640.50
Onions	27,057,715.20	17,049.60	60,697,036.80	38,246.40	12,797,568.00	8,064.00
Yam	6,518,983.38	4,107.74	14,623,665.42	9,214.66	3,083,302.95	1,942.85

### Table 40 Tanzania: Annual Compensation Amounts: average-size marshland plots of marshland dependents

### 7.5.9 Compensation Rates Update

An update of the current land market prizes contained in this RAP will be done prior to the determination of final replacement rates. This is due to the fact that civil works for the Project are not expected to commence immediately after Project approval.

Market prizes for crops will be updated prior to the final determination of compensation rates.

### 7.5.10 Compensation Process

### General

The compensation process with be performed under the project policy and according to the entitlements as presented above. The overall process will be embedded in the formal procedures for expropriation and valuation in Rwanda and Tanzania and executed through the district land offices, with official valuers.

Compensation must be paid before the impact occurs:

- For impacts from construction: compensation has to be paid and the entire compensation process for all affected people has to be completed by the start of Year 1 (= start of construction)
- For impacts from operation: compensation has to be paid and the entire compensation process for all affected people has to be completed by the start of Year 5 (= start of operation)

### Exit Survey and Agreement

Prior to the start of the compensation payment process, compensation agreements with affected people will be set up and signed . This will be done through an exit survey, to be carried out by the official valuers of the land offices of the districts of Kirehe and Ngara. The exit survey is to confirm the results of the surveys for validation of losses carried out November 2012 to January 2013 (see section 7.3) through the performance of the respective legal procedure.

The resettlement committees and PIU officers will participate in the exit survey. Agreement of the respective affected household to the exit survey documentation and the resulting determination of compensation will be officially documented in the compensation agreement.

Compensation agreements shall be signed off by both spouses of affected households. For households where partners are not officially married or for polygamous partnerships, the project will request the head of household to sign the agreement together with all partners, so that all partners can document their entitlement to compensation.

Exit survey results will be entered into the PIU compensation database.

### Issue of Cash Compensation

As stated above, compensation has to be paid timely in advance to the impact.

The disbursement of cash compensation will be managed by SACCO in Rwanda and NMB in Tanzania as local financial institutes.

Payments will be to bank accounts of affected households. PIU and the respective bank (SACCO, NMB) will assist people who do not have an account with the establishment of a bank account, any costs for opening an account will be paid by the project. Accounts should be in the names of both spouses.

Consultation results show that there is awareness of potential misuse of compensation money.

### Monitoring

There will be monitoring from the very start of the compensation process (see section 11.4). Monitoring of the compensation process will be contracted to an external entity. During the process, weekly progress reports will be delivered to PIU management. Any delays in payments which could influence the overall project schedule will be forwarded immediately to SPV.

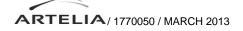
A special focus in monitoring will be on the people affected by loss of their residence. They will be tracked individually in order to follow up the process of finding a new residential site and to establish a new house timely before the affected building has to be left. Construction will not start until all people affected by loss of residential –or business structure will have properly moved out of their premises.

### Grievances

For grievances and complaints in the context of compensation, affected people can make use of the Project's grievance mechanism.

Grievances which stay unresolved will be reported to PIU management and SPV order to facilitate a timely solution.

**Note:** Marshland users who were absent at the time of the village self- validation, will be contacted as soon as the Project is approved and surveyed according to the self-validation exercise. They will be integrated into the exit survey. Due to the fact that the final layout of the construction area pattern is not yet available, there might be changes in size and location of areas required for construction. In case a change in construction area layout will affect different areas/households, these will be surveyed according to the self-validation exercise and then be integrated into the exit survey.



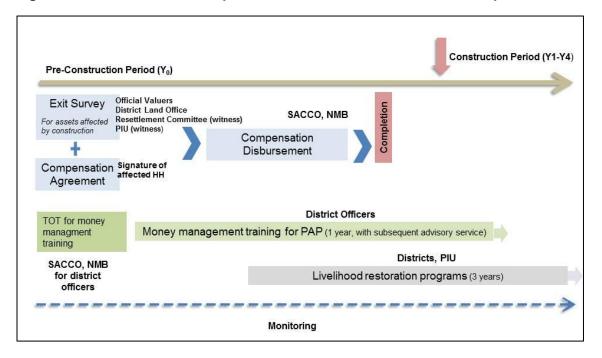


Figure 13 Overview: Compensation Process for Construction Impacts

### Figure 14 Overview: Compensation Process for Operation Impacts

nstruction Period (Y <sub>1</sub> -Y <sub>4</sub> )			Commissioning and start of Operation (Y <sub>5</sub> )
		>	S S
Official Valuers District Land Office Resettlement Committee (witness) PIU (witness) Signati		Compensation Disbursement SACCO, NMB	Operation, RAP Completion (Y <sub>5</sub> – Y <sub>8</sub> )
		District Officers	
		Money management with subsequent advis	
		1. (19) 1.	od restoration programs (3 year
	Monitoring	Districts, F	ขบ

# Figure 15 Compensation Process for Construction Impacts (Year <sub>0</sub>, prior to commencements of civil works)

	1	2	3	4	5	6	7	8	9	10	11	12
Activity		 Q₁	5	4	<b>Q</b> <sub>2</sub>	0	1	$Q_3$	9	10	Q₄	12
Set-Up of PIU: tender, contract staff as per section 10		<u> </u>			•••			<b>~</b> .,			•••4	
of RAP												
Final design of civil works												
Compensation Process												
Contracts for compensation disbursement with												
SACCO/NMB												
Exit surveys/compensation agreement for HH												
affected by construction, extension of survey period												
corresponding to availability of final construction area				200	200	200	202					
pattern												
Disbursement of compensation												
Livelihood Restoration												
Final arrangements for livelihood restoration												
measures: small business management, small business support; PIU livelihood restoration officer												
(business support, Pio inventiood restoration officer (business expert), district officers, SACCO and NMB			<b>***</b>									
representatives; consultation of affected businesses												
Training of Trainers for Money Management Training:												
SACCO for district officers in Rwanda and Tanzania												
Final arrangements for livelihood restoration												
measures: agricultural enhancement												
measures/livestock enhancement: PIU livelihood												
restoration officer; agronomists of districts; other												
district officers (social, community development),					_							
consultation of affected people (PAP losing												
agricultural land due to construction)												
Advisory service to affected people for enrollment in												
livelihood restoration												
Enrollment HH affected by construction in livelihood restoration: small business and agricultural												
restoration: small business and agricultural enhancement												
Start of Livelihood Restoration: Small business												
support/small business development												
Start of Livelihood Restoration: agricultural												
enhancement and livestock												
Implementation of Money Management Training for												
affected people: district officers												
Preparation Process for LADP measures (priority on												
affected communities and ex-PAPs): PIU and districts												
Grievance Process												
Training of Resettlement Commmittees for the								1				
management of grievanances on local level												
Maintenance of Grievance Management Process as												
per section 7												

**Note:** the table above refers to the preparation period, prior to the commencement of civil works. Civil works will only start in year <sub>1</sub> (after year <sub>0</sub>, the preparation period).

### 7.6 LIVELIHOOD RESTORATION PROGRAM

### 7.6.1 General

The livelihood restoration programs of the RAP aim to enable project affected people to fully restore their livelihoods and improve living standards

- through capacity building for more profitable and sustainable use of livelihood assets
- through capacity building for the establishment of alternative sources of livelihood.

Livelihood restoration programs contain subsidies (in the amount of 500 USD) to be used against investments related to the respective program.

Livelihood restoration programs are supplemented by micro-credit schemes in order to support sustainability of restored livelihoods on the long term and to provide for improvement of living standards.

Livelihood restoration programs target the following areas

- Agricultural enhancement,
- Improved livestock keeping
- Provision of access to income generating activities: small business development;
- A micro-credit program available for affected households is connected to the livelihood restoration programs

In addition, all affected households will have access to a financial training program to enhance the sustainable use of cash compensation.

### 7.6.2 **Preparation and Implementation through Districts**

Kirehe district and Ngara district confirmed their preparedness to take the lead in preparation and implementation of livelihood restoration programs in the context of consultation visits in February 2013.

Livelihood restoration programs will be implemented through technical staff of Kirehe and Ngara Districts with the support of capable NGOs.

The final details with regard to allocation of tasks to individual officers will be set immediately after project approval, at the start of year<sub>0</sub>, through cooperation of PIU (livelihood restoration officers) and the two districts. Affected peoples enrolment period for the livelihood support programs will be of three years duration.

District executives recommended the consideration of frameworks and formats of existing projects and interventions within the design of livelihood restoration programs, e.g. the Kirehe Community- based Watershed Management Project (KWAMP) or the "one poor family-one cow" project in Rwanda, in order to benefit from successful project designs and from lessons learned.

Small business development measures will be implemented with the support of the district cooperatives officer (Kirehe), the district community development officer (Ngara), livelihood restoration officers of PIU, cooperatives in the project area (through SACCO).

In general, the Project will enhance that affected people join existing cooperatives or that, with the support of the districts and of SACCO/NMB, cooperatives will be established. Cooperatives are considered as appropriate framework for the delivery of measures under the livelihood restoration programs and for the sustainable development of the livelihoods of participants/members. KWAMP is providing a continuous support to strengthen cooperatives in Kirehe District in terms of training in accounting, business plan, project management and leadership. Respective training will be made accessible for PAP within the livelihood restoration program.

Livelihood activities under the RAP are covered by the RAP budget.

In order to achieve a maximum of synergies, the design of livelihood restoration programs considers the measures under the LADP (also to be implemented through the districts) and vice versa.

### 7.6.3 Baseline Influencing Factors

Livelihood restoration programs are tailored to existing baseline conditions and consider the project impacts on the livelihoods of affected people.

For the construction area, baseline conditions are characterized by the function of the villages at the Rusumo Falls as economic hubs in an entirely rural area. A large number of different, mainly small businesses, markets for agricultural products from the wider area and a high concentration of brick making businesses in the marshlands form a dynamic business environment. Affected livelihoods are mainly based on business activities.

Consequently, capacity building for small business development is a focus of livelihood restoration measures for people affected by construction. Important aspects are the strengthening and diversification of existing skills (for the restoration of affected businesses), but also training for business development as alternative livelihood (e.g. for brick businesses that will not be able to restore their business).

For impacts from operation, affected people are smallholder farmers, depending on agriculture as main source of livelihood.

Those PAP who have agricultural land apart from arable marshland (that will be lost), livelihood restoration has a focus on the enhancement of agriculture to achieve higher productivity and practise sustainable use of agricultural land so that incomes from agricultural land would increase and perspectives for long term income security from agriculture would be enhanced. Agricultural enhancement has a focus on those households who will maintain sufficient areas of agricultural land to serve as sustainable livelihood asset. This will be a limited number of households in the affected villages in Rwanda, but virtually all affected households in Tanzania.

However, for a large number of the affected households in Rwanda, remaining agricultural land is of very limited size. Especially the young generation of farmers hold very small areas of land, due to inheritance practices and to overall land scarcity

(in Rwanda). Those affected households, who entirely depend on marshland, will even lose all the land they currently use.

This applies for 43 households in Rwanda and 4 households in Tanzania.

As a consequence, respective livelihood restoration measures will rather focus on the development of skills for alternative livelihoods, other than agriculture (i.e. small business development component of the livelihood restoration programs).

### 7.6.4 Gender Aspects

In general, both spouses of affected households (or all partners for non-marriage or polygamous partnerships) are entitled to participate in livelihood restoration programs.

Women will be specifically targeted through gender sensitive engagement and training methods, and through specific activities in both, the agricultural field and income-generating activities.

Program training activities will consider specific needs of women, e.g. with regard to training hours (in the context of the every-day working schedule of women).

### 7.6.5 Eligibility

Entitlements to livelihood restoration are presented in Table 25 – Entitlement Matrix. Households are entitled to livelihood restoration in case of

- Loss of arable marshland
- Loss of business, in case business cannot be re-established
- Loss of agricultural land (only occurs in Rusumo, Tanzania, due to construction), or access to agricultural land
- Loss of employment, in case employment cannot be re-established

Prior to the start of the programs, affected households will have access to advisory services in order to facilitate their choice for livelihood restoration. These services will be provided by district officers and by SACCO and NMB.

### 7.6.6 Agricultural Enhancement – Outline

Agricultural enhancement measures will be delivered under the framework of existing programs

- KWAMP (Rwanda)
- Crop Intensification Program in Rwanda (CIP)
- Farmers Field Schools Program

The KWAMP aims to promote poor smallholders in Kirehe district to overcome their food insecurity and low agricultural incomes, to combat land degradation and to

restore soil fertility. The immediate objectives of the KWAMP have a focus on the development of sustainable profitable small scale commercial agriculture, through

- An increased level of marketed production of crops and livestock products, leading to increases in incomes derived from gains in productivity, farming efficiency and cash returns to effort;

- The operation and maintenance of affordable irrigation facilities made available to a large proportion of the active poor and landless farmers in the District, reducing dependence on increasingly erratic rains and permitting a shift to higher value crops in response to market demand; and

- A steady improvement in the natural resource base in selected watersheds to enable production in the future, reversing the present negative trends of soil erosion and nutrient depletion coupled with failure to put available water to productive use.

Agricultural enhancement within livelihood restoration builds upon achievements of the KWAMP, such as

- Support to crop intensification
- Support to livestock intensification
- Soil protection and water conservation
- A concept to operationalize value chain development

### Source: MINAGRI website

http://www.minagri.gov.rw/index.php?option=com\_content&view=category&layout=blo g&id=208&Itemid=314&lang=en

The main components of the Crop Intensification Program (CIP) are

- Land use consolidation (growing one crop in the same area by different farmers)
- Improved seed and fertilizers use
- Proximity extension service by proximity service providers (through sector agronomists)
- Agricultural product marketing
- Change in farmer's attitude,
- Promote Agro inputs dealer's network
- Stimulate reliable, private-sector input and output markets: through fertilizer electronic auctions

Source: MINAGRI website

http://www.minagri.gov.rw/index.php?option=com\_content&view=category&layout=blo g&id=177&Itemid=38&lang=en

The CIP is linked to KWAMP measures in Kirehe district.

Within the framework of existing programs, the livelihood restoration program has a focus on the following aspects

• Extension services on improved agricultural techniques, including improved crop varieties, fertilization, small scale irrigation, erosion protection;

- Subsidies (in the amount of 500 USD per household) against the purchase of agricultural equipment;
- Provision of fertilizers and improved seeds;
- Enhance of establishment of cooperatives and capacity building for existing cooperatives; support of membership of PAP in cooperatives

Crop production will be supported by community-based extension services (with farmer field schools and the provision of improved planting materials.

The Farmer Field School approach will be used as learning framework that facilitates the transfer of innovation in agriculture. The teaching objectives of the FFS are to facilitate sound understanding by targeting farmers through exchange with technicians. The FFS approach explicitly involves women in the training of facilitators and producers.

### 7.6.7 Improved Livestock Keeping-Outline

This livelihood restoration package builds on the success of the "one poor family – one cow" project implemented by the Government of Rwanda and the corresponding component of KWAMP.

- Each beneficiary household has to build a shed adequate for receiving one or two cattle;
- Once this commitment is met, the beneficiary household receives one heifer (costs about 500 USD/heifer);
- Beneficiaries are further supported in the following ways:
  - Veterinary services (immunization and periodic health checks on the animals) and community based animal health interventions
  - Support in growing and harvesting fodder crops;
  - Training in integrated crop/livestock systems
  - Animal nutrition training and support.

Heifers will be sourced from local breeds.

### 7.6.8 Diversification of Livelihood, Small business development - Outline

This livelihood restoration program has a focus on the promotion of rural entrepreneurial activities and economic activities not requiring land.

This package includes the following:

- Different options for capacity building (e.g. commercial activities, agribusinesses such as bee-keeping, processing of farm products, e.g. banana beer)
- Technical and managerial training for this activity;
- Subsidies (in the amount of 500 USD per household) against the purchase of equipment related to this activity;

Training and further technical assistance will be delivered by experienced organizations with a permanent presence in the project affected area, i.e. SACCO and NMB.

In this program, too, women will be targeted as a specific group of interest, with specific engagement methodologies and specific activities and business areas.

### 7.6.9 Financial Training for Sustainable Use of Cash Compensation

Experience has shown that cash compensation, although very sought after by many household heads, could be detrimental in the medium term, to other household members, particularly the females and the children; the Project provides for measures to support sustainable use of cash compensation and for mechanisms within the overall monitoring framework to follow up the use of cash compensation.

Financial training will be offered to each affected household who receives cash compensation and will focus on:

- Assistance for opening and management of a bank account ;
- Financial planning for the household ;
- Planning of investments related to the household's participation in livelihood restoration programs;
- Saving strategy ;
- Management of existing debts ;

Households will be required to enroll on this training when they sign off the compensation agreement. Both spouses/all partners shall participate in the training.

Training will start in advance to the disbursement of compensation and be continued for a period of 1 year. The management of cash compensation will be integrated into the overall monitoring program.

Training will be provided by district officers, as per commitment of Ngara- and Kirehe districts from February 2013. Officers from both districts will be trained by SACCO ("Training of Trainers") immediately by the start of year  $_{0}$ .

For Ngara district, the following officers will participate in the ToT and act as trainers for affected households

- Community development officer
- Cooperative officer
- Trade officer
- Land officer
- Agriculture officer

For Kirehe district, the following officers will participate in the ToT and act as trainers for affected households

- Land officer for urbanization and resettlement
- Agriculture officer
- Officer in charge of cooperatives
- Officer for social affairs
- Proximity business officer

### 7.6.10 Micro-Credit Program

Micro-Credit schemes for affected people will be made available through SACCO and NMB in order to foster sustainability of livelihood restoration and improvement of living standard. Micro-credits will be available for all PAP who participate in livelihood restoration measures.

The respective information and related procedures will be part of the money management training. Furthermore, SAACO and NMB will provide personal advisory services on micro-credits.

# 7.7 ASSISTANCE TO VULNERABLE PEOPLE

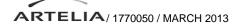
### 7.7.1 General

For identification of vulnerable groups see section 6.7.3 above.

Based on the identification of vulnerable households for the RAP, the individual support measures will be developed early in RAP implementation (start of year<sub>0</sub>), in order to ensure that individual needs in the context of displacement are fully considered. Consultations will be undertaken under the lead of PIU, through local resettlement committees.

 Table 41
 Overview: Vulnerable People

Group of vulnerable people	Identification as per section 6.7.3
Female headed households with small land holdings	<b>Rwanda:</b> 104 affected marshland users, 13 households entirely depending on marshland
	Tanzania: 3 women headed households using affected marshland
Household heading orphans	no household heading orphans amongst affected marshland users
Households with limited access to land, landless households	Rwanda: affected marshland users in the 6 affected villages
HIV/AIDS affected households	Geographical focus at Rusumo villages
Elderly and disabled people	All groups of affected people
Women in polygamous settings	During the village self-validation in the affected sub- villages in Tanzania, no household with polygamous setting was identified.



### 7.7.2 Individual Support for Vulnerable People

The Project through the Project Implementation Units (PRU) will assist vulnerable people insofar as they are affected by the displacement and resettlement process.

Vulnerable individuals in affected households will be consulted by local resettlement committees in affected communities; based on the identification of vulnerable people in the RAP (see above); resettlement committees will receive a training on

- the concept of vulnerability and the issues to be considered in the Project context
- how to conduct household visits
- o how to assess individual needs for assistance

Based on the consultation of vulnerable individuals, appropriate types of assistance will be developed by PIU, in cooperation with the resettlement committees and the social officers of the districts.

### 7.7.3 Envisaged Types of Assistance

- In depth explanation of exit survey process, assistance to negotiate compensation agreement, sign/co-sign compensation agreement, provide in-depth understanding of rights (e.g. for female spouses or for partners in polygamous settings)
- Compensation process (opening bank account, easy to understand money management training, in – depth explanation of rights), special focus on women, on elderly and on orphans heading households; Assistance in the post payment period to secure the compensation money
- Participation livelihood restoration (facilitation of participation for women, for orphans heading households), special provisions for HIV/AIDS affected persons; special consideration of elderly
- Counseling in matters such as family issues, health, money management, and livelihood restoration;
- Health care if required at critical periods: transition period;

The following process will be implemented:

- in depth information of the resettlement committees about the Project policy with regard to vulnerable people;
- consultation of vulnerable people amongst the affected households through the resettlement committees;
- Identification of assistance measures on a case-by-case basis, with the following process:
  - Review of each case by PIU community liaison officer, together with a resettlement committee member, including a visit at home and a detailed interview

- Discussion of the assistance measures required between the PIU officer, the resettlement committee member and the vulnerable person
- Report to the resettlement committee on required measures
- Review and decision by the committee
- Implementation of assistance measures
- Monitoring

The RAP contains a specific budget for assistance measures for vulnerable people.

### 7.7.4 Local Area Development Plan (LADP)

Whilst the livelihood support programs address the individual household level, broader community development measures are addressed in the context of the LADP. A summary of the LADP is attached as Annex 2 to the RAP.

The Local Area Development Plan (LADP) aims to support local economies by providing infrastructure in order to enhance different income generating activities. Infrastructure development will focus on markets, roads, rural electrification and water supply. Furthermore, the development of sustainable agricultural practises will support land based economic activities. The LADP will target communities in the Project area of influence, in Rwanda, Tanzania and Burundi. Affected communities will be considered with priority in the LADP.

By the start of RAP implementation, the final design of the LADP will be developed in cooperation with the target districts and with other relevant stakeholders in the three countries.

The LADP will be developed under consideration of three focal strategies which are in line with the current country strategies for the development of rural areas:

- Rural infrastructure development
- Agricultural intensification and extension
- Income generation including small business training and support

Within the broader geographical target areas for the implementation of the LADP, special consideration will be given to

- Communities along the Kagera river up to 15 km upstream of the Project site, in Rwanda and Tanzania (see section 7.7.5 below)
- Communities with ex-PAPs (see section 9)

### 7.7.5 Flood Risk Mitigation Plan

The development of a flood risk mitigation plan will specifically target communities that may experience some seasonal flooding of their arable marshlands, upstream of the dam site, with a priority area up to 15 km upstream the Project site.

The flood risk mitigation plan will be developed alongside existing watershed/catchment programs that have direct effects on controlling sedimentation and improving flood control.

### Priority consideration in flood risk mitigation

Priority consideration will be given to about 1,734 households in Rwanda, who cultivate arable marshland along the Kagera river in 21 villages between Rusumo East at the dam site and Kabuga about 15 km upstream from the Project site. The total area of arable marshland in these villages is about 401 ha (as per village self-validation in Nov 2012).

Table 42	Priority area for flood risk mitigation - Rwanda
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Village	Arable Marshland (ha)
Rusumo East	5.06
Nyakwisi	37.33
West Rusumo	16.24
Nshungeruzi	26.52
Nyakabungo	4.33
Ruhuha	18.1
Nyagahanga	5.3
Nyakigera	3.91
Kaguriro	8.65
Bweranka II	5.32
Kimeshu	14.54
Nyarutojo	14.69
Gahindu	8,45
Gasenyi	11.16
Gatari	19.94
Ryamukaza	9.31
Kabuga	25.06
Kabimba I	12.9
Nyamirambo I	51.49
Nyamirambo II	111.47
Total *source: village self validation in Nov 2012	401.32

\*source: village self validation in Nov 2012

Priority consideration will be given to about 607 households in Rwanda, who cultivate arable marshland along the Kagera river in 9 sub-villages up to 15 km upstream from the Project site. The total area of arable marshland in these villages is about 484 ha (as per village self-validation in Nov 2012).

Village	Sub-Village	Marshland Cultivated (ha)
Nyakiziba	Kabuye	18.25
Nyakiziba	Kyenda	61.37
Ntobeye	Burambira	46.37
Ntobeye	Kumurenge	40.56
Ntobeye	Mukatokatoke	51.22
Ntobeye	Mukirarama	43.45
Ntobeye	Rwintuku	20.05
Nyakiziba	Kagali	93.8
Nyakiziba	Ruhembe	108.48
	Total	483.55

### Table 43Priority area for flood risk mitigation - Tanzania

\*source: village self validation in Nov 2012

Flood risk mitigation will also give priority consideration to about 80 households in the direct vicinity of the dam site in Rwanda and Tanzania respectively (in total 160 households), that may experience some reduced production levels from their agricultural land due to seasonal flooding. All households with priority consideration under the flood risk mitigation plan will also be given priority consideration under measures of the LADP.

### 7.7.6 Overview: Preparation and Implementation of Livelihood Restoration Measures and LADP

The timely preparation of the final designs of livelihood restoration programs and of the LADP measures is of key importance in order to support livelihood restoration for PAP effectively and in order to enhance Project benefits for the population in the affected – and the wider Project area (target areas of LADP). The table below provides an overview on tasks and responsibilities related to the preparation of the livelihood restoration programs and the LADP for year <sub>0</sub>, the year of Project preparation. For further information, i.e. for construction phase activities and activities by start of operation, see section 10.5 below.

**Note:** Households will be provided with advisory services by PIU, the districts and SACCO in order to facilitate enrollment in livelihood restoration programs. Based on the current status of information, for households affected by construction it is assumed that affected businesses will enroll to business training measures. Due to the fact that virtually all affected households in the Rusumo villages are involved in business activities, it is assumed that a part of the households who will lose agricultural land, will also prefer business training over agricultural enhancement (agricultural enhancement training will only be efficient once alternative land has been purchased/allocated).

### Figure 16 Livelihood Restoration and LADP: Overview on Preparation/Implementation during pre-construction phase

	1	2	3	4	5	6	7	8	9	10	11	12
Activity		<b>Q</b> 1			Q <sub>2</sub>			$Q_3$			$Q_4$	
Installation of PIU at project site; Establishment of working groups for livelihood restoration preparation with districts; joint kick off meeting with PIU, executives of districts and relevant district officers, with SACCO and NMB												
Final Arrangements of livelihood restoration measures: small business management, small business support; PIU livelihood restoration officer (business expert), district officers, SACCO and NMB representatives; consultation of affected businesses												
Training of Trainers for Money Management Training: SACCO for district officers in Rwanda and Tanzania												
Final Arrangements of livelihood restoration measures: agricultural enhancement measures/livestock enhancement: PIU livelihood restoration officer; agronomists of districts; other district officers (social, community development), consultation of affected people (PAP losing agricultural land due to construction)												
Advisory service to affected people for enrollment in livelihood restoration												
Enrollment HH affected by construction in livelihood restoration: small business and agricultural enhancement												
Start of Livelihood Restoration: Small business support/small business development												
Start of Livelihood Restoration: agricultural enhancement and livestock												
Implementation of Money Management Training for affected people: district officers												
Compensation Process: Exit Survey and Agreements												
Compensation Process: Cash compensation disbursement							T					
Preparation Process for LADP measures (priority on affected communities and ex-PAPs): PIU and districts												
Start of Construction: start of year 1, see table below												•

RESETTLEMENT ACTION PLAN (RAP)

# 8. GRIEVANCE MECHANISM

The Grievance Mechanism provides affected parties with a mechanism to express any issues and problems that they may have with the compensation and resettlement process for the Project in a way which is free of cost and without retribution. Affected parties will also have ultimate recourse to the courts in accordance with the provisions of Rwandan and Tanzanian law.

# 8.1 ANTICIPATED TYPES OF GRIEVANCES

In the context of the Project, grievances could arise from: (list is illustrative only)

- Misidentification of owner/occupier of eligible property and assets;
- Errors in asset assessments;
- Disputes over plot limits, either between the affected person and the Project, or between two neighbors;
- Complaints about entitlement policy of the project;
- Disagreement of asset valuation;
- Disagreement on entitlement and ownership;
- Disputed ownership of businesses (for example if the owner and the operator are different persons);
- Disagreement of time and manner of compensation.

### 8.2 MANAGEMENT MECHANISM

### 8.2.1 General Principles and Key Aspects

The Project will put in place an extra-judicial mechanism for the management of grievances and disputes, based on explanation and on mediation by third parties. Each of the affected persons will be able to trigger this mechanism, while still being able to resort to the judicial system.

The mechanism will be based on the following principles:

- Each affected person will have easy access to deliver grievances and complaints;
- Grievances can be submitted orally (and will be recorded) or in written form ;
- Any grievance will be registered, acknowledged receipt of, and tracked until it is closed;
- The grievance management arrangement will include two tiers of extra-judicial, amicable review and settlement, with the first one internal to the PIU in cooperation with the local resettlement committee (village level), and the second one with involvement of external parties;

• The third tier of the mechanism is the judicial system, for those grievances that cannot be resolved; the overall objective is to avoid resorting to Justice for as many grievances as possible.

Key aspects of the grievance mechanism are:

- The public and especially PAPs need to be informed about the grievance mechanism and how they can make use of this process. The public will be informed via RAP disclosure process and through community meetings conducted by the PIU in cooperation with the local resettlement committees:
- Grievances will be recorded by using a Grievance Form (in local language, also available in English). Grievance Forms are available for recording complaints and will contain details regarding the grievance as well as the name and address of the applicant, application date, type of application and the name of the persons receiving the grievance. The forms will be logged in a register where they will be tracked through to a suitable resolution.
- The PIU will maintain a digital grievance database, containing the logs and records of all grievances received, with an indication of the respective status of a grievance (i.e. resolved, not resolved, pending. . .)
- Resolution options will be developed through unilateral proposal, bilateral discussion and/or third party mediation. If a complaint is not legitimate the case will be closed without agreement with the complainant. Any response will be communicated clearly either orally or in writing, and a grievance case will only be closed when an agreement with the complainant is reached.
- Affected people will be offered access to third party legal advice, through a qualified lawyer; this lawyer will be available at the PIU on site office on a regular base; legal advice will be at no costs; information on the possibility of access to legal advice will be communicated to the affected people;

### 8.2.2 Grievance Registration and Monitoring

The grievance mechanism shall be accessible to all affected parties, including vulnerable people. Hence, it is of key importance that grievances can be submitted on the village level.

Grievance registration will be possible:

- at the village level, registration through the resettlement committees;
- at the PIU Community Liaison Office, to be established at the Project site, either in Rusumo East or in Rusumo village;
- at NELSAP offices in Kigali.

Grievance registration will be possible as of the commencement of compensation and resettlement activities.

For each grievance, a grievance file will be opened, containing:

• grievance form (recording complaints, details regarding the grievance, name and address of the applicant, application date, type of application and the name of the persons receiving the grievance);

- receipt with acknowledgement of registration, to be handed back to the complainant;
- grievance monitoring sheet (actions taken, corrective measures);
- closure sheet, copy of which will be handed to the complainant after he/she has agreed to the resolution and signed off.

Grievances will be registered within 7 days of receipt and a response will be provided to the aggrieved party in 30 days or less.

Closure of a grievance does not automatically mean that the complainant is satisfied with the action taken (i.e. in cases where a complaint is not justified). Closure means that the complainant agrees that action has been taken by the PIU to address the grievance without being necessarily satisfied with the outcome.

### 8.2.3 Three Levels of Grievance Management

### First Level: Village level in Cooperation with PIU

In practice, in similar compensation and resettlement activities, grievances arise from misunderstandings of the Project policy, or result from conflicts between neighbours, which can usually be solved through adequate mediation using customary rules or local administration at the lowest level.

Furthermore, grievances are expected to arise in the context of construction activities. For this reason, the cooperation with the construction contractor's grievance management – and community liaison staff is of key importance (see ESMP). Grievances related to construction should be resolved through cooperation of PIU grievance management and the construction contractors staff in charge for grievances. During construction, weekly reports should be issued to senior management (PIU, SPV) that highlight grievances with potential to affected the construction schedule. These reports should include grievances where resolution is pending for long periods.

Aggrieved people will have the opportunity to submit their grievances at the village level. This setting provides maximum accessibility to the grievance mechanism for all affected people and the possibility to resolve grievances in a practical and direct manner.

Local resettlement committees/village leaders as members of the resettlement committees will record grievances in oral or written form. It is expected that a large part of grievances can be resolved directly through explanation and information to the claimant.

Resettlement committees/village leaders will obtain training from the PIU in order to address issues which can be resolved by explanation (i.e. explanation of resettlement policy, compensation strategy or entitlement determination, construction related regulations). The Project Implementation Unit (PIU) takes note of the grievances filed with the village chiefs during meeting routines and regular visits of all affected villages with consultations. Furthermore, regular meetings will be performed with key staff of the construction contractor. All grievances will be registered within PIU and entered in the electronic database.

Grievances, which were not resolved on the village level, will be reviewed. PIU grievance officers will perform the reviews, typically with the following steps:

- Review of existing relevant documentation on the individual case (household issues, potential plot disputes, initial measurements and counts, etc...); construction related disturbance-or other issue
- Review of disputed properties, disputed boundaries, or property characteristics in the field, as applicable, and hearing of interested parties (the complainant(s) and third parties (resettlement committee members);
- Agreement on proposed resolution within the grievance management team and the local resettlement committee/village leader; representative of construction contractor
- Response to complainant.

For these cases, the grievance management team will cooperate with representatives of the local resettlement committees and with representatives of the construction contractor and will meet directly with the complainant in order to provide in depth explanations and if necessary, combine the explanation with a field visit to the disputed area/ the location related to a construction related grievance.

The PIU grievance management team will:

- Maintain, check and file the registered grievances and log all grievances in a central database of grievances at PIU level;
- Ensure that grievances are acknowledged receipt of in the agreed timeframe (7 days);
- Collect files of grievances submitted at local levels on a regular basis (twice a month) to make sure that all grievances are dealt with in a timely manner; check that receipts for grievance registration were issued by the local levels (resettlement committees, cell and ward administrations)
- Make sure that local authorities and Village Resettlement Committees are duly consulted when reviewing the grievance; construction contractors representatives will be consulted when applicable
- Make sure that closure letters proposing a resolution to the complainant are timely sent to the complainant and acknowledged receipt of;
- Ensure that all steps of grievance management are properly documented.

### Second Level: Mediation Committee

The second tier aims at processing grievances that the first tier is unable to resolve, and coming up with solutions, which if agreed will be binding to both the implementing agency and the complainant(s). The objective is to avoid resorting to Justice and try to reach amicable settlements wherever possible. No grievance will be considered by the second tier unless it has already been reviewed by the first tier and the resolution proposed by the PIU was not acceptable to the complainant. The second tier of grievance management shall be based on a Mediation Committee established at District level, which will include:

- One representative of the District Administration;
- One representative of the Project Implementation Unit (PIU), acting as an observer; one representative of the construction contractor, acting as an observer
- Three representatives of the affected people, amongst them at least one woman, chosen i.e. from community based organizations, elders, customary authorities.

The Mediation Committee will meet as needed, depending on the inflow of registered complaints and disputes. Minutes of meetings, including proposed resolution arrangements, records of decisions, agreements reached, will be prepared.

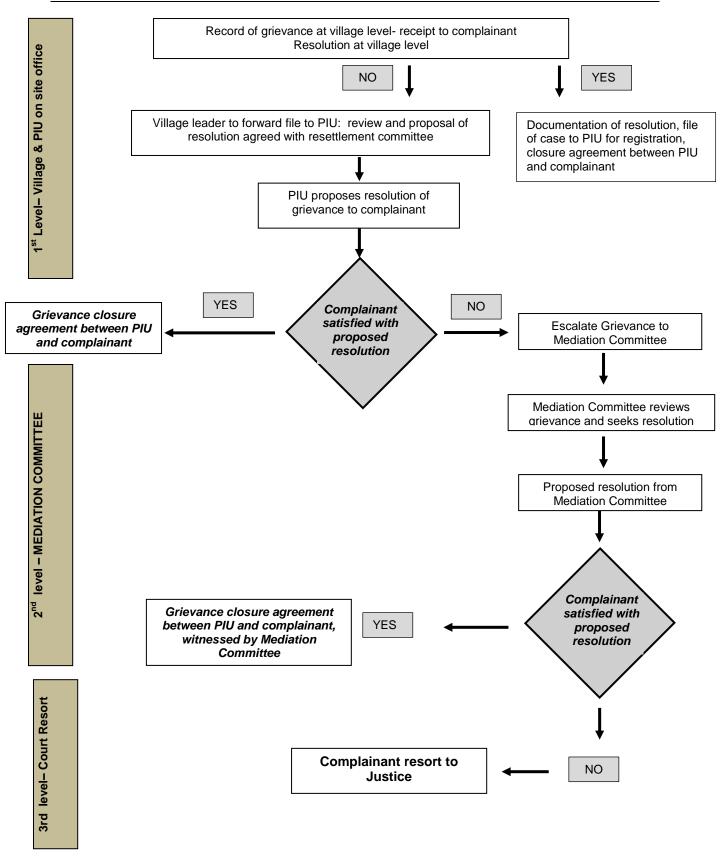
Third Level: Resort to Justice

In case this mechanism will not allow an amicable agreement to be reached, the complainant or the defendant can resort to Justice (and could at any time).

The figure below provides an overview on the grievance management mechanism.

### **RUSUMO FALLS HYDROELECTRIC PROJECT**

DAM & POWERPLANT COMPONENT RESETTLEMENT ACTION PLAN (RAP)



# 9. CONSULTATIONS

### 9.1 **GENERAL INFORMATION**

The overall goal of consultation and stakeholder engagement is to establish an ongoing, accessible and constructive dialogue with potentially affected parties and other interested organizations and individuals, so that their views and concerns can be taken into account in decisions about the Project in accordance with international good practice.

The consultation and stakeholder engagement activities of the RAP are entirely interwoven with the Project's Stakeholder Public Consultation and Disclosure Plan (PCDP), which is provided in a separate document.

In line with the relevant international requirements, consultation with and participation of affected communities and individuals are key elements of the RAP development and -implementation process. One essential aspect of this approach is the establishment of a robust process to redress the grievances of affected people (see above). Consultation with the affected population and with officials of local government, civil society and other representatives of the affected population is essential in order to achieve an in-depth understanding of types and extents of Project impacts as well as of required measures for mitigation and enhancement (= livelihood restoration measures).

The design of this RAP partially draws upon consultation activities which were performed during the development of the RAP for the IDS by SNII.

# 9.2 OVERVIEW ON CONSULTATIONS FOR THE FDS AND IDS PRIOR TO THE YEAR 2011

Between 2007 and 2008, a total of 270 individual and groupinterviews with stakeholders were conducted in eleven survey areas (source: SNII, RAP& LADP, Phase I, II and III):

Burundi

- Gatare(Busoni district)
- Nyagisozi(Busoni district)
- Ruzo (Giternayi (distruct)

Rwanda

- Rweru cell (Bugesera district),
- Jarama(Ngomadistruct)
- Kigarama(Kirehe District)
- Nyamungari (Kirehe District)

### Tanzania

- Nyamiaga (Ngara District)
- Kasharazi (Ngara District)
- Rusuzo (Ngara District)
- Nyakiziba (Ngara District)

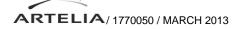
Similar individual and group interviews were subsequently conducted with 75 selectedstakeholders in Tanzania (Nyamiaga, Kasharazi, Rusuzo and Nyakiziba in the Ngara District). These interviews were conducted with the following stakeholder groups:

- Administrators and local elected representatives;
- Representatives of agricultural extension services or of social education and health careservices;
- Representatives of trade associations (farmers, fishermen, small traders etc);
- Representatives of local civil society associations (women, youth, etc.).

These interviews aimed to identify: (i) the status and recent developments in local economicconditions (agriculture, fishing, trade, crafts, industry, tourism, etc.); (ii) status and recentdevelopments in infrastructures and services; (iii) project's key stakeholders and representatives and on-going programs and local priorities.

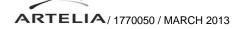
# 9.3 CONSULTATIONS CONCERNING THE IDS DURING THE PERIOD FEBRUARY 2011- APRIL 2012

In 2011, a comprehensive government stakeholder consultation process was developed in order to obtain authorizations for Consultants to conduct field work, as well as to engage as soon as possible with government authorities in obtaining their views, advice and participation in defining the socio-economic and environmental impacts of the project and the most adequate mitigation measures to apply. This was also a particularly important step in terms of gaining a better understanding of resettlement impacts and planning possible synergies with rural development projects to find available land and propose restoration strategies. The consultation process is summarized in the following Table.



Consultation Process and Objectives	Date	Level	Participants
<ol> <li>Introduce consultants to district authorities and testing with authorities the field program</li> <li>First introduction to the Rusumo Falls Project with Maps showing the flooded area</li> <li>Introduction of Consultants to District officials</li> <li>c. Testing the questionnaires and obtain comments from officers</li> </ol>	February 2011	District Level: Kirehe, Ngoma, Bugesera (Rwanda)	Governors Mayors & Vice-Mayors Executive Secretaries Economic Planners Social Affair Officers, Security Officers
<ul> <li>2) Introducing the project to government stakeholders and assess the adequate Institutional, regulatory and administrative framework for resettlement and local development planning</li> <li>National resettlement process confirmed Key issues to address identified Discussion on a monitoring and consultative scheme for the Rusumo Falls Project</li> </ul>	May 2011	National Level	Ministries of interior or Local Governance, Ministry of infrastructure or Energy Ministry of Agriculture, Livestock Ministry of Environment, Water and Natural Resources Ministry of Social Affairs or Community Development
<ul> <li>3) Introducing the Field Program and Agree on Consultation Mechanism</li> <li>Presenting the field program and requirements (participation and authorizations) from governments</li> <li>Agreement on the formation of a national and district/province taskforces for ensuring government officials directly participate in the Project, especially in designing the resettlement action plan and the local area development plan</li> </ul>	June 2011 National and	District Level	Same participants as above
4) Community consultations in 263 potentially affected PAPs (at 1,325 masl.) to inform about the Project, collect their views and present the upcoming Census process	June to August	Communityl evel	Village leaders and most members of the communit
5) Calling for national and district taskforces to present community consultation outcomes and village surveys' results and collect their views prior to PIC meeting September 12th	August 2011	National and District Level	Members of taskforces
6) Consultation of 9,000 PAPs with participatory and individual questions at the end of each survey to know their views and expectations	July 2011 to February 2012	PAP-level	Head of households, the wif and at times the children
7) Setting up of Resettlement Committees	July 2011 to February 2012	Village-level	Village leaders and choser representatives
<ol> <li>Workshop with district officials to elaborate the Local Development Plan</li> <li>e.g. village-level, cell-level and sector level measures to maximize benefits on communities</li> </ol>	September 2011	Kirehe, Ngoma	Members of District taskforces
9) Focus Group on Land Tenure, Vulnerable Groups	December 2011, January 2012	Kirehe, Ngoma	Identified groups and associations
10) Agree on the entitlement matrix, resettlement sites and the institutional arrangements with land and agriculture authorities	February 2012	National and District Level	Relevant members of taskforces

### Table 44 – Stakeholder Consultation Process with Respect to the IDS



### **RUSUMO FALLS HYDROELECTRIC PROJECT**

**DAM & POWERPLANT COMPONENT** RESETTLEMENT ACTION PLAN (RAP)

Consultation Process and Objectives	Date	Level	Participants
11) Send to taskforces preliminary local Development Program for comments	February 2012	National and District Level	Relevant members of taskforces
12) Include comments of all consultations to finally disclose the draft RAP, draft LADP and draft ESIA through a formal consultation process	April 2012 National and	District Level	Members of taskforces and decisional instances
13) Once agreed with governments, present to communities at the cell administrative building to obtain a level of approval	April 2012	Local level	Members of taskforces and decisional instances

# 9.4 CONSULTATIONS FOR PREPARATION OF THE RAP

### 9.4.1 Overview

The overall program for public consultation and participation is established in the PCDP for the Project (see below). During November and December 2012 and in January 2013, consultations with affected communities in Rwanda and Tanzania as well as with communities in the wider project area upstream the Kagera river (up to 20 km upstream the dam site) were performed.

Consultations were conducted after preparatory meetings with authorities of the two affected sectors (Kigarama and Musaza) in Rwanda and the district of Ngara in Tanzania. Sector authorities in Rwanda and Ngara district authorities in Tanzania facilitated the performance of the field program.

### Table 45 – Consultations in affected communities

Consultation of villages in Rwanda and Tanzania in the area up to 20 km upstream the Kagera river, including affected communities								
Nov 3 – Nov 28, 2012								
Locations	Rwanda: 30 villages along the Kagera river, upstream of the future dam site Tanzania: 9 villages along the Kagera river, upstream of the future dam site							
Objectives	<ul> <li>provide updated information on the Project</li> <li>raise awareness that the number of PAPs is significantly reduced by the RoR design and that there are people who were previously considered as affected and now are not affected any more (= Ex-PAPs)</li> <li>conduct a self-validation of affected marshland plots</li> <li>to obtain information on marshland use</li> <li>to communicate cut-off dates, to obtain acknowledgement and signatures from affected people and from resettlement committees</li> <li>to obtain endorsement from the resettlement committees on the compensation approach</li> </ul>							
Consultations	<ul> <li>village leaders and resettlement committees</li> <li>affected people</li> <li>Ex- PAPs (people considered as affected by previous Project designs and not any more affected by the RoR)</li> </ul>							
Note	In Rwanda, 2,585 marshland users were identified and registered. In Tanzania, 607 marshland users were identified and registered. However, according to the hydraulic modelling results, not all villages which were considered in the consultations will be affected by the Project. Details on the number of PAP according to the modelling results are presented in chapter 5.5 above.							

### **RUSUMO FALLS HYDROELECTRIC PROJECT**

**DAM & POWERPLANT COMPONENT** RESETTLEMENT ACTION PLAN (RAP)

Consultations in the future construction area, in Nyakwisi village, in Rusumo East village in Rwanda and in Rusumo village in Tanzania						
Nov 8 - Nov 16 • Dec 14 - Dec 16 •	Dec 21, Dec 22, Dec 27 2012 • Jan 11 – Jan 13, 2013					
Locations	Rwanda: Nyakwisi village, Rusumo East village Tanzania: Rusumo village (Mitako, Migombani)					
Objectives	<ul> <li>provide updated information on the Project</li> <li>conduct a self-validation of affected assets (land, residential structures, business structures)</li> <li>communicate cut-off dates, obtain acknowledgement and signatures from affected people and from resettlement committees</li> <li>obtain endorsement from the resettlement committees on the compensation approach</li> <li>obtain information on preferences of PAP, affected by the loss of their residential assets, if they would prefer the participation in a resettlement program of the Project or rather opt for cash compensation and then conduct self-resettlement.</li> </ul>					
Consultations	<ul> <li>village leaders and resettlement committees</li> <li>project affected people</li> </ul>					
Additional visits for on the spot int Interviews on the District and Cell Dec 9 – Dec 12, 2012	erviews and group discussions in affected villages evel					
Locations	Rwanda: Kimeshu village, Nyakwisi village, Nyarutojo village; Kagera District, Kigarama sector, Ngara District Tanzania: Rusumo village, Ntobeye village					
Consultations	<ul> <li>village leaders, village executive officers</li> <li>district officers, cell officers</li> <li>project affected people</li> </ul>					
Objectives	<ul> <li>obtain additional formation on marshland use (i.e. operation of brick making businesses)</li> <li>obtain views, proposals and ideas on the design of livelihood restoration measures and LADP measures</li> <li>obtain information on administrative procedures related to expropriation</li> <li>obtain information on experiences with ongoing projects in the area (One Stop Border Post)</li> </ul>					

### 9.4.2 Consultation Activities

### Self-Validation of Affected Assets

Affected local communities were visited in order to validate the affected assets (= marshland plots) in a participatory manner. Village leaders, resettlement committees and affected households participated in the self-validation process. Self- validation was aiming to obtain information on marshland use on the individual/household level. The validation was conducted in two steps

- (i) Village leaders were asked to provide information on marshland users in their villages and on the respective marshland areas, which are under cultivation by the individual users; furthermore, information on the total area of land cultivated by the affected households, was obtained; all marshland users of the past three years were identified for each of the affected villages
- Affected people were invited to community meetings; in the course of the meetings the household heads confirmed/updated the information provided by the leaders on their marshland plots and added information on the most important crops they had cultivated over the past three years;

Village leaders also provided up to date demographic information on their villages (population figures).

Self-validation visits were also carried out in the Rusumo East and Rusumo villages in order to validate assets which will be affected due to the construction of the Project.

The participants of the self-validation meetings confirmed the acknowledgement of the cut-off date with their signature.

Furthermore, residents in Rusumo village and Rusumo East village, who will be affected by loss of residential structures, were asked if they wished to participate in a resettlement program implemented by the Project, with the respective entitlements (see above) or if they would prefer cash compensation for their lost assets and then manage the relocation on their own. Without any exception, all affected people in Rwanda and Tanzania opted for the cash compensation and self - resettlement. Affected people confirmed their preference with their signature.

The signatures of affected people and resettlement committees are compiled in Annex 3.

### Information of PAPs

In the context of the consultations, communities were provided with updated information about the Project in the frame of community meetings. Participants were invited to ask questions and received direct response.

- Participants entirely appreciated the new Project design and the significant reduction of land take by the RoR Scheme. All PAPs in the villages upstream the future dam site expressed gratitude on hearing that they will not be affected by physical displacement with the RoR scheme.
- PAPs in Tanzania expressed doubt on the compensation process being able to meet the benefits associated with marshland use.
- The most frequent questions from people affected by the RoR scheme were related to the amount of compensation they would receive for the loss of production from marshland and when this compensation would be disbursed. People were concerned about if and how they would be able to gain access to alternative land, once their marshland plots would be not available for cultivation any more.
- People in the villages of Kabuga and Ryamukaza asked to know whether they will be considered for jobs when the dam construction exercise starts.
- People also wished to know whether they will have access to electricity which will be produced on Rusumo falls.

### Consultations on the RAP Compensation Approach

Simultaneously to the self-validation program, local authorities (for the 30 villages in Rwanda and the 9 villages in Tanzania) and local resettlement committees (for the Rusumo villages) were consulted on the compensation approach in order to obtain their endorsement:

• Compensation for loss of income from marshland

- Compensation for loss of residential structure
- Compensation for loss of business structure
- Compensation for loss of intermediate land

The consulted local authorities and resettlement committees endorsed the compensation approach and confirmed their agreement with their signatures.

The cut-off dates was also acknowledged.

### Key Informant Interviews

Structured interviews were conducted with the local resettlement committees to better understand issues of marshland use and to gain an understanding of what would be important to consider for livelihood restoration. The results of the interviews are compiled in Appendix 2. The respective information was integrated into the main RAP text, especially into the identification of livelihood restoration measures and into the baseline information about marshland use of affected communities.

Main issues addressed in the interviews were

- Most important crops on marshland and related yields
- Use of production from marshland (household consumption, market sale)
- Range of income from market sale of marshland production
- Seasonal flooding of marshland
- Coping strategies for loss of income due to seasonal flooding
- Dependency of residents on marshland production
- Assistance measures and compensation

### Additional interviews with affected people

Some of the affected communities in Rwanda and Tanzania were visited again. On the spot interviews of affected people and on the spot group discussions, complemented by community walks, confirmed information obtained during the field work in November 2012 and provided some additional information, mainly on the use of marshland, on preferences for livelihood restoration programs and on aspirations with regard to the Local Area Development Plan (LADP, provided in a separate document). The results of the field work are considered in the chapters on livelihood restoration and in the baseline sections above.

Main issues addressed in the interviews were

- Frequency of marshland use in the villages
- Income from sale of marshland production
- Businesses depending on marshland

- Challenges of marshland use (i.e. flooding)
- Preferences for livelihood restoration measures and for measures in the frame of the LADP

### Interviews on the District Level

Information gathering interviews were conducted on the district- and cell- levels in Rwanda and on the district level in Tanzania.

District/Cell-Unit	Topics addressed
Kagera District: Land Office (Land Officer); Secretary of District Land Commission	<ul> <li>Information about land register and the registrations process</li> </ul>
	<ul> <li>Information about expropriation process and related valuation procedures</li> </ul>
	<ul> <li>Procedures in cooperation with the land bureau in the Project context</li> </ul>
Kagera District: cooperatives business promotion officer	<ul> <li>Support of cooperatives by district (capacity building)</li> <li>Livelihood restoration measures and LADP measures related to agricultural business</li> </ul>
Kigarama Sector: agronomist and social development officer (together with local leaders)	<ul> <li>Marshland use issues</li> <li>Needs of affected people with regard to livelihood restoration measures and LADP measures</li> <li>Proposals for measures</li> <li>Sector activities to address poverty</li> <li>Agricultural cooperatives: mode of operation, members and activities</li> </ul>
Ngara District: District Executive Director	<ul> <li>Needs with regard to livelihood restoration measures and LADP measures</li> <li>Expropriation procedures</li> </ul>

#### Table 46: Interviews on the District- and Cell-Level

# **Consultations of District Task Forces**

On December 18th and 20th, the drafts of the RAP and the ESIA were presented to the District Task Forces in Rwanda (Kirehe District) and Tanzania (Ngara District) in order to obtain views and comments. For the RAP, comments and concerns were focussing on :

Project Impacts

- Extent of flooding of arable marshland due to project construction and operation
- Project impacts on fishing

Compensation Issues

- Mechanisms to discourage speculation with regard to eligibility for compensation
- Compensation for intermediate land
- Compensation disbursement in a complex household setting (polygamy in Tanzania)

Cooperation for RAP Implementation

- Exchange of information between the two district task forces, implementation of meeting routines
- Involvement of local leaders in grievance management

### Management of Expectations of - and Consultations with EX-PAPs

Ex- Project Affected People (Ex-PAPs) are people, who were considered as affected by previous designs of the Project, i.e. the Intermediate Development Scheme, but who will not be affected any more with regard to the RoR Scheme. The RoR is resulting in a considerably reduced number of affected people and in a significant reduction of the severity of impacts (i.e. reduction of physical displacement under the RoR).

The consultation of Ex-PAPs is a very important part of the overall consultation plan of the Project in order to

- Provide up to date information on affected areas and the corresponding affected people under the RoR
- Manage expectations of Ex-PAPs with regard to compensation (they will not be entitled any more to compensation)
- Avoid rumours and unrest amongst the population in the Project area (PAPs and Ex-PAPs) with regard to their status as PAP or ex-PAP respectively
- Provide a realistic reference base for individual short- and mid- term planning for households of PAP and ex-PAP (information that cut-off dates which were communicated in the context of previous design phases of the Project are no longer valid)
- Proactively reduce the number of grievances (resulting from insufficient information)

The district administrations of Ngoma in Rwanda and Giteranyi in Burundi were informed about the changes in Project design, i.e from IDS to the RoR Scheme. Corresponding information was provided to previously affected people (Ex-PAPs) in these districts. It was communicated that no social and environmental Project impacts are expected for the two districts (Giteranyi and Ngoma). The same message was communicated to previously affected communities which are located upstream the actually affected area along the Kagera river in the districts of Kirehe and Ngara, where the status of residents also changed from PAP to ex-PAP as a consequence of the new Project design. Ex-PAPs were informed, that the cut-off dates which were communicated in the context of previous Project design phases, are no longer valid (for cut-off dates for the RoR, see section 7.3.2).

A key point within the consultation program with ex-PAPs was to communicate information about measures under the Local Area Development Plan (LADP). The LADP will target communities in the entire project area, with a focus on ex-PAPs in order to enhance sustainable development and overall improvement of living conditions in the respective communities.

Consultation with ex-PAPs will continue during the implementation of the RAP, as outlined in the PCDP (separate document, Annex 1 to the RAP).

The table below provides an overview on consultations conducted with Ex-PAPs.

### Table 47 – Consultations with Ex-PAPs: Village Meetings

<ul> <li>Key Aspects of Consultations with ex-PAPs</li> <li>Information on change of Project design from IDS to RoR and respective reduction of Project impacts</li> <li>Information on the resulting change of status from PAP to ex-PAP</li> <li>Manage expectations under the RoR scheme</li> <li>Information on project benefits with a focus on measures under the Local Area Development Plan</li> <li>Provide communication materials with comprehensive Project information</li> <li>Enhance supportive attitude to the Project from local communities</li> </ul>				
Ex-PAPs Local Communities in Giteranyi district 12-14 Dec 2012	<ul> <li>Extremely happy that the project will not affect local marshlands,</li> <li>Enquired if they will get electricity from the project</li> <li>Enquired if they will get improved roads, schools or clinics</li> </ul>			
EX-PAPs Local Communities in Ngoma district 17 Dec 2012	<ul> <li>Happy that the project will have no impacts on their marshlands,</li> <li>Enquired if they will get electricity from the project</li> <li>Enquired if they will get improved roads, schools or clinics</li> </ul>			
Ex-PAPs Local Communities in Ntobeye 19 Dec 2012	<ul> <li>Happy that the project will not affect their arable marshlands,</li> <li>Some not pleased since they were anticipating cash compensation,</li> <li>Enquired if they will get electricity from the project</li> <li>Enquired if they will get improved roads, schools or clinics</li> </ul>			

# 9.5 **REGIONAL CONSULTATIVE WORKSHOP**

A consultative workshop in order to discuss the RAP, the ESIA and the LADP was held in Kigali on 4 February 2013, with a field trip to the Project site on 4 February.

The workshop program contained summarizing presentations of the ESIA, the RAP and of main aspects of the PCDP, LADP and the ESIA/RAP for the transmission lines.

For the RAP, the discussion focused on implementation arrangements with strong statements from the districts on their preparedness to take a lead role in key implementation processes of the RAP (livelihood restoration, financial training of PAP). Another focal point was the overwhelming preference for cash compensation over a resettlement program from people affected by loss of residence (see chapter 5.4 above). The background of this attitude is the specific situation of the villages at the Project site (Rusumo, Rusumo East, Rusumo West) as an economic hub area within an entirely rural environment. Affected people prefer to stay in this area, to purchase new residences with their cash compensation and to benefit from the economic opportunities and dynamics at the Project site rather than to be resettled to different, remote areas. Participants appreciated that all PAP who will receive cash compensation will be entitled to money management training. The districts stated their commitment to support the implementation of the respective training program through their staff.

The minutes of the workshop are attached in Appendix 7 to the RAP.

# 9.6 CONSULTATIONS IN THE CONTEXT OF RAP DISCLOSURE

The Executive Summaries of ESIA and RAP will be disclosed in the regional and national newspapers to allow the public and stakeholders to consult the documents for final feedback. Publications will be in English, Swahili and French.

Hard copies of the ESIA and RAP will be placed in public areas (Public Libraries, District offices, Ministries of Energy, Environmental Management offices) to allow for public consultation.

The disclosure process of the RAP will be accompanied by the consultation of affected communities in order to obtain their views and concerns on the overall approach and program of the RAP. A disclosure program, comprising:

- Public information events for presentation and explanation of the RAP, and
- Focus group discussions in order to obtain views and concerns will be implemented in each of the affected communities

Consultation events during disclosure will be held on site in the affected villages and be made accessible for all affected people, including vulnerable groups.

The disclosure process will be explained and the RAP executive summary will be presented and explained. Hard copies will be available for the PAP.

During the consultation events, concerns will be recorded and questions will be answered. PAP will be informed on the availability of the full versions of the RAP at the district offices.

Kirehe district in Rwanda and Ngara district in Tanzania as well as the local resettlement committees of the affected communities will support the performance of the disclosure consultation program.

# 9.7 CONSULTATIONS IN THE CONTEXT OF COMPENSATION AGREEMENTS

After disclosure and approval of the RAP, affected communities will be consulted again to assess their level of satisfaction and agreement with the proposed compensation scheme. According to the documented preferences of PAP affected by physical displacement, there will be no resettlement program in the Project context, as all PAP prefer cash compensation and self - resettlement. Therefore, this RAP does not include provisions for consultations with host communities at resettlement sites.

### 9.8 CONSULTATION DURING RAP IMPLEMENTATION

During RAP implementation, the Project Implementation Unit will be responsible for the planning and performance of regular consultation with affected communities, covering the different groups of PAP, including vulnerable people. Community Liaison Officers (to be assigned immediately by the start of RAP implementation, at the start of year  $_0$ ) will be the staff who will operate the consultation program for the project

affected communities during the implementation phase Key elements of consultation during RAP implementation are:

- Routine consultation of local resettlement committees in the context of the RAP monitoring program;
- Public consultation events in the context of the RAP monitoring program;
- Special consideration of vulnerable people, organize the identification of and the individual participatory needs assessment with vulnerable persons (see chapter 7.7 above);
- Continuous information of the affected population and other project stakeholders about Project progress and upcoming relevant activities;
- Continuous update of stakeholder list of the RAP;
- Provide accessibility for affected people, establish capacity/availability for quick response to consultation needs expressed by PAP (i.e. constructions related concerns).

From the start of RAP implementation, PIU will operate a field office at the project site. The operation of the project office will be communicated broadly to affected people, including office hours of key staff. The location of the office will be signposted. The field office will be established at a site which will be accessible without any disturbance from construction activities, access will not be severed by construction activities at any time.

# 9.9 PUBLIC CONSULTATION AND DISCLOSURE PLAN (PCDP)

The RAP is supplemented by a stand-alone Public Consultation and Disclosure Plan (PCDP). The PCDP is attached to the RAP as Annex 1.

The PCDP provides the framework for information and consultation of Project stakeholders with a focus on project affected people during RAP implementation. It contains provisions for consultation of ex-PAPs. Furthermore, the PCDP presents procedures and requirements for the disclosure process.

The table below provides an overview on forthcoming consultations as indicated in the PCDP.

#### **RUSUMO FALLS HYDROELECTRIC PROJECT**

DAM & POWERPLANT COMPONENT RESETTLEMENT ACTION PLAN (RAP)

#	Date of Consultation	Target Audience for Consultation	Nature/ Type of Consultation	Objective of the consultation	Participants
1	March, 2013	TAC and PIC	Two-day Workshop	Discuss the Share Holders' Agreements (SHA), the Implementation Agreement (IA) and the Special Purpose Vehicle (SPV) of the Regional Rusumo Project.	Ministries of Energy, Minerals, Environment, Agriculture, Natural Resources, National Environmental Management Councils, Utility Agencies, Country Investment Agencies, among others
2	March 2013	African Development Bank (AfDB)	Office meeting	Discuss Communication strategy under T-line	AfDB Senior Officials
3	March 2013	Utility Agencies (EWASA-Rwanda, REGIDESO-Burundi TENESCO- Tanzania)	Office meetings, emails and letters	<ul> <li>What they wish to be included in the Communication strategy</li> <li>Provide communication materials including Project Fact sheet &amp; FAQs for inputs &amp; improvements</li> <li>Any other concerns to address under the RoR</li> </ul>	Utility Agency Senior Officials
4	March 2013	<b>Environmental</b> <b>Agencies</b> (REMA-Rwanda, NEMEC-Tanzania Min- Envt-Burundi	Office meeting, emails and letters	<ul> <li>Informing them of the release of the ESIA and RAP Reports and seeking their feedback</li> <li>What they wish to be included in the Communication strategy</li> <li>Provide communication materials including Project Fact sheet &amp; FAQs for inputs &amp; improvements</li> <li>Any other concerns to address under the RoR</li> </ul>	Environmental Agency Senior Officials
5	March 2013	Country Investment Agencies (RDB-Rwanda NEMEC - Tanzania Min-Envt-Burundi	Office meeting, emails and letters	<ul> <li>Informing them of the release of the ESIA and RAP Reports and seeking their feedback</li> <li>What they wish to be included in the Communication strategy</li> <li>Provide communication materials including Project Fact sheet &amp; FAQs</li> <li>Any other concerns to address under the RoR</li> </ul>	Investment Agency Senior Officials
6	March 2013	NGOs and CSO (Nile Basin Discourse Forum- Witness NGO)	Office meeting, emails and letters	<ul> <li>Informing them of the release of the ESIA and RAP Reports and seeking their feedback</li> <li>Inform them of change from IDS to RoR scheme</li> <li>Create first rapport with them</li> <li>Establish their role in mobilizing communities to support the project</li> <li>Provide communication materials including Project Fact sheet &amp; FAQs</li> </ul>	NGOs + CSO Representatives Senior Officials

### Table 48 Consultations prior to RAP Implementation as per PCDP

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#### **RUSUMO FALLS HYDROELECTRIC PROJECT**

#### **DAM & POWERPLANT COMPONENT** RESETTLEMENT ACTION PLAN (RAP)

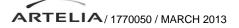
#	Date of Consultation	Target Audience for Consultation	Nature/ Type of Consultation	Objective of the consultation	Participants	
7	March 2013	Media and General Public	Workshop, emails and letters	Informing them of the release of the ESIA and RAP Reports and seeking their feedback	All stakeholders	
8	March 2013	Development Partners (WB, AfDB, KfW, EIB, Netherlands)	Development Partner's Workshop	Disclosure Workshop	All stakeholders	
9	March/April 2013	Project Affected Persons (PAPs)	Village meetings	PIU will visit the PAPs again to provide project updates. Issues of compensation will be resolved before construction	All project affected persons (PAPs)	
10	March/April 2013	Previously Project Affected Persons (Ex-PAPs)	Village meetings	PIU will revisit the Ex-PAPs in all project areas to inform them of changes in project design and to inform them that they are no longer going to be affected by the project. The purpose is to manage expectations.	All Ex-PAPs	
11	March/April 2013	Business Operators	Office meeting, emails and letters	Consultations will continue with Tourism Business Owners especially at the Project site to explain mitigation measures and compensation plans in place (where applicable) to protect their businesses. Also to receive their concerns and feedback on ESIA and RAP.	All business operators	
12	March/April 2013	Vulnerable Groups	Village meetings	Vulnerable groups' interests are represented through the Sector/District Grievance Mechanism Committees. Input on how their interests have been considered will be considered when meeting the district or local communities.	,	
13	March/April 2013	Tourists/Visitors	District offices and offices	The interests of tourists are being addressed through consultation with Tourism Business Association and at districts who will be kept updated of the project updates.	Tourism Associations, district authorities, etc	

# 9.10 **PROJECT STAKEHOLDERS**

Project stakeholders are listed in the following tables.

### Table 49 – Project Stakeholders, Tanzania

Stakeholder	Level and Type	Composition	Relation to Project Function in Project
Project Implementation Committee (PIC)	Regional; Government officials Part of NELSAP/NBI	Ministries of Energy and Minerals	Decisional body of the Project at regional level;
Nile Equatorial Lakes Technical Advisory Committee (NELTAC)	Regional; Government Officials Part of NELSAP/NBI	Ministries of Energy and Minerals, Water and Environment	Advisory body for the Project at regional level;
Rusumo Falls Tanzania Taskforce	National; GovernmentOfficials	Ministry of Energy and Minerals Ministry of Agriculture Ministry of Community Development Ministry of Land NEMC Ministry of Finance	Advisory body for the Project in Tanzania Planning and Coordinating Agencies for the RAP, LADP and ESMP in Tanzania Decision-maker in Tanzania
RusumoFalls District Taskforces	District; GovernmentOfficials	District Commissionner (DC) District Executive Director (DED) District Land Officer District Agronomist District Environment Officer District Planning Officer Ward Leaders	Advisory body for the Project in Ngara Planning and Implementing Agencies for the RAP, LADP and ESMP Decision-maker at District-level Decision-maker and advisors at Ward-level
Rusumo Falls Resettlement Committees	Village- and Subvillagelevel	Village Leader Subvillage leaders 4 Affected Households 3 representatives of vulnerable groups	Advisory body for the Project at village-level Planning and Implementing Agencies for the RAP, LADP and ESMP in Ngara Decision-maker at Village level Representatives of vulnerable groups
Tanzanian Nile Basin Discourse Forum	Regional and National Non-government Organizations (NGOs)	RegionalNGOs National NGOs	Reviewing social and environmental acceptability of the Project Take part in some community measures to be implemented
Joint Action Forum (JAF) Non-Government Organization (NGOs.)	Local; NGOs or Donors	CODISO, Concern, Jetropha, etc.	Ensure synergy between Projects Identify mitigation measures if conflicting projects
Affected communities and affected households, including vulnerable people	Local; Official representatives of PAP ; All project affected people	Rural population in project area of influence	RAP and LADP provide mechanism and measures to ensure that project affected people become project beneficiaries Regular consultation of affected people, special assistance for vulnerable groups



Stakeholders	Level and Type	Composition	Interest in the Project
Project Implementation Committee (PIC)	Regional; Government officials Part of NELSAP/NBI	Ministry of Energy	Decisional body of the Project at regional level;
Nile Equatorial Lakes Technical Advisory Committee (NELTAC)	Regional; Government Officials Part of NELSAP/NBI	Ministries of Energy Water and Environment	Advisory body for the Project at regional level;
Rusumo Falls Rwanda Taskforce	National; GovernmentOfficials	Ministry of Infrastructure (MINIFRA) Ministry of Local Governance (MINALOC) Ministry of Agriculture (MINAGRI) Ministry of Natural Resources (MIRINELA) Ministry of Finance (MINECOFIN)	Advisory body for the Project in Rwanda Planning and Coordinating Agencies for the RAP, LADP and ESMP in Rwanda Decision-maker in Rwanda
Rusumo Falls District Taskforces	District; Government Officials	Vice Mayor Permanent Secretary District Land Officer District Agronomist District Social Affair Officer Affected Sector Leaders Sector Agronomists	Advisory body for the Project in Kagera Planning and Implementing Agencies for the RAP, LADP and ESMP Decision-maker at District-level
Rusumo Falls Resettlement Committees	Cell- and Village level	CellExecutiveSecretary Village Leader Village Council 4 AffectedHouseholds 3 representatives of vulnerable groups	Advisory body for the Project at village-level Planning and Implementing Agencies for the RAP, LADP and ESMP in Ngara Decision-maker at Village level Representatives of vulnerable groups
Nile Basin Discourse Forum	Regional and National Non-government Organizations (NGOs)	RegionalNGOs National NGOs	Reviewing social and environmental acceptability of the Project Take part in some community measures to be implemented
Joint Action Forum (JAF) Non-Government Organization (NGOs.)	Local; NGOs or Donors	KWAMP. SNV, JICA, BTC	Ensure synergy between Projects Identify mitigation measures if conflictual projects
Affected communities and affected households, including vulnerable people	Local; Official representatives of PAP All project affected people	Rural population in project area of influence	RAP and LADP provide mechanism and measures to ensure that project affected people become project beneficiaries Regular consultation of affected people, special assistance for vulnerable groups

# Table 50- Project Stakeholder, Rwanda



# **10. IMPLEMENTATION ARRANGEMENTS**

# 10.1 **INTRODUCTION**

A complex Project such as the Rusumo Falls Run of River Scheme with the requirements of associated environmental and social management plans, the RAP and the LADP requires an adequate implementation set up, with agreed roles and responsibilities.

The RAP, the ESMP and the LADP will be implemented within one overall organizational set up, by multi-disciplinary teams (see below) on different levels. High level committees, representing different ministries of the two governments, will provide overall guidance as decision makers during the implementation phase. District authorities will act as advisory bodies and partners for implementation.

The intended implementation arrangements with a range of key actors on different levels, representing different entities, require the development of an overall communication plan for Project implementation (see below), in order to facilitate efficient performance.

The sections below present the implementation arrangements with a focus on the RAP. The respective requirements for the ESMP implementation are described in detail in the RoR ESIA, chapter 7.

# 10.2 ROLES AND RESPONSIBILITIES

The implementation of the Project will require the participation of several key players, including, but not limited to,

- the Project Owner and the Project Implementing Unit
- the Governments of Rwanda, Tanzania and Burundi (through high level councils)
- the relevant local and regional authorities of each national government
- as well as during construction the Owner's Engineer and the Construction Contractor (for details see ESMP).

# 10.2.1 High Level Councils and Committees

High level committees oversee and guide the process of Project implementation.

# **Council of Ministers**

The councils is composed of the ministers of the three countries who are in charge for electricity/energy provision.

## **Project Implementation Committee (PIC)**

The PIC is composed of the Managing Directors of the National Electricity Utilities, the DG/Commissioner/Director of Energy from each of the three countries

Technical Advisory Committee (TAC)

The Technical Advisory Committee currently consists of two experts, one from Rwanda and one from Tanzania.

# 10.2.2 Project Owner - SPVPC

As required by the Tripartite Agreement between Burundi, Rwanda and Tanzania; the role of the Project Owner is delegated to a *Special Purpose Vehicle Project Company* (SPVPC). The SPVPC shall be responsible for all aspects of project management, including those associated with its environmental and social issues.

The Project owner is the entity making commitments with authorities in Rwanda, Tanzania and Burundi as well as with funding agencies in relation to the implementation of the RAP, the Environmental and Social Management Plan and the LADP (for ESMP, see ESIA for the RoR Scheme, chapter 7).

The Project Owner (SPVPC) is responsible for overseeing and monitoring overall project implementation and for ensuring compliance with the environmental and social requirements of government authorities and funding agencies.

# 10.3 NELSAP: PROJECT IMPLEMENTING UNIT (PIU)

NELSAP will serve as project implementing unit (PIU) for the RAP, ESMP and LADP, with a team dedicated to carrying out the respective activities, and coordinating with the two governments.

The PIU will operate on site, in interaction with the project affected people and direct cooperation with the district authorities. PIU will report to the SPVCP.

The PIU as regional implementation unit will operate from Kigali (PIU headquarters) as well as directly at the Project site, with a local Project office (see section 9.8).

The key implementation processes of the RAP require continuous presence in the project area and continuous communication with district authorities (mainly via Task Forces, see below), resettlement committees and affected people. A project office at the Project site (location yet to be determined, in the Rusumo villages) will maximise efficiency and accessibility of the PIU staff. The present NELSAP team, already operating on the RAP, PCDP and ESMP preparation will be reinforced by additional staff (see Table 51 below).

To properly deliver its mandate, the PIU must be fully established and operational as soon as the decision to go ahead with the Rusumo project has been made. This is in order to timely initiate and manage those key RAP implementation activities, which will have to be performed prior to the start of construction (i.e. the compensation process for people affected by construction).

With regard to the implementation of the RAP and the PCDP, the PIU has the following responsibilities

# Communication and Coordination

- Overall coordination with national governments and with authorities and funding agencies with regard to the Project's social and environmental issues
- Implementation of the PCDP and establishment of good and operational relations to affected communities
- Communication and cooperation with district administrations (Ngara and Kirehe districts) as key actors with implementation of livelihood restoration programs
- Communication and cooperation with district administrations of the target area of the LADP as key actors with implementation of LADP measures
- Communication and cooperation with local resettlement committees as key actors with implementation processes (i.e. compensation process, monitoring, identification of vulnerable people)
- Communication and cooperation with the institutions involved in the compensation process and into training measures for affected people: SACCO (Rwanda) and National Microfinance Bank (NMB Bank) Ngara Branch (Tanzania)

# Management of RAP Implementation

- Ensure and monitor overall social and environmental due diligence within RAP, ESMP and LADP implementation (national requirements, lenders requirements)
- RAP Key Implementation Processes
  - Oversee and coordinate compensation process (see chapter 7.5.10)
  - > Operate Grievance Mechanism (see chapter 0)
  - Operate Monitoring (see chapter 11)
- Manage staff recruitment processes and contracting processes of external service providers
- Design of overall training plan for RAP implementation staff, oversee and coordinate implementation of plan

# Management of ESMP and LADP implementation

 PIU will also be responsible for ESMP – and LADP implementation. For further details, see ESIA for the RoR, chapter 7 and LADP as separate document (Annex 2).

# Change Management

 Communicate necessary changes of approach, particularly where substantial and material changes to the RAP (ESMP, LADP, PCDP) might be envisioned or necessary (i.e. as consequence of monitoring results) to SPVPC and PIC (see below) for final decision making

## Capacity building

• Facilitate and guide capacity building for authorities on different levels with regard to due diligence of Project management and due consideration of environmental and social safeguards

## Existing PIU Staff Positions and Additional Staff Requirements

The table below presents a summary of staff positions and corresponding tasks for the PIU with regard to RAP implementation. PIU will also manage ESMP and LADP - implementation. For respective staff positions and tasks see ESIA for the RoR (chapter 7, ESMP).

From the proposed staff positions, the following positions are already established with staff operating for the RAP and LADP (preparation phase) as well as PCDP- and ESIA - preparation.

- Lead Safeguard Specialist
- Communication Officer
- Environment Management Officer
- Social Development- and Resettlement Officer

Several support staff is also already in operation. The additional positions indicated in the table below shall be assigned through a tender procedure to qualified candidates in order to set up the full capacity for RAP (ESMP, LADP) implementation.

At the end of the construction phase, the PIU team will be gradually reduced as the need for intervention decreases and works will have been completed by its staff.

However, some key processes of RAP implementation will extend into the operation phase (i.e. monitoring), hence respective staff will perform until the completion of the RAP (after the compliance – and completion audit (external) and the acceptance of the RAP completion report (containing the independent outcome evaluation) by governments and lenders.

In the long run, two community liaison officers and one monitoring expert for long term livelihood tracking will be in charge on a permanent base for project operation.

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# Table 51PIU Set-Up and Tasks for RAP Implementation

#### Lead Safeguard Specialist (1)

#### TASKS\*

- report to SPVPC manager
- recruit PIU staff, and terminate him/her if warranted; in agreement with SPVPV management
- set up and implement of staff training plan

■ overlook and supervise RAP implementation, with a focus on key processes: compensation process, grievance management process, monitoring process

establish and follow up detailed short term implementation plan (monthly planning of activities); submitRAP Implementation Reports

- liaise with all team members of the PIU, hold regular team meetings
- operate communication routines with relevant administrations and authorities
- meet regularly with District Task Forces and Resettlement Committees
- act as observer in grievance mediation committee
- Propose, if necessary , corrective actions as consequence of monitoring results to SPVPC
- Implement decisions upon major corrective actions which might become necessary during RAP implementation
- overlook and supervise ESMP and LADP implementation

#### SKILLS\*

- Seniorspecialist with experience in of the Rusumo Falls region.
- relevant education record
- senior project management skills (including quality management)
- advanced communication- and coordination skills
- advanced expertise in social and environmental safeguards, familiarity with application of relevant guidelines
- familiarity with the Project and with all social and environmental plans related to the Project
- advanced reporting skills

#### Social Development and Resettlement Officer (1)

#### TASKS\*

- Ensure that RAP implementation proceeds in line with social safeguards requirements of lenders and governments of Rwanda and Tanzania
- oversee social issues in ESMP implementation (details see ESMP)
- supervise LADP implementation (details see LADP)
- meet regularly with District Task Forces and Resettlement Committees
- Initiate and supervise final design process for livelihood restoration measures
- Supervise implementation of livelihood restoration measures
- Coordinate exit survey prior to compensation disbursement with final technical valuation of losses
- provide guidance for social monitoring staff, follow up of monitoring activities
- coordinate community liaison officers, direct tasks and receive reports, liaise and cooperate with PCDP coordinator
- Deputy to PIU Manager

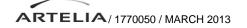
#### SKILLS\*

Senior social and/or development specialist with experience in resettlement and land acquisition issues, preferably in of the Rusumo Falls region.

- relevant education record
- senior specialist with experience in resettlement and land acquisition issues
- advanced communication- and coordination skills
- expertise in social safeguards, familiarity with application of relevant guidelines
- experienced in social field work, methodology and design
- familiarity with the project region and with the respective socio-cultural specifics, especially related to poverty issues, to gender issues and to vulnerable groups
- expertise in social monitoring
- familiarity with the Project and with all social and environmental plans related to the Project
- advanced reporting skills

#### **Environment Management Officer**

#### TASKS and SKILLS see ESMP



#### **DAM & POWERPLANT COMPONENT** RESETTLEMENT ACTION PLAN (RAP)

#### **Communication Officer (1)**

#### TASKS

- oversee and supervise implementation of PCDP
- develop actions of PCDP according to lessons learned within communication with PAPs
- liaise with community liaison staff, provide guidance in cooperation with social safeguards expert
- maintain contact to district authorities, resettlement committees and other representatives of PAP as well as to other stakeholders of the Project (see stakeholder engagement activities within ESMP)
- maintain relations to the public
- communication with media, project related publications and development of communication material

#### SKILLS

Senior specialist with experience in communication process management, public relations, facilitation

relevant education record

■ senior specialist with advanced expertise in designing and performing communication processes with different target groups, public relations experience

- advanced coordination- and facilitation skills
- familiarity with the project region and with the respective socio-cultural specifics
- familiarity with relevant safeguard policies
- familiarity with the Project and with social/environmental plans related to the Project

#### Livelihood Restoration and Community Liaison Officer (4)

#### TASKS\*

- operate under direct guidance of social safeguards expert and of PCDP coordinator
- maintain contact to and cooperation with affected communities
- technical management of livelihood restoration programs, in cooperation with the district authorities
- be accessible to liaise with affected population per request, especially for vulnerable groups.
- assist affected people in issues related to the Project (answer questions about the process, delivery of grievances, information about consultation activities etc.)

participate as observer on a case by case base in the exit surveys with final technical valuation of losses (under guidance of social safeguards expert)

- operation of consultation process with affected people (PCDP implementation), guided by PCDP coordinator
- identification of vulnerable people in cooperation with resettlement committees
- on the spot and ad-hoc consultation and information of affected people
- liaise with monitoring staff, involvement in monitoring process
- liaise with grievance management staff

#### SKILLS\*

■ technical skills required for the final design and implementation coordination of livelihood restoration programs: at least 1 agriculturalist, at least one expert for small – and micro businesses, at least one expert for agri-business;

- familiarity with government programs which would serve as conceptual frameworks for the RAP livelihood restoration measures
- very good communication skills and cultural sensitivity
- experience in livelihood restoration programs and in field work on the grass root level with rural population
- ability to work in a team and in an interdisciplinary manner
- ability to work proactively
- familiarity with the project area and with the respective socio-cultural specifics
- knowledge of local languages (depending on the area of operation)

#### Note

At least 50% of livelihood restoration and community liaison team should be female Livelihood restoration and community liaison officers are permanently operating from Project office on site



#### **DAM & POWERPLANT COMPONENT** RESETTLEMENT ACTION PLAN (RAP)

#### **Grievance Management Officer (1)**

#### TASKS\*

- supervise operation of grievance mechanism and regional coordination
- guide grievance management officers and establish detailed design of documents and procedures, in cooperation with social safeguards specialist
- train resettlement committees on their tasks within local grievance management
- maintain relations to resettlement committees and organize regular visits and consultation meetings in affected communities
- take over complex and disputed cases of grievances in order to avoid forwarding to mediation committee
- train grievance management officers and introduce them into their tasks
- report to social safeguards specialist and to PIU manager
- liaise with monitoring coordinator, contribute to monitoring
- follow up the registration of grievances and filing of grievances into the database

#### SKILLS\*

Experienced project manager with strong organizational, analytical - and communication skills.

■ familiarity with the Project and with social/environmental plans related to the Project, familiarity with the Project's grievance mechanism

experience with similar tasks in similar settings

■ familiarity with the legal aspects of the grievance process and familiarity with related administrative processes (i.e. processes related to expropriation)

- ability to work in a demanding set up, mediation skills, sensitivity towards socio-cultural specifics of the Project area
- ability to organize a complex mechanism

#### **Grievance Management Assistant (2)**

#### TASKS\*

- collection of registered grievances from resettlement committees
- reception, registration, processing of grievances according to the Project's mechanism
- participation in resolution of grievances on the first level through information and explanation
- proposals for grievance resolution
- on site verification of complaints and consultation of complainants
- contributions to monitoring

#### SKILLS\*

- very good communication skills and cultural sensitivity
- experience in social field work on the grass root level and in communication with the rural population of the affected area
- ability to work in a team and in an interdisciplinary manner
- ability to work proactively
- familiarity with the project area and with the respective socio-cultural specifics
- knowledge of local languages (depending on the area of operation)
- willingness to familiarize with relevant RAP implementation processes in order to provide information to claimants
- knowledge of local languages (depending on the area of operation)

#### Note

At least 50% of grievance management team should be female Grievance management officers are permanently operating from Project office on site



#### DAM & POWERPLANT COMPONENT RESETTLEMENT ACTION PLAN (RAP)

#### Project Database Manager (2)

#### TASKS\*

- develop Project database, provide advise with respective professional software
- get familiar with RAP processes and other relevant processes, consider processed in data base design
- cooperate with PIU staff in order to appropriately design the database
- design processes in order to file data from PIU staff into the data base
- report to PIU senior management
- provide data as required from PIU team

#### Database will at least contain

- -Socio-economic baseline data
- Grievance database
- -Monitoring database
- -Compensation database
- -Environmental data
- -Project report and documentation database

#### SKILLS\*

Senior IT expert with advanced skills in database management

- in depth familiarity with relevant software and technical settings
- experience with the design and management of complex database systems
- team working skills

#### Monitoring Officer (1)

#### TASKS\*

- regional coordination of monitoring
- implementation of internal monitoring programme of the RAP according to the provisions in section 11.4
- detailed design of procedures and monitoring forms under supervision of social safeguards specialist
- documentation of monitoring results and alert on any required corrective action as outcome of monitoring
- guide monitoring assistants and community liaison officers for monitoring procedures
- cooperate with local resettlement committees and district task forces
- forward results to database management
- deliver monitoring reports according to schedule

#### SKILLS\*

Senior expert in social monitoring, desirably in similar projects

- advanced expertise in designing and performing monitoring procedures, analyzing results
- familiarity with relevant social safeguard policies and their application
- familiarity with social field work in rural environments

good reporting skills

#### Monitoring Assistant (2)

#### TASKS\*

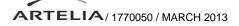
- perform tasks within the monitoring program under guidance of monitoring officer
- cooperate with community liaison officers and with resettlement committees within monitoring

#### SKILLS\*

- good communication skills and cultural sensitivity
- experience in social field work on the grass root level
- familiarity with the project area and with the respective socio-cultural specifics
- knowledge of local languages (depending on the area of operation)

#### Note

At least 50% of monitoring assistants should be female Monitoring assistant are permanently operating from Project office on site



DAM & POWERPLANT COMPONENT RESETTLEMENT ACTION PLAN (RAP)

#### Support Staff

Supporting staff will be hired according to demand (to be determined)

- Secretary
- Accountant
- Office assistant
- Driver
- Other support staff

\*Tasks and skills are presented as tentative lists, final description to be determined by the start of implementation phase

The figure below presents an overview on the PIU set up as described in the table above.

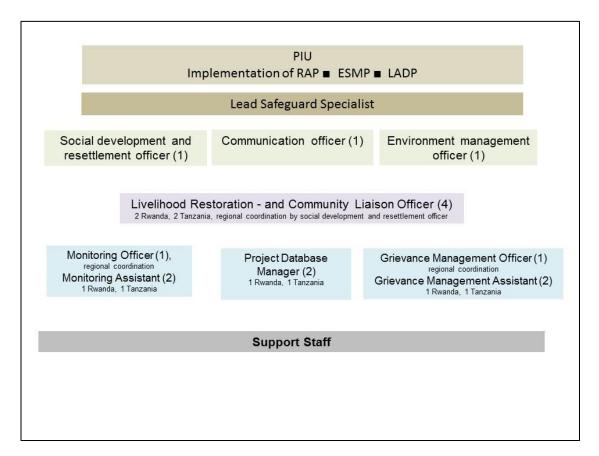


Figure 17 – PIU Overview Chart

# 10.4 OTHER PARTIES INVOLVED IN RAP IMPLEMENTATION

# **10.4.1 Project Implementation Committee (PIC)**

The PIC as high level regional committee will oversee and guide overall RAP implementation. The PIC will facilitate regional communication and exchange on government level. With the SPV, the PIC is the high level decision making body for the overall implementation process of the RAP. The PIC will establish an appropriate meeting routine for the period of RAP implementation.

# 10.4.2 Technical Advisory Committee (TAC)

The TAC is a high level regional technical advisory committee, with members from relevant government ministries of the three countries. The TAC will act on request (e.g. request the PIC or request by PIU via SPV).

## 10.4.3 District Task Forces

The District Task Forces act as implementing bodies for RAP related activities on the district level, in Kagera District in Rwanda and in Ngara District in Tanzania. They operate as direct partners to the PIU and will take the lead role with regard to the implementation of livelihood restoration programs (see section 7.6). Kirehe district and Ngara district both confirmed their commitment to actively participate in RAP implementation in February 2013.

District executive administration staff shall contribute with their expertise, their capacity and competence to the implementation of the RAP, corresponding to the different technical areas they represent (i.e. agriculture, social assistance, land bureau).

District Task Forces will establish appropriate meeting routines with the PIU. Continuous mutual information will be a key aspect of cooperation.

With the objective of overall capacity building, PIU will provide in-depth information about relevant social and environmental safeguards for the RAP. Practical aspects of application of the respective guidelines will be explained.

Sub-processes of RAP implementation such as the official valuation of affected assets, will be carried out by district officials (land bureaus) according to the relevant legal and administrative framework. The District Land Officer is member of the Task Force.

District Sector Leaders in Rwanda and Ward Leaders in Tanzania as representatives of the affected population will provide for updated information and for the consideration of area specific aspects within RAP implementation.

### Rwanda District Task Force, Kirehe District:

- Vice Mayor
- Permanent Secretary

- District Land Officer
- District Legal Officer
- District Cooperatives Officer
- District Agronomist
- District Social Affair Officer
- Affected Sector Leaders
- Sector Agronomists

# Tanzania District Task Force, Ngara District:

- District Commissioner
- District Executive Director
- District Community Development Officer
- District Land Officer
- District Legal Officer
- District Agronomist
- District Gender Officer
- District Environment Officer
- District Planning Officer
- Ward Leaders

# **10.4.4 Financial Institutions on the District Level**

The disbursement of cash compensation will be operated by district branches of financial institutions with expertise in rural environments (including micro-finance): SACCO in Rwanda and National Microfinance Bank (NMB) in Tanzania (as agreed by Ngara district and Kirehe district and by SACCO and NMB in Feb 2013).

SACCO and NMB will be contracted by NELSAP/PIU for the disbursement of compensation to affected households. PIU will provide the respective information for compensation disbursement (PIU compensation database). PIU and representatives of the district Task Forces will oversee the compensation disbursement process. Monitoring of the process will be performed by an external party (to be contracted), see section 11.4.

SACCO and NMB will also train district staff so that they can perform money management training for affected people who receive cash compensation (see section 7.6.9).

Furthermore, the micro-credit schemes which are associated with the livelihood restoration programs will be operated by SACCO and NMB (see section 7.6).

# **10.4.5 Resettlement Committees**

The resettlement committees are partners on the village level for RAP implementation, especially for:

- Compensation process: witness of exit survey with technical asset valuation by official valuers and final compensation agreements with households (see section 7.5 above);
- Involvement into the grievance mechanism on the village level (see section 8 above)
- Involvement into monitoring procedures, especially in monitoring of marshland dynamics (see section 7.4 above), of progress of livelihood restoration measures and of compensation disbursement
- Identification of vulnerable people on the household level, information of PIU on special concerns of vulnerable people in their community, organize meetings and with and visits of vulnerable people

PIU field staff shall regularly meet and consult with local resettlement committees on site in the affected villages.

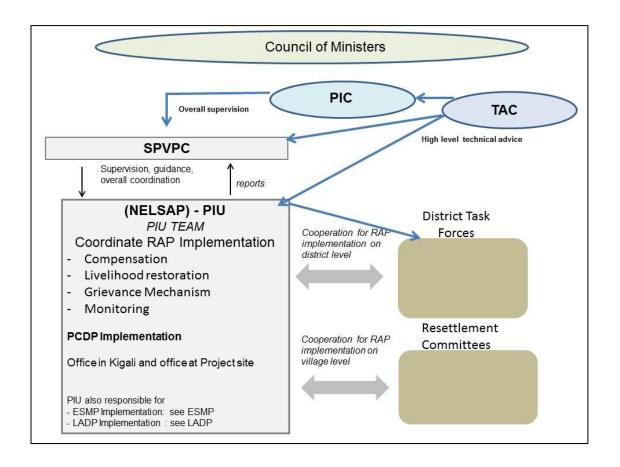
## Composition of Resettlement Committees, Tanzania

- Village Leader
- Subvillage leaders
- 4 Affected Households
- 3 representatives of vulnerable groups

### Composition of Resettlement Committees, Rwanda

- Cell Executive Secretary
- Village Leader
- Village Council
- 4 Affected Households
- 3 representatives of vulnerable groups

DAM & POWERPLANT COMPONENT RESETTLEMENT ACTION PLAN (RAP)



# Figure 18- Implementation Chart for the RAP

DAM & POWERPLANT COMPONENT RESETTLEMENT ACTION PLAN (RAP)

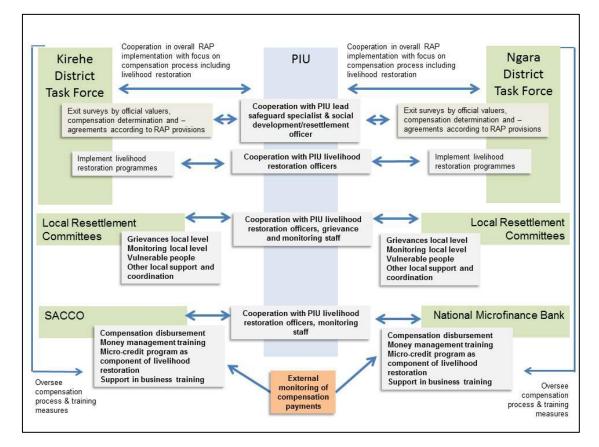


Figure 19 – Implementation Set Up on the District Level

# 10.5 **IMPLEMENTATION SCHEDULE**

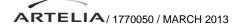
The project is divided into three phases.

**Phase 1** - Preconstruction period  $(Y_0)$ : establishment of PIU and start of RAP implementation (i.e. compensation for assets affected by construction, start of livelihood restoration measures for affected people);

**Phase 2** – Construction period  $(Y_1 - Y_4)$ : continuation of RAP implementation (i.e. compensation for loss of marshland resulting from project operation, start of livelihood restoration measures for affected marshland users);

Phase 3 – Commissioning and start of Project operation  $(Y_5)$ : continuation of RAP implementation;

After Phase 3 -  $Y_5$ - $Y_8$ : completion of RAP implementation.



DAM & POWERPLANT COMPONENT RESETTLEMENT ACTION PLAN (RAP)

	4	2	2	4	F	6	7	0	0	10	11	10
Activity	1	2 <b>Q</b> ₁	3	4	5 <b>Q</b> <sub>2</sub>	6	7	8 <b>Q</b> <sub>3</sub>	9	10	11 <b>Q</b> ₄	12
Set-Up of PIU: tender, contract staff as per section 10 of RAP					-2							
Final design of civil works												
Compensation Process												
Contracts for compensation disbursement with												
SACCO/NMB												
Exit surveys/compensation agreement for HH												
affected by construction, extension of survey period												
corresponding to availability of final construction area												
pattern							3333					<u> </u>
Disbursement of compensation												I
Monitoring												
Baseline survey (20%PAP startified sample) as												
reference base for outcome evaluation, determination												
of outcome indicators for monitoring Tender/contract for outcome evaluation												
Tender/contract for monitoring of compensation disbursement												
Internal monitoring as per section 11												
Outcome monitoring as per section 11												
Monitoring compensation disbursement												
Tracking of PAP who lose their residence for												
establishment of new residence before they have to												
leave their affected residence												
Livelihood Restoration												
Final arrangements for livelihood restoration												
measures: small business management, small												
business support; PIU livelihood restoration officer												
(business expert), district officers, SACCO and NMB												
representatives; consultation of affected businesses Training of Trainers for Money Management Training:												
SACCO for district officers in Rwanda and Tanzania												
Final arrangements for livelihood restoration												
measures: agricultural enhancement												
measures/livestock enhancement: PIU livelihood												
restoration officer; agronomists of districts; other												
district officers (social, community development),												
consultation of affected people (PAP losing												
agricultural land due to construction) Advisory service to affected people for enrollment in												
livelihood restoration												
Enrollment HH affected by construction in livelihood												
restoration: small business and agricultural												
enhancement												
Start of Livelihood Restoration: Small business												
support/small business development												
Start of Livelihood Restoration: agricultural												
enhancement and livestock												
Implementation of Money Management Training for affected people: district officers												
Preparation Process for LADP measures (priority on												
affected communities and ex-PAPs): PIU and districts												
Consultation												
Consultation of Vulnerable People on household level												
on support needed; implementation of support												
measures as per consultation results; consultation of												
PAP as per RAP and PCDP												
Grievance Process			L		ļ							I
Training of Resettlement Committees for the												
management of grievanances on local level Maintenance of Grievance Management Process as												
per section 7												

# Figure 20 Implementation Schedule for Year <sub>0</sub>

DAM & POWERPLANT COMPONENT RESETTLEMENT ACTION PLAN (RAP)

Activity		Yea	ar 1		Year 2				Year 3				Year 4			
Activity	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
PIU operation as per RAP																
Civil contractor mobilization																
Start of Civil Works, construction, Project commissioning at end of year 4																
Compensation Process																
Survey of PAP who were absent during village self-validation (PAP affected by operation) Exit surveys/compensation																
agreement for HH affected by operation, integrating PAP who were absent during village self- validation																
Disbursement of compensation																
Monitoring																
Internal monitoring as per section 11																
Outcome monitoring/evaluation as per section 11		•		•		•		•		•		•		٠		•
Monitoring compensation disbursement																
Livelihood Restoration																
Advisory service to affected people for enrollment in livelihood restoration																
Enrollment HH affected by operation for livelihood restoration measures																
Start and Operation of Livelihood Restoration Programs																
Money Management Training for affected people: district officers																
Implementation of LADP																
Consultation																
Consultation of Vulnerable People on support needed; implementation of support measures as per consultation results Consultation of PAP as per RAP and PCDP																
Grievance Process																
Maintenance of Grievance Management Process as per section 7 Figure 21						Sche										

Figure 21

Implementation Schedule – Construction Period

DAM & POWERPLANT COMPONENT RESETTLEMENT ACTION PLAN (RAP)

Activity		Year 5				Year 6				Year7				Year 8			
Activity	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	
PIU operation as per RAP																	
Project commissioning, operation																	
Monitoring																	
Internal monitoring as per section 11																	
Outcome monitoring/evaluation as per section 11		٠		٠		•		٠		٠		٠					
compliance/completion audit														٠			
Livelihood Restoration																	
Livelihood Restoration Programs																	
Money Management Training for affected people: district officers																	
Implementation of LADP																	
Consultation																	
consultation of PAP as per RAP and PCDP																	
vulnerable people - implementation of support measures as per consultation results																	
Grievance Process																	
Maintenance of Grievance Management Process as per section 7, available for target population of LADP																	

Figure 22 Implementation Schedule - Operation

# **11. MONITORING AND EVALUATION**

# 11.1 **OVERVIEW**

The monitoring is to assess the overall success of the RAP and the effectiveness of the various processes and measures. Monitoring activities will comprise three main components:

- Internal monitoring
- External monitoring (by external experts);
- RAP completion audit (by one or more international experts)

The internal monitoring process will run as part of day to day PIU activities by the PIU teams.

External monitoring is intended to provide an independent, third party, objective assessment of the on-going RAP implementation to ensure that the Project is meeting international standards for compensation and resettlement.

The monitoring & evaluation team in collaboration with representatives of affected people will select final outcome indicators by the start of Year  $_0$ . A stratified sample of about 20% of affected people will be used consistently for outcome measurement. The stratification process will ensure that all sub-groups are adequately represented in the sample. The team will finalize the baseline against which indicators will be measured for the sample households prior to affected households' loss of assets (by month 6 of Year  $_0$ ). Indicators will include both quantitative (such as income for livelihood restoration, size and quality for standard of living), as well as proxy indicators for livelihood restoration.

The completion audit will verify full, comprehensive and transparent implementation of the RAP according to international policies. Each of the key aspects of the M&E Mechanism is described below.

# 11.2 **OBJECTIVES OF MONITORING**

The overall objectives of monitoring in the RAP context are to verify the following points:

- Actions and commitments described in the RAP are implemented fully and on time;
- Project affected persons understand their rights;
- Eligible project affected persons (PAPs) receive their full compensation entitlements and livelihood restoration measures within the agreed time;
- Physically displaced HH restore and improve living standards to at least previous levels

- RAP compensation and livelihood restoration measures are effective with regard to the enhancement or at least the restoration of livelihoods of PAPs;
- Complaints and grievances expressed/submitted by PAPs are followed up and resolved and that, where necessary, corrective actions are implemented;
- If necessary, changes in RAP procedures are made to improve delivery of compensation/assistance to PAPs; needs for changes would be noted largely by the monitoring and evaluation results and through consultation of PAP

The overall responsibility of monitoring is with NELSAP. The monitoring will be performed by internal (PIU) staff who will receive training with regard to monitoring techniques and recording of monitoring results.

External experts will be hired for external monitoring (evaluation) where applicable.

# 11.3 **M&E APPROACH**

The following monitoring and evaluation approach will be used, whereby different levels of monitoring and evaluation are used

- Internal progress (Input/Output) monitoring: measures whether inputs are delivered on schedule and as defined in the RAP, and their direct measurable results, for instance
  - Amounts of compensation paid in a given month (see below)
  - People completing livelihood restoration training courses
  - Lost places of residence re-established
  - Businesses re-established

Monitoring will also seek to document and investigate specific conflict or hardship situations arising from the implementation of the RAP. Monitoring keeps track of RAP implementation efficiency and indicates whether changes have to be made to make the program work more efficiently. Progress monitoring is done internally by the Project at a frequency determined by the RAP for every indicator. For this RAP, participatory elements are integrated in the monitoring process, e.g. interviews and focus group discussions.

**Note:** Monitoring of compensation disbursement will be outsourced to an external independent entity.

- Outcome evaluation:
- Outcome evaluation assesses whether standard of living and livelihood restoration measures are achieving the goals of restoring/improving standard of living of physically displaced households and/or restoring/improving livelihood conditions of economically displaced households.

Outcome evaluation defines the extent to which the project is achieving or likely to achieve the objectives of the RAP. Re-establishment of businesses and earning acceptable returns over a reasonable period is an example of outcome. Outcome evaluation, combined with output monitoring results, will indicate whether the program is genuinely working and should continue to be implemented as planned,

or whether some fundamental changes need to be made. Outcome evaluation looks beyond numerical compliance to the longer term impacts of program inputs and outputs, do determine what works and what does not work, and what needs to be changed. Outcome evaluation will be done by an independent entity during RAP implementation.

Outcome evaluation often uses proxy indicators (indirect indicators): for example, many people are reluctant to talk about their actual income. Proxy indicators can be used to help determine whether affected people are re-establishing or improving their livelihoods and standard of living. Indirect indicators may include school attendance, or the purchase of "luxury" items such as motorbikes, sat TVs.

Outcome evaluation reports will be publicly disclosed.

• Audit of compliance and completion: Defines whether the RAP and applicable requirements have been complied with, and if the implementation can be deemed complete.

# 11.4 **INTERNAL MONITORING**

Internal monitoring will verify progress and analyse relevant issues at regular intervals (e.g. quarterly) in order to provide information for necessary updates of the RAP process.

Monitoring Aspect	Activity and specific monitoring parameters*	Monitoring Frequency					
Performance against schedule	Progress in technical validation of affected land and assets and signature of compensation agreements: % complete						
	Payment of compensation and delivery of livelihood restoration measures % complete						
	Land plots used temporarily during construction, number: - % of total land used for construction						
	Plots used during construction: % re-instated and handed back to owners						
	Grievance process: no. of grievances received/responded/resolved						
	Consultation activities: records of meetings, discussions, interviews, etc.						
	Summary of monitoring activities, to be integrated into the RAP Implementation Status Reports						
Overall	Was compensation paid to land owners and land users?	Monthly					
restoration of livelihoods and income	% of total payments/livelihood measures completed, in progress, not started, in appeal.						
lincome	Was compensation in general in line with agreed rates and in - time?						
	% of total payments made at agreed rates						
	% within agreed time frame.						
	How is the response of affected people to the livelihood programs? % enrolment of affected households						
	Where livelihood restoration measures delivered for all groups of affected people?						
	% of total livelihood restoration measures in progress, not started.						
	Was financial training delivered to all groups of affected people? % of affected households in financial training completed, in progress, not started, appeal						
	Did affected businesses receive entitlements?						
	% of total completed, in progress, not started, in appeal.						

## Table 52 – Selection of Indicators for Internal Monitoring

DAM & POWERPLANT COMPONENT RESETTLEMENT ACTION PLAN (RAP)

Monitoring Aspect	Activity and specific monitoring parameters*	Monitoring Frequency
	Did affected workers/employees receive entitlements?	
	% of total completed, in progress, not started.	-
	Have vulnerable people been identified on the household level? % of household situations reviewed	
	Have special needs of vulnerable groups been identified and addressed? % of vulnerable people addressed with targeted measures	
	Have physically displaced people managed to re-establish a new place of residence? % of displaced people established new place of residence	3 monthly
	Have affected businesses been restored? % of restored businesses	6 monthly
	What changes have occurred in the costs for living/expenditures of PAPs? Factual description	Once a year
	How have changes of income changed overall household economy of PAPs? Factual description	
	Number. of skilled and non- skilled PAPs engaged in construction workforce (or otherwise employed as part of Project)? Total no. of PAPs who applied for jobs, % employed part-time/full-time, % undergoing job training	
	Are livelihood restoration measures proving effective? Summary professional opinion	
	Are any additional support measures required? Professional opinion based on all results to date	
Level of PAP satisfaction	How do PAPs perceive the extent to which their overall livelihood has been restored? Results of routine interviews with PAPs	Continuously
	Have PAPs experienced any hardship as result of the Project? Results of routine interviews with PAPs	
Consultation and Grievances	Do PAPs understand the process of land acquisition/ compensation/ livelihood restoration measures? Results of routine interviews with PAPs	
	Do PAPS understand avenues for expressing grievances?	-
	Results of routine interviews with PAPs	
	What types of grievances have been issued and how have these been resolved? Summary of input from Grievance Procedure and routine interviews with PAPs: factual information.	

# 11.5 OUTCOME EVALUATION

Outcome evaluation will be done during RAP implementation by a qualified and experience external evaluator. Outcome evaluation (with data collection and analysis) will be done with 6-month intervals from the beginning of RAP implementation onwards. One of the key purposes of outcome evaluation is the identification of need for changes (e.g. for the implementation mechanisms) or additional actions within livelihood restoration. With 6-month intervals, need for changes can be identified timely and changes can be implemented as quickly as possible.

Simple-socio-economic parameters will be established and monitored Compliance and Completion Audit

The purpose of the compliance/completion audit is to determine whether the Project has met its commitments and can be released from further responsibility. Hence, the independent compliance and completion audit will focus on the assessment of

compliance with the commitments of this RAP, the relevant Rwandan and Tanzanian legislation and the WB Policies. The audit will be performed by an independent entity (to be determined). Evaluation reports will be made public.

# 11.6 **COMPLIANCE - AND COMPLETION AUDIT**

The compliance and completion audit will be performed about one year after completion of RAP implementation, including the completion of the livelihood restoration programs.

The compliance reviews will concentrate on

- Overall compliance with applicable legislation, international requirements and commitments of this RAP
- Compliance with the eligibility criteria described in this RAP
- Actual delivery of entitlements as described in this RAP
- Compliance with implementation mechanisms described in this RAP

The completion audit will assess all activities needed to achieve compliance were implemented and whether compensation (and resettlement) can be deemed complete.

A key objective of this RAP is that compensation and livelihood restoration measures should lead to sustainable restoration or enhancement of affected people's quality of life and income levels. At the time when affected people's quality of life and livelihoods can be demonstrated to have been restored, the RAP process can be deemed as completed.

# 11.7 **RESPONSIBILITIES**

- Internal monitoring will be a responsibility of the PIU team. In cooperation with the monitoring officers, the community liaison- with the grievance management officers will be in charge of gathering and processing relevant data. Interim monthly reports will be established according to monitoring activities.
- Monitoring results will be entered into a digital database by PIU database management experts.
- PIU officers will also prepare the annual monitoring report to be delivered to SPV/PIC
- Monitoring of the compensation disbursement process will be outsourced to an independent external entity. During the disbursement periods, PIU will receive weekly monitoring reports. Monitoring will include the individual tracking of people affected by loss of residence. They will be tracked in order to follow up the process of establishment of a new residency before the affected building has to be left.
- For outcome monitoring and evaluation external consultants will be hired, who will conduct six-monthly monitoring missions during RAP implementation. The scope

of work of this consultant will include the two countries to address transnational consistency issues and to allow for comparisons.

• The compliance/completion audit will be contracted to a qualified an experienced consultant.

# **12. BUDGET**

The following table provides an overview on the budget for RAP implementation. More detailed tables related to the different items are compiled in Appendix 6.

Table 53Overview on Budget for RAP Implementation

Item	I	Total Costs USD
Project Prepara Year <sub>0</sub> , Y		
Project Implementation Unit	for RAP Implementation $y_0$ and $y_1$ - $y_4$	
		1,220,200
Compensation, construction impacts	Due in Year <sub>0</sub>	
		2,236,645
Livelihood restoration PAP affected by construction impacts, including assistance to		744.040
vulnerable people External Monitoring and external Coordination	for RAP Implementation $y_0$ and $y_1$ - $y_4$	711,612
		555,000
Sub-Total, Preparation period and construction period	for RAP Implementation $y_0$ and $y_1$ - $y_4$	4,723,457
	roject Operation	L
• • •	5 – Year 9) (= 5 years)	
Compensation, operation impacts	Due in year 4	1,155,700
Livelihood restoration PAP affected by	Due Year <sub>3</sub> – Year <sub>6</sub>	1,100,700
operation impacts		1,180,476
External Monitoring and external	for RAP Implementation year 5 – year 9	
Coordination		
Sub Total Operation David		310,000
Sub-Total, Operation Period	for RAP Implementation year $_5$ – year $_9$	
		2,646,176
Grand Total, RAP I	mlementation	
Grand Total, RAP I	inpiententation	7,369,633
Summary Budget, LADP		7,309,033
Total, RAP and LADP Implementation		15,000,000
		22,369,633

For the budget, the best estimates available at this time were considered. A strong PIU team will be in place to monitor and manage RAP implementation adaptively both during construction and operation by responding to any issues that may arise. Correspondingly, actual budget allocations to individual activities may change, or new activities may be added as necessary.