Evaluation of the WaSH project in the Integrated Rural Villages of Nkurye and Murembera in the Commune of Giharo in the province of Rutana, Burundi

End of Term Evaluation

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December 2013

List of Acronyms and Abbreviations

ADDF	Association for the Defense of Women's Rights (Association Burundaise pour la Défense des Droits de la Femme)
AHR	Burundian Agency for Rural Water (Agence Burundaise de l'Hydraulique Rurale)
DPSHA	Directorate of Health Promotion, Sanitation, and Hygiene (Direction de la Promotion de la Santé, Hygiène et Assainissement)
FAO	Food and Agriculture Organization of the United Nations
GDP	Gross Domestic Product
INGO	International Nongovernmental organization
IRV	Integrated Rural Village (IRV : village rural intégré)
LRRD	Linking Relief, Rehabilitation, and Development Project
MSC	Most Significant Change approach
NGO	Non-governmental organization
PEA	Water and Sanitation Project (Projet Eau et Assainissement)
RCE	Communal water board (Régie Communale de l'Eau)
UN	United Nations
UNDP	United Nations Development Programme
UNHCR	United Nations High Commission for Refugees
UNICEF	United Nations Children Fund
WaSH	Water, Sanitation and Hygiene
WHO	World Health Organization

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Executive Summary

Overview of the Evaluation project

This report presents the findings of an end of term evaluation of the UNICEF WaSH initiative entitled "Appui à la réinsertion des populations vulnérables par l'accès aux services sociaux de base, notamment l'eau, l'assainissement et l'hygiène", implemented in 2 provinces in Burundi, between 2010 and 2013 under funding from the European Union. This project was one of three components of a larger reintegration project for former refugees done in collaboration with UNDP and FAO as UN agencies responsible for livelihoods and food security respectively.

This evaluation was limited to 3 main aspects of the achievements of the water, sanitation and hygiene project in 2 of the Rural Integrated Villages (IRV), namely effectiveness, impact, and sustainability. The project evaluation was mandated by UNICEF which entered into agreement with the School of Social Policy and Program Administration of Carleton University, Ottawa, Canada for the execution of the evaluation. The preliminary research and design work on the evaluation was done between November 2012 and June 2013, while the evaluation mission took place in Burundi over 18 days in July 2013 with a team of 2 evaluators supported by UNICEF Burundi staff from the Social Policy, Advocacy and Evaluation Section and the WaSH programme.

Evaluation objectives and intended audience

Evaluation objectives

The overall purpose of this evaluation was to assess 3 aspects of the project: effectiveness, impact and sustainability. Effectiveness looked at the extent to which the objectives were achieved, impact looked at the most significant changes due to the project as identified by beneficiaries, and sustainability assessment was focused on the likelihood of long term functionality of systems and of functionality of operating and managerial structures in view of future needs. The objectives were to assess the level of achievement of expected outcomes as well as the results attained in relation to access to clean water and improved hygiene practices in two IRVs in the Commune of Giharo in the province of Rutana in Burundi, as well as the long term viability of the results. The evaluation also aimed to indicate the perceptions of beneficiaries on the contribution of the WaSH project to social cohesion, a cross-cutting theme of the larger UN initiative.

Intended audience

The evaluation will be used primarily by UNICEF Burundi to understand what works, what could be improved and lessons learned from the projects that could be applied to the eventual scaling up of WASH programming in IRVs in Burundi. The recommendations provided in the final report may be used to improve the program, conditioned by resources available, to ensure the maximum achievement of the expected results. The

evaluation could also be used to inform the design and the implementation of similar projects in other countries with repatriated populations.

Other stakeholders who this evaluation report will be useful for are the direct project partners of UNICEF (PEA namely but also others who partnered in other catchment areas), local and national government structures involved in WaSH initiatives and in Health and Hygiene. Additionally, the report can be useful to a broader group of UNICEF allies working in water, hygiene and sanitation, such as the round-table on WaSH in Burundi, and International and local NGOs.

Evaluation methodology

The evaluation of the WaSH project used a non-experimental design (i.e. no comparison or control group). This design was fit due to the lack of baseline information but also meets appropriately the objectives of UNICEF for this evaluation, which are to get a measure of the effectiveness of the project implementation based on planned activities, an assessment of the impact of the WaSH project on a population that had previously no access to clean water on site, and an assessment of the likely sustainability of the project's benefits based on findings overall. Since all IRVs in the reachable geographic area were included in the UNICEF programme, the evaluation chose to focus on the changes before and after the project within the same population. Therefore, qualitative methods were adopted in carrying out this evaluation to gather an in-depth understanding of the perspectives of various project's primary targets (direct beneficiaries, members of water management and school hygiene committees, program staff, and staff from the implementing partner agency) and secondary stakeholders (such as representatives from the other UN agencies involved in the project and government staff at the national, district and communal levels).

Since this evaluation looked at a limited number of cases (2 IRVs) and concerned a limited percentage of the overall target population of the WaSH project, a case study design has been chosen to analyse and present findings associated with sustainability. Evaluation methods included in-depth interviews, semi-structured focus group discussions, and a conversational approach to gather and rate what beneficiaries identified as the "most significant changes" due to the project. Evaluators also used observation, informal discussions, documentary review as well as literature review in order to complement the collection of data.

Most important findings and conclusions:

- **Effectiveness**

In the WaSH project, UNICEF had planned three main activities in the province of Rutana: 1) supplying drinking water and sanitation in 2 targeted communities and 4 schools through rehabilitation/creation/extension of 2 new and existing water networks and construction of latrines in schools; 2) training and providing equipment for maintenance of water management committees in targeted communities; and 3) hygiene promotion in targeted communities and schools. **This evaluation found that the 3 activities were implemented with very little variations from the plans** meaning that water networks were rehabilitated; latrines were constructed in schools; water management committees and school hygiene committees were established; training

was given to water management committees and the Communal water board. Various factors, both enabling and constraining, impacted the attainment of the objectives. Enabling factors included: presence, proximity, and the proper functioning of infrastructures; the provision of training; collaboration between management structures; and recognition of value of the infrastructures and practices. Constraining factors included: the shortage, quality, maintenance, and state of repair of infrastructures; lack of clarity in the roles of members of management structures; lack of means and of training follow-up; and the challenge of changing life habits on hygiene.

Based on the findings of the evaluation of effectiveness, we conclude that **the overall objective of improving sustainable access to quality water, basic adequate sanitation infrastructure, and hygiene for people especially children and women was mostly attained.** There was a clear improvement in the access to clean water at both the household and school levels. Since sanitation facilities were not constructed in IRVs as part of this project, the access to basic adequate sanitation infrastructure has not changed for the communities with the exception of children attending the schools in which sanitation facilities were built. Awareness raising and promotion of the importance of good hygiene practices were mostly restricted to members of the water management committees and the Communal water board. These members sparingly shared their knowledge with their communities due to lack of training and follow-up.

- **Impact**

  Although not all planned activities of this project were implemented to their full extent and as intended, the WaSH project in the IRVs of Murembera and Nkurye had significant impacts on beneficiaries. Based on the findings from the Most Significant Change approach and other data collection methods**, the evaluation concludes that the WaSH project reached some of its short-term outcomes and all of its medium-term outcomes.** Although increase knowledge about clean water, sanitation, and hygiene was not verifiable nor identified as a significant impact, there is evidence that some knowledge transfer enabled communities to reach the medium-term outcomes.

Furthermore, the project had some **important unexpected impacts on targeted IRVs and those living nearby such as time gained from closer access to water, food security and diversity, and contribution to social cohesion**. This may be explained by the combined effects of the FAO and UNICEF projects impacting beneficiaries beyond the planned results of the project.

Although the project impacted on everyone, there seems to be a consensus that women were impacted the most from the changes as they often are the ones who are responsible for water, sanitation, and hygiene in the household.

- **Sustainability**

Based on the findings of the case study on the sustainability of benefits of the WaSH project, the evaluation concludes that **without a range of additional support by UNICEF, government partners and other skilled partners, there is a high risk that many of the benefits of the project will not be sustainable over the long term.** This is particularly crucial

about the capacity for maintenance and upkeep of the physical infrastructures for water and sanitation, as no sustainability can be affirmed without functional systems. The main secondary condition on which sustainability of benefits depends is the qualifications, skills and organizational capacity at community and government levels to support training and awareness about proper use of systems and the benefits of hygiene.

Lessons learned

Organizational and structural set-up

- Coordination between UN agencies is key in the design and implementation of a multi-component project to ensure the integration of its components to create a more cohesive program and to better support the objectives of the project.
- Roles and responsibilities of all parties must be clear and understood from the beginning to ensure a strong governing structure and the continuity of the results.

Infrastructure and technical sustainability

- The physical environment for settlement and infrastructures is a foundation for long-term viability. Taking the particular environment of the IRVs in consideration would greatly increase the viability of infrastructures.

Social inclusion and mindset change for sustainability

- Soft skills are as important as building infrastructures. Construction of water and sanitation infrastructures does not ensure a shift in habits and mentality in communities. Training and awareness raising is as crucial in enabling change.
- Full consideration needs to be given to women and children needs in training and awareness raising campaigns since women have a pivotal role in use, maintenance and proper care of water facilities and in hygiene and sanitation habits while children are young and adopt behavioural changes more easily than grown-ups (less ingrained habits).
- A shift in habits and mentality is a lengthy process. A significant change in habits requires time and substantial awareness raising campaigns and training, as well as creating means for purchase of basic inputs without which hygiene and sanitation practices would likely remain unsatisfactory.

Challenges

Local ownership

- Dependency syndrome and lack of local ownership require a longer term approach to changing mindsets. It is a drastic change for refugees previously living from delivered aid to face a situation where they must now take charge and be responsible for their own future with minimal external support (after cash and food inputs of the start-up). Training and accompaniment of communities and local government during the project period had limited scope to bring about the means for a shift to local responsibility and leadership.

Stability of human resources

- Mobility of stakeholders in the project, especially at community and communal levels, has affected knowledge retention on different important aspects of the project's implementation and sustainability.

Coordination of integrated actions

- Geographic distance between key project management units make working together and coordinating more challenging for the smooth collaboration, information flow and coordination between UN agencies.

Government partners' capacity

- A lack of program planning and monitoring expertise, financial, technical and logistical means as well as well human resources make it challenging for the government to assume its role fully, especially at local levels.

Impact of delays on project implementation schedule

- Delays in implementation of the WaSH project impacted the quality and intensity of post-construction activities. The UNICEF project had not in earnest started yet at the November 2011 mid-term evaluation and despite a year extension, had little time for proper training and awareness building activities following infrastructure building.

Key recommendations

Recommendations are expressed pertaining to the sustainability of the project, and other recommendations at the end of the report concern the future implementation and evaluation of comparable projects. Drawing on the findings and the conclusions of the evaluation of this project, recommendations for the sustainability of the project are as follows:

- ***Undertake some repairs and re-conditioning of water and sanitation structures***: UNICEF should do a proper diagnostic of major structural risks to water and sanitation structures so as to address issues beyond community's capacity that put the system's functionality at risk, and jeopardize the investment made.

- ***Curtail the density of water points' use***: Insofar as possible, water management committees and/or the Communal water board should find ways to reduce density of use on water points. Timing arrangement could be used to spread water collection more evenly.

- ***Ensure water points outside of the IRV are functional:*** UNICEF and the Régie communale de l'Eau should ensure that all water points built or rehabilitated within the context of this project are functional so as to alleviate demand on a fewer number of functioning water points.

- ***Clarify usage of water infrastructures at schools:*** UNICEF should clarify the authorization of community use of school water points with school authorities. Prolonged open use of water points will put pressure on the system and could

threaten its viability for school children unless co-management responsibility is addressed.

- ***Add wash basins for laundry close to water points*** should be considered if resources allow: they would be advantageous for water use efficiency, convenience and socialization for women, and improvements of use of water points. In theory, water points by UNICEF should have wash basins, but those seen in this mission did not.
- ***Extend training and awareness raising in communities:*** in the near future and regularly, UNICEF in conjunction with partners should offer refresher trainings that would include providing members with some visual material they can use to sensitize the community on proper use of the water points, sanitation and hygiene's benefits.
- ***Do training in schools:*** reiterating the rules for proper use of the water point and behavioral aspects of control, especially focusing on training young children about the value of clean water and use of sanitary facilities, is of vital importance to support early life habits. To do so, school staff, and school hygiene committees should get proper training and refreshers as indicated above.

1.0 Introduction and Country Context

1.1. Introduction

This report presents the findings of an end of project evaluation of the UNICEF water, sanitation, and hygiene (WaSH) initiative entitled "Appui à la reinsertion des populations vulnérables par l'accès aux services sociaux de base, notamment l'eau, l'assainissement et l'hygiène" for which UNICEF received 1,100,000 euros from the European Union. The project was funded for a 24-month period starting in July 2010, but extended by a year without costs due to a delayed start. The project, targeting returnees and vulnerable host communities in 2 provinces of southern Burundi, was focused on ensuring access to clean water through infrastructure building, extension and rehabilitation; the improvement of sanitation through construction of latrines in primary schools; and the improvement of hygiene practices.

The evaluation team carried out the evaluation in Burundi in the following locations: in the 2 IRVs, the administrative Commune of Giharo where the villages are located, in the schools that were targeted by the WaSH project, and in Bujumbura where institutional partners and government head offices are located. The evaluation was not comprehensive in terms of coverage due to limits of time, budgets, and other institutional constraints, but the qualitative approach allowed in-depth assessment in a small catchment (2 IRVs) of the 3 criteria selected in agreement with UNICEF, which are effectiveness, impact and sustainability. In addition, the evaluation team collected views and insights about- the inter-connectedness between social cohesion and the WaSH project, as this was an area of interest for UNICEF, and a cross-cutting objective of the larger UN project in which the UNICEF is one of three components.

1.2. Burundi Country Context

Burundi is a land locked country in Eastern Africa, in the Great Lakes region. Burundi had 8,053 million people in 2008 (2008 census) of which 90% of the population is in rural areas. 51% are women and 44% of people are estimated to be below 15 years of age[1]. With a high density of population of 310 hab./km sq, and an average growth rate of 3%, .Burundi is rated as the 178th poorest country in worldwide poverty level out of 187 countries tabulated in 2012 (Human Development Report 2012). 67% of the population is estimated to live under the poverty line[2] with 68.9% poor people living in the rural area against 34% in urban area. Agriculture accounts for 43% of the GDP. Burundi's economy is still largely dependent on international aid at 24% of GDP.

Over a period of 30 years, civil conflict in Burundi caused approximately one million people to leave and settle in refugee camps in neighbouring countries (Rwanda, Congo, Tanzania). The Arusha Peace and Reconciliation agreements signed in 2000 allowed for a voluntary and gradual return of many of those refugees (returnees) to

1 Enquête démographique et de Santé 2010, République du Burundi, Institut de Statistiques et d'Études Économiques du Burundi (ISTEEBU), Ministère des Finances et de la Planification du Développement Économique, Institut National de Santé Publique (INSP). Available online at : http://www.measuredhs.com/pubs/pdf/FR253/FR253.pdf

2 Questionnaire on the Basic Indicators of Well-being (**QUIBB, 2006**), World Bank, 2006.

Burundi, a process facilitated as of 2002 by UNHCR and the respective countries hosting the refugees. In a very poor and densely populated country, this resettlement has resulted in significant pressure on available land for agriculture, housing and other basic services, raising the potential risk to increase poverty and create a new outburst of conflict. In order to address this, the Government of Burundi established a national reintegration strategy in 2008 centered on "villagization" (settlement in new, organized villages) that would build communities for returnees with "no references" (i.e., who have lost their land and connections from the past) with provision of basic needs and services (e.g. housing, land, food security until fully settled, access to health services, water and sanitation, education and protection, security, and opportunities for community and economic development). The closing of the last camp at Mutabira in 2012, led to a massive return of refugees, estimated at 34 000[3]. This massive influx of people will undoubtedly constitute a source of additional tension on land.

Some information on access to water and sanitation services will help put the context of this project and evaluation in perspective. Recent statistics (2010)[4] show that 52 % of rural population in Burundi has 30 minutes and more to walk per day to access clean water sources. With many of the water sources providing unsafe drinking water, 94.8% of the population still do not treat water for safe consumption. Sanitation levels are quite low with 64% of the rural population accessing non-improved toilets (open pit latrines). In rural setting, only 5% of the population has access to improved toilets with running water or evacuation systems. Related to hygiene are the conditions of living in the household: 88% of the total population and 93% of rural population live in houses on uncovered ground.

These figures are useful background information to understand the context in which the UNICEF WaSH project has taken place, and to understand the wider context in which progress can be assessed.

2.0 Project Summary

2.1. Project Background

When the Government of Burundi adopted, in 2008, the strategy of "villagization" for landless Burundian returnees back from exile in neighboring countries (Tanzania, Rwanda, and Congo), the purpose went beyond the need for "resettlement". The theory was that "integrated rural villages" (IRV) set up in locations close to existing communities, and allowing for some mixing of local people (referred as "host" communities) with returnees would be a proper set up for reintegration, for the building of peace through close relationships and participation in social and economic life, and for the emergence of hubs for economic development beyond a mode of subsistence.

Fundamental to this approach were the principles of a viable settlement geared to long-term physical, social and cultural stability (the Burundi Government Strategy

[3] UNICEF Joint Internal Sitrep #4 on Mtabila former Burundian refugees, produced by Tanzania and Burundi COs with ESARO

[4] Idem, p.12

document mentions the imperative to avoid "anarchic and illegal reinstallation" as well as land conflicts5), and the building of a social model anchored on "pacific coexistence", social cohesion and collaboration between returnees and hosts.

In order to better respond to the long-term development plan for the country, the Burundi government also favored to set up those villages in traditionally low-density rural locations that would both minimize the pressure of demand for agricultural land and regroup communities around growing centres to maximize efficiencies of services, infrastructure, markets and agriculture based economic activities.

In partnership with the Government and along their respective mandates to support the long-term country development plan, three UN agencies (UNDP FAO and UNICEF) regrouped to define an integrated project for the reintegration of former refugees post the resettlement period. The initiative named LRRD ("Linking Relief, Rehabilitation and Development") , funded by the European Union, aimed to support reintegration of refugees, create conditions for sustainable and harmonious development within the IRVs in 3 provinces of Burundi.
The LRRD Program (Linking Relief Rehabilitation and Development) adopted a participatory and multi-sectorial approach to servicing IRVs in the Southern provinces of Makamba, Bururi, and Rutana. It focused on basic material well-being for reintegration, food security, access to socio-economic and livelihoods means, and basic services, integrating an overall objective of building peaceful relations and social cohesion with existing communities (host). Key objectives of LRRD were to support the peaceful reintegration of returnees with local communities, by creating conducive conditions for long term settlement and development, paving the way to equal participation in political, economic, and community life. For this, the program relied on three components managed by three UN agencies.

- Coordination, social cohesion, socio-economic infrastructure, and income-generating activities (UNDP)
- Food security (FAO)
- Access to basic services: clean water , hygiene, and sanitation (WaSH) (UNICEF)

The UNICEF project is concerned with water and sanitation in the context of resettlement and reintegration, and fits within the framework of the support by UN agencies to the Government of Burundi in its policies and strategic programs geared to ensuring a peaceful transition between humanitarian action and long-term development. It was financed by the European Union (contribution agreement FED/2010/244-434signed July 7 2010 and effectively started in January 2011) for a 24-month period starting in July 2010 and a total budget of 1,195,524 euros. The original 2 year period was followed by a no-cost extension of one year due to delay in start – up and implementation.

The WaSH component aimed to:

5 République du Burundi. 2008. Document de Stratégie, Programme de Villagisation dans le Cadre du Rapatriement et de la Réintégration au Burundi, Commission Intégrée Ad Hoc. Available online at : http://www.internal-displacement.org/8025708F004CE90B/(httpDocuments)/3A9B2D162895E16EC12578E7003014EF/$file/Commission-Integree-Ad-Hoc-1-Aug08.pdf

- Improve sustainable access to water and sanitation for about 27,284 people returning refugees living in peace villages (old and new) or returning to their hill as well as 44,182 people from host communities.
- Enable target populations to adopt good hygiene practices (hand washing with soap, good water conservation at home, and use of latrines) which would result in lower diseases and child mortality rates due to water-borne and hygiene problems.

UNICEF worked in partnership with a local government agency " Projet Eau et Assainissement" (PEA) as implementing partner for infrastructures rehabilitation and sensitization activities in those 2 sites, as well as in collaboration with the Agence Burundaise de l'Hydraulique rurale (Burundi Agency for Rural Water) as the overall government oversight partner for the project. For the creation and training of school hygiene clubs responsible for oversight of the infrastructures attached to schools, UNICEF worked in partnership with the government's "Département de Promotion de la Santé, de l'Hygiène et de l'Assainissement (DPSHA)" (Department of Health Promotion, Hygiene and Sanitation). Additionally, implementing partners and UNICEF worked collaboratively with local government structures at Communal (Régie Communale de l'Eau) and District levels on monitoring and ensuring maintenance capacity for post-project.

On the overall LRRD programme coordination, a Coordinating committee comprised of representatives from each of the UN agencies (UNDP, FAO and UNICEF) and their national government partners held regular follow-up meetings monthly during implementation and quarterly as the project was closer to the end (in 2012 and 2013).

This WaSH component takes into account the previously repatriated populations as well as the newly installed populations in IRVs as well as host communities, with a particular attention to women and children. The planned activities of UNICEF included:

- Improved access to drinking water;
- Improved access to sanitation facilities in schools;
- The establishment of structures for the management of water points (management, repair and maintenance, cost recovery) in IRVs;
- Awareness on clean water maintenance and hygiene in view of improving practices leading to better health (hand washing, good conservation of water at home, use of latrines, and body, food, and clothes hygiene).

With the official end of the WaSH component in July 2013, UNICEF Burundi commissioned this external End of Project Evaluation to assess the extent to which the objectives were achieved, and to outline lessons and recommendations.

2.2. Project's Logic Model

The logic model presented in Figure 1 below was developed by the evaluators based on the program documents provided by UNICEF Burundi. It is based on the *Wisconsin model* which depicts the theory of change into a series of "if-then" relationships[6]. This model depicts the following components[7]:

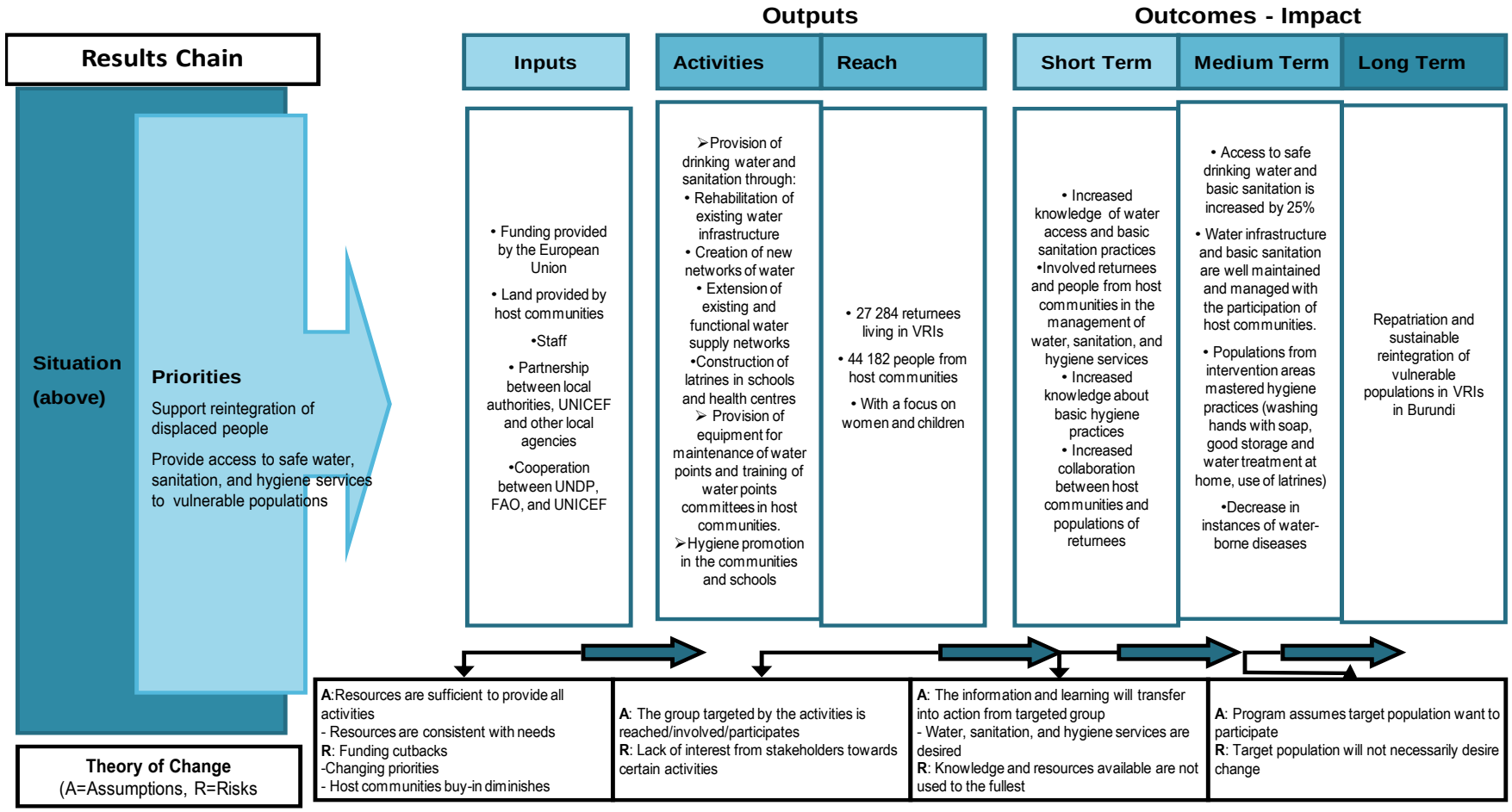
- Inputs: Resources that go into the program such as: money, materials, staff, etc.
- Outputs: Activities, products, and participation that are generated by the program after resources are inputted.
- Outcomes: Results or changes that stem from the outputs of the program. These range from short-term outcomes to medium-term outcomes to long-term impacts.
- Assumptions: The beliefs that surround the program in terms of what factors need to be present and the context in which the program works.
- Risks: Factors such as resources and/or barriers, which potentially limit program effectiveness.
- External factors: The environment in which the program exists and the potential factors that might affect the program.

6 University of Wisconsin-Extension, Cooperative Extension, Program Development and Evaluation. (2008). Developing a logic model: Teaching and training guide. Available online at: http://www.uwex.edu/ces/pdande/evaluation/pdf/lmguidecomplete.pdf

7 Ibid

Figure 1 : Logic Model

Situation Statement: The reintegration of the 1 million people that fled during the 30 years of civil conflict is causing significant pressure on the availability of land, housing, and other basic services, with a potential for increased poverty and renewed conflict. The Government of Burundi has established a national reintegration strategy that provides for access to basic needs and services for host communities. As part of that strategy, UNICEF is implementing a water, sanitation, and hygiene component.



3.0 Purpose and evaluation questions

3.1. Purpose and evaluation questions

3.1.1. Purpose

The overall purpose of this evaluation was to assess 3 main aspects of the project: effectiveness, impact and sustainability. The objectives focused on assessing the level of achievement of expected outcomes as well as the results attained in relation to access to clean water and improved hygiene practices in two IRVs, as well as the long term viability of the results. The evaluation also aimed to indicate the perceptions of beneficiaries on the contribution of the WaSH component on social cohesion.

Although the project was designed to involve 3 UN agencies working in collaboration, this evaluation focuses on the UNICEF component, and not on the coordination between the agencies. However, issues surrounding the coordination of the project arose through data collection. Even if it was not included in the evaluation, it does impede on effectiveness of the project and is raised insofar as it helps understand connections in the implementation.

3.1.2. Evaluation questions

Specifically, the evaluation aimed to answer the following three questions:

- Effectiveness: To what extent were the objectives of the WaSH program achieved?
- Impact: Have the WaSH interventions resulted in improved access to quality water sources and improved hygiene practices in targeted communities?
- Sustainability: How likely is it that benefits of the project will continue after funding ceases?

Appendix A presents the evaluation questions and their sub-questions, the related indicators, the data collection methods, the sampling strategy, and the timelines for data collection.

3.2. Scope of the Evaluation

As provided in the terms of reference (ToR, see Appendix B), this was a qualitative evaluation targeting 2 villages (IRVs) (Nkurye and Murembera, commune of Giharo, in Rutana province, south of Burundi) that include a population of 1,532 inhabitants in 341 households (6.7% of the 22,784 inhabitants of IRVs targeted beneficiaries of the whole WaSH project in the 2 provinces). It also took into account 4 of the schools (out of the 18 in the whole WaSH project) within the catchment area of those 2 IRVs where the WaSH project made investments in sanitation and water infrastructures (aquatanks for water collection, washing basins, and latrines) specifically targeting children.

This evaluation on the criteria of *effectiveness* (achievement of purpose or extent to which the WaSH project activities were implemented), *impact* (positive and negative changed produced by the intervention, directly or indirectly, intended or not), and *sustainability* (likely continuation of achieved results) was commissioned by UNICEF

Burundi, as part of a partnership agreement with the School of Policy and Program Administration (SPPA), Diploma in Program Evaluation (DPE) of Carleton University, in Ottawa, Canada.

The project followed an initial phase of infrastructure building funded by ECHO. The UNICEF standards on water and sanitation infrastructures and projects were the normative background for technical specifications, but this evaluation did not include any technical verification of the construction, completeness or quality of infrastructures vis-à-vis those standards. Comments on technical aspects in this evaluation are hence strictly based on testimonials and on visual observation of the sites visited.

The preliminary research and preparation for the evaluation took place between November 2012 and June 2013, and the evaluation mission took place over 18 days in Burundi, from July 17 to August 3rd 2013 (Calendar, Appendix C and D). Analysis and report writing were done between September and November.

4.0 Report Structure

This report is presented in 11 sections, which reflect the scope of work of the evaluation as contained in the Terms of Reference.

The first two sections present the *Country Context and the Project background.* Section 3 presents the *Evaluation Purpose, Questions and Scope;* Section 4 highlights the *Report Structure*. Section 5 expands on the *Evaluation Approach and Methodology* used in undertaking this evaluation. Sections 6 and 7 respectively present the findings as per two of the three evaluation criteria, namely *Effectiveness* and *Impact* and Section 8 presents an analysis and the findings relating to *Sustainability* in the form of a case study. In Section 9, observations and comments relating to the cross-cutting issues of *Gender, Rights of Children and Vulnerable Populations* are discussed. *Lessons Learned and Challenges* are presented in summary form in Section 10. Section 11 presents the *Conclusions and Recommendations*. The sections are followed by Appendices.

5.0 Evaluation Approach and Methodology

5.1. Overall Approach

The evaluation of the WaSH project used a non-experimental design (i.e. no comparison or control group) since this design appropriately fits with the information available and best meets the objectives of UNICEF for this evaluation, which are to get a measure of the efficiency of the impact and sustainability of the project achievements, and draw lessons learned (for the purpose, among others, to improve the implementation of similar projects in the future). No specific baseline information was provided to the evaluators, and a credible counterfactual would have required a population of new returnees settled in an integrated rural village not yet equipped with WaSH infrastructure or with no access to clean water on site or nearby. Since all IRVs in the reachable geographic area were included in the UNICEF programme, the evaluation chose to focus on the changes before and after the project within the same population. The absence of key baseline information about this population (health status upon arrival and before the WaSH project, distances required for access to water, water consumption data, assessment of water quality used before the project, etc) made the project non evaluable based on quantitative evidence. Qualitative methods were adopted in carrying out this evaluation to understand the perspectives of the project's stakeholders.

Since this evaluation looked at a limited number of cases (2 IRVs) and concerned a limited percentage of the overall target population of the WaSH project, a case study design has been chosen to present an in-depth understanding of the findings associated with sustainability. This is an appropriate approach to gather in-depth insights that although not generalizable, may offer deeper understanding of issues that promote or hinder the specific issue concerned by the study. It also unveils some conditions or context related information to better appraise what worked and in what way, how to adjust the program, what action to take, and what to consider in design of comparable projects in the future.

5.2. Evaluation Areas and Participants

5.2.1. Evaluation areas

The evaluation was carried out in 2 of the 8 IRVs involved in the LRRD project. Specifically, the evaluation focused on the IRVs of Nkurye I and II (pop. 282 households) which are 2 settlements built at different times grouped in a single location about 4 km from the main town of Giharo, and Murembera, a smaller IRV (pop 59 households) located about 3 km outside of Giharo along a main road. Both locations are in the Commune of Giharo in the province of Rutana. These villages were chosen for this evaluation by UNICEF because they were the last targeted in the project implementation, had not been visited by prior evaluation team (mid-term evaluation) and were within a close reach to each other, a condition deemed essential due to the limited time available for the field evaluation.

5.2.2. Evaluation participants

Participants in the evaluation included both primary and secondary project stakeholders. Primary stakeholders were direct beneficiaries (all household members: women, men and children; school children and school staff), members of water management committees and school committees, local leaders, a representative of the ADDF (a Women's rights association). The UNICEF WaSH unit and M&E unit staff, and staff from the implementing partner agency (PEA) in the two IRVs were also primary stakeholders.

Secondary stakeholders included representatives from the other UN agencies, UNDP and FAO involved in the LRRD project, as well as Communal, Provincial and National government staff involved with the project or in WaSH sector. Other secondary stakeholders consulted are the members of the National WaSH roundtable and relevant international NGOs. The secondary stakeholders were targeted to provide an overall assessment of the WaSH context in country including structural mechanisms, and their views on the project.

5.3. Sample/ Evaluation Participant Selection Procedure

Selection of evaluation participants used non-random procedures. This selection aimed to include stakeholders based on a cross-representation: people with roles in the implementation of the WaSH project, voluntary participation, availability, gender mix, as well as other criteria such as cross-section representation of the beneficiaries: returnees and host community members, dates of repatriation, age groups, etc. (See Appendix E for the selection criteria for direct beneficiaries' participation).

5.4. Data Collection Methods

Appropriate qualitative methods outlined below were chosen to meet the needs of this qualitative evaluation.

A team consisting of a UNICEF Evaluation Officer, a translator, and 2 M.A students from the University of Bujumbura acting as scribes and translators supported the two evaluators in collecting data. Their roles included translating conversations, taking notes, and facilitating discussions with direct beneficiaries. A UNICEF WaSH Section project officer who accompanied the mission for logistical support and social introduction did not take part in the data collection other than being interviewed as a secondary stakeholder. All interviews, focus groups, and a conversational approach, the "Most Significant Change" were conducted in Kirundi with direct beneficiaries. Data collection through formal and informal interviews with secondary stakeholders were conducted in French and did not include translators, nor the UNICEF WaSH staff.

The qualitative methods used are described below. See Appendix F for a summary of strengths and weaknesses of each method.

- **The Most Significant Change Approach**

The Most Significant Change technique is a "story -based" monitoring and evaluation approach that involves inquiring with project stakeholders about what in their views are

the most significant changes resulting from the project, exploring at what level such values are attributed and whether they are consensual across the target community, why the stated changes may be the most important or most relevant for the group. It helps with the identification of discrepancies in definitions, values, and perceptions, as well as bringing different perspectives up the ladder to other stakeholders (namely the project managers and donor agencies) that may not have been purposefully thought about by them. The MSC approach is "conversational" rather than "extractive" (ie it starts with asking people to tell a story illustrating what they see as the most significant change due to the project or an aspect of the project, rather than asking topic related questions). It is a conducive approach for assessing impact from the point of view of diverse stakeholders. In the context of this evaluation, MSC was used with direct beneficiaries, in each of the IRVs, over 4 to 6 hours, using first a gender disaggregated process, followed by a collective prioritization and development of "stories" (see Table 3). This was a primary method of data collection for assessing the impacts of the WaSH program.

- **Semi-structured Interviews**

Semi-structured interviews were used to get more in-depth information from stakeholders including: local administration at Communal level, local leaders in IRVs, a representative of the ADFF association, the implementing partner PEA, UNICEF, UNDP and FAO staff, and government representatives. Semi-structured group interviews were also held with water management committees and school committees.

- **Focus groups**

Focus groups with direct beneficiaries, men and women living in the IRVs, were used to generate discussions between group participants to arrive at shared understandings. Focus groups used flexibly the questionnaires protocols defined ahead of time so as to adapt to the trends of the groups conversation, inquire with more details when new issues emerged, allowing to collect additional qualitative insights and stories while ensuring also that a core common set of information and data was gathered.

- **Observation**

Upon arriving on each sites, the evaluation team, led by people from the communities, walked around took a look at the water and sanitation structures, some houses and latrines in the IRVs. Although the evaluation team did not include WaSH experts, evaluators were able to observe the state of some current infrastructures. Walking in the IRVs and talking with people, but also elsewhere, in the Commune Giharo for instance, allowed for a deeper understanding of the overall living conditions, stresses, realizations and successes and provided elements for further probing.

- **Review of Documentation**

The analysis of documentation included project documents (LRRD and UNICEF's component) (see Appendix G for a list of documents consulted). Documents provided by UNICEF's WaSH unit were project proposals, project reports, some monitoring mission reports, minutes of meetings and training reports.

- **Literature Review**

Literature on the country context, especially UN updates, Country profile and Country human development Index were consulted, as well as general information on development aid, WaSH sector, and relevant cultural and historical context pertaining to the location of the evaluation (see Appendix G for a list of literature consulted). Literature review included a broad range of documents pertaining to resettlement and in particular, similar types of projects in the Great Lakes region of Africa. WaSH program related literature in the context of repatriation of refugees was reviewed as were other WaSH reports by UNICEF and by NGOs.

5.5. Data Management and Analysis

All interviews, focus groups, and Most Significant Change activities were digitally recorded and later transcribed by the evaluators. Notes were also taken, including flip charts for the MSC process. All documentation was then imported into Nvivo (qualitative data analysis software) and analyzed to identify common themes, iterations, ideas and concepts linked to evaluation questions and indicators. Themes relevant to the questions were also identified for cross-reference. Choice of multiple data collection tools ensured methodological triangulation, and all protocols for data collection, interviews and focus groups procedures took into account the need for data triangulation as well. This was done to increase the reliability of findings, using the most validated responses and insights as a basis for findings and conclusions.

5.6. Description of sample

The total number of participants in the evaluation is **64** (22 women and 42 men) broken down as follows:
Number of direct beneficiaries = **50 (29 men and 21 women)**

- Water management committees: Men and Women Nkurye= **5**
- Water Management committee Men and women Murembera= **4.**
- School hygiene committees: **8 (**Mura and Kigogo schools: 3 ; Giharo and Nkurye schools:5)
- Focus groups : Women **12** (Murembera: 6, Nkurye: 6)
- Focus groups: Men: **9 (**Murembera: 4, Nkurye: 5)
- MSC group participants**: 26** (Nkurye: 14 ; Murembera: 12 **)**

Other stakeholders: **14 (13 men and 1 woman)**, as follows:

- UNICEF and partners: PNUD: 2, FAO: 1, UNICEF: 3, PEA: 1 = **7** (men)
- Government officials: Commune: 2, Province: 1, Directorship Hydraulics: 1 = **4** (men)
- INGO representatives: **3** (2 men, 1 woman)

6.0 Effectiveness

6.1. Introduction

The effectiveness criterion refers to the extent to which the WaSH program's objectives were achieved and how they are achieved. The assessment of effectiveness looked at the connection between planned and implemented activities, the factors influencing the attainment of the objectives, and means by which effectiveness can improve. In short, the evaluation team sought to answer the following question: to what extent were the objectives of the WaSH program achieved?

6.2. Delivery on Planned Activities

In the WaSH project, UNICEF had planned three main activities in the province of Rutana:

- Supplying drinking water and sanitation in 2 targeted communities and 4 schools through rehabilitation/creation/extension of 2 new and existing water networks and construction of latrines in schools;
- Training and providing equipment for maintenance of water management committees in targeted communities;
- Hygiene promotion in targeted communities and schools.

The UNICEF project's infrastructures included altogether 17 water networks in the 2 selected provinces. In Rutana, Giharo commune, there are 2 water networks of 32 water points covering the IRV locations and beyond. The IRV of Nkurye (I and II) have 8 water points, and Murembera has 2.

Some water infrastructures already existed prior to the project but were not functional due to poor design or construction flaws in a past intervention (not UNICEF implemented). UNICEF undertook rehabilitation of those infrastructures as well as construction of new ones. The sanitation infrastructure was limited to 4 primary schools in the 4 IRVs and included separate latrines for boys and girls, basins for hand washing with pipes and taps close to latrines. Large aquatanks of 3,000 litres each for water storage were built adjacent to schools. UNICEF and its partners did complete the rehabilitation and construction as planned in the technical proposals and project documents with a few minor adjustments.

Table 1 : Summary of activities carried out in the WaSH project in Nkurye and Murembera IRV

ACTIVITY COMPONENT	ACTIVITIES PLANNED	ACTIVITIES CARRIED OUT
ACTIVITY 1: SUPPLYING DRINKING WATER AND SANITATION FACILITIES TO TARGETED COMMUNITIES	▪ Rehabilitation/construction/extension of water networks o Shasha-Murembera, 18.4 kms long, 3 reservoirs and 7 water points o Butare/Nkurye was not initially identified as needing rehabilitation/extension ▪ Identification of school sin the targeted networks and launch tenders for the construction of latrines ▪ Construction of latrines in the targeted networks (minimum of one primary school per water network) ▪ After construction of networks, set up a monitoring/control of water quality	▪ Rehabilitation/construction/extension of 2 water networks: o Shasha-Murembera: 25kms long with 19 water points o Butare/Nkurye: 17kms long with 32 water points ▪ Extension of the Shasha-Murembera network to give access to water to the Kigogo school ▪ Construction of latrines at 4 primary schools : o Mura: 2 blocks of 6 latrines and 2 handwashing stations (verified) o Kanyererwe: 2 blocks of 6 latrines (unverified) o Kigogo: 2 blocks of 5 latrines, 2 handwashing stations, 1 aquatank installed (verified) o Giharo: 2 blocks of 6 latrines, 2 handwashing stations, 2 aquatanks installed (unverified)
ACTIVITY 2: TRAINING OF WATER MANAGEMENT COMMITTEES AND PROVISION OF EQUIPMENT FOR MAINTENANCE	▪ Awareness raising of beneficiaries of water and sanitation infrastructures ▪ Election/ establishment of management committees of water systems ▪ Training (detailed) on management of water management committees ▪ Training (general) on management of beneficiaries of water networks and basic sanitation infrastructures	▪ Establishment of water management committees for each water point ▪ Training of water management committees on various topics related to the management and maintenance of the infrastructures ▪ Training of the Communal water board on various topics related to the management and repairs of the infrastructures
ACTIVITY 3: PROMOTION OF HYGIENE	▪ Training (detailed) on hygiene practices of water management committees ▪ Training (general) on hygiene practices of beneficiaries of water networks and basic sanitation infrastructures	▪ Establishment of hygiene clubs in schools by DPSHA ▪ Training of water management committees on the promotion of hygiene ▪ Training of the Communal water board on hygiene promotion ▪ Provision of soaps to the Communal water board

6.3. Attainment of the objectives

The following sub-sections will examine the extent to which the objectives have been attained, within the limits of the evaluation scope, and the enabling and constraining factors that influenced achievement of the objectives.

The WaSH component of this project sought to attain the following objective:

- Improve sustainable access to quality water, basic adequate sanitation infrastructure, and hygiene for people especially children and women.

This objective can further be broken down in the following four sub-objectives[8]:

- Increase the number of households that have access to clean water;
- Increase the number of households that use latrines;
- Increase the number of children that have access to basic adequate water and sanitation infrastructures at school;
- Decrease in the number of water-borne diseases.

In the following sub-sections, each **activity will be examined in terms of its incidence on reaching the above-stated objectives.**

In the original program documents, a set of quantitative indicators were identified, for each activity, to measure results. A lack of baseline data at the outset of the project and lack thereof of measurement during and post implementation that would quantify the reach of those indicators and because the indicators were not used in the ongoing monitoring of the project, it is not possible to quantify the achievement of results. Therefore, the evaluation team chose to use qualitative data to measure the attainment of the objectives. The evaluation can, however, support conclusions on the effectiveness of the planned activities of this project in view of the objectives.

Activity 1: Supplying drinking water and sanitation facilities

The first activity was twofold. First, it involved supplying water to targeted communities by rehabilitating /constructing/extending water networks. Second, it involved constructing latrines in 4 schools. It can be assumed that the underlying sub-objectives driving this activity were to increase access to clean water and use of latrines at the household level and in schools.

As a result of these activities, it was expected that there would be a 25% increase in access to water and sanitation facilities in the targeted communities. The stated indicators for this activity were: 1) 75% of households have access to at least 20 liters of water per day, per person; 2) 80% of households have latrines that are consistent with standards; and 3) 90% of students have access to water and sanitation infrastructures consistent with standards. Although this evaluation does not allow results to be quantified, abundant clean water was available to all households within the IRVs and to

[8] UNICEF Burundi. June 2010. Proposition de projet à la Commission Européenne. Appui à la réinsertion des populations vulnérables par l'accès aux services sociaux de base, notamment l'eau l'assainissement et l'hygiène.

targeted schools. Latrines were only built in schools as part of the activities of this project and not in IRVs. Schools that the evaluation team had access to had respectively 5 and 6 blocks of latrines each for girls and for boys.

- ***Supplying drinking water***

> *"With the support of UNICEF, we now have clean drinking water. Before it was not possible, but now, we don't have any access problems".*
>
> -Man, community member-

The evaluation found that through the activity of supplying drinking water, there was an increase in access to water for households in IRVs and for targeted schools.

Several activities were planned and executed as part of efforts to supply water to the IRVs of Nkurye and Murembera. Although this evaluation can't quantify the results, all stakeholders consulted were unanimous that people living in the IRVs had access to clean water. However, this cannot be said about the communities surrounding the IRVs.

The Projet Eau et Assainissement (PEA), with support from UNICEF, rehabilitated the water networks of Butare/Nkurye and Shasha-Murembera to provide water to the two IRVs. It can be established, from documents, that the Butare network is 17km long and has 32 water points along the network. The Shasha-Murembera network is 25 km long and has 19 water points along its length. This network was extended to provide water to the Kigogo school near Murembera.

In Nkurye I and II, there were 8 water points constructed, 4 in each village, to serve 282 households (1,244 people). The "temporary handover" ('réception provisoire') was done on April 24th 2012. In Murembera, there were 2 water points installed in the village to serve 59 households (288 people). The "temporary handover" was done on October 25th 2012. The final handover ('réception definitive'), usually done one year after the "temporary handover " had not been done in those sites at the time of the evaluation mission.

With the installation of these water points, all households in both villages have access to clean water of good quality that is close to their house. According to plans, all houses are supposed to be at a maximum of 500m from a water point. The evaluation team was not able to confirm the exact distance of the water points from houses. However, beneficiaries and direct stakeholders confirmed that water is available near the houses. The evaluation team did not carry out an analysis of the water quality, but documents provided confirmed that this was done and that the water was safe for consumption. Beneficiaries also confirmed that, so far, water was available year-round.

> *"We are intervening in areas where before, there was no water and now the water is available and supplies the population. In terms of functionality of the networks to date, they provide water".*
>
> -Project staff -

There were conflicting reports about the functioning of the water points outside the IRVs. Many people living outside the IRVs indicated that their water points were no longer functioning. Therefore, they continued to get their water from a stream several kilometers away from their homes, or came to the IRV locations. It appears that many people from outside the IRVs come into the IRVs to get water, according to all stakeholders and observation. Some visited those water points because they were closer than the river where they

used to collect water, others, because the water was cleaner but not necessarily closer. All people who attested coming to the IRVs did so because water point closest to the house was non-functioning.

Factors that influenced an increase in access to water at the household and school levels

There are various factors, both enabling and constraining, that affected the ability of beneficiaries to access clean water, and, therefore, affected the attainment of the objectives of 1) increasing access to water in households, and 2) increasing access to water for children in schools. Some of these factors influenced access in the short-term while others have longer term influences.

Enabling factors

Factors that influenced a greater access to water included: proximity to houses and schools, proximity to roads, and sufficient water flow.

Proximity to homes and schools was the factor that was mentioned most often by all stakeholders in influencing access to water. The proximity of the water points allows residents to get water as often as needed. One woman living in Murembera mentioned that since she has 5 children, she often goes to get water 5 or more times a day. It also allows people to get water when it is convenient for them. For example, a woman needing water to prepare the meal is able to get water at that moment. A child on his way back from school is able to stop at the water point to get water before arriving home. Proximity of water to the schools and homes also means that children are able to get water without missing school.

Proximity of water points to the road is a factor that influences the access of people living outside of IRVs. In Murembera, the water point that is closest to the road is used most often by host communities because of its convenient location.

Sufficient flow is another factor that affects residents' access to water. All visited water points had very strong flow, though some people mentioned that uncontrolled flow due to broken taps influence negatively the flow downward in lower water points of the network. Beneficiaries have mentioned on several occasions that they prefer to use water points with sufficient flows as it decreases both the wait time and fill up time.

Constraining factors

Factors that affected the ability of beneficiaries to benefit from an increase in access to water included: water points in need of repairs, fluctuating amount of water available at water points, the number of people using water points, and the lack of rain water collection infrastructures.

Several of the water points in both IRVs are in need of repairs. During the evaluation field visits, there were at least 3 water points in Nkurye needing repairs and at least 1 in Murembera. The most common problems were broken taps and cracked

> *"Sometimes when water is abundant, it does not take time, but otherwise, you have to stand in line. When there are many people, we have to wait and get water in the order that we have arrived".*
>
> -Man, community member-

pipes. Broken taps meant that water was running non-stop from the water point. Since it is a gravitational system, it can affect the water pressure at the water points below. Cracked pipes restrict the amount of water flowing out of the tap. At the Kigogo school, the aquatank installed was not functional.

The amount of water coming out of the tap can fluctuate due to various reasons. Less water flowing means that users of that water point have decreased access to water. Several causes of fluctuating water amount were offered: seasonal variations (i.e. more water during rainy season and less water during the dry season), daily variations (i.e. no water available at certain water points after a certain time), and insufficient flow. A member of a water management committee mentioned that some water points worked in the morning but sometimes, later on in the day, did not yield water anymore.

The number of people using a water point influences everyone's access to water. All groups of stakeholders mentioned that villages are expanding due to additional repatriation and high birthrate and that the current number of water points is insufficient for the growing population. Additionally, there is increased pressure on water points with their additional use by residents from outside the IRVs. Wait times are further increased by congestion at water points due to collection and other activities on site such as washing and doing laundry.

The lack of structures that effectively collect and filter rain water means that there is a constant demand on the water infrastructures in place and on spring water. In Burundi, the significant amount of rain in the rainy season, if collected and filtered, could mean a lesser demand on the system and more efficient use of water.

- ***Sanitation facilities***

The evaluation found that through the activity of constructing sanitation facilities, there was an increase in access to and use of sanitation facilities for children attending the targeted schools. There was no increase in access to and use of sanitation facilities at the household level since there were no latrines constructed in IRVs as part of this project.

Several activities were planned and were implemented as planned around the building of latrines at targeted schools. This evaluation does not allow the results to be quantified to show that there was an increase of 25% in access to sanitation facilities in targeted communities. Although latrines were built at 4 schools, most residents of the IRVs did not have access to those latrines.

UNICEF, in collaboration with DELTA Constructions, built 2 blocks of 5 and 6 latrines at 4 primary schools (Mura, Kanyererwe, Giharo, and Kigogo) in the Commune of Giharo. In addition to the latrines, 2 handwashing stations of 3 taps were built at three of the schools (Kanyererwe does not have access to water). At the schools of Giharo and Kigogo , respectively 2 and 1 aquatanks were installed.

> *"The latrines are there and functional. There are 5 for girls and 5 for boys and 2 for teachers and the principal. Since there are 6 classes for 650 students, one of the classes has to share latrines and it creates problems. It's insufficient".*
>
> -Teacher-

The evaluation team visited the Kigogo school (close to Murembera), discussed with teachers from the 4 targeted schools and visited the school near the IRV of Nkurye

(although this school was not part of the ones chosen for construction of new latrines). The evaluation team observed that, at Kigogo, the latrines for girls face the latrines for boys and are only separated by a low wall. This design was raised as an issue for female students who fear the proximity with boys. It also doesn't appear to be within UNICEF's construction standards for latrines in school settings[9]. In the same school, the 3 taps for hand washing on the girls' side were torn from the structure, the reasons stated being high water pressure and vandalism. At the Giharo school, comments were that the latrines were built far away from the handwashing stations, but that they were functional although with so many students, there were concerns about maintenance and overflowing.

Factors that influenced an increase in access to and use of sanitation facilities

There are various factors, both enabling and constraining, that affected the ability of beneficiaries to access and use sanitation facilities, and, therefore affected the attainment of the objectives of 1) increasing use of latrines in households, and 2) increasing use of latrines for children in schools.

Enabling factors

Factors that influenced a greater access and use of sanitation facilities included: presence of latrines and proximity to schools.

The most crucial factor to access to sanitation facilities is the presence of latrines. Although the evaluation team was not able to observe whether school children used the latrines since it was the summer vacation, testimonials from teachers indicated that during the school year children use the latrines. Since the latrines are for the school, adults from IRVs do not have access to them.

The proximity of the latrines to the schools were also a factor that influenced greater access and use by children. Because of the short walking distance, children were able to use the latrines without missing too much of the lesson.

Constraining factors

Factors that negatively affected the ability of beneficiaries to benefit from an increase in access to and use of sanitation facilities included: bad state of latrines/ dirty latrines, age, fear, and the number of latrines for school population.

Latrines that were full or dirty were not used by children and teachers. Although students, with the supervision of a teacher, are responsible for cleaning the latrines, it happens that people defecate beside the hole. Due to lack of resources, cleaning of latrines is done with twigs which doesn't clean them properly.

It was mentioned by several teachers and members of hygiene clubs that younger children were less inclined to use the latrines and were more prone to defecate in the fields instead. There seemed to be less aware about sanitation in the first 3 grades of school at younger age and apparently, and some young kids fear falling in holes. It was mentioned that, in Giharo, the holes are bigger than usual.

Finally, an insufficient number of latrines for the number of students and teachers was mentioned by many as a factor that affected the use of sanitation facilities by students (

[9] UNICEF. WASH standards in schools. http://www.unicef.org/wash/files/WASH_in_schools_manual.pdf

a school has 5 blocks each for boys and girls and 660 students, meaning on average 66 pupils per latrine, with higher density for boys and less for girls). Long wait times during breaks meant that some students preferred going in the fields.

Activity 2: Training of water management committees and provision of equipment for maintenance

The second activity involved raising beneficiaries' awareness about water systems and sanitation infrastructure and the set-up and training of water management committees. These structures would be responsible for the management and maintenance of water infrastructures. The aim of this activity was to ensure that the water and sanitation infrastructures would be well maintained and managed by the communities to ensure that the objectives of increased access to water and sanitation infrastructures would be sustainable. The established criteria were: 1) 95% of water management committees are established are functional; 2) 90% of improved water sources are functional at the time of the evaluation; 3) 80% of users pay their water dues; and 4) at least 4 meetings of water beneficiaries are held each year. Although this evaluation does not allow for the quantification of results, it can be said that water management committees were in place for each water point; most water points were functional albeit in need of repairs, and almost all users had paid the water dues for the year, with the exception of very vulnerable households who were dispensed. However, it cannot be confirmed that there were at least 4 meetings per year for water beneficiaries.

Water management committees and RCE

UNICEF, in collaboration with PEA, established water management committees in IRVs. The communal administration was consulted and included in the process. For the setup of water management committees, water users in IRVs were assembled and asked to elect 3 to 5[10] people as a water management committee.

Both water management committees and the communal water board ("Régie Communale de l'eau"-RCE) were then trained by PEA. The 3-day training workshops included topics such as the importance of water and ways to reduce diseases, the roles and responsibilities of members, collaboration between management structures, mobilization and awareness raising techniques, and repairing infrastructures/ The RCE also received a toolkit and equipment to maintain and repair the infrastructures that included rain boots, jackets, saws, hammers, shovels and keys amongst other things.

> *"It is thanks to the water management committees that take care of the maintenance around the water points, that they still work. It prevents the destruction of the water points".*
>
> -Woman, community member-

Members of the water management committees and of the RCE felt underprepared and undertrained for the tasks they must accomplish. All mentioned the need for more in depth-training on managing the water points. RCE staff also mentioned that the material received during the training was insufficient and that it had been depleted already. They lacked tools, rain boots, and parts for repairs. Users attributed the establishment of the water management committees as the reason why the water structures still work today. However, project staff agree that, in theory, the water management committees

[10] That number varies between the IRVs of Murembera and Nkurye. In Nkurye, there are 4 or 5 members in the water point committees while in Murembera, there are 3 members.

and the RCE are great because they can manage locally but, in practice, they may lack the capacities, the training, and the resources to do so efficiently.

One area of concern for many is the complexity of the operational chain when a water point needs repairs. As it stood at the time of the evaluation, the water management committee notified the officer at the hill level who then notified the RCE. If the problem was bigger in cost than 200,000 francs, the RCE had to take it up to the provincial level Rural Hydraulic Agency (AHR).

This long chain of command might partly explain the number of water points that were in need of repair at the time of the evaluation mission. Because of the complex delegation and administrative procedures, it often delays repairs to weeks and months. Although most of the water taps still worked, they were not functioning as well as they could, and demand on the working sites threatens their longevity.

Alongside maintenance, cleanliness, and protection of water points, one of the main responsibilities of those committees is to collect the water dues of 1000 Burundian francs per year from users. Users of some water points even gave additional money to speed up repairs that had been reported long ago and were not acted upon. For this year, it was mentioned that almost everyone paid their dues including users outside the IRVs. Some very vulnerable households were not expected to pay due to their conditions. It seemed that collection was thoroughly applied, with some people being denied access until they had contributed dues. The money collected is sent to the RCE to buy material and send the communal technician ('fontainier') to repair.

Water committee meetings are usually held in conjunction with other meetings called for by the IRV leaders. The committees use those meetings to address the users on issues concerning the water points such as cleanliness and other issues. Some committees mentioned holding a meeting at the end of each month, others, only when something important needed to be discussed.

Hygiene clubs in schools

The installation of the water point at the Kigogo school was not initially planned in the construction of the Sasha-Murembera water network. Since it was done after the fact and without additional resources, training was not done at this school. A very brief set of instructions were given to school staff on the day of the 'temporary handover'.

"We did not receive training. We don't know if the infrastructures are for the school only or for the school and the community. When people from the community come to get water here, it causes conflicts. The water point was handed off to the principal of the school without any training or information".

-Member of a hygiene club-

Factors that influenced the establishment and well-functioning of water management committees and hygiene clubs to ensure the sustainable access to and use of water and sanitation infrastructures

Both enabling and constraining factors affected the establishment and functioning of committees and hygiene clubs, and therefore affected the sustainability of access to and use of water and sanitation infrastructures.

Enabling factors

Factors that positively influenced the functioning of the water management committees and hygiene clubs include: provision of training to at least some of the members of water management committees and hygiene clubs, collaboration between the various management structures, and recognition of the value of water and sanitation infrastructures.

Providing training to some members of water management committees and hygiene clubs helped to anchor the committees as a management structure and led to infrastructures being somewhat maintained so that they can still be used today. Continuous training of more members and users would greatly enhance the management capacities of the committees and their ability to deal with the issues that arise.

Collaboration between the various water management committees, hygiene clubs, and the RCE heightened to ability of the community to manage the water points. By working together, some were able to raise additional money to make repairs to broken water points. This collaboration would greatly be enhanced by increasing capacities within each of these management structures.

The recognition of the value of having clean water close to the houses and recognition of the value of the convenience of having latrines at school has impacted the committees' ownership of those infrastructures. By recognizing their value and importance, committees do more in their power to protect those resources.

Constraining factors

Factors that negatively impacted the influence of water management committees and hygiene clubs include: lack of clarity in the role of each management structure, membership changes, and having the resources to make simple repairs.

Roles and responsibilities of members within a committee seem understood by most members, but specific roles and responsibilities of each management structure are unclear to most beneficiaries and local and communal administration. The chain of command is unclear which causes delays in information and repairs.

The water management committees and the RCE lack the resources necessary to make simple repairs. Explanations for this included: lack of money to buy tools and parts, lack of willingness to pay on the part of users, and insufficient training. Because water management committees do not keep any money, they have to send a request to the RCE to make any repair to structures. This causes abnormal delays in action.

Activity 3: Promotion of hygiene

The third activity involved training beneficiaries of water networks and sanitation infrastructures on hygiene practices. The aim was that communities would master good hygiene practices such as hand washing with soap and water conservation and treatment at home, and therefore, would fulfill the objective of decreasing the number of water-borne diseases. Indicators chosen for this activity are: 1) at least 80% of households practice proper water conservation and treatment at home; 2) 75% of students and households use soap to wash their hands; 3) Containers used for water are properly cleaned after each use; and 4) 90% of households use family latrines.

Although this evaluation does not allow results to be quantified, hygiene, cleanliness, and water conservation and treatment are hampered by the lack of access of most households and all schools to soap. Without soap, people cannot properly wash their hands, bodies, clothes, utensils and containers. On the sanitation aspect of hygiene, latrines in IRVs are problematic and this affects overall cleanliness.

> *"Even if you put in extraordinary infrastructures but the level of training, information, and standard of living are this low, you cannot hope to improve the hygiene level in 2 years".*
> -Project staff-

For the IRVs of Murembera and Nkurye, hygiene promotion was included in the training received by water management committees and water service at the communal level provided by PEA. The communal water board of Giharo and water management committees' members were trained on mobilization techniques, awareness raising on safety and care for drinking water, hygiene and environmental sanitation. According to the training report, participants put forth several recommendations for the promotion of hygiene including more support from UNICEF and the communal administration in awareness raising campaigns and the provision of teaching tools to be able to better share their knowledge with users. Members of committees trained were then expected to share knowledge with their communities.

As part of this activity, school hygiene clubs were also established by the DPSHA to ensure the maintenance and well-functioning of the latrines and water structures. The hygiene clubs are usually composed of 5 school staff members who are responsible of the cleanliness and the well-functioning of the sanitation infrastructures. They often work in collaboration with water management committees and local administration to solve issues that arise about the water points and latrines. Some members of the clubs were invited to the training alongside members of water management committees while others received no formal training. Training on hygiene promotion in schools was done by the DPSHA during the setup of the hygiene clubs. In schools, the responsibility for hygiene promotion rests on teachers but there are no contracts with UNICEF requiring schools to do so.

It was mentioned by many members of water management committees, school hygiene clubs and leaders at local and communal levels that training received wasn't sufficient for the needs: training was short, held only once and no refresher or follow-up was possible due to time and resources. A unanimous view is that for a continuous improvement, more training support would be required.

Factors that influenced good hygiene practices in the communities to enable a decrease in water-borne diseases

> *"Of course we need more training. As the Kirundi proverb says- Uwutosora imfuku yamiza akatsi mu jisho (we must continue to educate people so that they may fully understand)".*
> -Local leader-

There are various factors, both enabling and constraining, that affect the mastery of good hygiene practices in the communities, and therefore the attainment of the objective of reduction of water-borne diseases.

Enabling factors

A factor that influenced good hygiene practices in the communities is a desire of most beneficiaries to follow the

hygiene practices they have been taught by trainees. The water management committee held a knowledge sharing meeting in the Murembera IRV which was well attended by both IRV residents and people nearby. Many people wash their hands and clothes often with water even in the absence of soap.

Constraining factors

Factors that negatively influenced the practice of good hygiene include: the unavailability of soap, the lack of training follow-up, and the difficulty of changing habits.

It was overwhelmingly obvious that residents of the IRVs do not have the means to prioritize the purchase of soap on an ongoing basis, and therefore do not often wash with soap. Some soaps were provided to the RCE at the beginning by PEA but were quickly depleted.

The population from the IRV is highly mobile, and therefore knowledge does not necessarily stay within the communities. Due to the lack of training follow-up, many people who have been trained forgot the notions they were taught. Additionally, some current members of the water management committees have not been trained as they joined the committees later. This loss of know-how is compounded by the lack of visual aids or training material for members to use in communities after the training.

One of the major hurdles to the practice of good hygiene is the difficulty and time required to change habits. To enable a shift in mindset implies changes at both the individual and collective levels. It is through ongoing and sustained sensitization efforts that a gradual shift in habits can be achieved.

7.0 Impact

7.1. Introduction

Impact of the project was assessed by examining the effects of the project on the beneficiaries. Because all three key sectors of activities are intertwined, it is a challenge to assess probable causality regarding the impacts. This section looks at the effects of the program without breaking them down by planned activity. The evaluation team sought to answer the following question:

- Have the WaSH interventions results in improved access to quality water sources and improved hygiene practices in targeted communities?

To guide the analysis of the project's impacts, the evaluation team based itself on the outcomes identified in the project's logic model to assess the intended and unintended impacts found by the evaluation.

The table below summarizes the short-term and medium-term outcomes identified in the logic model in comparison to the impacts that arose in the evaluation.

Table 2 : Comparison of short and medium-term impacts based on the logic model and those found through the evaluation

	Impacts of the project	
	Based on the logic model	**Found through the evaluation**
Short-term impacts	Increased knowledge and understanding of water access and basic hygiene practices	Was not identified as being one of the most significant changes brought forth by the project, nor obvious through observation
	Involve returnees and people from host communities in the management of water, sanitation, and hygiene services	Increased social cohesion
	Increased collaboration between host communities and populations of returnees	
	Increased knowledge about sanitation	Was not identified as being one of the most significant changes brought forth by the project
Medium-term impacts	Access to safe drinking water and basic sanitation increases	Access to abundant clean water
	Water and sanitation infrastructures are well maintained and managed with the participation of host communities	Increased social cohesion and collaboration
	Population from intervention areas mastered hygiene practices (washing hands with soap, good storage and treatment of water at home, use of latrines)	Health and hygiene improvement attested by beneficiaries but undocumented quantitatively; no use of soap observed
	Reduction in water-borne diseases	Health and hygiene improvement attested
Unintended impacts		Food security and food diversity
		Safe collection of water and the end of fear
		Time gained by people, especially women, from closer access to water
		Other changes such as being able to engage in income-generating activities that require water on site

7.2. Effects of the program on beneficiaries

Although not all planned activities of this project were implemented to their full extent and as planned, the WaSH project in the IRVs of Murembera and Nkurye had significant impacts on beneficiaries. The following impacts were identified as significant by a group of beneficiaries in each village through the Most Significant Change approach. Further

details on those impacts as well as the social cohesion impact were also gathered through other data collection exercises with multiple stakeholders.

Expected impacts of the project included increased access to water, improved hygiene practices in the targeted communities, and increased social cohesion. The evaluation found that, although that there was improved access to water and mitigated results in the practice of hygiene, they were not the only impacts for beneficiaries. The following 5 impacts of the project were identified as being most significant: health improvement and reduction in diseases; time gained; quantity and quality of water available; safety in the collection of water and food security and diversity. Although the project impacted on everyone, there seems to be a consensus that women gained the most from the changes such as more time in their day, the ability to diversify and increase their activity namely in food production, a sense of security and safety while collecting water close to home, and noticeable improvements in their health and that of their children.

The results of the Most Significant Change approach in Nkurye and Murembera are presented in Table 3 below. The most significant changes identified through the MSC exercise are listed below alongside the number of votes each change has received in each IRV. Each participant voted for his/her three most significant changes. The top 3 changes for each IRV are identified with an asterisk.

Table 3 : Significant changes due to the project as identified in the Most Significant Change exercise

Change	Nkurye- # of indiv. votes	Murembera - # of indiv. votes
Health improvement and reduction in diseases	8*	7*
Time gained and reduced distance	4	7*
Quantity and quality of water	2	7*
Safety for the collection of water	5*	3
Hygiene improvement	4	3
Food security and food diversity	7*	0

7.2.1. Expected impacts

Health and hygiene improvement

Improvement in health was identified in both Nkurye and Murembera as being the most significant change caused by the project (based on # of iterations by participants in the MSC). Improvement in health was stated as the most important to the communities

because being healthy means having stronger physical capacity for activities and a range of occupations. Reduction in diseases also means less health-related expenses, leaving households with more money for other expenses. Increased time for productive activities and decreased expenses mean more economic well-being that translates in improvement in living conditions.

> *"Before the project, the children were sick all the time. When I went to get a child treated, I came back to find that another child was sick. It hurt me because of the diseases linked to the lack of clean water. Now the UNICEF project has brought about a big change".*
> -Man, community member-

Beneficiaries attested to better health at the household level especially in reduced diarrhea, intestinal worms and in infestations by ground tics that affect children's skin conditions and at times their mobility. Clean water was confirmed as a crucial factor in reducing diseases. Before the project, residents used to drink dirty water that they got from streams and rivers. Although the evaluation team was not get information about health related visits to the Health centre for the 2 IRVs due to the lack of availability of Health Services during the mission, delays in obtaining information post-mission, and the unavailability of disaggregated data at the IRV level, many beneficiaries as well as project staff and UN agencies representatives confirmed that the number of cases had decreased especially in children and women, and as a result, that there was less congestion at the nearby health centres.

> *"Before this water and sanitation project, I was dirty because I had to go to the river to get water. It took me a lot of time, time that I could have used to do other useful work. I washed very seldom; I could not wash my clothes. I rarely washed my children and my kitchen utensils. There was a lot of dirt in my house which caused my children to have tics. My children and I often had stomach issues such as schistosomiasis. It was the same thing for the neighbours. After the project, we now have water near us. I wash myself and my children every day. Even if I do not have soap, I wash my clothes. I clean my kitchen utensils and my house. The most significant change for me was the reduction in diseases for myself and my children and for the whole community. Something that has not changed is the lack of latrines in the community".*
> -Woman, community member-

One root cause of this change is improved hygiene and cleanliness of the body, home, clothes, and environment. Improved hygiene is due to putting into practice the good hygiene practices that people have learned in training and through awareness raising campaigns and the support of water points' committees. In the stories of most significant changes, one aspect of improved hygiene that often arose is that of people washing themselves more often. There were mentions by various groups of stakeholders that body odours had improved because people from IRVs washed themselves more and wear cleaner clothes than before. Improved hygiene and cleanliness also applies to the schools. In targeted schools, children are able to clean the classrooms several times a week compared to once a month before. Water is also used to clean the latrines. Children and teachers are able to wash themselves after sports which is considered a great improvement. A reduction in diseases has meant that children don't miss much school and absenteeism rate has dropped.

However, improved hygiene is limited by the unavailability of soap in the communities and in schools and the lack of dedicated spaces for washing clothes near the water points. As mentioned by several people interviewed, hygiene has improved for some, but not for everyone. It seems that there are still people not understanding or applying

hygiene seriously, and there is a need for more awareness raising on the importance of hygiene; the dusty environment and lack of soap are stated as deterrent to making efforts to keep clean. As mentioned by project partner, a shift in mentality regarding hygiene takes time, and, therefore, the current improvement in hygiene is a step in the right direction even if more needs to be done.

Another reason for better health is better nutrition that has been caused by water availability, as explained in the *Food security and food diversity* impact.

Access to abundant clean water

The access to abundant clean water was identified as one of the three most significant changes in Murembera (tied with the other 2). In Nkurye, it did not feature in the top 3 but it was identified as an important change. Beneficiaries explained that having access to clean and abundant water was implied in all of the other changes. Without abundant clean water, no changes would have happened. The importance of access to abundant clean water was emphasized by all as the basic life condition. But it is important to note that access to water in itself does not lead necessarily to better conditions.

With greatly improved access to an abundance of clean water, beneficiaries no longer have to choose between activities that require water. Women are now able to do everything they need to do whenever they want. For example, a woman who is sick can still get water because it is near the home. Before the project, they almost never had enough clean water to, amongst other things, clean themselves, their children, and their homes; to prepare food, to drink, and to wash their hands. An example of change is that now children are able to wash their hands before eating because of the easily available water. On top of ease to collect water, improved access has also rendered other activities easier to accomplish such as washing clothes and preparing food. People can now wash themselves and clean at their convenience. Access to clean water at schools means that whenever children are thirsty, they can drink without missing class. People no longer have to stock water in the home for a whole day, reducing the risk of contamination before consumption.

> *"Before the installation of the water points in the village, I lived a miserable life. I got water in a dirty river far away. In this river, there were frogs, snakes and worms. After the installation, we now have clean water near us. We don't travel long distances anymore and my children and my house are clean and diseases have decreased".*
> -Woman, community member-

7.2.2. Unexpected impacts

Food security and food diversity

Food security and food diversity was identified as the second most significant change in the IRV of Nkurye. It was also implied in many of the changes mentioned in Murembera. Distribution of agricultural inputs by FAO and training on farming techniques combined with easy access to water has led to gardening activities close to water points and households, with the result of a more balanced nutrition for beneficiaries. This is turn may lead to a higher degree of food self-sufficiency and a reduction in childhood malnutrition.

Food security and diversity were expressed in terms of the reduction of cases of anemia and savings on food purchase. The money saved from not having to buy vegetables can be used for other household needs. In both villages, many of the houses had adjacent little gardens in which they grew some vegetables such as "lengalenga" (a type of green vegetable) and, sometimes, fruit trees. The proximity of water points allowed users to water their gardens even during the dry season. For households with livestock, water is used for the animals. The increased ability to cultivate fruits and vegetables is considered as an important economic development result for communities.

Safe collection of water and the end of fear

Before the project, getting water involved fear: violence, darkness, unsafe travel conditions leading to insecurity, and stories of banditry. The "end of fear" about collecting water was identified as the third most significant change in the IRV of Nkurye and an important change in Murembera.

> *"The place where we used to collect water was really terrible. One day, a man was kidnapped from there. A few days later, we found him dead in the stream. Despite this, we continued to drink that water".*
>
> -Woman, community member-

Increased safety about getting water translates importantly as freedom of movement because the water is in the villages and nearby homes. This brings peace of mind to parents as their children do not have to go great distances to get the water. Fear of running out of water has been alleviated by the access to abundant clean water.

Time gain

> *-"Myself, I thank God, because before the distance was great and we could not send the children to get water. We could go 2 days without washing ourselves and we drank unclean water".*
>
> -Man, community member-

The gain of time was identified in Murembera as being in the top 3 most significant changes for the community. It was also identified as an important change in Nkurye. The main factor for the gain of time is the much shorter distance that residents have to walk to get water. Although the distance was not measured, people interviewed stated that before the project, they had to travel for several kilometres and that it could take in the vicinity of an hour. Since women are usually the ones responsible for water, this change greatly impacts them. The time gained allows women to spend more time in the fields or in productive activities, taking care of children, engaging in income generating activities such as gardening, doing house chores and even, as mentioned, more socializing among them.

The gain of time also applies to children. Often, children, especially girls, are the ones that have to get water. Because they had to walk several kilometres to get water, they were often late for school or had to skip school. They can now get water on their way to school or on the way back. Children miss less class time, especially girls, because of the proximity of water.

The gain of time can be expressed as an economic advantage because people are more productive in the fields, and, therefore may be able to increase the yield from their

crops. Some testimonials reflect that there has been this advantage for household economy from time saved in fetching water.

> *"Sometimes, the children went to get water before going to school. Sometimes they were late for school, other times they did not go to school. Now, children are able to get water and go to school without being late. For me, the biggest change is the fact that my children are not late to school. The child can go to school with a water container. He can get water on the way and also he is able to wash himself before or at school. Another change is the reduction in diseases, especially in children and women".*
>
> -Woman, community member-

The gain of time has also been expressed as an improvement in living conditions, especially for women. When they had to walk several kilometres to get water, they were exhausted. What was expressed by women as a reduction in fatigue has also positive benefits for their health, bodies, and capacity for care and productive engagement.

Other changes

Access to water at a short distance has enabled participation in new activities that depend on the availability of large quantities of water on site. Examples include making local beer and making bricks for houses and latrines.

Another important change is increased social cohesion between repatriated people and host communities due to the access to water.

Social cohesion

The purpose of this evaluation was not to tackle in depth whether the WaSH project was a major contributor to social cohesion. Social cohesion, as referred to in this project, is "the positive relationship between repatriated communities and host communities". It was not identified as an objective in the UNICEF WaSH project though it was part of the UNDP component, and stated as an overall objective of the LRRD project.

However, there is strong interest and value for UNICEF to understand whether the WaSH project had any incidence on the building of social cohesion between returnees (IRV based) and host populations (partly in IRVs but mostly nearby). The evaluation team took this aspect in consideration by collecting views and testimonials of members of the 2 populations, and views from other project stakeholders that have been most directly involved in the project implementation.

The commentary that follows on social cohesion takes into account reflections from interviews, focus groups, the "most significant change" conversations, literature as well as documentary reviews.

Water is an essential condition of life, and can easily be the cause of conflicts as it can be a community builder and unifier. It appears from testimonials and observations that the realizations of the WaSH project caused more unifying results than the opposite. Testimonials to the effect that water access was an "entry point" for social cohesion were numerous. There is widely positive feedback by beneficiaries about the contribution of the WaSH project to social cohesion. Repatriated communities in IRVs

previously had limited opportunities to fully engage with the villages and populations outside of the IRV catchment. Before the project, both repatriated and host communities had to get water at far distances, which was an opportunity to get to know each other but also created additional pressure on a limited source of water unfit for use by a dense community. This led sometimes to conflicts, with host community members blaming incoming IRV residents for the scarcity of water and its excessively poor quality. At that time, there were already conflicts around land accessibility, and any other potential threat added to the existing tension. Some people reflected that there had been some tensions and even conflicts at the outset of the resettlement period and at the start of the project, but that great efforts of sensitization and sharing of benefits by the UN agencies helped reduce those tensions.

Influence and impact of WaSH project on social cohesion

According to testimonials, most of the water infrastructures outside IRVs in the adjoining communities are not functional and have not been for some time, which results in host community members using water infrastructures set up by the UNICEF project in IRVs.

> *"People from outside the IRV were not coming in the village before, so there was no meeting. But now that there is water here, they are coming, they meet, exchange ideas, share water, and it is changing the IRV residents behavior"* -Project staff-

A large proportion of interviewees attributed this sharing of water between host communities and returnees as a trigger for the building of relationships, allowing people to know each other and develop links "beyond meeting at the water point".

Many people recognized the value of multiple daily meetings at the water point between host and returnees as a factor for stronger relationships, and ties of collaboration and mutual support. For instance, a man mentioned that his landless family was able to make an agreement to farm on a host community member's land in return for shared products because of the discussions between women meeting at the water point. Women who have saved time from water duties can engage more with each other and build stronger social connections.

Because of the shared recognition of the value of clean water, it seems that collecting fees from users for repairs has not been controversial and that all users, whether host community members or returnees, have contributed their share of money (1,000 BIF) for when repairs are needed. Testimonials about the sharing of water management duties between village residents and non-residents were expressed, especially for Murumbera where the water points are by the roadside, and easily accessible for everyone.

Social cohesion assumes the building of harmonious relationships and a sense of solidarity. The tone and types of arguments that were made during interviews and focus groups support the idea that a true sense of solidarity has been built around water access: when asked what they would change or recommend to improve the water systems, many mentioned the need to help people from the host community have fully functional water points. A participant was strongly endorsed when stating that she "feels a lot of pity for the women who still have to walk long distance to the river for dirty water because they don't have access to this clean water in their community". The issues that

a lack of functioning water points in host communities is deplorable and must be corrected came out in a majority of the interviews, focus groups and all conversations of the MSC process. It is undoubtedly a strong feeling.

Factors related to WaSH that may negatively affect social cohesion

Even if water flow is currently good in water points that are functional, there is only so much pressure that the system can support: it would be imperative to multiply the usability and functionality of water point inside and outside IRVs so as to spread the population over many points, and reduce the risk of overuse that can lead to breakage, overcrowding, and eventually conflicts.

In the case of at least one school, Kigogo, there is some tension arising from the lack of clarity and sharing of responsibilities pertaining to water management: community members come and use water points, even if the taps are broken, and school staff are unclear about the legitimate use of those facilities by community. There is a feeling that while everyone needs water, this wide use by community jeopardizes the proper use by school children and staff. Though it is not specifically an issue of social cohesion between host and returnees, it is an issue of possible social tension that should be resolved.

Key lessons about access to clean water and social cohesion

A key lesson that arose from testimonials is that collective use of the same water points, especially between women, appears to be a strong connector and a factor in building relationships of mutual support, friendship and solidarity. Conducive elements seem to be the sharing of a needed resource that frees time for both returnees and host communities, and the recognition that this mutual benefit promoting other acts and opportunities for solidarity.

Some adjustments that may entice the building of stronger bonds and even better social cohesion are changes that would allow women to spend more social time together around water points, for instance, setting up laundry enclosures on site. This addition would have a double advantage: that of convenience for women's laundry tasks (which in the dusty environment have to be done often), but also the advantage of amplifying social opportunities and social cohesion. With proper training and support, it may also provide women with a stronger sense of responsibility about the maintenance and cleanliness of water points for long term sustainability and ongoing hygiene improvement.

8.0 Sustainability

8.1. Background

"Sustainability" refers in this project to the maintenance and functionality over the long term of the water and sanitation system and water supply so that benefits of the project remain effective over an "extensive time period after the withdrawal of all forms of support from the external agency" (OECD/DAC 1998). Sustainability is not here attached to the project itself but rather to the resulting services and benefits, and implies that "prevailing structures and processes have the capacity to continue their functions over the long term" (DFID, 2000). The concepts of "viability" and "sustainability are at the very core of the project, mirroring the main purpose of the Government's strategy. Consequently, all components of the project and the activities defined under each were selected so that the IRVs become adequate settings for sustainable community systems and for peaceful relationships over the long term. This included: providing returnees with land, opportunities for socio-economic activities and viable livelihood means, and access to basic services and infrastructures. However, the UNICEF component was concerned with providing access to clean water, sanitation and hygiene for IRVs in defined water networks areas in 2 Provinces, and the evaluation focused on this component's sustainability, while acknowledging impending factors outside of the WaSH project that affect the sustainability of its benefits .

The case study research question is:

- Did UNICEF's water, sanitation and hygiene (WaSH) project in the integrated rural villages of Nkurye I and II and Murembera support the conditions required for the sustainability of the project's benefits.

8.2. Findings

The following findings tied to the evaluation criteria of sustainability and the questions it aimed to address are explained in detail under the narrative case study that follows.

Quality of infrastructure construction and maintenance

Though water infrastructures and sanitation facilities appear relatively well built for the most part, observation of 3 water points sites in IRVs and 1 school site as well as results from focus groups and interviews confirmed a number of technical issues preventing the proper functioning or use of these infrastructures: as explained below, some issues are linked to design flaws, other to inadequate maintenance, density of users issues, and possibly adequacy or quality of material (parts) although the evaluation team could not verify this aspect in data triangulation.

Effectiveness of organizational and managerial structures

A number of structures were put in place for the ongoing oversight and management functions of the project and post-project. School hygiene clubs were set up in all schools, water management committees for each water points were elected by communities and trained, and arrangements were made as well as training provided to the Communal Water board (RCE). From interviews, focus groups and the MSC process, it appears that gaps in communication flow, capacity issues (both material and skills related) at Communal and to some extent at community levels, lack of clarity about functions and responsibilities, lack of commitment and prioritizing at local government level and lack of means and resources negatively affect the smooth management of the infrastructures, despite visible engagement at community and schools level. So while the structures for management have been put in place, bureaucratic dysfunctions and lack of capacity and commitment at some levels compromise the effectiveness of those structures.

Ownership by community of water and sanitation infrastructure

From interviews and focus groups, it appeared that Community Water Management committees for each water points generally take their functions seriously for collection of water fees and demanding repairs, but that their key roles as custodians of the water point sites and as awareness builders of the community about use, maintenance of water and hygiene practices appear not to be strongly implemented due to lack of confidence, lack of clarity on this role, and lack of means and capacity issues.

8.3. Issue of interest of the Case study

The long-term viability of basic access and use of clean water, sanitation infrastructures and means of hygiene are essential parts of the larger sustainability of IRV environments and communities. This case study discusses more in-depth the question of sustainability of the WaSH component as a complement to the other evaluation questions of "Effectiveness" and "Impact" addressed in this evaluation.

The issue of interest is whether the necessary conditions for sustained access to clean water, and the derived benefits of such (basic life preserving aspects of sanitation and hygiene and further opportunities triggered by access to clean water) have been met by the WaSH project. This study will explore how the project set up the conditions for sustainability, discuss any caveat or risks to sustainability identified in the evaluation findings and their likely implications. Some recommendations will be proposed to alleviate those risks.

As stated in project documents and reiterated in many interviews, the essential condition of clean, accessible and affordable water on a sustainable basis is not only required for survival, but is also needed as a basis for other human life needs to be met (proper sanitation conditioning health, proper nutrition, time for economic generating and productive activities, etc). Places with no reasonable access to clean water will offer limited opportunities for long term settlement or long term living unless other available resources allow for provision (purchase) of water using extraordinary means or facilities. In the Province of Rutana, in the Commune of Giharo, good water sources exist that, using gravitational power provide plenty of clean water.

UNICEF took charge of the rehabilitation, construction, and extension of water systems, making clean water available on a full time basis in most locations, with collective water taps in IRVs, or cisterns and tanks along the broader water networks. This is a notable achievement in a location where only 26% of the population had access to clean water (compared to a national average of 55%) in 2007.

While the focus of this evaluation is specifically the WaSH component of the LRRD project, the broader lens of overall sustainability of the IRVs cannot be overlooked: proper water systems, sanitation and hygiene conditions work in combination with other elements to ensure sustainability. Therefore, some other aspects will be mentioned that relate to overall community sustainability and could make working in isolation on the sustainability of water systems, sanitation and hygiene of little relevance or efficacy.

8.3.1. Motivations

The UN system is mandated to support areas of priorities and expertise in humanitarian and development arenas in partnership with National governments. The UN agencies therefore support and complement efforts of governments.

UNICEF was motivated to undertake this WaSH project due to the basic needs faced by returnees "without references" (who had lost contacts with former relatives or lost their right to land due to their prolonged absence from the country. The peaceful, proper and sustainable reinsertion of returning families following the resettlement process was a high priority for UNICEF in its mission of support to national governments priorities regarding children's welfare, hence the future of Burundi's population.

As no sustainable reintegration is possible without access to basic services, UNICEF's priority was to ensure proper infrastructure for clean water, hygiene and sanitation in IRVs and around them. The choice of location, as explained in the Project background of this report, was justified by high refugee number, high incidence of water-borne diseases affecting particularly children, and budgetary constraints.

Along with the Burundi government's strategy, UN agencies see long term development for former refugees as conditional to an adequate transition from emergency to stable and peaceful reinsertion. On those grounds, they identified essential measures of capacity enhancement of administrative structures at all levels (community, communal, provincial and national). The project was designed so that overall responsibility would be transferred to local communities and government post implementation. The need to ensure a locally owned maintenance and upkeep of benefits called for proper handover in managerial and operational roles.

Building the conducive environment for peaceful relationships between host and refugees also meant a widely participatory engagement of both, the inclusion of vulnerable members of the host communities in the IRV target groups, and the setting up of inclusive community management structures.

8.3.2. Analysis of steps towards sustainability:

From documents collected and interviews, four main types of assumptions guiding this project in terms of sustainability can be extracted. These are the main areas in which changes needed to happen to ensure the conditions for sustainable project's benefits. Project activities were designed and carried out in alignment to those objectives. The analysis below reflects what was planned, what was done, and the observable results or comments on whether the achievements are likely to result in sustainability of the project's benefits.

1) Physical infrastructure:

Access to water : The assumption was that proper infrastructure set up in strategic locations in IRVs and in primary schools would provide close (within 500 m of household/school) access to clean water on an ongoing basis, and offer the conditions for the adoption of proper sanitation and hygiene practices only possible with easily available clean water.

Both IRV populations have expressed satisfaction and there was unanimous agreement on the improvement that clean access to water has brought to the community, compared to the dire conditions they experienced before UNICEF's intervention. However, based on the fact that infrastructures were at the time of the evaluation 2013 field mission approximately a year old, there are a number of issues to raise from a technical sustainability viewpoint:

- ***Technical issues: adequacy of design and construction***: most of the structures visited appear to have been well built. However, there is a loss of water on many water points (6 of the 10 IRV water points at the time of the visit and most taps in one of the schools were defective) due to combined factors of broken taps or pipes letting water flow or leak constantly, and the lack of measures to capture water pouring out of the open holes with strong flow in most places. There were important investments in infrastructures whose design or functionality appear faulty (aquatanks in Kigogo school not functional, pipes blown out from water pressure, water outflow of high pressure untapped leading to low pressure in water points below, latrines far from water points in a school, latrines lacking depth and filling up quickly in schools, boys and girls latrines accessed through the same enclosure resulting in fear by girls, etc). Though this evaluation did not have technical expertise to analyze issues in depth, it appears that many can be attributed to design flaws (aquatanks in school, underestimation of water pressure impact on pipes, distance between school and latrines, boys and girls latrines in the same enclosure) while others are a consequence of inadequate maintenance (delays in replacing faulty parts) or parts of questionable quality (taps appear to break often)

  The main consequence is an unfortunate loss of a precious resource that may eventually dry up: this is a direct threat to the sustainability of water points and access to clean water for communities. The issues observed call for some technical adjustments beyond the capacity of communities, the consideration of systems for

better water capture that would minimize losses and increase efficiency of use, and improvements in the capacity for maintenance and timely repairs with an emphasis on community-based action.

- ***Usage related issues***: the water points are well used, and serve populations beyond those of the IRV. Demand for clean water is high, and because of the availability and closeness, testimonials all reflect a much higher quantity of water collected and used by households compared to the situation prior to the project when walking to a river to collect dirty water meant a 1 to 4 km walk, often more than once a day. From focus groups and the MSC conversations, it seems most households now use 3 to 4 times more water than they did before the project. The quality of water is also a major cause of satisfaction. However, some stressors on water use are the number of water points serving a very dense population with increasing needs for water (even if none of data collected from focus groups suggests that more than 10 litres per day per person is collected generally, which is half of the WHO standards). From responses collected, it appeared that 5 to 8 fill ups of 5 litres containers per day would be a standard use in a household (with the caveat that our methodology doesn't allow conclusions due to quantitatively non-representative data collection).

  Populations outside the IRV also use IRV water points, as their own access to water seems defective. There is a risk on the longevity of an overused water point. The lack of functional water points outside the IRVs is cause for concern over the longer term as it may result in an overwhelming number of people relying on the same few water points. Delays in making repairs will amplify this risk.

  It is unclear to school staff whether the community has a right to use its water points, and there appears to be some cause for conflict around legitimate access and sharing of responsibilities for upkeep in one school (Kigogo). Additionally, there is much demand on latrines in schools, with for instance 5 latrines each for boys and girls for a school of 650 students (a ratio of 65 pupils per latrine). Latrines in general, including in schools, have very little depth due to the hard soil they were built on. Some are already overflowing and there is no system for drainage of excretat. Schools have very little means to ensure this type of maintenance which poses a sustainability threat.

- ***Maintenance and upkeep***: though water points sites are well constructed, with at least one point having been fenced for additional protection (Murembera), on 3 IRV sites visited, maintenance and upkeep could be improved. Young children mixing with adults, crowd around the water tap instead of organized in line, spillage of water creating a muddy space where most people walked bare feet, clothes washing under the tap or close by with laundry spills reaching the water point catchment area, are some of the observations that call for some strategic remedial action. It appears that water management committees experienced membership turnover meaning they have not all been trained. Despite their appreciation of the 3 day training they received, members mentioned that material and means to properly mobilize and sensitize the community are lacking. An assessment of the level of skills, capacity, and means for water committees to properly play their role should be done in the context of planning for a refresher training and accompaniment especially if considering their possible role in technical repairs. School personnel and students expressed great satisfaction with the availability of water and teachers saw improvements on cleanliness and hygiene of the children.

Even school attendance has been positively affected: the benefit of better attendance was noted as a great value for girls especially who are mostly the ones formerly walking long distances to fetch water prior to school, delaying their attendance. For maintenance of structures at schools, proper capacity of school personnel and students' awareness need to improve, without which the risk is high that infrastructures would have too short a useable life span.

2) Behavioral changes:

Hygiene and Sanitation practices: The expected behavioral changes were foreseen mainly at 2 levels: 1) changes in hygiene and sanitation practices at the community level which would be made possible by clean water and would then spread community-wide as communities take charge, and 2) accordingly changes in practices of management for self-reliance by local authorities and communities.

It was logical to perceive that with communities and schools having ongoing access to clean water and sanitation infrastructures, a strong sense of the value of such access to water would develop and entice a positive chain of actions and results (more regular washing, increased cleanliness, safe drinking water resulting in better health, less water borne diseases/epidemics; better capacity and time for productive activities; etc.). UNICEF's objectives were foremost to create, through availability and use of clean water, improved sanitation and hygiene practices leading to better health, particularly for children and women.

In the absence of baseline data, hence benchmarks to measure the reaching of indicators, and because there was no monitoring collaboration with the communal health services, this evaluation can only use observable and self-reported qualitative evidence. There have been many testimonials of improvements in hygiene and sanitation, in schools as well as in communities. Clean accessible water has allowed to better clean spaces, objects and people, with sometimes dramatic unforeseen secondary results such as reducing the ground tics infections affecting children's skin (to the point of sometimes preventing their walking to attend school), improving body hygiene that allegedly improved "marital relationships", reduction of diarrhea and tape worms especially in children, and health improvements from drinking clean water and cleaner environment.

But a number of systemic changes can occur only over time and with increased awareness, sensitization, and promotion of change in habits at collective, household and individual levels. Though dividends of clean water access and improved sanitation and hygiene seem to be acknowledged and recognized, the widespread adoption on a sustainable basis of better practices will require more work. Observation showed very little measure in 2 of the 3 IRV sites visited for cleanliness and controlled access and use, proper hygiene in water collection, etc. There are many factors at play, such as poverty levels that hinder purchase of soap in schools and in households. People seemed satisfied in general with improvements felt now compared to the pre-project, and the proposed perspective that they could get "a lot better" seemed to be "farfetched" because of the extra work, costs and hindrances of poverty. A woman summarized this

issue as follows: "Will I go to town, far away, to buy a piece of soap instead of buying the food I need?"

Governance practice change: The behavioral change expected about local governance's responsibility and leadership for the future was expected to happen as a progressive take-over by local government and local communities of the effective responsibility for maintenance and upkeep of the infrastructures (following their engagement in the project, their structural set-up, and capacity-building activities). This leadership transfer is no doubt essential to long-term sustainability. This expected change was beyond simply "administrative" in nature: it also implied, according to stakeholders, a change in "mindset" where government structures would become operational leaders and ask for support from external actors such as UN agencies when required, rather than the other way around. This change of "ownership" of the project appears not be have materialized according to all stakeholders interviewed. This can be attributed to a mix of factors based on information collected, such as : lack of ongoing engagement in the implementation of the project (there were testimonials about the Communal structures being "informed" about the project rather than "involved" in co-design); ongoing changes in bureaucratic structures and staff turnover that are greatly affecting the attention that local governance can pay to any project follow-up; challenges with understanding of governance's role as custodians and leaders in program maintenance; financial and logistical resources constraints; and lack of capacity and skills.

Donors and support agencies such as the UN have an ongoing role to play in reinforcing leadership capacity, skills and knowledge so appropriate structures deliver of what they are mandated for, and are accountable for demonstrating the results of their engagement. Depending on resources available, investments in building capacity and improving technical skills at communal level should be considered a priority investment for agencies that have injected important resources in projects requiring close oversight from communal structures. A certain commitment to investment in protecting the value of past investment is a way to pave the road to sustainability.

3) Organizational structure:

Based on interviews, it was thought that collective recognition of the value of water as a trigger for stability, productivity, and long term development would be a solid foundation to move communities and communes from passive recipients to active upkeepers /managers, especially given that UNICEF and its partners supported the set up and training of appropriate structures to ensure these roles.

There seems to have been positive collaboration throughout the project implementation phase with local authorities and provincial and national levels of government. UNICEF's implementing partner in Rutana and Murembera (Programme d'Eau et d'Assainissement – PEA) is an agency of the government and many of the individuals involved have been engaged with one another due to mobility between UNICEF and government staffing, contributing to collaboration.

At the local government level, the Communal administrator is a key actor for any ongoing project. UNICEF and the project partners ensured engagement with these

position holders by involving them in joint missions, keeping them abreast on progress and ensuring collaboration in various capacity development activities. The office of the communal water board ("Bureau de la Régie communale de l'Eau" - RCE) is the local government structure that would ensure ongoing maintenance, and assume responsibility for repairs, awareness raising and sensitization at community level, act as liaison between communal government and community water committees, as well as being custodian of the funds collected from water users and deposited in a financial institution named COOPEC. Technicians for repairs ("fontainiers") work for the RCE structure. Local water committees also respond to a water network representative who, in principle, mediates between community level needs and the Commune.

UNICEF and its partners organized and held training 2 sessions of 3 days each for Communal Water Board ("Régie communale de l'Eau"-- RCE), and for community-based Water Management Committees ("Comité de gestion de l'eau--CGE), so as to transfer knowledge of both technical and administrative nature. These training sessions are summarized in the Effectiveness section of this report. The training workshop for the RCE emphasized administrative and financial management of maintenance as well as technical skills, whereas the CGE workshop addressed the importance of clean water for health, contamination and its risks, hygiene, prevention of diseases, and the conditions required to keep the benefits of the water infrastructure in functioning mode. According to interviews, school's hygiene clubs got basic instructions but no training.

The purpose of community-based structure (Water management committee) is to be the first instance of oversight on the functioning of the water points, including hygiene and maintenance, cleanliness of the environment, collection of user fees for repairs, as well and communicates needs for repairs and problems to zonal or communal structures for their action. Once informed, the RCE manages the technical team and plans, through series of administrative steps before repairs can be done.

Community Water Management committees appeared to be committed to their functions, and though lacking proper support from Communal structures, especially in responsiveness and repair proceeding, they showed commitment to collecting community's water fees, transferring the collection to Communal level, and working together to maintain as much as possible the water points in working order. Though commitment appeared generally strong, as attested by meetings, activities and actions taken in the last year, the understanding of their role and the capacity to sensitize the community on proper use and maintenance of water point sites seemed uneven and altogether not strong enough.

The set-up of structures to oversee maintenance, upkeep, reinforcement at community level of sound water use and hygiene was the strategy to ensure future long-term sustainability from an organizational view point. But it appears that the current complex and hierarchical structure is a mismatch with concepts of local ownership and decentralization promoted by the Government and the project: local committees raise fees from users for repairs, then flag needs to zonal liaison (but not always nor everywhere), who then communicate with communal structures, which send the information to directorship for hydraulics before proper authorizations, equipment, and plans are made for repairs. Technicians are logistically challenged (transportation) which

may add more delays. Often, according to testimonials, weeks and even months elapse before repairs are done on water points from which water flows uninterruptedly.

Such a system needs reassessment and correction to improve functionality, timeliness and quality of response, as well as accountability. Without a change, sustainability responsibility delegated mostly to communes may not be filled and that could be at a great cost to the benefits from the project. At the end, communities would be paying the price.

4) Institutional and State engagement:

The project was also founded on the premise of a changing role for both the implementing agencies and the government structures : UN agencies and partners would have a main role as implementation leaders for the initial phase of building infrastructures, then move to a capacity-building and convener role with the creation of structural mechanisms for future sustainability, progressively playing a more remote supportive function until final hand-over, when communal and provincial structures are able and effective in leadership for follow-up and management of project outputs in close collaboration with communities.

So as to phase-in this progressive transfer of responsibilities, a temporary hand-over of infrastructures was done, followed by a year of co-responsibility where any technical failings identified will be under the responsibility of UNICEF and technical partners, before a final handover a year later closes the project and devolve the entire responsibility for future maintenance to community and communal structures. In the 2 IRVs of Nkurye I and II and in Murembera, the temporary handovers had been done for about 10 months at the time of the evaluation mission.

It was expected that after the project, there would be an adequate policy framework, roles and responsibilities would be clear, and government structures (national, provincial, hill based and communal) would be enabled, skilled and accountable to monitor, respond to needs, and problem-solve to sustain the benefits from the project.

Though the evaluation concerned only UNICEF WaSH initiative, many issues observed and discussed around the overall project sustainability (LRRD) and the IRV communities' viability over the long term remain acute preoccupations for project stakeholders, including community members, partners and UN agencies. Observations of the evaluation team about the state of houses and latrines on both IRVs raise serious concerns. Houses built with adobe bricks a few years ago are now falling off and made inhabitable, latrines have no roof, house roofs damaged by winds have holes letting the rain pour in heavily in rainy seasons. A testimonial of a resident stated that out of 25 households who returned from Congo in 2008, only 5 now remain in the IRV, other having returned due to those conditions and lack of land. The long-term viability of the IRV requires a thorough cross-sectoral and inter-agency approach, as even if water systems were well taken care of and hygiene and sanitation were to improve thanks to availability of water, other factors may play against the success of long-term reintegration which would basically result in all UN projects having been unsustainable.

The complexity of governance issues and of structures as described to the evaluators (National, Provincial, Communal, Zonal – hill based—and Community based) may be a challenge to clear operational functions and proper managerial leadership at communal and other government levels over the short term. Adding to this a number of present conjectural issues in the government's restructuring of rural water services, namely a decentralization process that still has to be fine-tuned and operationalized, it seems difficult to propose ways in which this change in managerial set-up can quickly adjust for efficient and effective leadership functions on the follow-up of the WaSH project.

Accordingly, in order to minimize the risk that gains be eroded by ongoing disrepair and lack of capacity to address major issues impending on long-term sustainability, UNICEF and LRRD partners should collectively discuss, in close collaboration with allies (the WaSH National Roundtable for instance, partner INGOs and NGOs with recognized capacities) how better support can be provided to government structures in terms of leadership development, technical means and skills improvement, systems and project management practices and accountability mechanisms. Mixed measure of appropriate training and accompaniment plan for relevant government structures should be prioritized within resources available, with a focus on sustainability of project's investments for repatriated Burundians

8.3.3. Contributions to sustainability:

The UNICEF's WaSH project deployed considerable efforts and investments in creating, through easily accessible clean water, basic conditions for life and re-establishment to be sustained in IRVs of Nkurye and Murembera. The issues analyzed in sections above and the measures proposed for improvement should be understood within the larger scope of the impressive possibilities and solutions that were brought by the WaSH project. Some of these results were raised through the "the Most Significant Change", and others were observed and testified on by focus groups and interviews.

Most obvious to sustainable life is the access to clean water close to houses, ensuring a range of benefits related to hygiene and overall health, clean water, school attendance, time gain for other activities, security, food security, and social cohesion. Section 7 provides details about those benefits.

Those benefits can in and of themselves contribute to the growth of a sustainable environment for life and resettlement, as long as what sustains those perceived benefits remains fully operational (water systems) and as long as other factors do not tip over the weighing of benefits, such as for instance unviability of housing, conflicts, lack of land or means to build a sustained livelihood.

9.0 Cross-cutting issues

9.1. Gender equality in WaSH project

Women's perspectives and participation in WaSH projects are crucial since they are primarily responsible for getting the water, for ensuring cleanliness, for caring and for teaching hygiene practices to children.

The evaluation found that gender equality was included in the design of the WaSH project by UNICEF. There were at least 3 aspects of the project where efforts were made to integrate gender equality: water management committees, separate latrines for boys and girls in schools, and "cash for work" opportunities available to women.

In each water committee, the project required that there be at least 2 women out of 5 members (which was deemed a minimum and not a maximum number). Members were elected based on their skills and their community recognition. This requirement was adhered to in Nkurye where at least 2 women were on each of the water management committees. In Murembera, there was one woman out of a 3 member committee. This is partly due to the small number of households in the IRV. However, from conversations and observations, it seemed that many women were involved in water management issues. Women held various roles on committees including president and vice-president.

During the construction of the water networks, there were "cash for work" opportunities. Depending on the requirements for the task (i.e. specialized tasks vs. general tasks), opportunities were available to both men and women. Both UNICEF and PEA encouraged women and girls to participate in the construction of the water networks, and they were paid for the task performed.

On many occasions, it was mentioned that impacts of having access to clean water were more pronounced for women as they are the ones responsible for water in the household. One woman member of a water committee in Nkurye stated that "women are the ones that benefit the most from having clean water near them but that the impacts are felt throughout the whole family". An impact most valued by women was the gain of time from the past when walking long distance for water was necessary. That time has now been freed up for other activities (productive, economic, care and social). Improved hygiene practices and sanitation were also more important for women, and they are seen as vital for hygiene practices to be adopted. A woman from Nkurye explained the importance of access to water for women in terms of improved hygiene: "Cleanliness, hygiene, and household sanitation, are the responsibility of women. Women are the ones that clean their children's and husband's clothes. It's more important for women."

Though benefits were considerable for women, there are in contrast several issues and challenges that affect women particularly and hinder their participation and full benefits from the WaSH project. Considering the management functions of water points in IRV, there have been few training opportunities for women. Many members of the communities mentioned that men were often favoured to receive training related to water use, management and hygiene. It seems that gender bias still permeate choice of participants for training when the ones selecting are all male, and traditionally, it has been more "customary" to think of men as attendees of training than women who are busy at home. When training was offered to women, other issues arose: some women could not

attend as it was far from the village and they had no alternative for childcare. Women who did attend the training with their babies were often not able to fully participate because of the demands of care of their child.

In their traditional social functions as caregivers, main caretaker for the family, responsible for children, as food producer and processers, and in all their other caring and productive roles, women have a pivotal role for overall management issues pertaining to water. The statements about their place and roles in the project offer the perspective that while UNICEF and its partners have emphasized and insisted rightfully on the participation or women and girls, they still face cultural and social exclusion when it comes to training opportunities and key managerial functions. Continued awareness on the importance of involving women as decision-makers, planners, problem-solvers, as well as giving them means to improve their skills and knowledge, have to be purposefully pushed and enacted by UNICEF and other stakeholders at all levels for future sustainability. Women have to be encouraged and supported to take up those positions.

Another issue that was raised was the need for a shift in thinking on women's roles and involvement in management of water points in the communities. Proposed explanations for the lack of women voicing their opinions and getting more involved in managing water was fear of voicing their opinion, the belief that men must be leaders in development projects and the lack of time.

9.2. Rights of children and vulnerable people in WaSH project

9.2.1. Children

The evaluation found that children benefited from the WaSH project in several ways including: access to water at the Kigogo school, reported reduction in water-borne diseases, better health, and improved hygiene at home and in school.

One of the main activities affecting children specifically was connecting the Kigogo school, situated outside the Murembera IRV, to the water network. Together, UNICEF and PEA decided to extend the water network to the school, even if it is was not originally planned, because it would greatly benefit the children of that school.

A reduction of diseases and an increase in health were stressed about benefits for children. Improved hygiene at home and at school are deemed important contributors to those benefits.

9.2.2. Vulnerable population

This WaSH project specifically targeted vulnerable populations. Since all returning refugees are considered vulnerable, the project's design was aimed at facilitating and supporting the sustainable reintegration of these populations. Furthermore, the project also targeted vulnerable host populations. This evaluation found that vulnerable populations were given special considerations in the design and implementation of the project.

The composition of each IRV was deliberately set up to ensure the rights of vulnerable populations and promote cohabitation in an effort to build peace. Each IRV was composed of 80% returning refugees and 20% vulnerable host population. The residents

making up the 20% of vulnerable people were identified and chosen by their communities and communal administration. Since UNICEF and PEA did not participate in these decisions, it can only be assumed that the 20% was made up of the most vulnerable residents of host communities such as children in charge of households, older people responsible for young children, widows and widowers with children, and sick people or people with disabilities. Though people mentioned the vulnerable populations from the host communities living in the IRV and some were met, it was not possible for the evaluators to assess whether the quotas were adequately met, not whether the integration of vulnerable people to returnees was effective.

10.0 Lessons and Challenges

10.1. Lessons learned

10.1.1. Organizational and structural set-up

- **Coordination between UN agencies is key.** Aside from UNDP acting as coordinator of the LRRD project, the 3 UN agencies involved were each responsible for the design, implementation, and follow-up of their respective components. This resulted in the design and implementation of 3 components that were not fully integrated with one another. It appears that the LRRD components were in reality 3 projects happening side by side, with some level of coordination that wasn't always systematic, possibly restricting efficiency and effectiveness. However, it was mentioned that opportunities for cooperation arose throughout the project and at times allowed agencies to deliver their programs in a more resource-efficient way. Had the 3 components been designed in a more integrated way from the beginning, it may have resulted in a more cohesive program and better support to the entire reintegration needs of beneficiaries.
- **Roles and responsibilities of all parties must be clear and understood from the beginning.** Because of the multi-partied governance structure of the water and sanitation infrastructures, the roles and responsibilities of each party involved could have been clearer and understood by all to ensure a strong governing structure. In this case, the lack of understanding of the roles of each sub-structure, and the complexity of the operational and managerial structure led to delays, duplication of efforts, and frustrations on the part of the users (and other project stakeholders).

  This lesson also applies as well to the parties involved in the execution and delivery of the WaSH component. Staff or organizations turnover, shortcomings in communications, documentation and in sharing information likely contributed to confusion, gaps in traceable responsibility and accountability that affected efficient implementation, monitoring of the activities, and handover of responsibilities of the project.

10.1.2. Infrastructure and technical sustainability

- **The physical environment for settlement and infrastructures is a foundation for long-term viability.** Oftentimes, infrastructures are built whereas viability of chosen location can be questionable for some infrastructure setup. In Murembera, the rocky soil under very thin topsoil makes it very difficult to build latrines deep enough to be sustainable. Furthermore, in both villages, the hard packed soil does not allow water to be absorbed and causes run-offs or overflowing. While examples of conditions that appear ill-suited for settlement were raised, the evaluation could only visualize the ones concerning the viability of latrines. Taking the particular environment of the IRVs in consideration would greatly increase the viability of the infrastructures.

10.1.3. Social inclusion and mindset change for sustainability

- **Soft skills are as important as building infrastructures.** The construction of water and sanitation infrastructures does not ensure a shift in habits and mentality on the part of the communities. Training and awareness raising campaigns are crucial in enabling and supporting changes. In similar future projects, impacts might be greater in terms of change in practice if training and awareness campaigns and construction of infrastructure were given the same importance, and thus, were implemented as complementary.
- **Full consideration of women and children in training and awareness raising.** Women have a pivotal role in use, maintenance and proper care of water facilities. They are also main caregivers and they bear a potentially strong influence in changing hygiene and sanitation habits. Children, on the other hand, are impressionable on messages conveyed to them early on and can change behavior often more easily than grown-ups. Very little training and awareness raising was done with children in the targeted communities, and it was devolved to teachers. Few women were trained and encouraged to take leadership roles on committees, were it not the UN agencies efforts to require a certain number of women on water committees. Since children are the future of the IRVs, raising their awareness is a crucial element of sustainable changes. Young people, children and women could altogether have a transformative impact on hygiene and sanitation practices if they are more systematically targeted for training, supported in taking leadership and encouraged with measures of accompaniment.
- **A shift in habits and mentality is a lengthy process.** The short time-frame in which the WaSH component of the LRRD project operated may have had an influence on some of the short-comings about the adoption of good hygiene practices by the targeted communities. Many project stakeholders recognized that a shift in lifelong habits and mentality cannot be done in such a short period, and by brief training opportunities for a few. A significant change would require time and substantial awareness raising campaigns and training, as well as creating means for purchase of basic inputs without which hygiene and sanitation practices would likely remain unsatisfactory.

10.2. Challenges

- **Stability of human resources.** Mobility of stakeholders in the project, especially at community and communal levels, has affected knowledge retention on different important aspects of the project's implementation and sustainability. For instance, many people trained on water committees and on the RCE have been changed, and no training refresher has been offered so new members could get support and knowledge to play their roles.
- **Dependency syndrome and lack of local ownership.** Many returnees had been accustomed while living abroad in refugee camps to get their basic needs met in the form of delivered aid. It is a drastic change for them to face the expectation that they must now take charge and be responsible for their own future with minimal external support beyond the cash and food inputs of the startup. In addition, training and

accompaniment of communities and local government during the project period have had a too limited scope to bring about clear understanding and means required for a shift to a local responsibility and leadership.

- **Obstacles to coordination efforts between UN agencies.** In an effort to maximize use of resources and coordination, the 3 UN agencies organized common field trips to monitor the projectès implementation. However, distance between key project management units (UNDP and FAO in Makamba and UNICEF in Bujumbura) made working together and coordinating more challenging.
- **Partners' capacity.** In the LRRD project, the role of UNICEF is to support the government structure in delivery and oversight of the WaSH project's outcomes. However, a lack of financial, technical and logistical and trained human resources make it challenging for the government to assume its role fully. Government partners mentioned the lack of vehicles, money, and fuel to conduct field visits to monitor the project or send technicians.
- **Delays in implementation.** There were important delays in implementing the WaSH component of the LRRD project. The UNICEF project had not in earnest started yet during the November 2011 mid-term evaluation. In the 2 IRVs targeted in this evaluation, the work on the water networks was completed in mid-2012. Explanations for these include a delay in awarding of the funds required for the project, changes in implementing partner NGOs, an underestimation of the scale of the work needed to rehabilitate the water networks. These delays might have caused other activities such as training and awareness raising campaigns to be rushed and trimmed back due to limited funding.

11.0 Conclusions and Recommendations

11.1. Conclusions

11.1.1. Effectiveness

Strengths

The three main activities were mostly implemented as planned which resulted in the supply of drinking water for households and targeted schools and the supply of sanitation facilities in schools; the training of water management committees and the initial provision of equipment for maintenance; and the promotion of hygiene in targeted communities and schools. Overall, the implementation of these activities supported the attainment of the project's objectives.

Various factors supported the attainment of the project's objectives and enabled communities to benefit from the results of the activities. Such factors include the presence, proximity, and the proper functioning of infrastructures; the provision of training; collaboration between management structures; and recognition of value of the infrastructures and practices.

The importance of women was recognized in the management of water infrastructures. There are mechanisms in place to ensure the presence of women in the water management committees, but the objectives might be more fully attained if they were given an increased presence and role.

Weaknesses

Since there were no planned activities targeting the improvement of access to sanitation facilities in the IRVs, **it negatively impacted the effectiveness of the activities in reaching the objective of increasing access to sanitation facilities.**

Various other factors constrained the attainment of the WaSH component's objectives such as the shortage, quality, maintenance, and state of repair of infrastructures; lack of clarity in the roles of members of management structures; lack of means and of training follow-up; and the challenge of changing life habits on hygiene. Overall these factors were not taken into account in the design and implementation of the project, and, therefore negatively impacted the attainment of the objectives.

Overall conclusion

Based on the findings in the effectiveness section of this report, the evaluation concludes that t**he overall objective of improving sustainable access to quality water, basic adequate sanitation infrastructure, and hygiene for people especially children and women was mostly attained.** There was a clear improvement in the access to clean water at both the household and school levels. Since sanitation facilities were not

constructed in IRVs as part of this project, the access to basic adequate sanitation infrastructure has not changed for the communities with the exception of children attending the schools in which sanitation facilities were built. Awareness raising and promotion of the importance of good hygiene practices were mostly restricted to members of the water management committees and the Communal water board. These members sparingly shared their knowledge with their communities due to lack of training and follow-up.

11.1.2. Impact

Strengths

The WaSH project had significant impacts on beneficiaries. Expected impacts of the project include health and hygiene improvement, access to abundant clean water, and increased social cohesion. Unexpected impacts include food security and food diversity, the safe collection of water and the end of fear, and time gained.

Although the project impacted on everyone**, there seems to be a consensus that women gained the most from the changes.** This stems from the importance of women in the collection of water and sanitation and hygiene practices in the household.

Weaknesses

Short-term outcomes relating to an increase in knowledge about clean water, sanitation, and hygiene were not identified as being significant impacts of this project. This could be due to the lack of training of most members of the communities and to the lack of training follow-ups for members of water management committees and the Communal water board.

Overall conclusion

Based on the combined findings that emerged from the Most Significant Change approach and those from other data collection exercises with multiple stakeholders**, the evaluation concludes that the WaSH project reached some of its short-term outcomes and all of its medium-term outcomes.** Although increase knowledge about clean water, sanitation, and hygiene was not identified as a significant impact, there was some knowledge transfer to enable communities to reach the medium-term outcomes.

Furthermore, the project had some important unexpected impacts on the targeted IRVs and those living nearby such as food security and food diversity and time gained by people from closer access to water. The latter may be explained by the combined power of the FAO and UNICEF interventions to impact beneficiaries in ways beyond the planned results of the project.

11.1.3. Sustainability

Strengths

The constructed and rehabilitated water and sanitation infrastructures present overall, for most, good standards of quality, and are effective in providing ongoing access to abundant clean water to households in the IRVs as well as those living outside but close to the IRVs, and to schools, an essential mean to sustainable access to water and sanitation.

Community water management committees are generally effective in collecting water fees to ensure ongoing repairs and maintenance, and demonstrate awareness and commitment to ensuring the good functioning of water systems in the future, which are essential elements to ensure sustained engagement and ownership by the community.

Weaknesses

The lack of functioning of some water infrastructures that would imply excessive investments by the community to repair is a major failing in that **inoperable expensive infrastructure is a waste of resources and renders ineffective some of the outcomes** related to access (reduces the attainment of the objectives)

Organizational and managerial structures for the sustained benefits of the project over the long term are not sufficiently effective and efficient to support long-term sustainability of the benefits: local community structures have not been adequately trained, equipped and properly supported and monitored to meet their responsibilities, and in particular those related to water points maintenance and community awareness building on hygiene practices. Multi-level and complex bureaucratic structures and procedures at local government level present many challenges to the willingness and capacity to exercise leadership and ensure effective maintenance and upkeep. Changes will be required to simplify this structure, clarify roles, and set up proper accountability mechanisms.

Overall conclusion

Based on the findings of the case study on the sustainability of the WaSH project benefits, the evaluation concludes that **without a range of additional support by UNICEF, government partners and other skilled partners, there is a high risk that many of the benefits of the project will not be sustainable over the long term.** This is particularly crucial about the capacity for maintenance and upkeep of the physical infrastructures for water and sanitation, as no sustainability can be affirmed without functional systems. The main secondary condition on which sustainability of benefits depends is the qualifications, skills and organizational capacity at community and government levels to support training and awareness about proper use of systems and the benefits of hygiene.

11.2. Recommendations

The recommendations provided here are not for the improvement of project implementation since this was a summative evaluation, but aim rather to help UNICEF, its partners and government structures to consolidate activities and outcomes achieved by the project. They also intend to provide insights on consolidation, improvements and strategies for future design and implementation of a comparable project.

11.2.1. Recommendations for sustainability of project's benefits

- ***Undertake some repairs and re-conditioning of water and sanitation structures***: UNICEF should do a proper diagnostic of major structural risks to water and sanitation structures (water pressure, adequacy of pipes, unusable water tanks, overflowing latrines on thin hard soil) so as to address issues beyond community's capacity that put the system's functionality at risk, and jeopardize the investment made.

- ***Curtail the density of water points use***: Insofar as possible, water management committees and/or the Communal water board should find ways to reduce density of use on water points. Timing arrangement could be used to spread water collection more evenly.

- ***Ensure water points outside of the IRV are functional:*** UNICEF and the Régie communale de l'Eau should ensure that all water points built or rehabilitated within the context of this project are functional so as to alleviate demand on a fewer number of functioning water points. This is imperative for sustainability of the IRV based water points and sustained community benefits.

- ***Clarify usage of water infrastructures at schools:*** Since it was not clear whether or not school structures could be used by neighboring community, UNICEF should clarify this aspect with school hygiene clubs. It is important to remember that prolonged open use of water points will put pressure on the system and could threaten its viability for children in schools, unless co-management and responsibility is addressed properly.

- ***Add wash basins for laundry close to water point sites*** should be considered by UNICEF , if resources are available, as they would be both advantageous for water use efficiency, convenience and socialization for women, and improvements of activities at the water points. Although, in theory, all water points built by UNICEF should have wash basins, the water points seen during this evaluation mission did not.

- ***Extend training and awareness raising in communities:*** in the near future and regularly, UNICEF in conjunction with partners should offer refresher trainings that would include providing members with some visual material they can use to

sensitize the community on proper use of the water points, sanitation and hygiene's benefits.

- ***Do training in schools:*** reiterating the rules for proper use of the water point and behavioral aspects of control, especially focusing on training young children about the value of clean water and use of sanitary facilities, is of vital importance to support early life habits. To do so, school staff, and school hygiene committees should get proper training and refreshers as indicated above.

11.2.2. Recommendations for implementation of future comparable projects

- ***Consider decentralizing repair functions*** at the community level for minor repairs such as taps and pipes breakage. The complex governance structure was identified as one of the possible causes in the delays in repairs. Giving more power and authority to water management committees would ensure some level of ability and empowerment with water management committees properly trained and equipped to fulfill this function which would reduce sole reliance on Communal water board for repairs.
- ***Create an enabling environment for continuous training and awareness raising activities*** so as to offer the best opportunity for skills to be upgraded, messages to be understood, and transmission of knowledge at community level be effective and efficient. This could be done through partnerships with expertise based NGOs with the support, involvement and accompaniment by the RCE at Communal level or upcoming decentralized government structures as a means of transitioning for oversight responsibilities.
- ***Reinforce and empower water management committees:*** Water management committees should be properly skilled and equipped for their roles as facilitators and their roles as trouble-shooters on basic upkeep. Training should include visual material they can use when they return in communities so as to support their role in awareness raising.
- ***Encourage and support women to take up responsibilities and managerial roles in water management, and sensitize authorities to the importance of this participation*** : Although women are given special consideration in their participation in water management committees, such projects would likely improve achievement of impact and sustainability by giving women the means and opportunities to improve their skills, knowledge and roles in leadership, by alleviating the obstacles posed to their full engagement in training and leadership opportunities.

11.2.3. Recommendations for evaluation of comparable projects

- ***Set priorities on monitoring and evaluation***: UNICEF Burundi should consider setting priorities on monitoring and evaluation that would allow a simple yet systemic approach to gathering and documenting data, especially quantitative measures that support evidence, for better evaluability in formal project evaluations.

- ***Collect data on health at the level of the communities:*** In order to better monitor the achievement of objectives by measuring indicators of health, hygiene, and sanitation, UNICEF should work closely in such projects with public communal health services to establish solid baseline data and set up a tracking and measurement monitoring system.

APPENDICES

Appendix A: Data Collection Strategies

Main evaluation Questions	Sub-questions	Indicator	Literature review	Document review			Observation	Focus groups				Interviews						MSC	Timelines for Data Collection
				UNICEF docs	H2O comm. docs	Monitoring reports		Men- Host	Men- Repatriated	Women- Host	Women Repatriated	Local leaders	Officials	Program staff	water committees	Principals	Teachers	Community sample	
Effectiveness																			
To what extent were the objectives of the WaSH program achieved?	To what extent have the activities been implemented as planned?	Activities that were implemented as planned	x	x	X	x							X	x					July 2013 (on site) Doc and lit. review were done before
		Activities that were not implemented as planned	x	x	X	x							X	x					
	What are the main (enabling, constraining) factors that influenced the access to clean water?	Perspectives on which factors influenced achievement (or non-	X					x	x	x	x	x		x	x		x		July 2013 (on site) Doc and lit. review were done before

Main evaluation Questions	Sub-questions	Indicator	Document review				Observation	Focus groups				Interviews						MSC	Timelines for Data Collection
			Literature review	UNICEF docs	H2O comm. docs	Monitoring reports		Men- Host	Men- Repatriated	Women- Host	Women Repatriated	Local leaders	Officials	Program staff	water committees	Principals	Teachers	Community sample	
	What are the main (enabling, constraining) factors that influenced improved sanitation and hygiene practices?	achievement) of the objectives	X					x	x	x	x	x		x	x		x		
	Are there more effective ways to link access to clean water and improved hygiene practices?	Other successful WaSH component or programs	x	x									x						done prior to site visit and revisit after
		Perspectives of key program staff										x		x	x				July 2013 (on site)
Impact																			
Have the WaSH interventions resulted in	How have the construction/rehabilitation/ extension of water networks affected access	Most Significant Change stories																x	July 2013 (on site)

Main evaluation Questions	Sub-questions	Indicator	Literature review	Document review			Observation	Focus groups				Interviews						MSC	Timelines for Data Collection
				UNICEF docs	H2O comm. docs	Monitoring reports		Men- Host	Men- Repatriated	Women- Host	Women Repatriated	Local leaders	Officials	Program staff	water committees	Principals	Teachers	Community sample	
improved access to quality water sources and improved hygiene practices in targeted communities?	to water in host and repatriated communities?	Perspectives of key program staff											x	x					
	What are the most significant benefits of improved access to water for the community (host or repatriated)?	Stories of Most Significant Change in community due to WaSH project																x	July 2013 (on site)
	What are the changes at the household level with regard to knowledge about sanitation?	Stories of Most Significant Change in community due to WaSH project																x	July 2013 (on site)
	Have hygiene practices improved in schools because of the	Current hygiene practices in schools Baseline														x	x	x	

Main evaluation Questions	Sub-questions	Indicator	Literature review	Document review			Observation	Focus groups				Interviews						MSC	Timelines for Data Collection
				UNICEF docs	H2O comm. docs	Monitoring reports		Men- Host	Men- Repatriated	Women- Host	Women Repatriated	Local leaders	Officials	Program staff	water committees	Principals	Teachers	Community sample	
	project?	data?																	
		Current knowledge about hygiene practices in schools														x	x		July 2013 (on site)
	Have hygiene practices improved in homes because of the project?	Current hygiene practices in homes Baseline data?								x	x			x					July 2013 (on site)
		Current knowledge of hygiene practices in homes								x	x			x					July 2013 (on site)
	How are host and returnee communities engaged together on	Level of community wide initiatives /					x					x	x	x	x			x	July 2013 (on site)

Main evaluation Questions	Sub-questions	Indicator	Literature review	Document review			Observation	Focus groups				Interviews						MSC	Timelines for Data Collection
				UNICEF docs	H2O comm. docs	Monitoring reports		Men- Host	Men- Repatriated	Women- Host	Women Repatriated	Local leaders	Officials	Program staff	water committees	Principals	Teachers	Community sample	
	issues of mutual interest?	interaction																	
Sustainability																			
How likely is it that benefits of the project will continue after funding ceases?	What is the quality of infrastructure construction and maintenance?	% of working taps and latrines	X			x									x				July 2013 (on site) Doc and lit. review will be done before
		Opinion of construction quality	X				x						x	x	x				July 2013 (on site) Doc and lit. review done before
	Are the systems effectively managed?	Management effectiveness	X			x						x		x	x				July 2013 (on site) June 2013 (monitoring data analysis) Doc and lit. review done before

Main evaluation Questions	Sub-questions	Indicator	Literature review	Document review			Observation	Focus groups				Interviews						MSC	Timelines for Data Collection
				UNICEF docs	H2O comm. docs	Monitoring reports		Men- Host	Men- Repatriated	Women- Host	Women Repatriated	Local leaders	Officials	Program staff	water committees	Principals	Teachers	Community sample	
		Perspectives on adequacy of capacity development support	X					x	x	x	x	X		x	x				July 2013 (on site) Doc and lit. review done before
		% of households paying for water services	X			x									x				July 2013 (on site) June 2013 (monitoring data analysis) Doc and lit. review done before
		Total fees collected per month	x			x									x				July 2013 (on site) June 2013 (monitoring data analysis) Doc and lit. review done before

Main evaluation Questions	Sub-questions	Indicator	Literature review	Document review			Observation	Focus groups				Interviews						MSC	Timelines for Data Collection
				UNICEF docs	H2O comm. docs	Monitoring reports		Men- Host	Men- Repatriated	Women- Host	Women Repatriated	Local leaders	Officials	Program staff	water committees	Principals	Teachers	Community sample	
	Do communities feel ownership of water systems and sanitation infrastructure?	Degree of community involvement in construction and management	X					x	x	x	x	x		x	x				July 2013 (on site) Doc and lit. rev. done before
		Satisfaction with water and sanitation systems	X					x	x	x	x	x		x	x			x	July 2013 (on site) Doc and lit. rev. done before

Appendix B: Execution calendar

		Jan-Mar.				April-May-June								July-August								September-December							
1. Conception phase (January-July 2013)																													
1.1	Initial discussions (by telephone/Skype)																												
1.2	Literature review																												
1.3	Logic model presentation to client																												
1.4	Preparation of evaluation plan																												
1.5	Preparation of data collection instruments																												
2. Data collection phase (July-August 2013)																													
2.1	In-depth document review																												
2.2	Preparations and travel																												
2.3	Field mission																												
	2.3.1 Interview with stakeholders (Bujumbura)																												
	2.3.2 Focus groups (2 IRV)																												
	2.3.3 "Most significant change"																												
	2.3.4 Observation																												
	2.3.5 Debriefing (Bujumbura)																												
2.4	Translation																												
3. Analysis and writing phase (August-December 2013)																													
3.1	Synthesis and analysis of data																												
	3.1.1 Qualitative data analysis																												
	3.1.2 Quantitative data analysis																												
	3.1.3 Quality assurance																												
3.2	Evaluation report draft																												
3.3	UNICEF feedback on draft evaluation report																												
3.4	Final evaluation report																												
4. Evaluation management (January-December 2013)																													
4.1	Communication with client																												

Appendix C: Final calendar for evaluation mission

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
		July 16 Depart from Canada (Ottawa – Bujumbura)	**July 17** **Bujumbura** **13h 55** Arrive in Bujumbura (transportation and settle in at the hotel Club du Lac Tanganyika) **15h 45** : Meeting with UNICEF (Rep, SP, WaSH)	**July 18** **Bujumbura** **8h -16h** : Participate in the WaSH program review and meeting with key partners (PEA, Pro-Sec-Eau, etc.)	**July 19** **Bujumbura** **8h-11h** : Meeting with UNICEF and planning[11] **12h-16h** : Meeting with translators, studentts and mission support team	**July 20** **Bujumbura** Document review, planning for field mission
July 21 **Bujumbura** Rest (morning) PM Document	**July 22 - Rutana** IRV mission – Rutana **8:30h-11h00** : Document and logistical preparation **11h** : Interview with the Chief of the WaSH	**July 23-Rutana** **8h-10h00 :** Drive Rutana-Giharo : visit to authorities of the Commune of Giharo drive to Nkruye IRV **10h00-10h45** Observation of IRV Nkruye,	**July 24-Rutana** **8h-9h25 :** Drive Rutana-Giharo-Nkurye- **10 h-11h30** Interview with school hygiene committee (Murembera and Kigogo) in Giharo /	**July 25-Rutana** **7h-8h:** Team preparation for MSC (Ad) **8h-9h45 :**Drive Rutana-Nkurye **10h15-12h30:** MSC	**July 26 -Rutana** **8h-9h45 :Drive** Rutana-Kigogo-Murembera **9h45-10h15:** Visit of Kigogo school **10h15-11h45** : Interview with IRV	**July 27** **Bujumbura** **9h00-10h20** Interview with UNICEF (Program Officer WASH)

[11] Meeting with UNICEF: Discussion on the mission plan and data collection, receipt of documents, meeting with translators, confirmation of meetings and calendar, presentation of key stakeholders and eventually of execution partners and UN agencies

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
review, planning for field mission	Section- Amah Klutse (UNICEF) **12h00-14h45 :** drive from Bujumbura-Rutana **14h45-15h45 :** Confirmations of interviews and logistics for Nkurye Review and preparation for MSC **15h45** : Drive back to Rutana	Introduction to local leaders, Visit of the site (IRV water points) **11h15-14h45** Interview with IRV management committee **Nkurye 1 and 2** / Lb **11h15-12h30** Interview with management committee at the communal level (Communal water board and administration / JjO **12h30-14h45** : Lunch break and interview with the President of the *Association de Défense des Droits de la Fille et de la Femme*	LA Interview with school hygiene committee (Nkurye 1 et 2)/ JO **12h-13h30** : Interview with water management committees **Nkurye** / Women JjO Interview with water management committees **Nkurye** / Men / LbA Lunch break **14h15-16h** Focus group **Nkurye** / (women) JjO Focus group **Nkurye** / (men)	(Most Significant Change) phase 1 – Collection of most significant change stories: Men (LbA) Women (JjO) **12h30-13h15** : Lunch break **13h15-15h30** : Phase 2 of MSC-Restitution and priorization of stories; Identification of most significant collective changes/ JLbjOPA) **15h45-17h** : Drive back to Rutana Review, feedback and confirmation of interviews for Murembera	management committee / LbA Interview with the water management committee Murembera / JjO **12h15-13h** : Lunch break **13h00-15h40** : « Most Significant Change » (MSC) (men : LbA/ women: JjO/ +everyone) **15h40-17h** : Drive back to Rutana	**10h30-15h00** Drive back to Bujumbura

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
		(ADDF)/JjO **<u>15h15-16h40</u>** : Drive back to Rutana **<u>19h15-21 :00</u>** : Introduction to « Most Significant Change" with the team	LbA **<u>16h-17 :20</u>** Drive back to Rutana **<u>18h15</u>** : Mission planning review			
July 28 Rest (morning) PM Document review	**July 29** **Bujumbura** **<u>8h-8h30 :</u>** Meeting with UNICEF M&E Coordinator **<u>9h-10h30</u>** Interview with **FAO** (Joseph Sakubu) **<u>11h00-12h00 :</u>** Meetng with D.G Infrastructures d'Hydraulique et Assainissement (Min. de l'Eau,	**July 30** **Bujumbura** **<u>9h-10h45</u>** : Meeting with PEA (Aimable Irakoze, Directeur technique et Chef de service) **<u>11 :15h-12 :15</u>** Meeting with Action Aid : Program and policy officer / CLTS approach (Community Lead Total	**July 31** **Bujumbura** **<u>9h-12h45</u>** Consolidation of data colelcted, document review **<u>13h-16h0</u>** Review of transcripts, finalize data collection **<u>16h30-20h45</u>** Preparation for restitution to the UNICEf	**August 1** **Bujumbura** **<u>9h00-11:30</u>** Preparation for the restitution to UNICEF's representative **<u>11h00-12 :30</u>** Work sessions with Odette (M&E) planining / discussion on relationship with Carleton **<u>15h00-16 :00</u>** Restitution meeting with UNICEF	**August 2** **Bujumbura** **<u>9h00-10:30</u>** Preparation Work sessions with key UNICEF staff, planning for next steps and relationship with Carleton (discussion) **<u>10h30-11:30</u>** Presentation to UNICEF Section Chiefs and	**August 3** Leave Bujumbura to return to Canada

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	énergie & mines) **<u>12h20-14h15 :</u>** Interview with **PNUD** Gerard (Project Coord.); Normand (Responsible for province of Rutana) **<u>15h-15h45</u>** Meeting with M. L Lenneac, GIZ, Leader WASH in Burundi	Sanitation) Lunch break **<u>13 :15h-15 :15</u>** Document review, Filling in the gaps in terms of information (documents and questions to UNICEF)	representative	Representative (Johannes…) **<u>17h00-20 :30</u>** Preparation of Power Point presentation for UNICEF Section Chiefs	feedback **<u>11:30-12 :30</u>** End of mission and goodbyes **PM : Pack-up**	

Appendix D: Selection criteria

SELECTION CRITERIA FOR DATA COLLECTION
EVALUATION WASH UNICEF-BURUNDI – IRV NKRUYE AND MURUMBERA

1) INTERVIEWS :

A) Execution partners WaSH
Execution partners involved in the WaSH project (at least 1 representative from each NGO with whom UNICEF worked): we propose to group the execution partners together for an interview : what do you think?

B) Institutional partners (FAO et UNDP)
We propose an interview with institutional partners of the United Nations (1 or more representatives from FAO and UNDP together). This means a single interview, unless there are advantages to separate the two partners in interviews: What is your opinion?

C) Local leaders : Individual who plays an important role in the management of the IRV. This group includes the chiefs of the IRV (if there is more than one chief per IRV, it would be good to have a delegate of the group of IRV authorities). Ideally we would like to meet the main chief of each IRV plus 2-3 members of the management committee for each IRV.

D) Officials : Must be a governmental employee at the provincial or national level in a department that is linked (or is significantly related) with the UNICEF WaSH project. We seek to meet representatives relevant to the project (4-8 government employees).

E) IRV Water management committees : Must have been a member of a water management committee in the IRV for at least 3 months. Ideally, we would like to have a balance between men and women. We would like to meet with 4-6 members of water management committees from each IRV.

F) Primary school staff : there are four schools involved in the WaSH project in the two IRVs according to our information. To discuss access to latrines and health aspects in schools, we suggest having interviews with school personnel: principal or assistant, and onr or two teachers. Given the tight schedule, it would be useful to have only one interview in each IRV that would comprise representatives (2-3) from each school in the IRV. Feasibility to be discussed with UNICEF and confirm whether this will be possible. We would then have two interviews (one in each IRV) with school staff.

2) Focus groups :

A) Men beneficiaries living in IRV (representing repatriated and host communities): must be a man who has been using a water point and has been living in the IRV for at

least 3 months. Must not be a member of a water management committee or a member of the management committee of the IRV. Ideally, we would like to meet with representatives of the host community and repatriated people. We would like to meet 6-8 men in each IRV.

B) Women beneficiaries living in IRV (representing repatriated and host communities): must be a woman who has been using a water point and has been living in the IRV for at least 3 months. Must not be a member of a water management committee or a member of the management committee of the IRV. Ideally, we would like to meet with representatives of the host community and repatriated people. We would like to meet 6-8 women in each IRV.

C) For the Most Significant Change- Beneficiaries:
The target group for the exercise of the Most Significant Change should include, in each IRV, 16-20 participants, ideally half women and half men. This exercise is demanding and it is imperative that the participants are volunteers (accept to participate in 2 session lasting about 2-2.5 hours each). The sessions are planned on 2 days, one day apart, to facilitate reflection and intra-community discussions between sessions. We could consider an incentive to encourage participation. The translation shall be made throughout the MSC to ensure open participation but it is necessary that all participations use a common language to avoid the need for multiple translations. The recruited participants must be volunteers, representative of the majority of beneficiaries. The group would ideally have the following characteristics:
- 50% men/50% women (40% men/60% women is acceptable due to the importance of water for women)
- Includes repatriated and host community representatives (as 80/20% ratio, or 70/30%)
- Varying ages (from 20 years of age to older adults)
- Include passive recipients (not particularly involved in the project or management of water systems) and active beneficiaries (people more involved, possibly even active in project management or management of water committees); people who live near water points (less than 200m) and others who live far from these structures (about 500m).

Appendix E: Summary of strengths and weaknesses of methods

Data collection method	Strengths	Weaknesses	Proposed usage for this evaluation
Focus groups	• Allows a group to build on each other's ideas and arrive at rich stories • Can arrive at common ideas for a particular group of participants • Generates rapport with stakeholders • Generates in-depth information	• Time consuming • Requires someone who can facilitate the discussion • May lead to 'group think' • Some participants may take the lead while others refrain from expressing opinions	This will be our primary data collection method. Because of the large number of users and other stakeholders, focus groups will be used to bring together similar groups and share stories. Many of our focus groups will be focused on understanding the perspectives of users.
In-depth interviews	• Generates in-depth information • Generates rapport with stakeholders • Flexible and allows for targeted questions • Allows interviewee to express his/her opinions in private	• Time consuming • Can be side-tracked by issues important to interviewer	Interviews will be used to get more in-depth information about the program from certain stakeholders. Because they are time-consuming, we are limiting ourselves to interviewing the people that most likely have the most to say about the WASH program: program staff, water committees, local leaders, officials, and in the case of schools, principals and teachers.
Observation	• Can be formal or informal • Allows evaluator to experience the situation as it happens	• Can be interpreted in many ways when not situated in context • Time consuming • Observed individuals may alter their behaviour	We anticipate using observation to gauge the quality and extensiveness of the water networks. We recognize that we are not WASH experts and will not pretend to be so. However, we think that, with the help of checklists, we can gain a better understanding of what is there and how it works.
Most Significant Change[12]	Focuses on building narrative around a topic In-depth perspective into the changes that occurred in the lived experiences of participants due to the	May not give voice to critics of the project Does not get at the how and why of the program's success or failure	This will be the primary method of data collection for assessing the impact of the WASH program. Because of its high sensitivity to values, MSC will be used to

[12] Based on Dart,J.and Davies, R, , "A Dialogical Story-based Evaluation Tool: the Most Significant Change", *American Journal of Evaluation*, Vol 24, no 2, 2003, p 138.

	project Allows for open dialogues between stakeholders		understand the impact of the program on the lives of various stakeholder groups. The stories that will come out of this will be rich and valuable.
Document review	Good way to understand program design and history Biases in information generally limited	Time consuming Information may be incomplete Information only available on what was deemed important by program staff	We expect to use document review to look at other programs and how they have linked access to water and improved sanitation and hygiene practices. If there are any monitoring reports or a database of monitoring data, we will look at these as a way to triangulate our findings.

Appendix F: List of documents and literature consulted

List of documents

European Union. November 2012. Rapport de monitoring. Programme LRRD d'appui à la villagisation dans le cadre du rapatriement et de la réintégration au Burundi.

Landell Mills. June 2012. Évaluation à mi-parcous des interventions dans le cadre du Programme LRRD d'appui à la viabilisation des Villages Ruraux Intégrés au Burundi.

Projet Eau et Assainissement. August 2011. Réhabilitation/extension des réseaux d'adduction d'eau potable : AEP Shasha-Murembera et Nkurye en commune Giharo, province Rutana.

Projet Eau et Assainissement. March 2012. Étude d'un projet de gestion durable des infrastructures d'eau potable en milieu rural : Commune pilote de Giharo en province de Rutana.

Projet Eau et Assainissement. Rapport de session de formation des comités de gestion des points d'eau du 13 au 17 félRVer 2012. March 22, 2012.

Projet Eau et Assainissement. Rapport final de la session de formation du service communal de l'eau à Giharo, province Rutana du 26 au 30 mars 2012. April 2012

Projet Eau et Assainissement. September 2012. Rapport des réalisations des travaux de réhabilitation de l'AEP Shasha-Murembera.

UNDP. 2010. Programme LRRD d'appui à la viabilisation des villages ruraux intégrés dans le cadre du rapatriement et de la réintégration au Burundi. Fiche descriptive du projet.

UNDP. Compte-rendu de la réunion du GTTPV de Rutana. April 23, 2013.

UNDP. Compte-rendu de la réunion du GTTPV de Rutana. February 27. 2012.

UNDP. Compte-rendu de la réunion du GTTPV de Rutana. July 24, 2012.

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UNDP. Compte-rendu de la réunion du GTTPV de Rutana. May 2nd, 2012.

UNICEF Burundi. June 2010. Proposition de projet à la Commission Européenne. Appui à la réinsertion des populations vulnérables par l'accès aux services sociaux de base, notamment l'eau l'assainissement et l'hygiène.

UNICEF Burundi. Procès-verbal de réception provisoire des travaux de construction des latrines dans 4 écoles de Giharo. August 22, 2012.

UNICEF Burundi. Procès-verbal de réception provisoire des travaux des travaux de construction du réseau d'AEP Butare/Nkurye. April 25, 2012.

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