

**THE REPUBLIC OF UGANDA
DATA COLLECTION SURVEY ON SOCIAL
INFRASTRUCTURE NEEDS OF
REFUGEE-HOSTING COMMUNITIES IN
NORTHERN UGANDA**

FINAL REPORT

JULY 2018

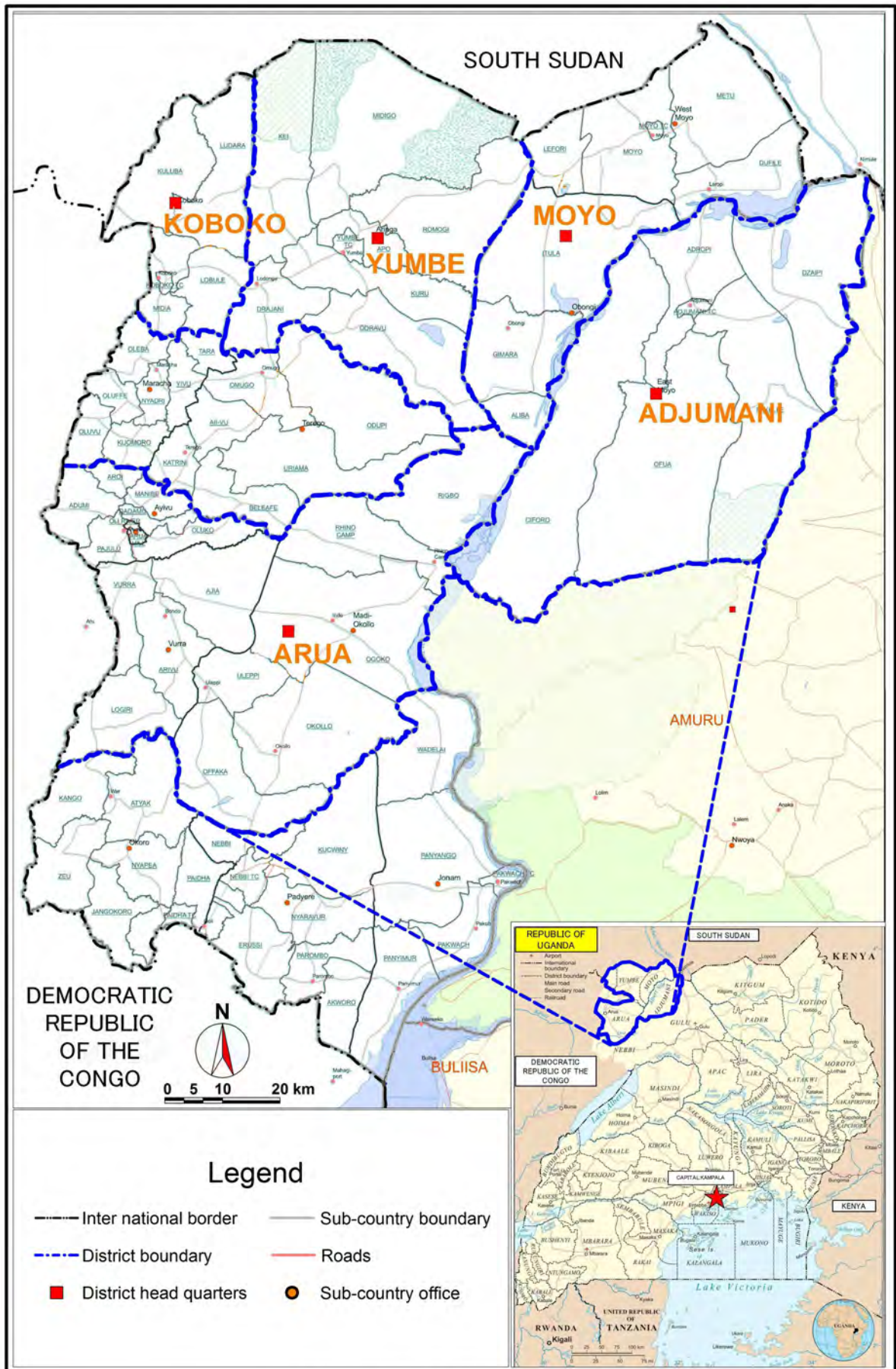
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Location of the Study Area

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LIST OF ABBREVIATIONS

Abbreviations	Full Form
AAH	Aktion Afrika Hilfe
A-CAP	the Project for Capacity Development in Planning and Implementation of Community Development in Acholi Sub-Region
AfDB	African Development Bank
AHA	Africa Humanitarian Action
AHPC	Allied Health Professionals Council
AIRD	African Initiatives for Relief and Development
ARC	American Refugee Committee
ARV	Antiretroviral drugs
BOG	Board of Governors
BRMS	Basic Requirements and Minimum Standards
CAO	Chief Administrative Officer
CAP	Chapter
CBMS	Community Based Management System
CDO	Community Development Officer
CHEW	Community Health Extension Worker
CICO	Chongqing International Construction
CLTS	Community Led Total Sanitation
CRRF	Comprehensive Refugee Response Framework
CWS	Central Medical Equipment Maintenance Workshop
DAR	Development Assistance to Refugee-Hosting Areas
DBST	Double Bituminous Surface Treatment
DCA	Dan Church Aid
DDEG	Discretionary Development Equalisation Grant
DDP	District Development Plan
DED	District Education and Sport Department
DEO	District Education Officer
DFID	Department for International Development
DGHS	Director General of Health Service
DHD	District Health Department
DHIS	District Health Information Software
DHO	District Health Officer
DHSCG	District Hygiene and Sanitation Conditional Grant
DOE	Department of Education
DOH	Department of Health
DOR	Department of Refugees
DR	Development Response
DRC	Danish Refugee Council
DRDIP	Development Response to Displacement Impact Project
DUCAR	District, Urban, or Community Access Roads
DWD	Directorate of Water Development
DWO	District Water Office
DWSDCG	District Water and Sanitation Development Conditional Grant
EMHSLU	Essential Medicines and Health Supplies List for Uganda
EMIS	Education Management Information System
ESSP	Education and Sport Sector Strategic Plan
EU	European Union

Abbreviations	Full Form
FAO	Food and Agriculture Organization of the United Nations
FY	Fiscal Year
GBV	Gender-Based Violence
GER	Gross Enrolment Rate
GDP	Gross Domestic Product
GH	General Hospital
GI	Galvanized Iron
GIS	Geographic Information System
GIZ	German Agency for International Cooperation
GOU	Government of Uganda
HC	Health Center
HIAS	Hebrew Immigrant Aid Society
HIJSRA	Humanitarian Initiative Just Relief Aid
HMA	Hot Mix Asphalt
HMIS	Health Management Information System
HPM	Hand pump mechanic
HSC	Health Service Committee
HSDP	Health Sector Development Plan
HSP	Health Sector Plan
HSSIP	Health Sector Strategic and Investment Plan
HUMC	Health Unit Management Committee
IAU	Interaid Uganda
ICT	Information and Communication Technology
ILO	International Labour Organization
IP	Implementing Partner
IRC	International Rescue Committee
JICA	Japan International Cooperation Agency
JMS	Joint Medical Store
JPF	Joint Partnership Fund
JWESSP	Joint Water and Environment Sector support Programme
KfW	Kreditanstalt für Wiederaufbau (German Development Bank)
LAB	Laboratory Test Kit
LC	Local Council
LWF	Lutheran World Federation
MDA	Ministries, Departments and Agencies
MDR-TB	Multidrug-resistant tuberculosis
MoES	Ministry of Education and Sports
MoFPED	Ministry of Finance, Planning and Economic Development
MoH	Ministry of Health
MoLG	Ministry of Local Government
MoPS	Ministry of Public Services
MoWT	Ministry of Works and Transportation
MQS	Minimum Quality Standards
MSF	Médecins Sans Frontières
MTI	Medical Teams International
MWE	Ministry of Water and Environment
NDA	National Drug Authority
NDP	National Development Plan
NDP II	Second National Development Plan
NER	Net Enrolment Rate
NGO	Non-Governmental Organization

Abbreviations	Full Form
NISD	Nsamizi Institute for Social Development
NMS	National Medical Stores
NPA	National Planning Authority
NPHC	National Population and Housing Census
NRC	Norwegian Refugee Council
NRH	National Referral Hospital
NUSAF	Northern Uganda Social Action Fund
NWSC	National Water and Sewerage Corporation
ODF	Open Defecation Free
OP	Operational Partner
OPD	Outpatient Department
OPM	Office of the Prime Minister
PC	Pharmacy Council
PCMS	Procurement and Contract Management Services
PCR	Pupil Classroom Ratio
PDU	District Procurement and Disposal Unit
PEAP	Poverty Eradication Action Plan
PHC	Primary Health Care
PLE	Primary Leaving Examinations
PNA	Peacebuilding Needs and Impact Assessment
PNFP	Private Not-for-Profit
PO	Private Operator
PPA	Project Partnership Agreement
PS	Primary School
PS	Permanent Secretary
PTA	Parent Teacher Association
PTR	Pupil Teacher Ratio
QPPU	Quantification and Procurement Planning Unit
RDO	Refugee Desk Officer
ReHoPE	Refugee and Host Population Empowerment
RGC	Rural Growth Centre
RIC	Refugee Impact Catchment
RMF	Real Medicine Foundation
RMNCAH	Reproductive, Maternal, Newborn, Child and Adolescent Health
ROW	Right of Way
RRH	Regional Referral Hospital
RWC	Refugee Welfare Council
RWS	Regional Medical Equipment Maintenance Workshop
RWSSD	Rural Water Supply and Sanitation Department
SIP	Strategic Implementation Plan
SBS	Sector Budget Support
SC	Sub-County
SDG	Sustainable Development Goals
SFG	School Facility Grant
SMC	School Management Committee
SO	Scheme Operator
SRS	Self-Reliance Strategy
SS	Secondary School
SS	South Sudanese
STA	Settlement Transformation Agenda
TB	Tuberculosis

Abbreviations	Full Form
TIET	Department of Teacher Instructor and Education Training
TOR	Terms of Reference
TPO	Transcultural Psychosocial Organization Uganda
TSU	Technical Support Unit
UACE	Uganda Advanced Certificate of Education
UBOS	Uganda Bureau of Statistics
UBTS	Uganda Blood Transfusion Service
UCE	Uganda Certificate of Education
UCI	Uganda Cancer Institute
UGX	Ugandan Shilling
UHC	Universal Health Coverage
UHI	Uganda Heart Institute
UMDPC	Uganda Medical and Dental Practitioners Council
UN	United Nations
UNCRL	Uganda National Chemotherapeutics Research Laboratory
UNDAF	United Nations Development Assistance Framework
UNDP	United Nations Development Programme
UNFPA	United Nations Population Fund
UNHCR	United Nations High Commissioner for Refugees
UNHRO	Uganda National Health Research Organisation
UNICEF	United Nations Children's Fund
UNMC	Uganda Nurses and Midwives Council
UNMHCP	Uganda National Minimum Health Care Package
UNRA	Uganda National Road Authority
UO	Umbrella Organization
UPE	Universal Primary Education
URCS	Uganda Red Cross Society
USD	United States Dollar
URF	Uganda Road Fund
USAID	United States Agency for International Development
USE	Universal Secondary Education
UVRI	Uganda Virus Research Institute
VHT	Village Health Team
VOL	Voice of Life
VST	Vocational Skills Training
WA	Water Authority
WA-CAP	Project for Capacity Development of Local Government for Strengthening Community Resilience in Acholi and West Nile Sub-Regions
WASH	Water, Sanitation and Hygiene
WB	World Bank
WESPR	Water and Environment Sector Performance Report
WFP	World Food Programme
WHO	World Health Organization
WSDF	Water and Sanitation Development Facility
WSSB	Water and Sanitation Boards
WTU	Windle Trust Uganda
WUC	Water Users Committee
WVI	World Vision International
Z/S	Zone/Settlement

Study Photos (1/4)



31 July 2017
On the way to a Zone in Bidibidi Settlement



1 August 2017
A truck stuck in mud due to bad conditions of the road
Sinyinya, Adjumani



1 August 2017
Potholes due to delay of appropriate road maintenance
Yumbe – Manibe (Class-B) Road



12 August 2017
Vehicles stuck on a trunk road during rainy season
Kochi-Moyo (Class-B) Road



18 August 2017
Survey on the construction of a new bridge
for a national road (Class-C) in Yumbe



10 August 2017
Patients waiting outside due to lack of internal space
Yenga HCIII, Odupi Sub-County, Arua

Study Photos (2/4)



18 August 2017

Medical treatment at a temporary facility
Idiwa HCIII, Itula Sub-County, Moyo



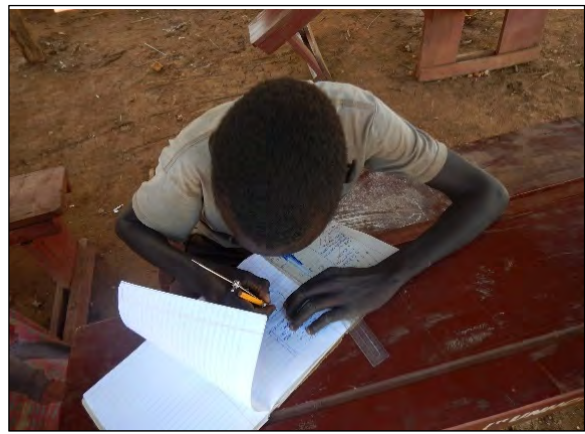
23 November 2017

Post-natal room with 2 beds in Kureku HC 11, Adjumani



23 November 2017

Latrines in Kureku HC11, Adjumani



31 July 2017

A self-studying boy aiming to be a teacher in Bidibidi
Settlement, Yumbe



9 August 2017

Overflow of pupils in a classroom
Zone 1, Bidibidi Settlement, Yumbe



16 August 2017

Overflow of pupils in a classroom
A refugee settlement in Adjumani

Study Photos (3/4)



28 July 2017

A water facility in a refugee settlement in Yumbe



31 July 2017

Water supply volume survey in Adjumani



14 August 2017

Waiting queue at a public water faucet
Zone1, Bidibidi Settlement, Yumbe



24 October 2017

Conducting survey on functionality of a piped water facility in
Omugo Sub-County, Arua



1 August 2017

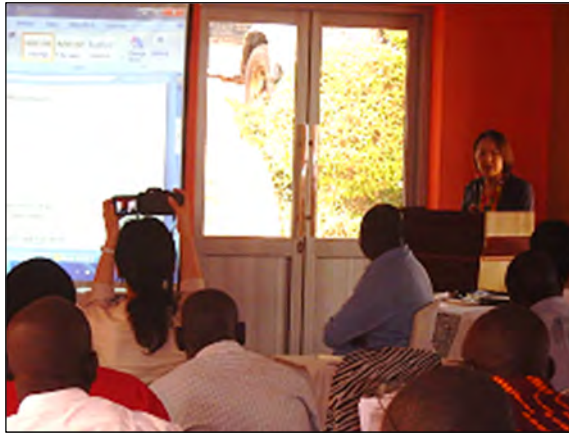
Interview at Adjumani District Office



2 August 2017

Interview at Moyo District Office

Study Photos (4/4)



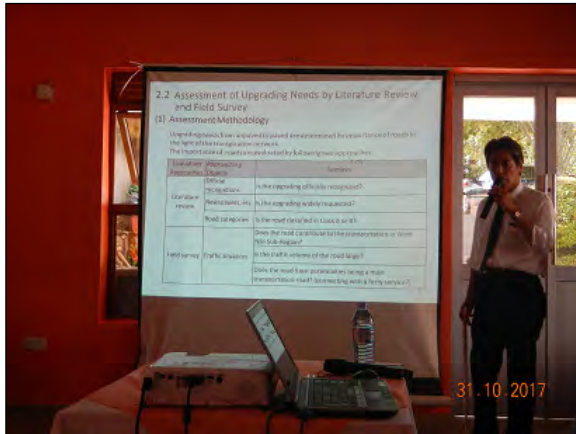
31 October 2017

Opening Remarks by JICA Senior Advisor at Arua Workshop



31 October 2017

Presentation on the health sector
Arua Workshop



31 October 2017

Presentation on road and small-scale bridges
Arua Workshop



8 November 2017

Presentation at the OPM-chaired Government Meeting
(Kampala)



28 February 2018

Press Conference at OPM



28 February 2018

Presentation at the OPM-Chaired Workshop

CHAPTER 1 BACKGROUND AND OUTLINE OF THE STUDY

1.1 Background of the Study

With its generous refugee policies, Uganda has been receiving refugees and asylum seekers even before its independence and in recent years from the conflict-affected countries, especially the Democratic Republic of Congo (DRC), Somalia, South Sudan, and Burundi. The number of refugees in Uganda has reached 1.4 million, out of which over 70% are from South Sudan (as of March 2017)¹.

About 90% of South Sudan refugees are registered in West Nile Sub-Region in Northern Uganda². Their number increased very rapidly in 2016 – 2017 triggered by an armed conflict occurred in Juba, the capital of South Sudan, in July 2016. The refugee population is twice of the population of Yumbe District, one of 5 host Districts in West Nile Sub-Region, with about four hundred and eighty thousand (2014 Census) which indicates Uganda has received a population larger than one District.

Uganda's refugee policies are development-oriented: refugees residing in government-allocated areas have access to social infrastructure and facilities in host communities, such as schools and health centres, and similarly Ugandan nationals have access to facilities in the refugee-residing areas.

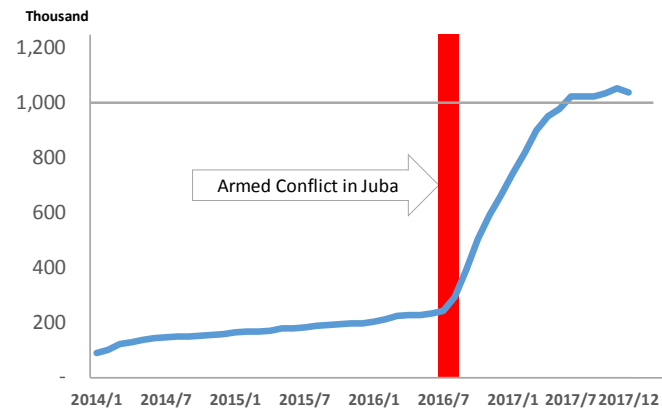
West Nile Sub-Region was affected by continuous conflicts involving several armed forces since the military coup d'état in 1970's led by the former President Amin and until the ceasefire agreement reached in 2002. Security concerns and transportation inconvenience due to the conflicts affected the development of the area, which was left behind for a long period. The recent influx of the refugees has been too rapid, creating additional burdens social infrastructures which are not sufficient even for the local Ugandan populations.

1.2 Purpose of the Study

It must be noted at the outset that the JICA study is referred to as "Study on Refugee Hosting Communities in the West Nile Sub-Region of Uganda: Situation Assessment and Needs Identification" ("the Study"), while the title registered in the JICA document system is "Data Collection Survey on Social Infrastructure Needs of Refugee-Hosting Communities in Northern Uganda." Since the former title has been used throughout the study period in Uganda, the contents of the report follow the same title.

The Study has been conducted in the context mentioned above with the following purposes:

- Assess current situations and identify issues in both settlements and host communities with respect to (i) social infrastructures in the sectors of water and sanitation, education, health and roads and



Source: Prepared by the Study Team with data obtained from <http://data.unhcr.org/SouthSudan/country.php?id=229> (accessed on 19 February 2018)

Figure 1.1-1 Influx of South Sudan Refugees into Uganda

¹ UNHCR, Uganda Refugee Response – Monthly Snapshot, March 2018.

² OPM, Refugee Information Management System (RIMS), 8 February 2018.

small-scale bridges and (ii) social structures and relationships.

- Identify priority needs in the four social infrastructure sectors that require urgent attention with a view to easing burdens on the host communities and promoting social cohesion encompassing settlements and host-communities in support of the Government’s transformational refugee policies.
- Identify and formulate social infrastructure projects to be supported by JICA and the Government of Japan and propose a future direction and modality of assistance.

1.3 Target Areas

- Refugee residing area (“the Zones/Settlements” as explained in Chapter 2 of this report) and host community in the District of Adjumani, Arua, Koboko, Moyo, and Yumbe
- Kampala (for communications and coordination with OPM, MDAs and donor/partner agencies)

1.4 Relevant Ministries, Departments and Agencies to the Study

Ministries, Departments and Agencies (MDAs) relevant to the Study are as shown in the table below.

Name	Mandate/Jurisdiction
Office of Prime Minister (OPM)	Department of Refugee within Minister for Disaster Preparedness, Management and Refugees
Ministry of Local Government (MOLG)	Had established a national minimum standard of the service for the rural area under Local Government Management and Service Delivery Fund
Relevant Departments of the Host Districts in West Nile	<ul style="list-style-type: none"> - Planning Unit/Planning Department: headed by District Planner - Works Department/Works and Technical Services): headed by District Engineer, responsible for District road, community access roads, and water facilities - Health Department: headed by District Health Officer (DHO) responsible for Health Centre II-IV and General Hospital - Education and Sports Department: headed by District Education Officer (DEO), responsible for maintenance and management of the primary and secondary education, and teacher allocation planning for the primary education
Ministries and Authorities	Ministry of Works and Transportation (MoWT), Ministry of Health (MoH), Ministry of Education (MoE), Ministry of Water and Environment (MWE), National Planning Authority (NPA), Uganda National Road Authority (UNRA)

Source: Prepared by the JICA Study Team (JST)

1.5 Timeline of the Study

Study	Timeline	Details
Preparation in Japan	July 4 – July 14, 2017	<ul style="list-style-type: none"> ▪ Understanding contexts and issues through literature review and web research
1 st Study in Uganda First Half	July 15– September 2, 2017	<ul style="list-style-type: none"> ▪ Initial assessment to identify priority needs
1 st Reporting and Planning in Japan	September 4 – September 29, 2017	<ul style="list-style-type: none"> ▪ Reporting and planning in Japan ▪ Collection of data and information by national consultants
1 st Study in Uganda Latter Half	October 2, – November 1 st Week, 2017	<ul style="list-style-type: none"> ▪ 5 District stakeholders’ consultation workshops in Arua and OPM-chaired meeting in Kampala ▪ Continuation of field research by national consultants
2 nd Study in Uganda First Half	November 2 nd to 3 rd Week, 2017	<ul style="list-style-type: none"> ▪ Identification of priority projects
2 nd Reporting and Planning in Japan	November 22 – January 19, 2017	<ul style="list-style-type: none"> ▪ Short-listing of priority projects & project formulation

Study	Timeline	Details
2 nd Study in Uganda Latter Half	January 28 – February 1, 2018 February 23 – March 3, 2018	<ul style="list-style-type: none">▪ Technical consultations with sector ministries in Kampala▪ Dissemination workshops on study findings and priority projects in Kampala
Final Reporting in Japan	March – April 2018	<ul style="list-style-type: none">▪ Final Reporting in Japan

This report is the final report of the Study and is based on data collected during the period of August - November 2017 and other relevant information made available to the Study Team by February – March 2018.

CHAPTER 2 STUDY APPROACH, METHODOLOGY & PLAN

2.1 Approach of the Study

2.1.1 Alignment with Uganda's Refugees Policy and Harmonization with Partners

Against the background of Uganda having a long history of receiving refugees and administering refugee settlements (as described in Chapter 4 of this report), GOU adopted the Refugees Act in 2006 and the Refugees Regulations in 2010. Subsequently, policies on refugees and refugee-hosting communities were articulated as Settlement Transformation Agenda (STA), which was presented as part of the National Development Plan (NDP) II (FY 2015/16 – 2019/20).

The Refugee Department of the Office of the Prime Minister (OPM) is responsible for coordinating the STA implementation.

In response to the STA, the UN and the World Bank framed a strategy “Refugee and Host Population Empowerment (ReHoPE)”. ReHoPE now constitutes part of the Comprehensive Refugee Response Framework (CRRF), for which Uganda has been designated as a model country in the wake of its adoption by the UN General Assembly in September 2016. The Uganda Solidarity Summit on Refugees, co-hosted by the President of Uganda and the UN Secretary-General in June 2017, confirmed the commitment of GOU and the international community to coordinated efforts for humanitarian response and development assistance for both refugees and host population. Details of the CRRF organizational arrangements are currently being rolled out.

The Study has been conducted, first and foremost, in alignment with GOU's refugee policy with an aim to contribute to implementation of the STA on the ground through detailed assessment and identification of priority needs in the refugee-hosting Districts of West Nile. At the same time, the Study has been carried out taking account of plans and approaches of both humanitarian and development partners and sharing information generated through the Study with them, with a view to contributing to the realization of the CRRF in Uganda.

2.1.2 Area/Regional Development Perspectives

Decentralized development planning and implementation at District level has been one of the key features of the decentralization policies of Uganda since the 1990s. JICA has been a key partner in this arena in Acholi and West Nile Sub-Regions through “Project for Capacity Development in Planning and Implementation of Community Development in Acholi Sub-Region (ACAP)” (2011-2015) and “Project for Capacity Development of Local Government for Strengthening Community Resilience in Acholi and West Nile Sub-Regions (WACAP)” (2016 – 2020). The Districts are currently implementing the District Development Plan (DDP) II (FY 2015/16 – 2019/20). Refugee-hosting Districts across the country including the 5 Districts of West Nile are undergoing mid-term review of the DDP II during FY 2017/18 with guidance from the National Planning Authority (NPA). It is expected that the review will involve taking stock of refugee-related impacts and reflecting them in an updated version of the DDP II.

On the other hand, planning and implementation in the refugee settlements are led by OPM with support from UNHCR, separately from the District planning and implementation arrangements. While the Districts are often consulted on sectorial issues in the settlements, there is lack of institutional mechanism to plan and implement infrastructure projects and service delivery encompassing both the Districts and settlements. Cognizant of such institutional limitations, the Study has pursued a holistic approach, by adopting area/regional development perspectives and assessing situations in both the settlements and host communities transcending their jurisdictional boundaries, while taking account of the nature of the respective infrastructures and availability of reliable data.

2.1.3 Social Considerations

Sensitivity to local social situations including any on-going or potential tensions is another underlying approach of the Study. The Study Team understands that while a number of efforts have been underway to promote mutual understanding and peaceful coexistence between refugees and host community populations, host communities, particularly in places that have experienced sudden and massive refugee inflows since 2016, are dissatisfied with what appear to be slow responses from GOU and partners in addressing increasing burdens on roads and other social infrastructures. Also, situations in South Sudan and DRC may be relevant to understanding social relations in the settlements as well as host communities.

The Study has adopted two-level perspectives in understanding and addressing social situations: regional-level and project-level. The regional-level perspective, looking at the settlement-hosting Districts in West Nile as a whole, has been employed for defining methodologies for assessing and identifying priority needs and formulating priority projects. The project-level focus has sought to identify socially stabilizing factors as well as destabilizing factors in or around the respective communities (i.e. Sub-Counties or Parishes where priority infrastructure projects will be proposed). The analysis is expected to inform detailed designing process of priority projects through measures that can capitalize on and enhance stabilizing factors, while being mindful of any destabilizing factors.

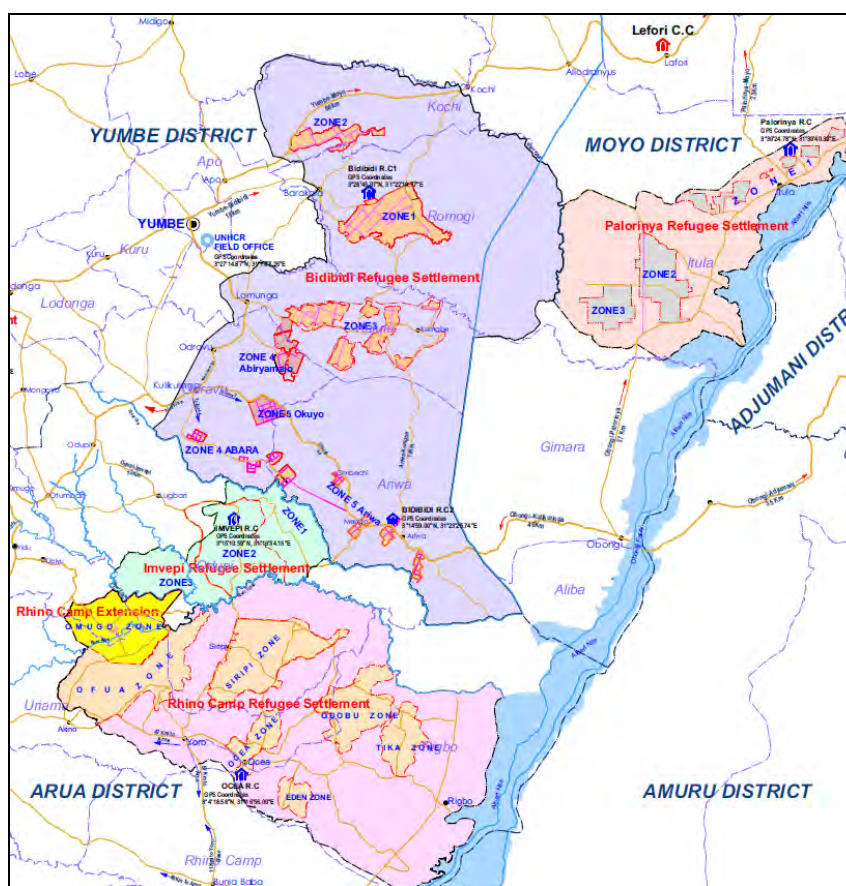
2.2 Methodology of the Study

2.2.1 Basic Facts on Settlements and Host Communities

One of the first questions the Study Team sought to clarify was the physical location of the settlements and host communities in the 5 Districts of West Nile. During the preparatory stage in Japan, a desk review of a range of documents including settlement maps prepared by UNHCR led to the identification of possible Sub-Counties where the settlements are located. The names of the Parishes, however, were not available. Pinning down the exact location of the settlements vis-à-vis the Sub-Counties and Parishes that host the settlements thus was the first task of the Study Team in Uganda.

(1) Host Communities

The Study Team observed that there is a flexibility in defining “host communities” among officials/staff of OPM, UNHCR and the 5 Districts. A map of the settlements on the western side of the River Albert Nile created by UNHCR Arua Sub-Office (Figure 2.2-1) marks in colours wider areas surrounding refugee residing areas (i.e. lands allocated to refugees for residence through OPM’s negotiation with local landlords or communities), which are considered to be “host communities” according to OPM Regional Desk Officer (RDO) in Arua. The Districts, on the other hand, argue that the entire District area should be considered as a “host community,” as different parts of the District, not only the areas neighboring the settlements, are affected by the inflow and presence of refugees. An interview with the OPM Refugee Department in early August 2017 confirmed that areas corresponding to “host communities were not fixed and stakeholders viewed them differently.



Source: UNHCR Arua Sub-Office

Figure 2.2-1 Map of Settlements (UNHCR Arua Sub-Office, May 2017)

(2) Settlements

With regard to the settlements, the Study Team learned that each of the refugee residential areas is referred to as “Zone” in the Districts of Arua, Koboko, Moyo and Yumbe, while each is called “Settlement” in Adjumani District. A cluster of Zones is called “Settlement” such as “Palorinya Settlement” in Moyo and “Bidibidi Settlement” in Yumbe. The arrangement of the Settlements and Zones in the 5 Districts as of August 2017 is as encapsulated in Table 2.2-1.

Table 2.2-1 Refugee Residing Areas in the 5 Districts of West Nile (August 2017)

District	Settlement	Zone	Year of Establishment
Adjumani	18 Settlements in total	--	1987 ~ 2016
Arua	Rhino Camp	Zone 1 ~ Zone 6 (Total 6 Zones)	1993 ~ 2016
	Rhino Camp Extension	Zone 7 (Total 1 Zone)	2017
	Imvepi	Zone 1 ~ Zone 3 (Total 3 Zones)	2017
Koboko	Lobule	Zone A & Zone B (total 2 Zones, each with clusters of refugee residing areas)	2013 ~ 2014
Moyo	Palorinya	Zone 1 ~ Zone 4 (Total 4 Zones)	2016 ~ 2017
Yumbe	Bidibidi	Zone 1 ~ Zone 5 (Total 5 Zones)	2016

Sources: UNHCR, OPM (RDOs Arua and Adjumani), July – August 2017

Since the Study was in need of assessing impacts caused by refugees with respect to extra stress on social infrastructures, the Study Team zoomed in on each of the refugee residing areas, i.e. each Zone in the 4 Districts and each Settlement in Adjumani District. For this purpose, this Study refers

to a refugee residing area as “Zone/Settlement”, or “Z/S” in acronym.¹ At the same time, the term “Settlement” which refers to a cluster of Zones in the 4 Districts is used as appropriate, as it is how the refugee residential areas are organized by OPM and UNHCR and recognized by local and national stakeholders as well as international partners.

It must be underscored that the focus on each Zone/Settlement and its boundary is for the purpose of the Study, i.e. to assess settlement-related impacts in host communities and compare them with situations within the settlements through collection and analysis of relevant data. The Study Team is well aware of the on-going efforts of promoting coexistence of refugees and host populations by making public services in the respective areas available for all regardless of the nationalities and promoting dialogue and joint activities transcending the boundaries. Too much emphasis on the boundaries may be counterproductive in this context and it should be solely for the purpose of assessment as well as planning and implementation of services.

2.2.2 Refugee Impact Catchment and Scope of the Study

It would be reasonable to consider the Sub-Counties where the Zones/Settlements are located as “host communities.” There are 18 such Sub-Counties in total in the 5 Districts of West Nile as of August 2017. For public services that must be available in close proximity, e.g. water and sanitation, Parishes may be more appropriate “host communities” in terms of assessing and addressing impacts on the services. On the other hand, the Districts’ claim that entire the District area should be considered as a “host community” is valid to an extent, as services in places not adjacent to the Zones/Settlements, are affected by the refugee influx. General hospitals and regional referral hospitals usually located in town/municipality areas, are obvious examples. Also, a number of refugees residing in Zones/Settlements come to urban centres seeking job opportunities or conducting business, creating extra demand for municipal services such as water supply, waste water treatment and solid waste management. According to Yumbe District, the population of Yumbe Town has increased three-fold due to such refugees (typically male adults) registered in Bidibidi Settlement.

In light of these situations and as a way to structure the debate on “host communities”, the Study Team adopted an approach to conceptualize host communities as “Refugee Impact Catchment” (“RIC”) in two categories. The first category, RIC 1, refers to areas adjacent to Zones/Settlements where services are typically expected to be available in proximity, while the second category, RIC 2, corresponds to areas beyond the RIC 1 areas with services at higher levels of chains. For the sake of simplicity, the Sub-Counties hosting a Zone/Settlement(s) are deemed to be the RIC 1 areas. The two RICs and the services corresponding to the Study’s four target sectors are juxtaposed in Table 2.2-2. It must be noted that RIC 1 and RIC 2 are merged for roads & small-scale bridges, as it does not make much sense to assess and plan for roads and bridges independently from the networks that they are part of. In other words, the assessment takes account of the conditions of the roads in the vicinity of settlements as well as their potential for improving network connectivity, for facilitating transportation of people, goods and services.

¹ Some of the Zones/Settlements contain pocket areas where Ugandans continue to live. Since such areas are usually very small, the Study has treated them as being part of the respective Zones/Settlements for the assessment. Their populations are reflected in the District and Sub-County populations.

Table 2.2-2 Refugee Impact Catchment, RIC (Original Version as of August 2017)

	RIC 1 (Sub-Counties hosting Zone/Settlement)	RIC 2 (Other Intra or Inter-District Areas)
Water & Sanitation	<ul style="list-style-type: none"> ▪ Rural water supply ▪ Sanitation and hygiene 	<ul style="list-style-type: none"> ▪ Urban water supply, water treatment ▪ Sewerage
Health	<ul style="list-style-type: none"> ▪ Health Centers (HC) II, III & IV (Note: The government's policy is to establish HC IV in each County and therefore the catchment for HC IV is a County.) 	<ul style="list-style-type: none"> ▪ General hospitals ▪ Regional referral hospitals ▪ Medical staff training schools
Education	<ul style="list-style-type: none"> ▪ Primary education ▪ Secondary education 	<ul style="list-style-type: none"> ▪ Vocational schools ▪ Teacher training schools
Roads & Small-Scale Bridges	<ul style="list-style-type: none"> ▪ Community roads (incl. bridges) ▪ District roads (incl. bridges) ▪ National roads (incl. bridges) 	

The RICs and corresponding services have been adjusted with inputs from stakeholders provided at a workshop in Arua (31 October 2017) and an OPM-chaired meeting in Kampala (8 November 2017). The adjusted version, with descriptions of the characteristics of the respective service types, is shown in Figure 2.2-2 and its illustrative image in Figure 2.2-3. The scope of the Study, shown in Figure 2.2-4, is RIC 1 with respect to water & sanitation, health and education and RICs 1 & 2 with respect to roads & small-scale bridges.

The Study does not explicitly address impacts caused by self-settlers, i.e. those mainly from South Sudan who are not registered refugees nor asylum seekers, given their informal status and absence of statistics. Self-settlers are present mainly in northern parts of Koboko and Moyo, creating extra load on public services. GOU is not obliged to protect them under international or national law. Nevertheless, the issue is particularly imminent in Koboko, where the District and Sub-Counties (particularly Kuluba Sub-County) are not able to turn a blind eye, as the self-settlers demand services particularly for health, education and water supply.² And it should be noted that some of the priority projects that have been identified through the Study will benefit the self-settlers.

² A participant in the Arua workshop in October 2017 shared that there are three types of self-settlers: (i) those who live with cattle and do not want to move to the settlements as there is no grazing land; (ii) those who live in Uganda with their Ugandan relatives; and (iii) those belonging to an elite class in South Sudan who refuse the status of refugees. According to Koboko District staff, majority of the self-settlers are from South Sudan but about one third of them are from DRC. Self-settlers are also present in urban centres, particularly Arua, mainly for business purposes. In November 2017, the Study Team visited Busia Entry Point at the border and was informed that about 500 huts have had been rent out to South Sudanese. Assuming there are 5 people per hut, the total number amounts to 2,500, which is not insignificant in comparison with the total number of registered refugees in Koboko District, which is about 4,400 (all living in Zones in Lobule Sub-County). Another example is a primary school near the Entry Point that receives 556 pupils, out of which 186 are South Sudanese self-settlers.

**Refugee Impact Catchment (RIC):
An Alternative Approach to Conceptualizing “Host Communities”**

Sectors	RIC 1 (Sub-Counties adjacent to the Zones/Settlements)	RIC 2 (Other intra and inter-District areas)	RIC 2 +
WASH	<ul style="list-style-type: none"> Rural water supply Sanitation & hygiene 	<ul style="list-style-type: none"> Urban water supply incl. water treatment plants Sewerage 	Urban public services
Health	<ul style="list-style-type: none"> HC II, HC III 	<ul style="list-style-type: none"> General hospitals (GH) Regional referral hospitals (RRH) Medical/health staff training institutes 	
Education	<ul style="list-style-type: none"> Early childhood & special education Primary education Secondary education 	<ul style="list-style-type: none"> Teacher training institutes Vocational schools 	
Roads/ Small-scale bridges	<ul style="list-style-type: none"> Community Access Roads & Small-Scale Bridges 	<ul style="list-style-type: none"> District Roads & Small Scale Bridges National Roads & Bridges 	

Public services expected to be available **within short distance** (in the Village/Parish/Sub-County and County with respect to HC4)

Public services at **higher levels of chains**, requiring a broader geographical perspective for planning & provision

Impacts in urban centers are created by both registered refugees (who seek job opportunities) and “self-settlers.” “Self-settlers” impact border areas (particularly in Koboko and Moyo), too.

8

Figure 2.2-2 Refugee Impact Catchment, RIC (Updated Version as of November 2017)

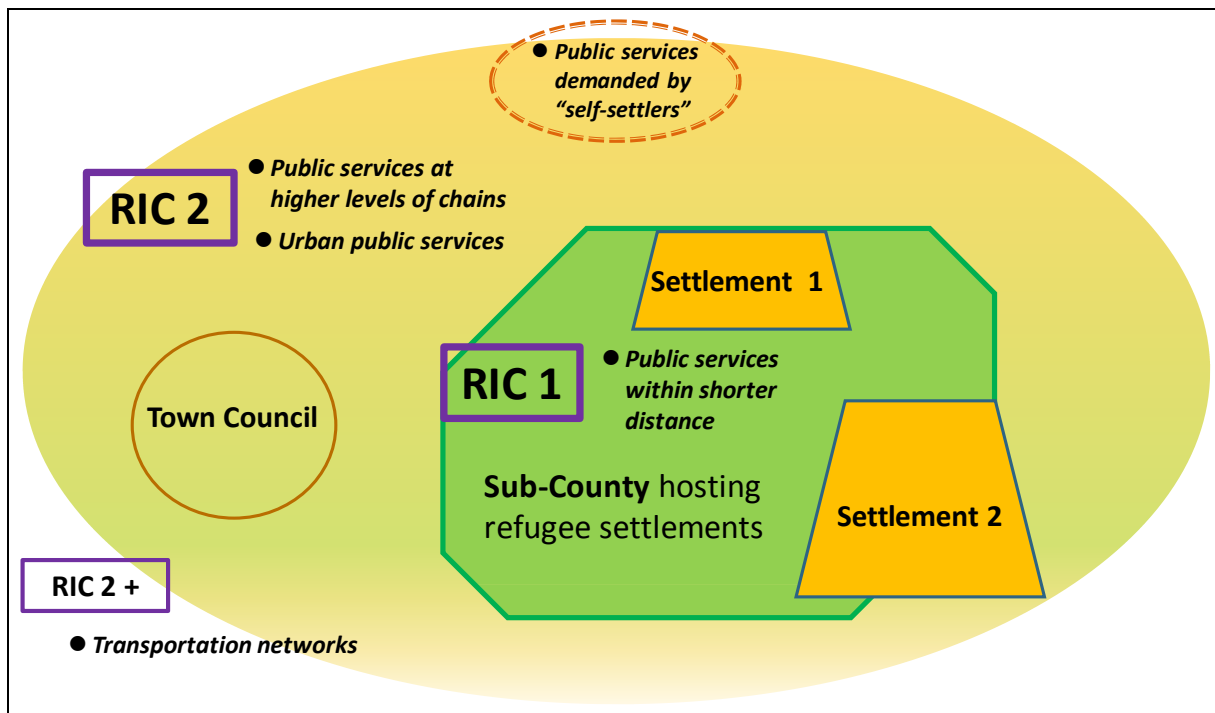


Figure 2.2-3 Refugee Impact Catchment, RIC (Image)

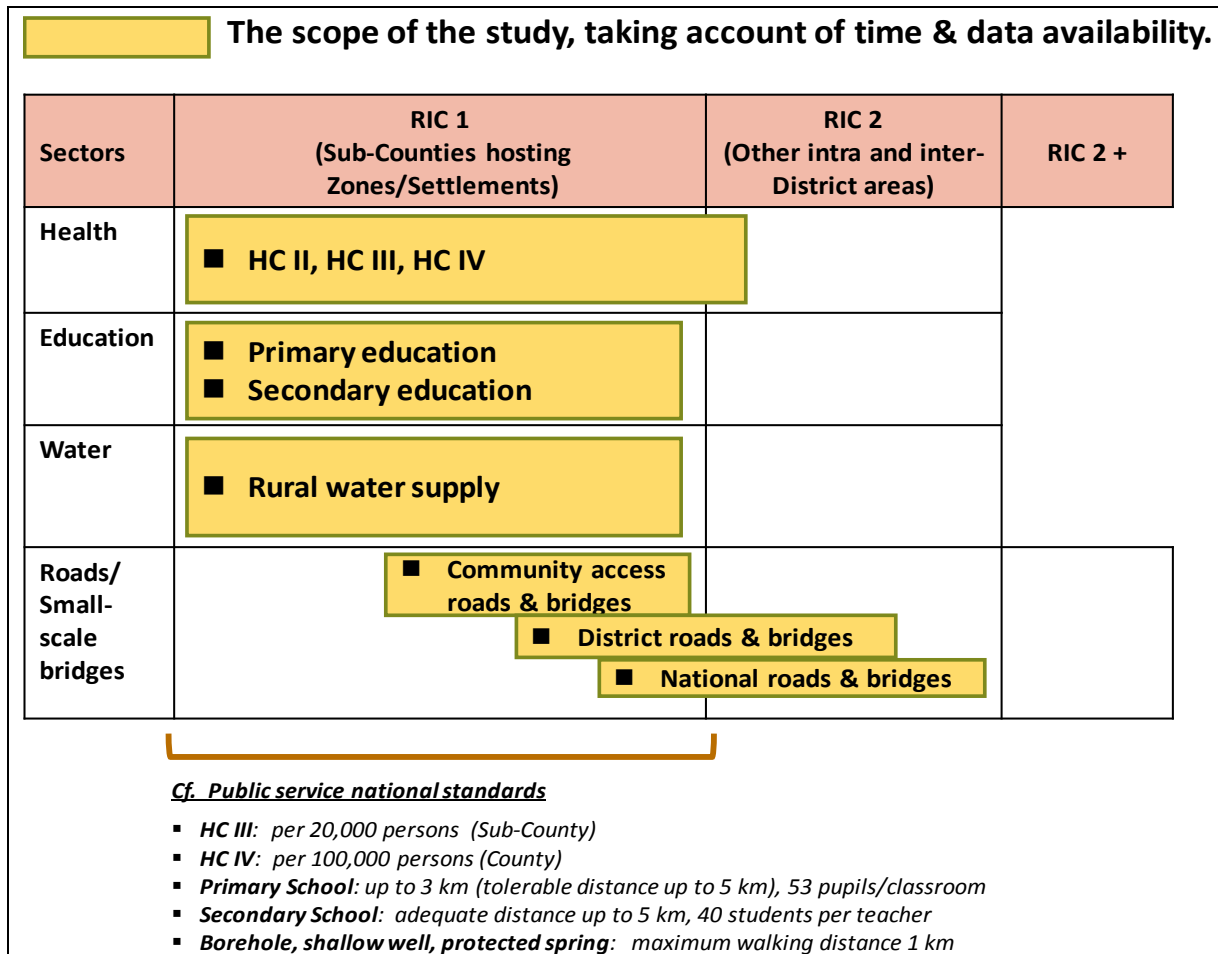


Figure 2.2-4 Refugee Impact Catchment (RIC) and the Study Scope

2.2.3 Assessment Methodologies

(1) Original Methodology and Adjustments

The Study Team originally envisaged a methodology to (i) identify priority areas (Districts and/or Sub-Counties) in light of key development indicators and population load caused by the refugee influx and, in parallel, (ii) assess degrees of stress on existing infrastructures in the four sectors in the host communities and (iii) identify priority needs in the four sectors combining the results of (i) and (ii). The original flow of the Study reflecting this methodology is as in Figure 2.2-5.

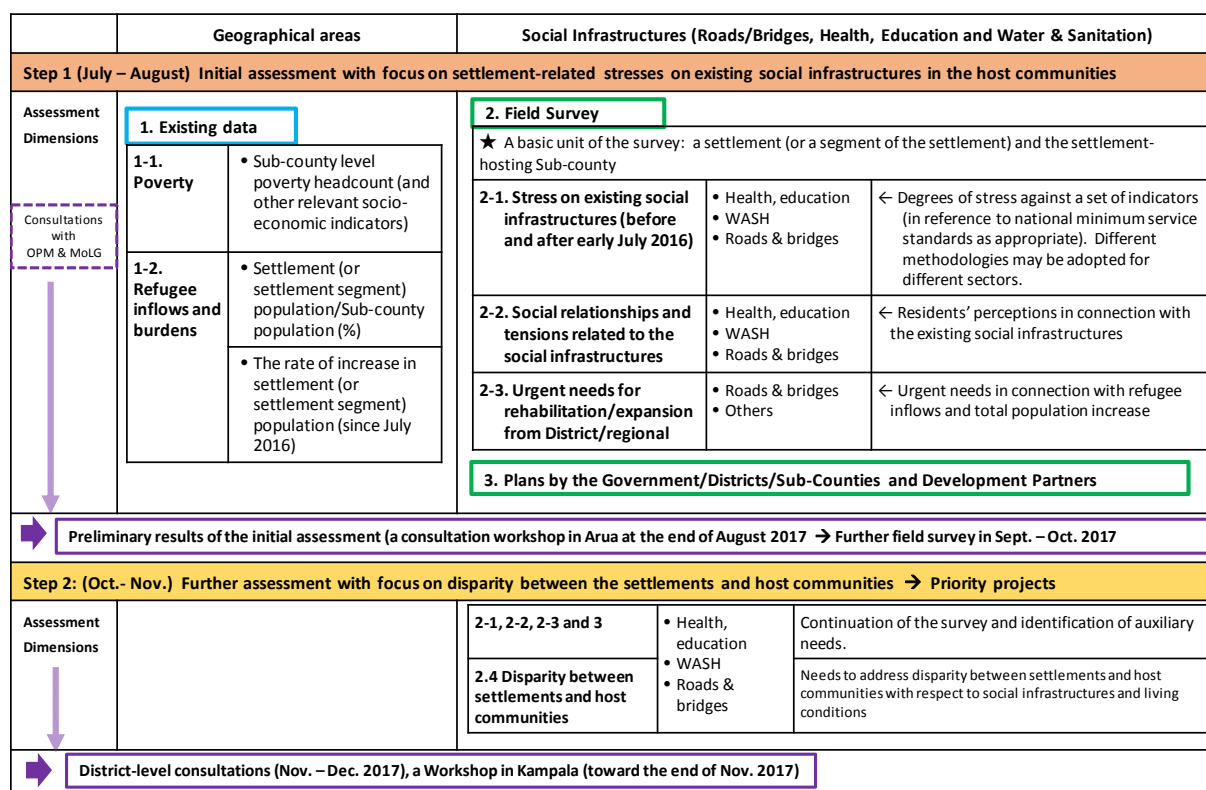


Figure 2.2-5 Initially Conceived Assessment Methodology (as of July 2017)

This methodology and work flow required a review and adjustment upon commencement of the study in Uganda due, mainly, to three factors. Firstly, having gained an understanding on the settlements and host communities as described above, conducting basic fact-finding on the settlement boundaries and populations took a considerable amount of time as explained in Chapter 3. Secondly, collection of data particularly on health, education and water for both the settlements and outside the settlements involved a number of visits to and subsequent follow-ups with not only the Districts, OPM and UNHCR but also Sub-Counties, various NGO partners who operate in the settlements and private contractors. Thirdly, since the Districts were of a view that the entire District is impacted by the refugee influx, it would not be convincing or reasonable to identify priority Districts and/or Sub-Counties based only on available socio-economic and population statistics, most of them being as of 2014 or earlier.³

The Study Team therefore adjusted the work plan, shifting the focus to basic data/information collection during the first stage and assessing priorities in each of the sectors separately, without pre-selecting priority geographical areas. The adjusted work plan is presented in 2.3 below.

(2) Sector Assessment Methodologies

The methodology for assessing stress on social infrastructures and identifying priority needs was designed for each sector taking account of the characteristics of the infrastructures (and services derived from them) and availability of relevant quality data (i.e. data that are appropriate for the assessment and that are accurate and updated). For health, education and water supply, the assessment was conducted with respect to the 18 Sub-Counties that host the Zone/Settlement(s), while for roads & small-scale bridges the assessment involved all the areas of the 5 Districts

³ Population statistics in the form of estimates are available for years beyond 2014 when the census was conducted by Uganda Bureau of Statistics (UBOS). Since the 2014 census included refugees residing in Uganda at the time of the census, the estimates also reflect those refugees. However, refugees arrived after the census are not included in the estimates. More later on this in Chapter 3 (3.2.1).

including the 18 Sub-Counties. (Note that sanitation was not included in the assessment, as the government’s policy focuses on household latrines, and public latrines are mostly dealt with in the health and education sectors. For the health sector, since the government’s policy is to establish a Health Center IV in each County, the area beyond the Sub-County was included in the assessment scope.)

The essence of the assessment methodology for each sector is described in Table 2.2-3 below. Details are explained in the subsequent Chapters on the sectors.

Table 2.2-3 Overview of the Sector Assessment Methodologies

Sector	Focus of the Assessment	Methodology of the Assessment
Health (HC II – HC IV)	<ul style="list-style-type: none"> Stress on health facilities in RIC 1 (SCs + Counties for HC IV) 	<ul style="list-style-type: none"> Composite indicators <ul style="list-style-type: none"> Refugee impact: refugee population load (2017) + increase in OPD & delivery (2016 – 2017) Sector development: total health facility capacities, HH access to health facilities Interviews with the Districts (qualitative)
Education (primary & secondary)	<ul style="list-style-type: none"> Stress on primary & secondary education facilities in RIC 1 	<ul style="list-style-type: none"> Composite indicators <ul style="list-style-type: none"> Refugee impact: pupil/student population vs. classrooms → classroom overload Sector development: school attendance, literacy, etc. Interviews with the Districts (qualitative) (Note: the results were the same for all the target Sub-Counties.)
Water	<ul style="list-style-type: none"> Stress on existing water facilities in RIC 1 	<ul style="list-style-type: none"> Demand & supply gap (i.e. supply shortage) <ul style="list-style-type: none"> Demand & supply gap in each SC inclusive of Z/S Demand & supply gap in (i) each SC excluding Z/S and (ii) each Z/S respectively (Demand = 20 l/person/day = minimum requirement. Supply = capacity of four types of government-recognized water supply facilities)
Roads & Small-Scale Bridges	<ul style="list-style-type: none"> Conditions of national, District & community access roads & small-scale bridges (i.e. stress related to the refugee presence) Degrees of contribution to improving mobility within the 5 Districts 	<ul style="list-style-type: none"> Road conditions survey, interviews & literature review <ul style="list-style-type: none"> → Road conditions: 5 stage evaluation → Assessment in light of potential for improving mobility in the 5 Districts

The results of the assessment were consolidated as a list of priority needs for each sector. For health, education and water supply, the 18 Sub-Counties were scored and then ranked according to the scores. For roads & small-scale bridges, priority segments of national, District and community roads extracted through the assessment were presented as a list. While the list of the roads & small-scale bridge sector can be converted into a list of priority projects with relative ease, identifying specific projects for health, education and water supply in the prioritized 18 Sub-Counties required in-depth data collection mostly at facility level (due to absence of most of the required data at District or Sub-County level). Therefore, priority projects for these three sectors were not indicated at this stage; instead a typical project package reflecting standard specifications and costs was developed and shared with the Districts and government MDAs.

2.2.4 Identification of Priority Projects

The Study Team identified priority projects based on the results of the assessment in each sector. Criteria and considerations for defining priority projects included:

- The projects being located in the Sub-Counties where needs as per the sector assessment are higher than in others (health, education and water sectors)
- Balance among the 5 settlement-hosting Districts of West Nile
- The projects having higher degrees of contributing to sectoral policies of GOU and addressing sector issues
- Cost estimates
- Size and efficiency of the construction contract which will provide sufficient incentives for bidders
- The projects not involving issues related to land (i.e. whether a land needs to be acquired, whether soil conditions are appropriate, etc.)
- The projects not being under implementation or having received funding commitment yet by the Government, the District or partners

An initial list of priority projects and their profiles were prepared in November – December 2017 and were shared with the respective sector ministries/authorities in Kamapala in late January 2018. The final set was prepared in February 2018 reflecting comments and inputs from the sector ministries/authorities.

2.3 Work Plan of the Study

The work plan of the Study reflecting the adjusted methodology explained in 2.2 above is as Figure 2.3-1 below.

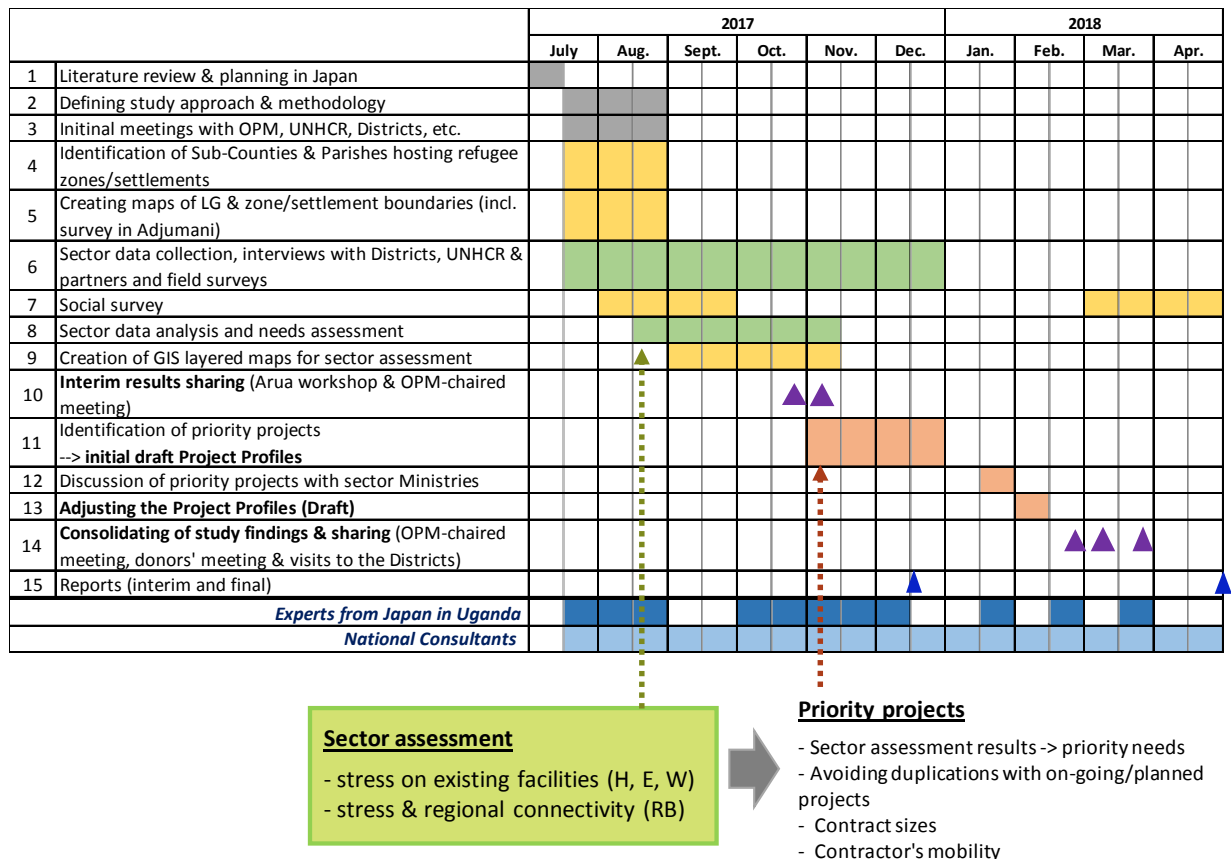


Figure 2.3-1 Work Plan of the Study

CHAPTER 3 BASIC FACTS ON 5 WEST NILE DISTRICTS AND SETTLEMENTS

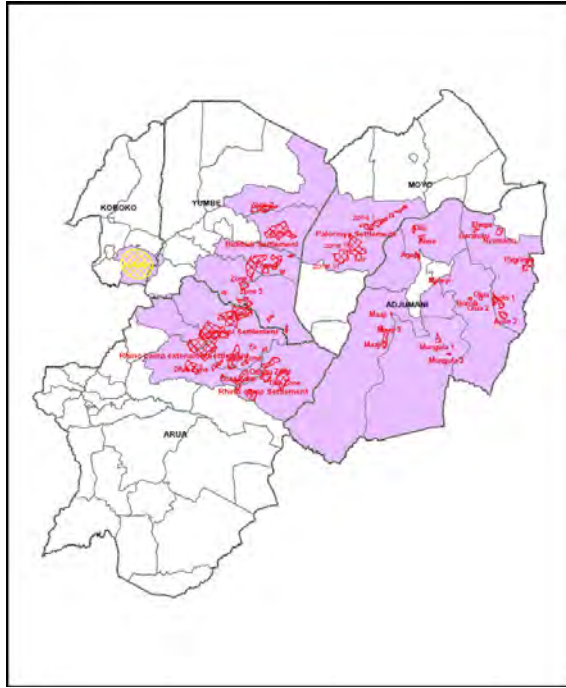
3.1 Settlements, Sub-Counties and Parishes

As mentioned in Chapter 2, it took a considerable amount of time for the Study Team to pin down the exact locations of the Zones/Settlements vis-à-vis the neighbouring Sub-Counties and Parishes and to obtain basic facts on the Zones/Settlements. The interviewees included officials/staff of OPM RDOs, Settlement Commandants' offices, Districts, Sub-Counties, UNHCR and Refugee Welfare Councils (RWCs). The Zones/Settlements and the Sub-Counties and Parishes that host them are listed in Table 3.1-1, The geographical locations of the host Sub-Counties and Parishes are highlighted on two separate maps shown below as Figure 3.1-1 and Figure 3.1-2. Details of the fact-finding results are provided in the following: Annex b-3-1 (Sub-Counties & Parishes Adjacent to Refugee-Residing Areas [Zone/Settlements] in the 5 Districts of West Nile; Annex b-3-2 (Details on Sub-Counties & Parishes Adjacent to Refugee-Residing Areas [Zones/Settlements] in the 5 Districts of West Nile): and Annex b-3-3 (Refugee-Residing Areas [Zones/Settlements] in the 5 Districts of West Nile).

Table 3.1-1 Sub-Counties & Parishes Hosting Zones/Settlements

District	Zone/Settlement (Refugee Residing Area)	Sub-County	Parish
Adjumani	<ul style="list-style-type: none"> ▪ 18 Settlements: Nyumanzi, Elema, Baratuku, Pagrinya, Ayilo 1 & 2, Olua 1 & 2, Boroli, Mungula 1 & 2, Maaji 1, 2 & 3, Mirieyi, Agojo, Alere, Olijji 	7 Sub-Counties: Dzaipi, Pakele, Itirikwa, Ukucijoni, Ofua, Ciforo, Pachara	11 Parishes: Ajugobi, Miniki, Logoangwa, Lewa, Boroli, Melijo, Mungula, Ayiri, Iliny, Agojo, Alere
Arua	<ul style="list-style-type: none"> ▪ Rhino Camp (7 Zones) ▪ Imvepi (3 Zones) 	4 Sub-Counties: Odupi, Uriama, Rigbo, Omugo	9 Parishes: Azapi, Lugbari, Imvepi, Akinio, Katiku, Ocea, Odoobu, Kwili, Ndaapi
Koboko	<ul style="list-style-type: none"> ▪ Lobule 	One Sub-County: Lobule	4 Parishes: Ajjipala, Aliribu, Ponyura, Tukuliri
Moyo	<ul style="list-style-type: none"> ▪ Palorinya (4 Zones) 	One Sub-County: Itula	8 Parishes: Ubbi, Palorinya, Yenga, Kali, Paalujo, Legu, Waka, Demgbele
Yumbe	<ul style="list-style-type: none"> ▪ Bidibidi (5 Zones) 	5 Sub-Counties: Kululu, Odravu, Ariwa, Romogi, Kochi	15 Parishes: Kongbe, Yoyo, Abara, Oluba, Ikafe, Okuyo, Rigbonga, Baringa, Bidibidi, Iyete, Onoko, Swinga, Yayari, Kochi, Ombachi
Total:		18 Sub-Counties	47 Parishes

Source: Prepared by the Study Team based on information from OPM, UNHCR, the Districts, etc. (August 2017)



Source: Prepared by the Study Team based on information from OPM, UNHCR and the Districts (August 2017)

Figure 3.1-1 Sub-Counties in the 5 Districts of West Nile hosting Zone/Settlement

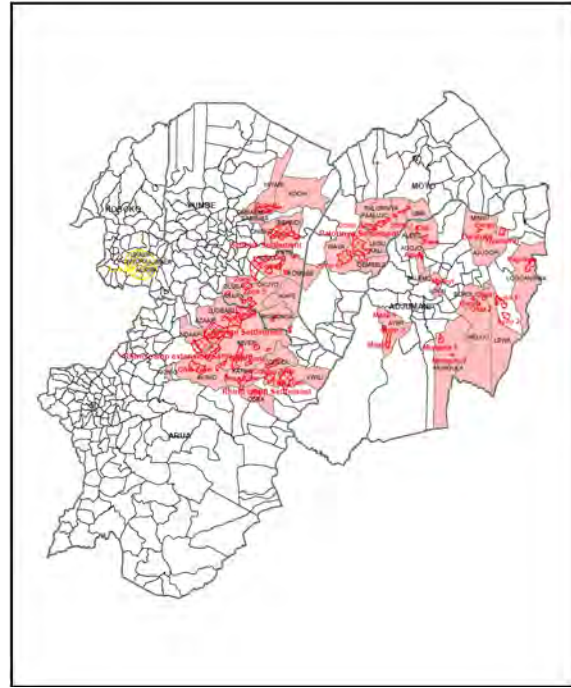


Figure 3.1-2 Parishes in the 18 Sub-Counties hosting Zone/Settlement

3.2 Populations of the Districts, Sub-Counties and Settlements

3.2.1 Population Data Sources

Population statistics of Uganda are managed by Uganda Bureau of Statistics (UBOS) through its periodical population and housing census. The latest census was conducted in 2014. UBOS is also responsible for projecting population growth for each District and Sub-County based on a formula devised for the respective local government jurisdictions. (The 2014 population data for the Districts and Sub-Counties are available on the UBOS website. The population projection figures as well as Parish population data are provided by UBOS on demand.) Annex b-3-1 contains the Sub-County and Parish-wise population statistics including projections for 2017.

Settlement population data (i.e. number of registered refugees) are managed by and available with OPM; however, population for each of the refugee-residing areas (Zone/Settlement) was not readily available in most cases and required contacting the Settlement Commandant offices. The Zone-wise population statistics were not available for Bidibidi Settlement affected by recent introduction of bio-metric registration. Zone-wise refugee population data maintained by UNHCR Health Unit were used instead. Similarly, only the total population for the three Zones of Imvepi Settlement were available. Annex b-3-3 presents the Zone/Settlement-wise population statistics as of July – August 2017. As of writing of this report, an OPM and UNHCR-led exercise to verify the refugee populations in all Zones/Settlements has started in the wake of news that some of refugee data were inflated by field staff.

It must be noted that UBOS included refugees in the 2014 census with respect to Adjumani, Arua and Koboko Districts (which hosted settlements at the time of the census) and therefore its population projections for the subsequent years reflect them. In other words, the District and Sub-County population data for 2017 (as well as 2015 and 2016) for the three Districts include refugees who were present in Uganda at the time of the 2014 census. They are also included in the Zone/Settlement population data, if they continue to be registered in the Zones/Settlements in the same Districts, and therefore counted doubly. UBOS plans to exclude the settlement refugee populations in the next census.¹

¹ Interviews with UBOS staff in August 2017.

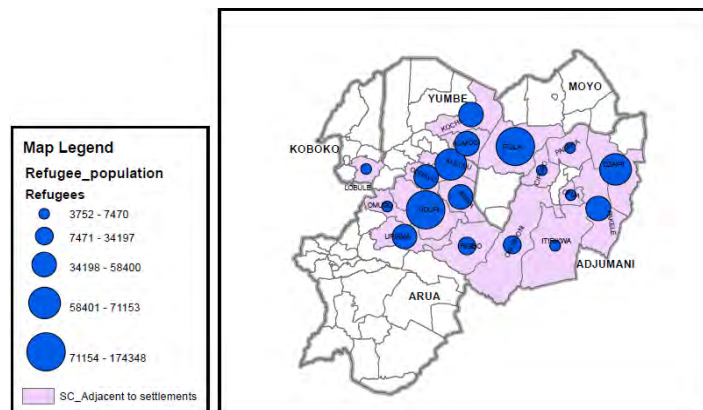
3.2.2 Populations of the Districts, Sub-Counties and Zones/Settlements

The 2017 populations of the 5 Districts and the 18 Sub-Counties hosting Zones/Settlements vis-à-vis the refugee populations are in Table 3.2-1. Population load on each District and Sub-Counties hosting Zone/Settlements is also shown in the same table. In Moyo, the refugee population outweighs the host community population. At Sub-County level, all the hosting Sub-Counties except in Koboko are outweighed by the refugee populations. Figure 3.2-1 is a graphical presentation of the refugee population in each of the 18 Sub-Counties. Figure 3.2-2 and Figure 3.2-3 respectively illustrate Sub-County population density for 2017 without refugees and with refugees.

Table 3.2-1 Populations of the 5 Districts, 18 Sub-Counties and Zones/Settlements

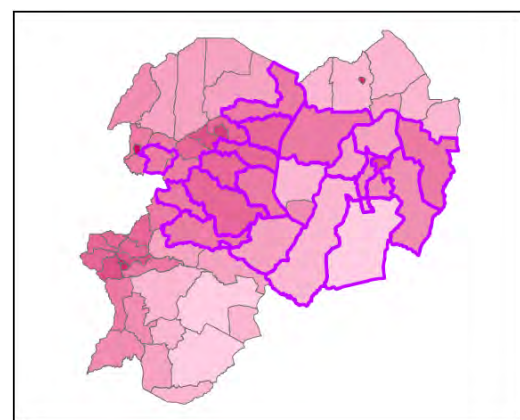
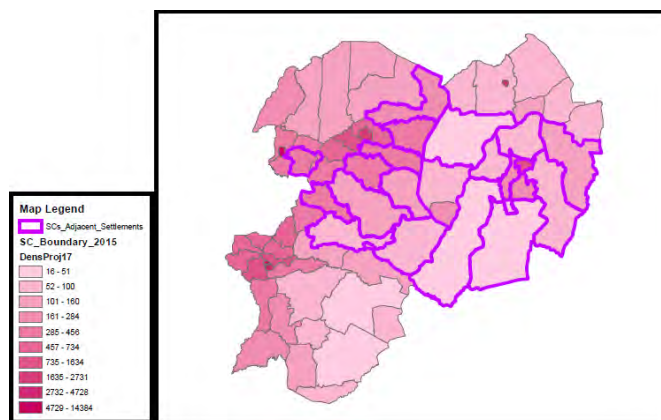
District	District Population (A)	Total Zone/Settlement Population (B)	B/A (%)	No. of Sub-Counties Hosting Zones/Settlements	Total Population of the Host Sub-Counties (C)	Total Zone/Settlement Population (D)	D/C (%)
Adjumani	225,251	179,520	79.7%	7	166,436	179,520	107.9%
Arua	782,077	233,841	29.9%	4	131,655	233,841	177.6%
Koboko	206,495	4,396	2.1%	1	33,679	4,396	13.1%
Moyo	139,012	174,702	125.7%	1	13,262	174,702	1,317.3%
Yumbe	484,822	276,710	57.1%	5	190,328	276,710	145.4%

Source: Prepared by the Study Team based on UBOS statistics and data from OPM and UNHCR (August 2017)



Source: Prepared by the Study Team based on data from OPM and UNHCR (August 2017)

Figure 3.2-1 Populations of Registered Refugees in the 18 Sub-Counties



Source: Prepared by the Study Team based on data from OPM and UNHCR (August 2017)

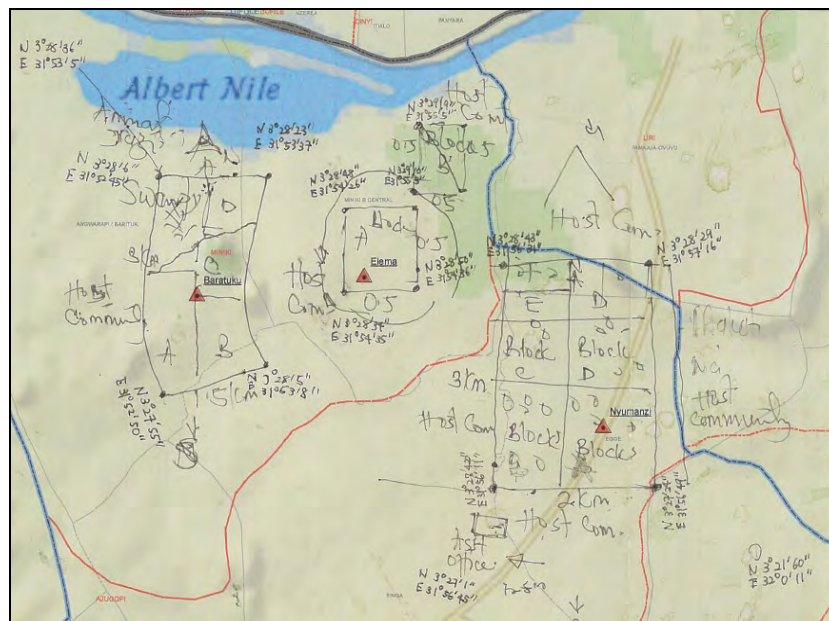
Figure 3.2-2 Population Density of the Sub-Counties without Refugees

Figure 3.2-3 Population Density of the Sub-Counties with Refugees

3.3 Map of Local Government/Administrative Boundaries and Settlements

A map consisting of layers of local government/administrative boundaries (Districts, Municipal/Town Councils, Sub-Counties and Parishes) and the Zones/Settlements was not available except for UNHCR-produced maps of Zones/Settlements in Arua, Koboko, Moyo and Yumbe with information on the corresponding Districts and Sub-Counties but without the Parishes. A map of the Settlements in Adjumani was not available at all. The Study Team therefore created such a layered map to visually grasp the location of the Zones/Settlements vis-à-vis the Sub-Counties and Parishes in all the five Districts. The latest local government/administrative boundary data of UBOS were obtained through UNHCR Kampala Office and the Zone/Settlement data for Arua, Moyo and Yumbe Districts were provided by UNHCR Arua Sub-Office who has mapped each Zone. The consolidated map is provided as Annex b-3-4.

The Lobule Settlement in Koboko is divided in two Zones, each consisting of a number of small lands allocated to the refugees. None of them have been surveyed by UNHCR, though their approximate location has been recorded. The two Lobule Zones are therefore shown in a circle, which indicates their approximate location. Since the settlements in Adjumani have not been mapped yet, the Study Team visited each one of them and drew a map based on information provided by the Settlement Commandant or his/her staff. The hand-drawn maps were then checked with Google Earth's aerial photographs and adjusted to fit to the situations on the ground. The map of the Adjumani settlements are therefore an estimate and needs a full survey to reflect accurate boundaries.



Source: JICA Study Team

Figure 3.3-1 Hand-Drawn Map of Adjumani Settlements (August 2017)

CHAPTER 4 GOVERNMENT POLICY AND STRUCTURES

4.1 Refugee-Related Government Policy

Uganda has a long history of receiving refugees and administering refugee settlements, dating back to the time before the country's independence in 1962. The Settlement Transformation Agenda (STA), the cornerstone of GOU's present policy on refugees, was derived from experiences in the 1990s and 2000s. The Self-Reliance Strategy (SRS), set out in 1998 for Adjumani, Arua and Moyo which had been receiving refugees from the then Sudan, was the first explicit refugee-related policy of GOU. The main thrust of the SRS was to assist refugees to contribute to local communities on economic and social fronts. The SRS demonstrated a noteworthy achievement in the health sector, where the services that had been provided separately to refugees and host community populations were integrated to a certain degree. Based on this initial experience and lessons learned, OPM with UNHCR framed the Development Assistance to Refugee-Hosting Areas (DAR) in 2004 targeting eight settlement-hosting Districts including Adjumani, Arua, Moyo and Yumbe. The DAR activities included improving livelihood and access to social services, environmental protection and management and local government capacity building.¹

These experiences culminated in the Refugees Act 2006, which fully reflects the provisions of the 1951 UN Convention Relating to the Status of Refugees (commonly referred to as the "Geneva Convention") and other international agreements. Subsequently, GOU adopted the Refugees Regulations in 2010, spelling out implementation details of the Refugees Act 2006. Policies on refugees and refugee-hosting communities were then articulated as the STA presented as part of the National Development Plan (NDP) II (FY 2015/16 – 2019/20). OPM's Refugee Department is responsible for coordinating the STA implementation. The relevant part of the NDP II and the STA are summarised in Table 4.1-1 below.

In response to the STA, the UN and the World Bank framed a strategy "Refugee and Host Population Empowerment (ReHoPE)". ReHoPE now constitutes part of the Comprehensive Refugee Response Framework (CRRF), for which Uganda has been designated as a model country in the wake of its adoption by the UN General Assembly in September 2016. The CRRF Uganda consists of five pillars: (i) Admission and Rights; (ii) Emergency Response and Ongoing Needs; (iii) Resilience and Self-Reliance; (iv) Expand Solutions; and (v) Voluntary Preparation. The STA and ReHoPE corresponds to the third pillar "Resilience and Self-Reliance."

The Uganda Solidarity Summit on Refugees, co-hosted by the President of Uganda and the UN Secretary-General in June 2017, confirmed the commitment of GOU and the international community to coordinated efforts for humanitarian response and development assistance for both refugees and host population under one umbrella. The CRRF organizational arrangements for Uganda are currently being rolled out (as of March 2018).

¹ The descriptions on the SRS and DAR here have drawn on "An Assessment of Uganda's Progressive Approach to Refugee Management" published by OPM, UNHCR and the World Bank Group in 2016. It is the understanding of the Study Team that the Comprehensive Peace Agreement between the north and south of the Sudan in 2005 led to a massive repatriation of Southern Sudanese refugees, as a result of which the DAR effectively faded out. The breakout of the civil war in South Sudan in December 2013 provided a renewed context for GOU's refugee response policy.

Table 4.1-1 Outlie of the Settlement Transformation Agenda (STA)

National Development Plan (NDP) II	
<p>Chapter 14 includes:</p> <ul style="list-style-type: none"> ■ Enhancement of national response capacity to refugee emergency management <ul style="list-style-type: none"> ▪ Formulate and implement a national refugee policy ▪ Develop and implement a Refugee Settlement Transformative Agenda ▪ Develop and implement projects and programs for refugees and refugee hosting areas 	
Settlement Transformation Agenda (STA) 2016 - 2021	
<p>“to achieve self-reliance and local settlement for refugees and to promote social development in the refugees hosting areas as a durable solution to the refugees’ problems, while protecting national and local interests”</p>	<p><u>6 Pillars</u></p> <ul style="list-style-type: none"> ▪ Land management ▪ Sustainable livelihoods ▪ Governance and rule of law ▪ Peaceful co-existence ▪ Environmental protection ▪ Community infrastructure

Source: NDP II (FY 2015/16 – 2019/20) and OPM documents on STA (July 2017)

4.2 Role and Structure of Office of the Prime Minister (OPM)

The 2010 Refugees Regulations spell out two important principles that are relevant to the Study: (i) integration of refugees in the host communities and (ii) integration of refugee issues in development plans through the collaboration of national and local government bodies. The relevant provisions are quoted below. The “Commissioner” refers to the Commissioner of the Refugee Department of OPM.

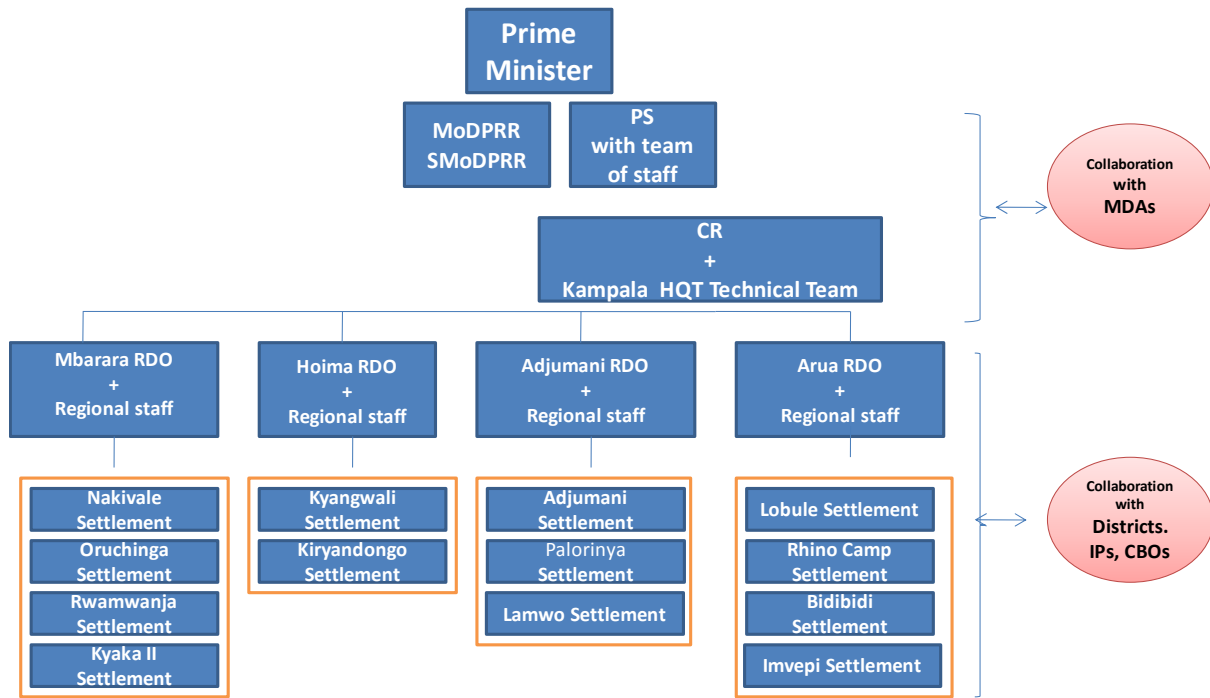
60. Integration of refugees in host communities

- (1) The Commissioner shall ensure that refugees are integrated into the communities where the refugee camps or the refugees are settled.
- (2) For the purpose of sub regulation (1), the Commissioner shall sensitize the host communities about the presence of refugees and any other matters relating to their coexistence with each other.

61. Integration of refugee matters in development plans

The Commissioner shall liaise with the national, local and regional planning authorities for the purpose of ensuring that refugee concerns and related matters are taken into consideration in the initiation and formulation of sustainable development and environmental plans.

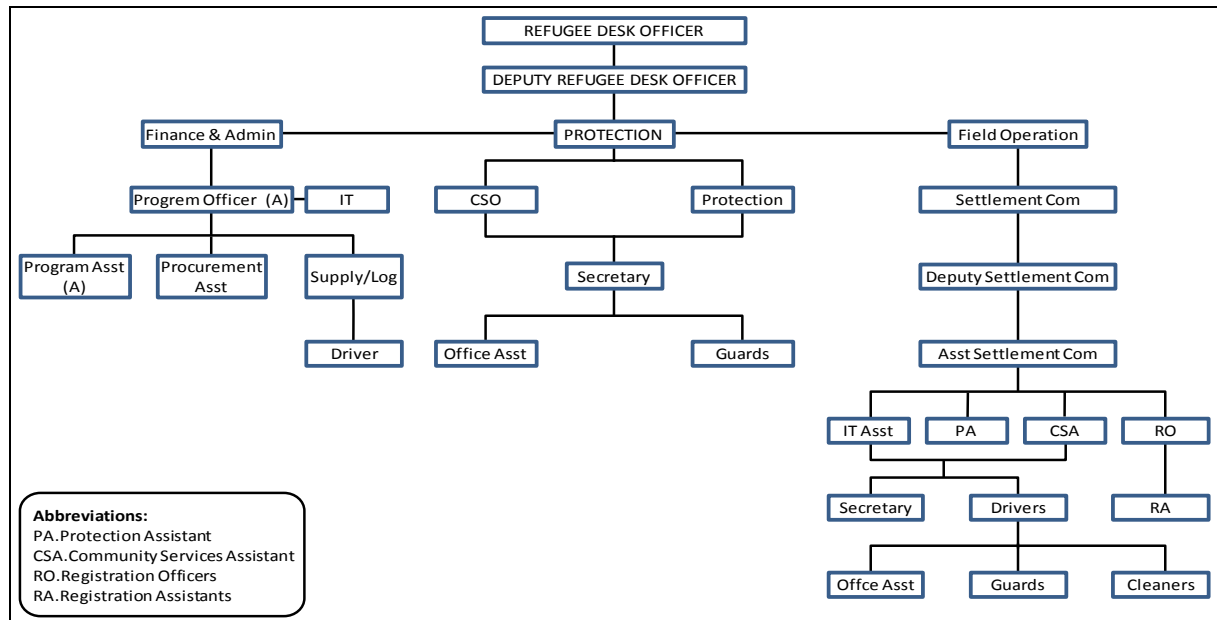
OPM operates through four regional offices, each headed by Regional Desk Officer (RDO), and through them, Settlement Commandants who are responsible for the respective settlements. The overall structure of OPM with respect to the refugee functions is shown in Figure 4.2-1. (Note that Adjumani RDO is responsible for Lamwo Settlement in Acholi Sub-Region, in addition to the settlements in Moyo and Ajumani.)



Source: OPM (July 2017)

Figure 4.2-1 Organogram of OPM Refugee Department

The structure of the RDOs and Settlement Commandant offices is illustrated in Figure 4.2-2. OPM settlement responsibilities under Adjumani RDO and Arua RDO are described in Table 4.2-1.



Source: Created by the Study Team based on interviews with OPM Refugee Department and RDOs (August – November 2017)

Figure 4.2-2 Structure of OPM Regional and Settlement Offices

Table 4.2-1 West Nile Settlements and OPM Responsibilities

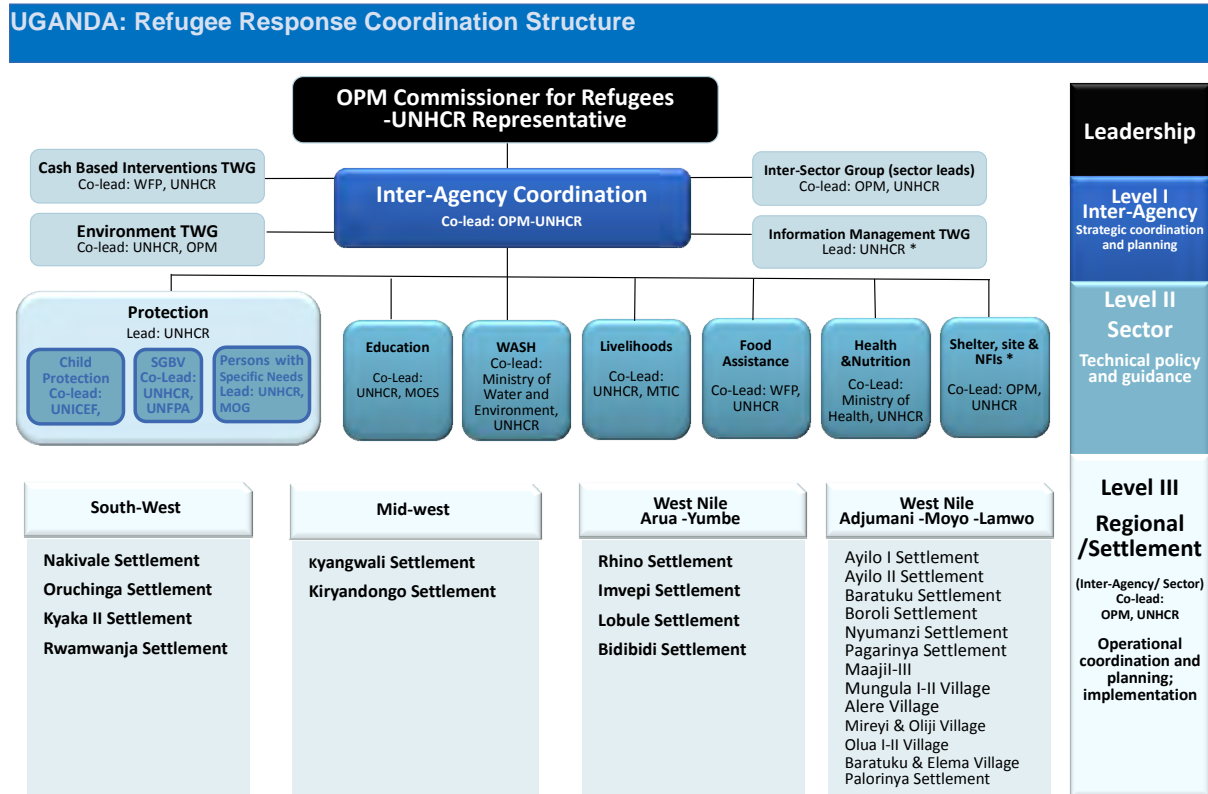
District	Settlement	Zone	MM/YY of Est.	Supervision	In-Charge Settlement Commandant (SC)
Adjumani (Adjumani RDO)	Nyumanzi	n.a.	Jan-2014	Settlement Commandant	Assistant SC
	Elema		1993		
	Baratuku		May-2014		
	Pagrinya		Jun-2016		Assistant SC
	Ayilo 1		Feb-2016		Deputy SC
	Ayilo 2		Aug-2014		
	Olua 1		Feb-2012		Assistant SC
	Olua 2		Feb-2012		
	Boroli		Dec-2013		Assistant SC
	Mungula 1		1994		Assistant SC
	Mungula 2		1994		Assistant SC
	Maaji 1		1987		Assistant SC
	Maaji 2		2012		Assistant SC
	Maaji 3		2014		Assistant SC
	Mirieyi		1994		Assistant SC
	Agojo		Sep-2016		Assistant SC
Alere	1993	Assistant SC			
Oliji	1991	Assistant SC			
Moyo (Adjumani RDO)	Palorinya	Zone 1	Dec-2016	Settlement Commandant of Palorinya	Assistant SC
		Zone 4 (Base camp zone/ Ext C)	Mar-2017		Assistant SC
		Zone 2(Morobi)	Dec-2016		Assistant SC
		Zone 3(Morobi)	Jan-2017		Assistant SC
Arua	Rhino Camp	Zone 1: Ocea	1993	Settlement Commandant of Rhino Camp	Assistant SC
		Zone 2: Siripi	1993		
		Zone 6: Ofua	2016		Assistant SC
		Zone 3: Eden	2016		Assistant SC
		Zone 4: Tika	1993		Assistant SC
		Zone 5: Odubu	1993		Assistant SC
	Rhino Camp Extension	Zone 7: Omugo	Jan-2017	Deputy SC	
	Imvepi	Zone 1	Feb-2017	Settlement Commandant of Imvepi	Assistant SC
Zone 2		Feb-2017			
Zone 3		Feb-2017			
Koboko	Lobule	Zone A	Sep-2013	Settlement Commandant of Lobule	Assistant SC
		Zone B	Jan-2014		
Yumbe	Bidibidi	Zone 1	Aug-2016	Settlement Commandant of Bidibidi	Assistant SC
		Zone 2	Oct-2016		Assistant SC
		Zone 3	Oct-2016		Assistant SC
		Zone 4	Nov-2016		Assistant SC
		Zone 5	Dec-2016		Assistant SC

Source: Consolidated by the Study Team based on interviews with Settlement Commandant Offices (August – November 2017)

4.3 Assistance by the UN and Donor Partners

4.3.1 Role of UNHCR

UNHCR is responsible for providing fully-fledged assistance to GOU in relation to refugees, with its role specified in the 2006 Refugees Act. In Kampala, UNHCR along with OPM co-chairs coordination mechanisms with government MDAs, other UN agencies and bilateral donors and partners, while they steer similar coordination arrangements at settlement level. The overall coordination structure is as illustrated in Figure 4.3-1.



Source: UNHCR (November 2017)

Figure 4.3-1 Refugee Response Coordination Structure

Sector-wise coordination mechanisms are also in place, each sector meeting being chaired by UNHCR or its partner NGO. The Districts are often consulted on sector issues and representatives of Sub-Counties and Parishes are invited to settlement-level meetings as appropriate. It appears, however, that coordination with local government/administrative bodies takes place mostly on an ad-hoc basis.

UNHCR has prepared an information management strategy for systematic recording and updating of data on refugees, available and required services to them and host populations, on-going and planned projects by partners, among others. A similar strategy was designed for 2012 – 2014 but was not fully implemented due to lack of funding and staff shortage. A recently established information management unit has undertaken an Open Street Map exercise in Arua in August 2017 and is set to embark on the strategy implementation.²

The total budget of UNHCR in Uganda for 2017 is USD 500.7 million, with USD 123.7 million having been disbursed by donors till March 2017. Table 4.3-1 lists government and private donors of UNHCR and Table 4.3-2 shows budget allocations to the sectors related to this Study.

² An interview with UNHCR information management staff (November 2017).

Table 4.3-1 Donors for UNHCR (2017)

	Government/Organization and Funding (M: USD million)
Major Donors	United States of America (266 M) Sweden (76 M) Priv Donors* Spain (54 M) Netherlands (52 M) United Kingdom (45 M) Norway (41 M) Priv Donors Republic of Korea (26 M) Japan (25 M) Denmark (23 M) Australia (19 M) Priv Donors Italy (17 M) Canada (16 M) Switzerland (15 M) Priv Donors USA (14 M) France (14 M) Priv Donors Japan (14 M) Germany (12 M) Priv Donors Sweden (11 M) Italy (10 M)
Other Donors	Algeria Austria Belgium Bosnia and Herzegovina Chile Costa Rica Estonia Finland Holy See Iceland Indonesia Ireland Kuwait Lithuania Luxembourg Malta Mexico Monaco Morocco New Zealand Portugal Qatar Republic of Korea Russian Federation Saudi Arabia Serbia Singapore Spain Sri Lanka Thailand Turkey United Arab Emirates Uruguay Zambia Private Donors

Source: 2017 Funding Update as of 7 November 2017, UNHCR Uganda

* Priv Donors refer to private donors including firms and individuals.

Table 4.3-2 UNHCR Budget Allocations (2017)

Sector	Share in Total Budget	Annual Budget (M: USD million)
Roads & Small-Scale Bridges (incl. shelters)	11.4%	57.1 M
Health	9.7%	48.6 M
Education	5.4%	27.0 M
Water	3.3%	16.5 M
Others	70.2%	351.5 M
Total	100.0%	500.7 M

Source: UNHCR Uganda Factsheet (March 2017)

4.3.2 Other UN Agencies and Donor Partners

The UN Country Team and the World Bank responded to GOU's STA by developing ReHoPE as mentioned above. With the launch of the CRRF by the UN and the designation of Uganda as its model country, ReHoPE now constitutes one of the CRRF pillars, while it remains an umbrella of UN agencies' support to refugees and host communities in alignment with the STA and in adherence to a principle set out by GOU that 30% of the resources for refugees be allocated for host populations.

The World Bank has recently conducted a study (in May – August 2017) to take stock of the past, current and future expenditures of GOU, the UN agencies and donors in the 11 refugee-hosting Districts. According to its report, the total expenditures by the UN agencies in the 11 Districts in 2016 were USD 36 million, 36% of which were by UNHCR, 29% by UNICEF and 20% by WFP. The funding requirement of the UN agencies for 2017 has risen to USD 217 million in response to the refugee influx. Donors plan to allocate approximately USD 310 million in total for 2017. However, this is an estimate, as it is difficult to compare or aggregate the data provided by each donor. Donors place higher priority on social service and livelihood support.³

The Study Team took account of the following in addition to on-going and planned assistance by other major donors such as the European Union (EU) and African Development Bank (AfDB):

- UNHCR ReHoPE funding: UNHCR's annual funding to the settlement-hosting Districts to implement refugee response-related projects. Around USD one million or less per District per year.
- Development Response to Displacement Initiative Project (DR DIP): Implemented by OPM with funding from the World Bank capitalizing on the implementation structure of Northern Uganda Social Action Fund (NUSAF) 3. USD 50 million for the initial phase, to be supplemented by with additional funding. Refugee Response Fund: to be implemented by OPM with funding from KfW

³ ReHoPE Stocktake Report, Consultants hired by the World Bank November 2017.

for STA-related activities.

In addition, UNDP and the World Bank support an initiative of the National Planning Authority (NPA) to reflect refugee impacts in the District level planning through the process of on-going mid-term review of the District Development Plans (DDP) II (2015/16 – 2019/20).

4.4 Organization and Budget of the 5 Districts of West Nile

4.4.1 Structure of Local Governments in the 5 Districts

The structure of local government and administration in Uganda consists of five levels of Local Council (LC), i.e. LC 1 to LC 5 in accordance with the Local Government Act 1998 (CAP 243). The structure in the 5 Districts of West Nile is illustrated in Figure 4.4-1. Districts (District Councils), Municipalities (Municipal Councils), Towns (Town Councils) and Sub-Counties (Sub-County Councils) are local governments that have juridical personalities, while others are essentially administrative units. As mentioned in Chapter 3, Zones/Settlements in the 5 West Nile Districts are located in a total of 18 Sub-Counties and 47 Parishes as of August 2017.⁴

Local Council (LC) Level	Arua		Yumbe		Koboko		Moyo		Adjumani	
LC 5	Arua District		Yumbe District		Koboko District		Moyo District		Adjumani District	
LC 4	Arua Municipality				Koboko Municipality					
LC 3	26 Sub-Counties (Z-hosting: 4)		Yumbe Town 12 Sub-Counties (Z-hosting: 5)		6 Sub-Counties (Z-hosting: 1)		Moyo Town 8 Sub-Counties (Z-hosting 1)		Adjumani Town 9 Sub-Counties (S-hosting: 7)	
LC 2	Parishes	Wards	Parishes		Parishes	Wards	Parishes		Parishes	
LC 1	Villages	Villages/Cells	Villages		Villages	Villages/Cells	Villages		Villages	

Source: Created by the Study Team based on JICA WA-CAP-related documents and field interviews.

Figure 4.4-1 Local Government & Administrative Structures in the 5 Districts of West Nile

4.4.2 District Organization (Staffing)

The Ministry of Public Services (MoPS) is responsible for defining the organogram including staff posts of each local government. MoPS introduced a new District structure for FY 2017/18 onwards. As a result, the Districts had to spend extra time to prepare the latest organogram with information on the number of staff and vacant posts. The Study Team obtained the latest organogram from Adjumani, Arua, Koboko and Moyo Districts as of November 2017. A staffing summary of these four Districts is provided as Annex c-4-1 and an overview is shown below in Table 4.4-1.

Adjumani and Koboko Districts have relatively higher levels of staff fulfillment, with over 80% for the road sector and 100% (Koboko) and 82% (Adjumani) for the education sector. On the other hand, Arua and Moyo have road-related staff fulfillment at 71% and 45% respectively. Moyo's

⁴ Pakele Sub-County in Adjumani District was upgraded to Town Council in FY 2017/18 (Daily Monitor, 27 February 2018). It is listed as Sub-County in this Study in accordance with the information as such provided to the Study Team in July – August 2017.

staffing is at the lowest for education as well as health, at 75% and 65% each. A common issue faced by all Districts is that government fiscal transfers for staff remunerations are not sufficient for the Districts to enable recruitment for the vacant posts.

Table 4.4-1 Staff Posts and Fulfillment in the 5 Districts of West Nile

District	Total District staff		Health Dept. (# of posts, % filled)	Education Dept. (# of posts, % filled)	Works Dept. (incl. water staff) (# of posts, % filled)
	Total #of posts (excl. unit-level staff such as teachers & health workers)	% filled			
Adjumani	152	66%	N.A.	11 posts, 82%	18 posts, 83%
Arua	196	68%	11 posts, 82%	13 posts, 85%	31 posts, 71%
Koboko	73	95%	N.A.	4 posts, 100%	5 posts, 80%
Moyo	153	63%	8 posts, 63%	8 posts, 75%	20 posts, 45%
Yumbe	N.A. (as of November 2017)				

Source: Created by the Study Team based on information provided by the Districts.

4.4.3 Budget (Revenues and Expenditures)

An overview of the annual budgets and expenditures of the 5 Districts for FY 2014/15 – 2016/17 is presented in Annex c-4-2. The budgets of the 5 Districts vary and range from about USD 30,000 (Koboko) to about USD 200,000 (Arua). The budget for FY 2017/18 and its per capita size are shown in Table 4.4-2 below. Koboko's budget is the smallest, attributed to a lower level of government fiscal transfers than for the other Districts, while its locally raised revenues are at the same level as the other Districts. Table 4.4-2 also provides per capita budget reflecting the refugee population in each District. While the Districts do not normally incur direct expenditures for refugees under the current fiscal arrangement, the figures indicate the magnitude of the impact created by the presence of refugees in these settlement-hosting Districts.

Table 4.4-2 Fiscal Capacity of the 5 Districts of West Nile

District	FY 2017/18 Approved Budget (Ushs 000's)	USD equivalent (USD 1 = Ushs 0.00028)	District population (UBOS 2017)	Budget per capita (USD) - without refugees	District population taking account of refugees (UBOS 2017 & OPM August 2017)	Budget per capita (USD) - with refugees
Adjumani	24,991,811	6,997,707	225,251	31.07	404,771	17.29
Arua	69,880,580	19,566,562	782,077	25.02	1,015,918	19.26
Koboko	11,024,150	3,086,762	206,495	14.95	210,891	14.64
Moyo	21,026,382	5,887,387	139,012	42.35	313,714	18.77
Yumbe	34,822,313	9,750,248	484,822	20.11	761,532	12.80

Source: Consolidated by the Study Team based on Budget Framework Paper FY 2017/18 of each District (Uganda Budget Information on the website of Ministry of Finance, Planning and Economic Development), UBOS census & population estimates and OPM refugee statistics.

A significantly low level of locally raised revenues is a key characteristic common to local governments in Uganda, being at 1 – 5 % of the total revenue in the 5 West Nile Districts. Major part of the revenues consists of transfers from the government and donor funding. Ministry of Public Works & Transport (MoWT), Uganda National Road Authority (UNRA), Ministry of Water and Environment (MoWE), Ministry of Education (MoE), Ministry of Health (MoH) allocate transfers for recurrent and development spending, while Ministry of Local Government (MoLG) allocate administration-related transfers for recurrent budget. In addition, Discretionally Development Equalization Grant (DDEG) has been made available since FY 2016/17, having integrated several project-based donor funds for intergovernmental transfers.⁵ The Districts also

⁵ FY 2016/17 Grant and Budget Guidelines (draft) issued by OPM, Local Government Finance Commission, Ministry of Lands, Housing and Urban Development and other line ministries.

receive direct funding from the UN agencies and donors, which are specified separately in the budgets. Donor-funded activities for which funds are not transferred to the District are mentioned as off-budget items in the budget document.

With respect to expenditures, approximately 50% on average are for staff costs. The staff cost share in the total expenditure is higher in education at 35 – 60%, moderately high in health at over 10% - 30% and lower in roads & engineering (incl. water) at 10% or less. A chronic shortage of budget for operation and maintenance is a major issue, which is being addressed by some partners. For example, UNICEF provides direct funding to the refugee-hosting Districts for hiring temporary teaching staff and teachers' training as part of ReHoPE.⁶ The World Bank will fund development and recurrent transfers for education and health sectors through a new Intergovernmental Fiscal Transfers Program.⁷

The budget and expenditure documents of the Districts are available on the website of the Ministry of Finance, Economic Planning and Development (MoFPED) but those for Sub-Counties are not included. With DDEG directly being transferred to Sub-Counties, Sub-County level accountability through budgeting and financial management obviously requires more attention.

Some of the Districts of West Nile have planned measures to address refugee impacts and implemented them through the annual budget. Hiring of temporary education and health staff, councilors' awareness raising for refugees, dialogue and cultural activities between refugees and host populations, awareness raising for environmental protection are examples of such activities reported by the Districts.⁸ The Districts are currently exploring methodologies for reflecting refugee responses in the District Plan; implementation of refugee-related measures through the annual budget may be expected for the settlement-hosting Districts in the near future.

⁶ An interview with UNICEF (July 2017).

⁷ Program Appraisal Document: Intergovernmental Fiscal Transfers Program (June 6, 2017).

⁸ "The Role of Districts in Integrated Refugee Management: Experiences from the Refugee Hosting Districts of Uganda," presented by Kamwenge District CAO and Yumbe District CAO at the JICA-UNDP Side Event of the Uganda Solidarity Summit on Refugees (22 June 2017).

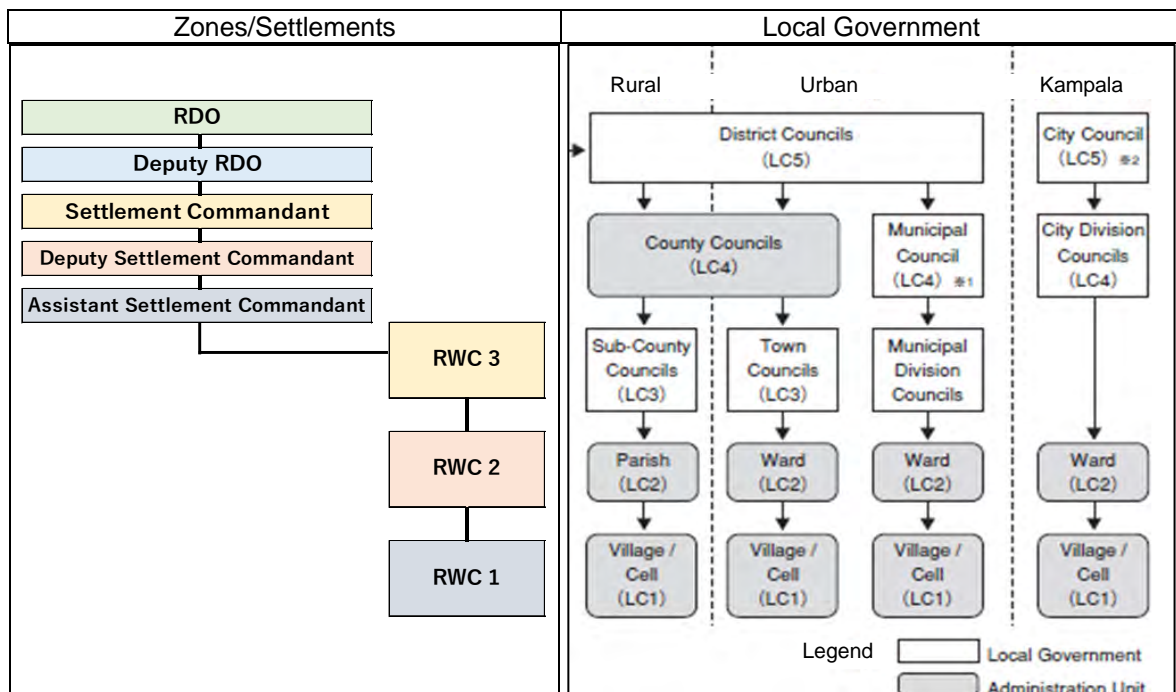
CHAPTER 5 BASIC SOCIAL INFORMATION OF THE REFUGEES AND HOST COMMUNITIES

5.1 Overview of the Zones/Settlements

5.1.1 Administration Mechanism in the Zones/Settlements

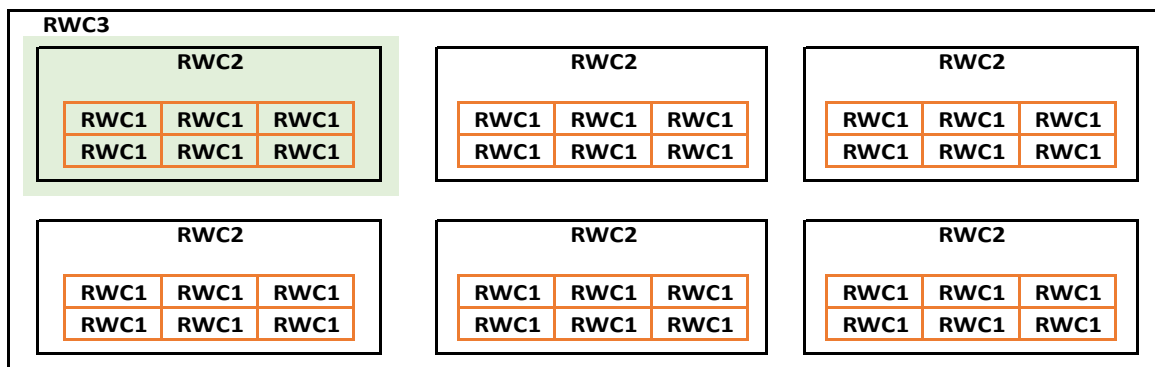
(1) Refugee Welfare Councils

Along with the decentralization since early 1990's, local governments are founded at District and Sub-County (SC) levels, which are called Local Council (LC) 5 and LC3 respectively. Under LC 3, there are two layers of administration unit: Parish and Village referred as LC2 and LC1 accordingly. By corresponding this LC system, Refugee Welfare Councils (RWC)s were established in the Zones/Settlements: namely RWC3, RWC2, and RWC1. The RWCs are equivalent to LC 1 to 3 in terms of the hierarchic structure but fall beyond the jurisdiction of the LC System. (Figure 5.1-1, Figure 5.1-2)



Source: Structure of the Zones/Settlements was prepared the Study Team. For the yellow line, See Figure 5 4. Structure of the LC are cited from JICA, 2007, *Decentralization and Service Delivery in Africa*, p.175.

Figure 5.1-1 the Zones/Settlements and LCs



Source: Prepared by the JST based on information collected from RDOs of Aduamani and Arua

Figure 5.1-2 Structure of RWC

As described in Chapter 4, the different term has been used for the refugee residing areas: it is called settlement in Adjumani District, and zone in the rest of 4 host Districts. Subsequently, a different term is given to each level of RWC as summarised in the following table.

Table 5.1-1 LC and RWC

Level of LC	Level of RWC	Arua, Yumbe, Koboko, Moyo*	Adjumani
LC 3 / Sub-County	RWC 3	Settlement	All Settlements
LC 2 / Parish	RWC 2	Zone	Settlement
LC 1 / Village	RWC 1	Village	Block

Source: Compiled by the Study Team based on the interview with RDO of Adjumani and Arua

* Palorinya in Moyo District has RWC 1 and 2 only at the time of the study, RWC3 to be founded around 2018 February.

5.1.2 Administration within the Zones/Settlements: RWC

<p>Member of the RWC</p> <ol style="list-style-type: none"> i. Chairperson ii. Vice Chairperson iii. General Secretary iv. Secretary for Security v. Secretary for Persons with Special Needs vi. Secretary for Women Affairs vii. Secretary for Environment viii. Secretary for Education ix. Secretary for Youth & Sports x. Secretary for Finance <p>Source: Prepared by the JST based on information collected from RDOs of Adjumani and Arua</p>

Functions of RWC are to arbitrate the dispute among refugees and between the refugees and host community and to coordinate with the relevant LCs. All the RWC members are not paid but volunteers, for two years for one term. The RWC members are either elected or nominated by a Chair of RWC 3 from a member of RWC1 and RWC 2 under the supervision of OPM.

To be eligible for the position at RWC, one must be able to a.) read and write, b.) complete primary education: grade eight (8) in South Sudan or Grade Seven (7) in Uganda.

Other grassroots organizations could be found in the Zones/Settlements are traditional leaders called Local Court Leaders and Clan, persons working for social sectors: Water and Sanitation, Child Protection, Gender-based Violence, and cultural activities.

5.1.3 Management of the Z/S by OPM

Refugee Desk Officers (RDO) sent by OPM supervise the RWCs (See 4.2 for the detail). RWC 3 chairperson reports Assistant Settlement Commandant after receiving the report from the RWC2. UN agencies and NGOs that provide social services in the Z/S are not involved in the management of Z/S.

5.1.4 Provision of Social Services in the Zones/Settlements

As the Refugee Act 2006 stipulates, response to the refugee influxes is handled by OPM, or the Department of Refugees (DOR) specifically. DOR and UNHCR lead refugee response in close coordination with sector line ministries, departments, and authorities (MDAs), other UN agencies and NGOs.

Social services available in the Zones/Settlements are health, education, water and sanitation and community services along with the distribution of items such as food and non-food items. Some NGOs have been providing items meant for livelihood improvement: seeds, agricultural tools and livestock.

UN agencies and NGOs have set up the sector-wise coordination meeting to share the information and its plan and to avoid duplication of the assistance. See Chapter 6 Roads and Small Bridges, Health Chapter 7 Health, Chapter 8 Education, and Chapter 9 Water and Sanitation for

sector-specific information. In refugee response, UN agencies and NGOs work with UNHCR through the following two arrangements, which is common whenever UNHCR operates, but not limited to Uganda’s case.

Table 5.1-2 Partnership with UNHCR

Title	Description
Implementing Partner (IP)	Organizations enter into Project Partnership Agreement (PPA) with UNHCR to implement sub-project of UNHCR with UNHCR fund. Ex) NGOs, Non-profit Organization, Local Governments, UN agencies
Operational Partner (OP)	Organizations make a blanket or regional Memorandums of Understanding (MoU) with UNHCR and sign Letters of Understanding (LoU) in specific country/area for collaborative refugee assistance by own funds. Most of the OPs are UN agencies and international NGOs. Ex) WFP (food distribution); FAO (food security), WHO (health); UNFPA (reproductive health, gender-based violence); UNICEF (child protection); ILO (microfinance, vocational training); UNDP (post conflict reconciliation, recovery from conflicts)

Source: Compiled by the Study Team based on the following documents: UNHCR, Partnership: An Operations Management Handbook for UNHCR’s Partners, 2003, UNHCR Emergency Handbook, The Office of Internal Oversight Services (OIOS), Audit of UNHCR’s relationship with implementing partners, 2010.

JICA has been an active partner of UNHCR since 1999 when an agreement was made between the two in which JICA could closely coordinate with UNHCR across the globe. The major areas of the partnership are as follows: support for the repatriation and reintegration, prolonged refugee situations, integration in the host country, post-conflict recovery, community development, peacebuilding, and urban refugees.

Uganda has been accepting refugees and asylum seekers from the conflict-affected countries since 1959 even before achieving its independence in 1962. Uganda’s refugee laws are widely recognised as among “the most progressive in the world” under which refugees and asylum seekers can access to social services not only those in the Z/S but those meant for the Ugandan as well. In the early years, host community and the Z/S had a separate social services system. In 1999, it was decided that two flows of the systems should be integrated into one in order to minimise the gap and allow the Districts manage it easier. Since then, District of Arua, Moyo, and Adjuamani has been providing these services for both nationals and refugees. Although local governments are expected to deliver basic services to refugees and host communities alike, Region do not have sufficient financial and technical capacity to deliver the social services to the increased populations after the sudden and massive influx in July 2016.

The 2006 Refugees Act and the 2010 Refugees Regulations have entitled refugees to the right to work, freedom of movement, and availability of Ugandan social services, including access to documents such as Refugee Identity Cards as well as birth, death, marriage, and education certificates.

Refugees residing in Z/S have access to land (without ownership) for cultivation or pasture that is arranged by OPM but do not have the right to sell or lease the land. This restraint applies all the foreigner in Uganda, however, seems not well known to both the refugees and the Ugandan as the social survey in the host community and Z/S reveal (See “5.3 Basic Social Information Survey”). At the same time, refugees are not allowed to engage in any political activities within Uganda, whether at local or national level. Refugees also shall not undertake any political activities within Uganda against any country, including his or her country of origin. (the 2006 Refugees Act, Article 35)

5.2 Basic Social Information of the Districts and Sub-Counties

Socio-economic statistics are available in the following resources:

- UBOS’ National Population and Housing Census 2014;

- the District Development Plan (DDP) II (2015/16 – 2019/20); and
- the District Local Government Statistical Abstract (prepared in 2009, 2012 and 2013 depending on the Districts).

Relevant data extracted from these documents are presented in: Annex d-5-1 (Basic Socio-Economic Data of the 5 Districts and the Settlement-Hosting Sub-Counties of West Nile). It should be noted that the types of data presented in the DDP II and Statistical Abstract vary depending on the Districts, which compromises their utility for cross-District or Sub-County comparison.

5.3 Basic Social Information Survey

The Basic Social Information Survey aims at collecting qualitative information of the host communities and the Zones/Settlements (Z/S) in order to supplement statistical data such as that of UBOS for the comprehensive analysis of the host communities and the Z/S.

5.3.1 Items Surveyed

The below table presents items surveyed as the basic social information through an interview using a questionnaire.

Item	Host Communities	the Zones/Settlements
Interviewee	Sub-County Chief and/ or Parish Chief	- Commandant (OPM) - RWC
1 Population		
Population: by sex, age group	●	●
Ethnicity	●	●
Language: Mother and no-mother tongue	●	●
Literacy	●	●
Head of a Household by sex	●	●
2 Livelihood		
Major means of livelihood: Agri and non-agri	●	●
Income by resource	●	●
Seasonal income	●	●
3 Land & Asset		
Land: Ownership, Use and size	●	●
Land issues: associated with construction of Z/S if any	●	●
Financing institution: type, access from refugees, purpose	●	●
4 Resource		
Human: Skill/technical personnel	●	●
Material: eg. livestock	●	●
Communication: Radio, cell phone	●	●
5 Z/S		
Further influx of refugees	●	●
New Z/S Plan	●	●
Donors, IPs, OPs	●	●
6 Communal function		
Communal function/ community-based organization, Self-support activities	●	●
Mechanism: decision making, conflict resolution & prevention	●	●
7 S/Z and host communities		
Place/opportunity both encounter	●	●
Perception	●	●

5.3.2 Summary of the Outcomes

The findings from the interviews were summarised in the following tables.

(1) Population

	Item	Host Communities (Sub-Counties)	the Zones/Settlements
1-1	Population:	<ul style="list-style-type: none"> - See Annex 5-2 - The number of the refugee is increasing by birth and by new arrivals. 	<ul style="list-style-type: none"> - See Annex 5-2 for the population by Z/S - The number of the refugee is increasing though the rate has slowed down
1-2	Population: by sex, age group	<ul style="list-style-type: none"> - Data not available 	<ul style="list-style-type: none"> - More women and children than men. Eg. Ayilo: Total number of the Refugee 33,306. Children -64%, Women-25%, Men-11%
1-3	Resident Status	<ul style="list-style-type: none"> - Influx in the past: in 1944, 1996, 2012, 2014, and 2015 - Refugees entered 1990's married to Ugandan: some come to Uganda counting on relatives from such marriage. - Self-settlers are found areas near the border 	<ul style="list-style-type: none"> - Refugees are registered. - They are settled on arrival and with their family, but not on family lines, and ethnic group. - The earlier arrival of the South Sudanese was on 1999 - Some ethnic groups are settled separately like Dinka and the Nuer those conflict each other in South Sudan
1-4	Ethnicity	<ul style="list-style-type: none"> - Madi, Lugbara, Kuku, Gimara, Aringa, Kakwa, Alur, Acholi, Reli, Baganda. - Ratio and number vary depending on the Sub-Counties 	<ul style="list-style-type: none"> - Dinka, Nuer, Kakwa, Madi, Acholi, Tokpoza, Zande, Murule - In some zones, Dinka forms a majority as their hometowns (Bor, Juba and Marakal) was affected by conflicts. - Boroli Zone: there are 42 tribes/ethnic groups: the large majority is Madi - The ethnic group found both in Uganda and the refugees: Madi, Kuku, Acholi - Lobule Settlement: all the refugees are Kakwa from DRC.
1-5	Language	<ul style="list-style-type: none"> - Mother tongue: correspond to ethnic group. 	<ul style="list-style-type: none"> - Correspond to ethnic group: Some speak English, Arabic, French and Swahili - Cannot communicate with the Ugandan at health centres and schools as the refugees speak mother tongue or Arabic - Partners* have hired translators for the refugees at health facilities and assistants at educational facilities.
1-6	Literacy/literacy rate	<ul style="list-style-type: none"> - Literacy rate varies depending on the Sub-Counties and the language. - Male has a higher rate than female as many girls drop out from the school between P4 and P6 - The youth has a higher literacy rate than the elderly. - After the implementation of free education policies and adult literacy education programme, literary in the mother tongues has been increasing. - Literacy of other language tends to be low. Occasionally, high in English as it is used in the secondary schools. - No relation to the ethnicity though that of the majority ethnic group influences the rate. 	<ul style="list-style-type: none"> - Literacy rate varies depending on the Z/S. - English literacy rate is higher in the youth and the lower in adults. - Those near to the Ugandan border send their youth to Ugandan school, who has the higher rate than others. - No relation to the ethnicity though that of the majority ethnic group influences the rate. - Refugees staying since 1990 can communicate with Ugandan in their language such as Madi.

	Item	Host Communities (Sub-Counties)	the Zones/Settlements
1-7	Household Head (HH)	<ul style="list-style-type: none"> - Male HH is mostly common - The ratio of female HH vary, being a widow or from polygamy - Child HH arises from early marriage. Orphans or abandoned are taken care by the relative, so no child HH for these reasons. - No relation to the ethnicity though the situation is influenced by that of the majority ethnic group. 	<ul style="list-style-type: none"> - The majority is female HH because the husbands remain in South Sudan as combatants, the ratio varies among Z/S. e.g., Nyumanzi Zone shows 99%, others at 70%. - Most of the younger children who have no adult relatives are placed in foster homes. - OPM does not approve younger than 18 as HH. There are child HH ratio vary among Z/S, like 5%, 10%, 30% - In some Z/S, Dinka has more female HH than other groups, and more child HH found in Dinka and Nuer. - No relation to the ethnicity in general though the situation is influenced by that of the majority ethnic group in each Z/S.

(2) Livelihood

	Item	Host Communities	the Zones/Settlements
2-1	Livelihood	<ul style="list-style-type: none"> - Subsistence agriculture is the main source of livelihood, - Very few farmers practice commercial agriculture with crops such as cotton, tobacco, cassava, beans and maize - Other: fishery, livestock, hunting, trading of vegetable, mill, tailor, brick making 	<ul style="list-style-type: none"> - Food aid from WFP, which lasts for 5 years and then the refugees start feeding for themselves. - Homegrown vegetable with provided input: seed, tool, and livestock - Small business - Support from relatives - Agricultural programmes supporting the host communities and the refugees by 50:50 - Those who originate from especially the Equatorial region of South Sudan are agriculturalists. So, they also practice Kitchen gardens.
	Seasonal income	<ul style="list-style-type: none"> - Rainy season (April to October/November): Agriculture - Dry season (November and March): Brickmaking, construction material making, - Year-round: livestock 	<ul style="list-style-type: none"> - Rainy season (March/April to October/November): Agriculture, grass cutting for roof - Dry season (November and March): Production/produce buying
	Refugees' work/job	<ul style="list-style-type: none"> - Refugees are not allowed to join the civil service by law. Some do casual work - Many are employed by the partners 	<ul style="list-style-type: none"> - OPM encourages the refugees to work. OPM and partners employ translators for the health and education facilities mostly on a voluntary basis. - They are free to work with NGOs if they have the qualifications. To work with government, they need to process a work permit. - Their papers should be certified by the higher council of education under the Ministry of Education in Kampala. Due to cost to Kampala, little applies such process. - They would also need movement permits from OPM to work elsewhere apart from the settlement to avoid trouble.
2-2	Income amount	<ul style="list-style-type: none"> - The average monthly income is low because most of the people survive on subsistence agriculture, which leads to a low annual income. 	<ul style="list-style-type: none"> - The average income is very low for the refugees because there are no major economic activities
2-3	High-income season	<ul style="list-style-type: none"> - No particular information 	<ul style="list-style-type: none"> - November and December as harvest season

(3) Land and Asset

	Item	Host Communities	the Zones/Settlements
3-1	Land use of the refugees	<ul style="list-style-type: none"> - Some people from the host community sold land using land agreements drafted at LC II in the trading centres to the refugees without a certificate or title. And now their businesses are flourishing, the locals who sold the land to them have become jealous and they want their land back. 	<ul style="list-style-type: none"> - The land allocated by OPM is basically used for accommodation with backyard gardens for home consumption. - Refugees may temporarily obtain land for purposes of agriculture on an individual basis from the landlords. The rent is around 20,000UGX/year.
	Land ownership of the refugees	Not surveyed	<ul style="list-style-type: none"> - The land laws in Uganda do not allow the foreigners to own land; this includes the refugees. They can only rent including sub-rent or borrow land. - They can only own land if they get residential status in Uganda. - The Ugandans go ahead and sell their land to the refugees. But this trend is more prevalent in the urban settings. Both Ugandans and refugees are not aware of the law. And some Ugandan sells the land because of poverty.
3-2	Land issue between Ugandan and the refugees	<ul style="list-style-type: none"> - The only conflict has been around natural resources such as grass and poles for building houses and firewood. OPM, RWC and LC organised meetings and the issue was eventually solved. - Frequent community dialogues have prevented issues of land conflicts. - Both sides had an issue on grazing area of the livestock, but now a certain land is secured as pasture for both the Ugandans and the refugees to be commonly used. - Some members of the host community still have grudges that the refugees have taken their land for free. - Lobule Sub-County: The refugees have not bought land in SC but some are buying land in the municipal especially the refugees from South Sudan who are self-settled 	<ul style="list-style-type: none"> - Livestock owned by Ugandan destroyed the refugees' farm. Later, pasture area was marked for the Ugandans livestock. Stray animals destroy crops for both the refugees and the host communities. - The refugees have been given goats under the livelihood program of partners and they have also bought others, meaning that their herd of goats have increased. The refugees also look for material for the houses as the Ugandans do. OPM and partners organize dialogues to settle such issues amicably. - Some refugees misunderstood the use of the land for agricultural activities: when the harvest was poor on a hired land, he/she could use the land for another year as a compensation for the poor yield.
	Land issue related to construction of the Z/S ¹	<ul style="list-style-type: none"> - Pakele Sub-County: the land used for settling refugees in Boroli Settlement is still in court. That prevents the expansion of the settlement. - In some communities, the residents are saying that their generosity was not appreciated. The community thinks that the support given by UNHCR is not enough. - No compulsory land acquisition by OPM. - No challenge, rather people requested for the refugees to be brought here because they imagined that they would also benefit from the social services. 	<ul style="list-style-type: none"> - Communities are willing to give land for refugees to settle because they have seen elsewhere that settling refugees comes with improved social services such as health, education, roads etc. - The community has the feeling that there is brotherhood between the South Sudanese and them. - OPM is mandated to secure the land through negotiation, not compulsory land acquisition - At the beginning of the settlements, some landowners wanted compensation and were

¹ Arua District NGO Network (ADINGON) compiled "The Causes Of Conflicts between Host Community and Humanitarian Actors in Arua District". The findings suggest that the conflicts between the two sides occurs between OPM and the partners and OPM and the host community regarding construction of Z/S and the management of Z/S. Issues found are ①Illegal land acquisition procedure for settling refugees, ②Deceptive promise of Employment in refugee settlement, ③Exclusion and disregard for community concerns and forum, ④Destruction of cultural site, environment, homesteads and investments of host community, ⑤Inappropriate handling of previous conflicts, ⑥False Landlords, ⑦Land Grabbing, ⑧Unresolved Sub-County border conflict

	Item	Host Communities	the Zones/Settlements
			<p>refusing to give the land, but later when they were sensitized that there are no benefits, they agreed.</p> <ul style="list-style-type: none"> - High expectations by the host community in terms of personal benefits at family level such as jobs. - They do not appreciate the improvement in social services as being compensation. They expect monies for their own personal use.
3-3	Financing institution: type, access to refugees, purpose	<ul style="list-style-type: none"> - VSLA, the partners are encouraging joint groups of refugees and nationals. This is to improve on the integration of refugees & host communities. - Mobile money 	<ul style="list-style-type: none"> - VSLA for the Ugandans, for the refugees, and for the mix of the two. The partners are encouraging joint groups of refugees and nationals. - Mobile money - Post bank mobile banking used by WFP for cash for food.

(4) Resources

	Item	Host Communities	the Zones/Settlements
4-1	Human Resources	<ul style="list-style-type: none"> - Farmers, also teachers, social workers, translators, traders - Quite a few vocational training institutes though the need for it is quite high. - For those who came from Congo with some qualifications, there is also the language issue between French and English. 	<ul style="list-style-type: none"> - Farmers, also teachers, social workers, health workers, translators, traders, carpenters - Skill training for agriculture is available but no other. Going to vocational training institutes in host communities supported by NGOs. - Needs for vocational training is quite high. IPs give scholarships, but only a few refugees can take. This leaves the majority of the refugee youth idle.
4-2	Material resources	<ul style="list-style-type: none"> - Livestock: goats, cows, chicken, sheep, pigs 	<ul style="list-style-type: none"> - Livestock: goats, cows, chicken, sheep,
4-3	Means for communication	<ul style="list-style-type: none"> - Around half of the HH has a mobile phone, some have a smartphone, but a poor network. - Radio: listen to Ugandan programmes - TV: Ugandan programmes for news and music, satellite TV for football and news 	<ul style="list-style-type: none"> - Mobile phone, smartphone, TV, solar panel, - Use Ugandan mobile networks, but that of South Sudan can be used in some places - Radio: listen to South Sudan or Ugandan programmes for news and music - TV: Ugandan programmes for news and music, satellite TV for football and news

(5) Further Influx

	Item	Host Communities	the Zones/Settlements
5-1	Prospect	<ul style="list-style-type: none"> - The influx will continue due to hunger and war in South Sudan though the pace is slower. 	<ul style="list-style-type: none"> - The influx will continue due to hunger and war in South Sudan.
5-2	New settlements	<ul style="list-style-type: none"> - The existing capacity of settlements is to the maximum so the refugees are settled in the relatively new Z/S. - No plan for expansion or new construction. But this will be on condition that the host communities get services such as improved classroom blocks; improved health services including building new health centres for them at Parishes; improved road networks and livelihood support. 	<ul style="list-style-type: none"> - The existing capacity of settlements is to the maximum so the refugees are settled in the relatively new Z/S. The District local government is insisting that the population of refugees should not exceed that of the host community. - There is no immediate plan to open but possible.
5-3	Partners	<ul style="list-style-type: none"> - The District considers "Host community" 	<ul style="list-style-type: none"> - Vary depending on Z/S

	Item	Host Communities	the Zones/Settlements
		<p>as the whole District. This affects the support to the SC development plans, especially the SCs who have more stress of the refugee influx.</p> <ul style="list-style-type: none"> - Livelihood projects by development partners use the 50/50 distribution ratios for refugees and nationals. - During the period for budget conferences, the partners all come to present their updates while Sub-County presents the development plan. Most of the partners use the 30/70 rule for allocating their resources. - HCs were improved under ReHope. All these should have been done by the District and Sub-County local government but the partners have helped. - The SC had a plan of integrating the partner plans into the DDP but the partners are not even sharing their plans. 	<ul style="list-style-type: none"> - LWF: school construction - Windle Trust, NRC, IRC, Welt Hunger Hilfe, Save the Children, War Child Canada, War Child Holland, AAR Japan: school construction and support for maintenance - Food for the Hungry, Bread the World: livelihood

(6) Communal function/activities

	Item	Host Communities	the Zones/Settlements
6-1	Communal function/ community-based organization , Self-support activities	<ul style="list-style-type: none"> - Communal works for clearing roads, cleaning around water points. - Celebrations of national days, religious days and marriages. - VSLA - Opening community road and planting under NGOs were participated by the Ugandan and the refugees. 	<ul style="list-style-type: none"> - Cultural day, national holiday of South Sudan and Uganda, and religious events for the refugees and the Ugandans. The whole refugee community and host community attends these functions. These activities are for building trust and for encouraging peace organised by OPM and partners. - Groups for dram, dance, football.
6-2	Mechanism: decision making, conflict resolution & prevention	<ul style="list-style-type: none"> - Decision making according to the LC system - Issues are discussed by LC, RWC and OPM if any 	<ul style="list-style-type: none"> - Decision making through the RWC system OPM assistant settlement commandants are also involved in the decision making at the settlements. - Small disagreements with the host community are usually handled on the spot by LCs and RWC with the support of OPM such that the issues do not escalate.

(7) Host Communities and the Zones/Settlements

	Item	Host Communities	the Zones/Settlements
4-1	Occasions both see/talk/work each other	<ul style="list-style-type: none"> - IPs usually organize meetings and community dialogues. - The LCs and RWCs sit together to manage some issues when necessary. - No special mechanism apart from budget conferences where executives of the RWC are at times invited. - The Dinka at one time wanted to start a separate market for them alone. This was not in the plan of the Sub-County. Both the Sub-County and OPM intervened in the situation and there is now only one market which is shared with both refugees and host community. - The collective activities are livelihood 	<ul style="list-style-type: none"> - Dialogue meetings organized between refugees and host communities by partners and radio stations. These dialogues are used to raise issues affecting both sides and also for sensitization on various issues. OPM and partners guide the discussions. - No occasion to talk apart from issues such as stray animals destroying crops on either side; conflicts over resources like water, grazing land and building materials. - Mungula Zone: In a primary school, 2 children – one from refugee and one from host community, collided at a water point. Their parents joined the fight which later drew both refugee and host community to

	Item	Host Communities	the Zones/Settlements
		<p>activities supported by partners. Otherwise, refugees do not participate in local planning meetings.</p> <p>- There was a community road which was opened by the community. But because this was a shortcut to the settlement, UNHCR promised to maintain this road if the community allows the UNHCR trucks to use it as the shortcut. After the agreement, UNHCR has not maintained the road even when the road is now in a bad state so the community decided to block the road and stop UNHCR trucks from using the road.</p>	<p>the fight. The assistant settlement commandant had to bring in police and Sub-County to quell the situation.</p>
4-2	Perception towards each other	- No specific answer	- No specific answer

5.4 Radio Programme Survey

Radio programmes are widely used to disseminate information in Northern Uganda. Peacebuilding and co- coexistence of refugees and the host communities are popular topics in the programmes including talk shows by NGOs. Thus, the radio programme survey has been undertaken in order to obtain a perception of refugees and the host communities towards each other and their needs, which may provide a grand picture of the refugees- host communities relation.

Table 5.4-1 Radio Station by District

District	# of radio stations based in the District
Adjumani	4
Arua	4
Koboko	1
Moyo	2
Yumbe	0
Total	11

A total eleven (11) radio stations are found in the 5 host Districts in West Nile. Its coverage area reaches to neighboring Districts.

The following are topics related to the refugees and host community aired in the programmes.

(See Annex d-5-2 for the detail of the radio programme.)

- Co- coexistence of refugees and the host community with cooperation
- the right of refugees child for education
- Lectures by religious leaders on peacebuilding in South Sudan
- Tips on health, sanitation, agriculture and livelihood
- Call-in dialogue by refugees - host communities
- Report on any incidents: Serious incidents are referred to local leaders for action
- views from both refugees and host community on how to live together in harmony
- Peace building programs for South Sudanese by a station originally located in South Sudan currently evacuated in Uganda
- Public announcement on refugees related topics
- Debate between refugees - host communities including debates within schools to discuss how the refugee youth and host community youth can co-exist
- Talk shows by NGOs to discuss various issues affecting refugees and host communities such as Child protection; Health; Water and sanitation; Education; Livelihood and Peaceful coexistence.
- Peace building for South Sudan; reconciliation programs: can only be listened to on a special radio set which is given by the radio station. So far, the radio station has given out 5,000 radio sets to refugee leaders such as the RWCs and the other opinion leaders. 10,000 more radio sets to be given to refugee leaders.

CHAPTER 6 SOCIAL INFRASTRUCTURE SURVEY: ROADS AND SMALL-SCALE BRIDGES

6.1 Current Situations and Issues

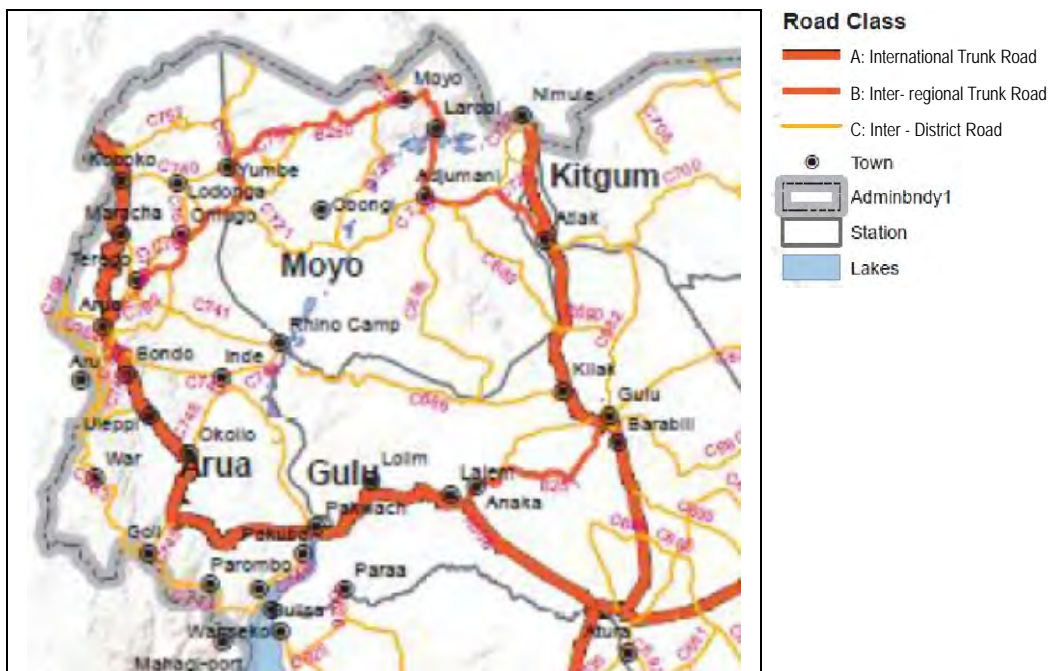
6.1.1 Road Situation and Challenges in Uganda

Current situation and challenges in the road sector of Uganda in general are as follows:

- ✓ Low percentage of upgraded roads in comparison with neighboring countries
Uganda: 3.5% (Paved Road 5,100km, Unpaved Road 139,700km) Other Countries: Kenya 7.0%, Tanzania 8.2%, Rwanda 19.0%
(Source: National Road Infrastructure Development Programme, Uganda National Road Authority: UNRA, July 2017)
- ✓ Small budget for the road maintenance from Uganda Road Fund: URF
FY2017/18 Maintenance Budget for UNRA: 274 billion UGX (77 million USD, 1UGX=0.00028USD) In fact, UNRA recognizes the total amount of 554 billion UGX are required for maintenance budget.
(Source: National Road Infrastructure Development Programme, UNRA, July 2017)
- ✓ Budget for the new road construction from the government is limited
New Road Construction budget in UNRA FY 2017/18: 3,518 billion UGX (985 million USD, 1UGX=0.00028USD)
Budget Details: Grant 1,546 billion UGX, Donor funding 1,971 billion UGX
UNRA recognizes that 700 billion UGX is insufficient for the new road construction budget
(Source: National Road Infrastructure Development Programme, UNRA, July 2017)

In view of the current situation mentioned above, challenges are described below, all of which are relevant to the West Nile Sub-Region.

1. Upgrading roads from unpaved to paved is crucial; urgent tasks
2. New financial resources for maintenance of existing roads are required
3. New financial resources for new road construction are also required



Source: UNRA Corporate Strategic Plan 2017-2022

Figure 6.1-1 National Road Network in West Nile Sub-Region

6.1.2 Road Situation and Challenges In/Outside of Settlements

Road maintenance of in/outside of settlements are shown in Table 6.1-1.

Table 6.1-1 Maintenance of Roads In and Outside of Settlements

Inside of Settlement	Chief Administrator:	United Nations High Commissioner for Refugees: UNHCR
	Maintenance and Financial Resources:	Covered by UNHCR
	Maintenance Method:	- Outsourcing to the local contractor from IP - In the case of Sub-Office Pakele and Arua, IP is African Initiatives for Relief and Development: AIRD
	Maintenance Items:	- Road surface grader shaping (1 or 2 times per year) - Repairing of pot holes and ruts (Regularly)
	Source:	An interview with UNHCR Sub-Office Pakele and Arua November, 2017
Outside of Settlement	Chief Administrator:	UNRA: National roads connecting to the settlements District: District roads and community roads connecting to the settlements
	Maintenance and Financial Resources:	Covered by URF

- ✓ Regardless of types of the road, national, District or community, and/or the level of damages, road damages have been observed were caused by big and heavy UNHCR vehicles. Observed damages are namely cross sectioned drain pipes, ruts and pot holes.
- ✓ The damages worsen when the rainy season begins. That caused flooding or becoming like swamp from the puddle, for instance, the road becomes not conducive for driving,
- ✓ Each District has a limited budget which cannot cover the road maintenance.
- ✓ Current poor road condition will increase dissatisfaction from the people who live along the road. It has a possibility that those people have negative feeling towards UNHCR's big and heavy vehicles.

The newspaper article below shows the case that local people in Yumbe gave a road closing notice to UNHCR due to the deterioration of the road caused by their vehicles.

Newspaper: Radio Pacis (2017, Nov. 16)
Place: Yumbe District, Romogi SC
Road Type: Community road (Yumbe – Barakara)
Settlements: Bidibidi Settlement Zone 1
Road Condition: Damaged the drainage due to UNHCR's heavy truck passing
Requirement from the Local People: Requested the repair of Yumbe-Barakara community road connecting to the settlements damaged by UNHCR trucks



Source: Radio Pacis (2017, Nov. 16)

Photo 6.1-1 Drainage Situation of the Road

- ✓ Roads inside settlements: Though there are exceptions on the road surface in parts, road condition is generally good overall because road construction and its maintenance is implemented regularly by UNHCR and IPs.
- ✓ Roads outside settlements: As mentioned above, road condition is bad in general. These dilapidated roads not only worsen the condition of the local people but also affects UNHCR's initiative to transport goods and supplies to the refugees. Therefore, some cases are observed that on behalf of UNRA and each District responsible of roads outside settlements, UNHCR repairs damaged roads

connecting to the settlements.

6.1.3 Consideration on Construction of Roads and Small Scale-Bridges Sector

The following are considered in the construction of roads and small scale-bridges sector:

- Formulation of construction schedule in consideration of the rainy season
- Procurement of crushed stones and sands

(1) Formulation of Construction Schedule in Consideration of the Rainy Season

- ✓ Rainy season in the West Nile Sub-Region: From August to October. (Source: A Regional Climatographic of West Nile, Uganda, to Support Human Plague Modeling, July 2012)
- ✓ Annual average rainfall of Arua¹: 1,600mm per year. (Average from 2005 to 2015, Source: timeanddata.com) which shows slightly more amount of rainfall than Tokyo (1,440mm per year).

Table 6.1-2 shows the annual rainfall data in Arua.

Table 6.1-2 Annual Rainfall Data in Arua

Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Rainfall (mm/year)	38	64	108	114	158	141	166	206	182	207	136	79	1599

Note: Highted in yellow shows the rainy season

- ✓ Construction schedule shall be based on the consideration of annual work pause factor: 1.35 which is followed by JICA design integration manual supplement version. However, following constructions shall be avoided from rainy season and its schedule shall be reflected in the construction schedule.
 - The abutment and pier construction of the bridge
 - Asphalt pavement construction

(2) Procurement of Crushed Stones and Sands

The Following information describes where to procure the crushed stones and sands.

1) Procurement of Crushed Stones

There is no private crushed stone plant within this study area, though crushed stones are produced in the south part of Arua in West Nile Sub-Region. An alternative option is to transport the crushed stones from the South part of Arua although this will increase in redundant the procurement cost and the total construction cost. Therefore, the Study Team proposes to produce the crushed stones on the site in order to save for the construction cost. In fact, except along the river site, the target area of the Study is mountainous with around 1,000 meters where rock mountains are exposed beside the roads, quarry can be procured from construction area to save cost.

¹ the biggest city in the West Nile sub-region

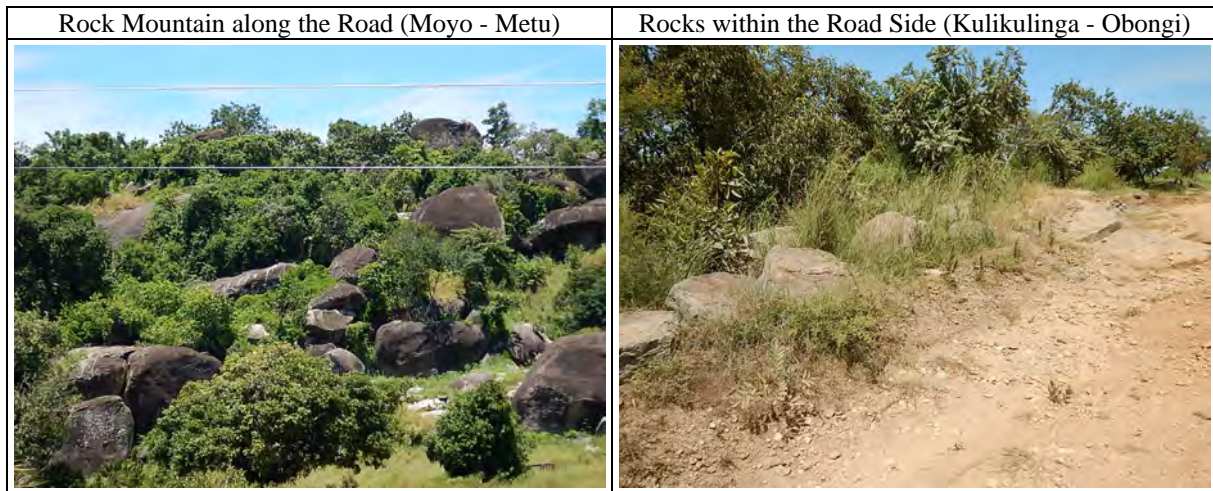


Photo 6.1-2 Mountainous Areas in West Nile Sub-Region

There are two approaches of providing rock mountains as follows: 1) orderers secure the mountain and provide it to the contractors and/or 2) providers secure the mountain by themselves. In the case of National road class A in which opened 2015, Vurra – Arua – Koboko – Oraba, Chinese contractor, CICO, negotiated with the land owner and secured the quarry collection area for the production of crushed stones. The area become a massive reservoir after the construction.

2) Procurement of Sands

A lot of small rivers flow in the mountainous areas in West Nile Sub-Region where river sands are accumulated. Photo 6.1-3 in the right shows the local people collecting the river sands while the left photo shows the cargo of those collected river sands.



Photo 6.1-3 Collection of River Sands

Production scale of collected river sands by the local people is limited but it can be expanded by means of using a construction equipment.

6.2 Assessment Methodology and Data

6.2.1 Assessment Methodology

(1) Identification of the Road Assessment

Roads for assessment were selected based on the following identification table and three references:

- ✓ Table 6.2-1: Identification of the roads
- ✓ Host District Resilience Requirements, distributed by Office of the Prime Minister: OPM at the Northern Uganda Donor Meeting on June 16 2017
- ✓ Strategic Implementation Plan 2015 published by Ministry of Works and Transport: MoWT
- ✓ Corporate Strategic Plan 2017 – 2022 published by UNRA.

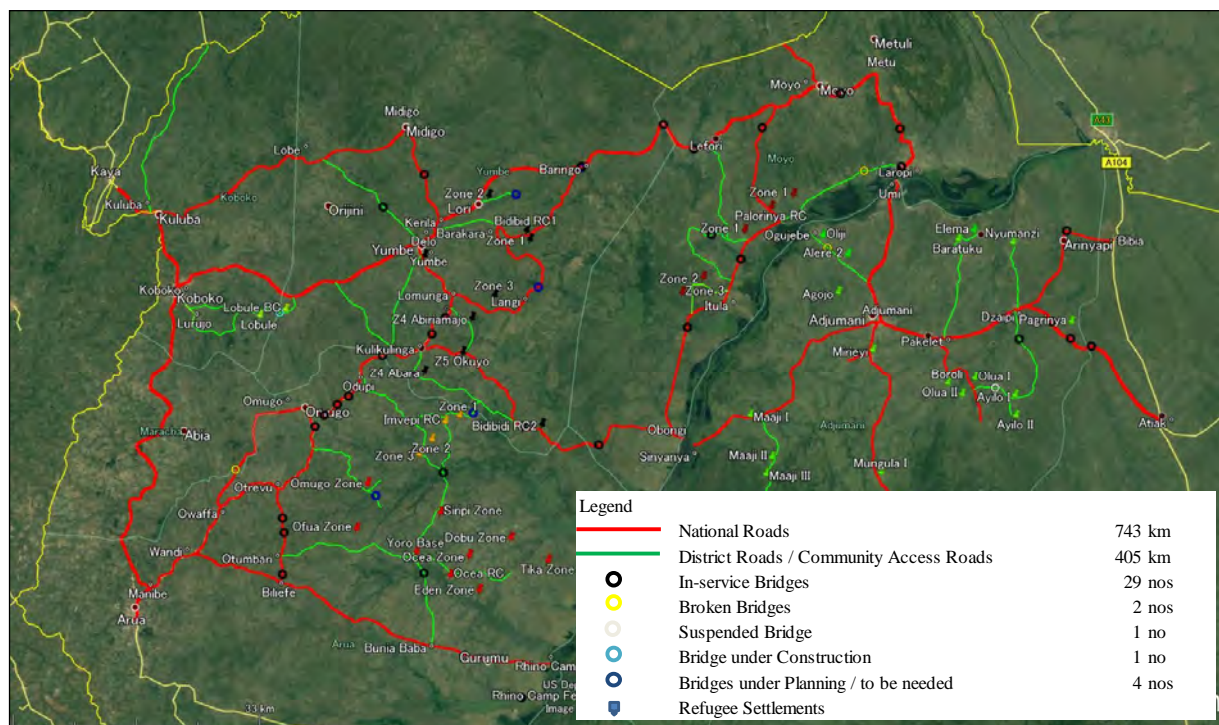
Table 6.2-1 Identification of the Roads

Assessment Road	Selection Approach
National Road (5 Districts in West Nile)	Class A: International Trunk Road / B: Inter- regional Trunk Road
	Class C: Inter- District Road connecting to host communities/ settlements and locally important roads for transportation
Dist. Roads / Community Roads	Roads connecting host communities/ settlements to the national roads

In addition to above identification table and references, District officials’ inputs at Arua Workshop, held on October 31 2017, were also considered for the identification of the roads for the assessment.

(2) Survey Map

Based on the identified roads for the assessment, the survey map is shown in Figure 6.2-1.



Source: The Study Team

Figure 6.2-1 Survey Map

(3) Methodology

Roads survey was conducted based on two approaches: 1) road condition and 2) Need for pavement upgrading. Road condition is judged by the visual rating; it shall be rehabilitated when it is rated as “poor” and/or “bad”. On the other hand, pavement upgrading needs are assessed in the light of both literature review and field survey.

Table 6.2-2 Focus of the Assessment and Methodology

Focus of the Assessment	Method	Criteria for Listing
Road Condition	Visual Rating	Roads rated “Poor” and “Bad” to be rehabilitated
Pavement Upgrading Needs	Literature Review	Roads of committed projects and/or matching project in SIP
	Filed Survey	Roads of high potentials of inter regional logistics (connecting with ferry)

1) Assessment of Road Condition

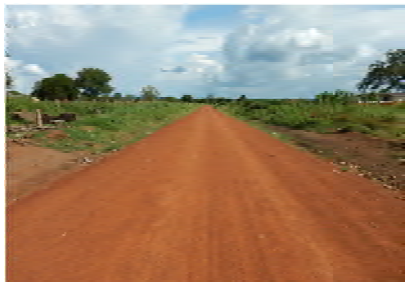



Criteria rating for the road condition by visual rating is described in Table 6.2-3. There are five rating: “Very Good” as no distress or excellent surface condition and ride; “Good” as good pavement crown and good drainage, “Fair” as good crown (75-150 mm), “Poor” as little or no roadway crown (< 75 mm) and “Bad” as no roadway crown or road is bowl shaped with extensive ponding.

Table 6.2-3 Rating Criteria

	Visible Distress	General Condition/treatment Measures
Very Good	No distress. Excellent surface condition and ride.	New construction—or total reconstruction. Excellent drainage. Little or no maintenance needed.
Good	Good pavement crown, and good drainage. Slight corrugation and/or slight rutting in some areas. Dust under dry conditions.	Recently regraded. Good crown and drainage throughout. Adequate gravel for traffic. Routine grading and dust control may be needed.
Fair	Good crown (75-150 mm). Adequate ditches on more than 50% of the roadway. Some culvert cleaning needed. Moderate corrugation (25-50mm deep) over 10-25 % of the area. Moderate rutting, especially in wet weather. Occasional small potholes (<50mm deep).	Shows traffic effects. Regrading (reworking) necessary to maintain. Needs some ditch improvement and culvert maintenance. Some areas may need additional gravel.
Poor	Little or no roadway crown (< 75 mm). Adequate ditches on less than 50% of the roadway. Culverts partially filled with debris. Moderate to severe corrugation (>75mm deep) over 25% of area. Severe rutting (> 75 mm) in 10 to 25 % of roadway during wet weather. Moderate potholes (50-100 mm deep) over 10-25 % of area.	Travel at slow speeds (< 40 km/h) is required. Needs additional new aggregate. Major ditch construction and culvert maintenance also required.
Bad	No roadway crown or road is bowl shaped with extensive ponding. Little if any ditching. Filled or damaged culverts. Severe rutting (>75mm deep), over 25% of the area. Severe potholes (>100mm deep), over 25% of area. Many areas (over 25%) with little or no aggregate.	Travelling is difficult and road may be closed at times. Needs complete rebuilding and/or new culverts.

Source: Based on "Gravel PASER Manual", Wisconsin Transportation Information Center, 2002, slightly modified by the Survey Team.

Table 6.2-4 Rating Examples of Road Surface

Good		Fair	
	<ul style="list-style-type: none"> Good crown Slight rutting Slight corrugation Good ditch 		<ul style="list-style-type: none"> Good crown Moderate rutting Moderate corrugation Good ditch Small potholes
Poor		Bad	
	<ul style="list-style-type: none"> Little crown Moderate rutting Moderate potholes Traps water 		<ul style="list-style-type: none"> No crown Extensive ponding Severe rutting Severe potholes Very poor drainage

2) Upgrading Needs Assessment

All assessment roads except Vurra – Arua – Koboko – Oraba road (A: International Trunk Road) are in unpaved condition. Consideration of upgrading was done in the light of the transportation network in West Nile Sub-Region.

Table 6.2-5 Criteria for Up-grading Needs

Evaluation Approach	Approaching Objects	Remarks
Literature Review	Official recognitions	Is the upgrading officially recognized?
	Newspapers, etc.	Is the upgrading officially requested?
	Road categories	Is the road classified in class A? or class B?
Field Survey	Traffic Situation	Does the road contribute to the transportation network in West Nile in Sub-Region?
		Is the traffic volume of the road large?
		Does the road have potentialities being a main transportation road? (Connecting with a ferry service?)

See the following page for the flow of the data collection.

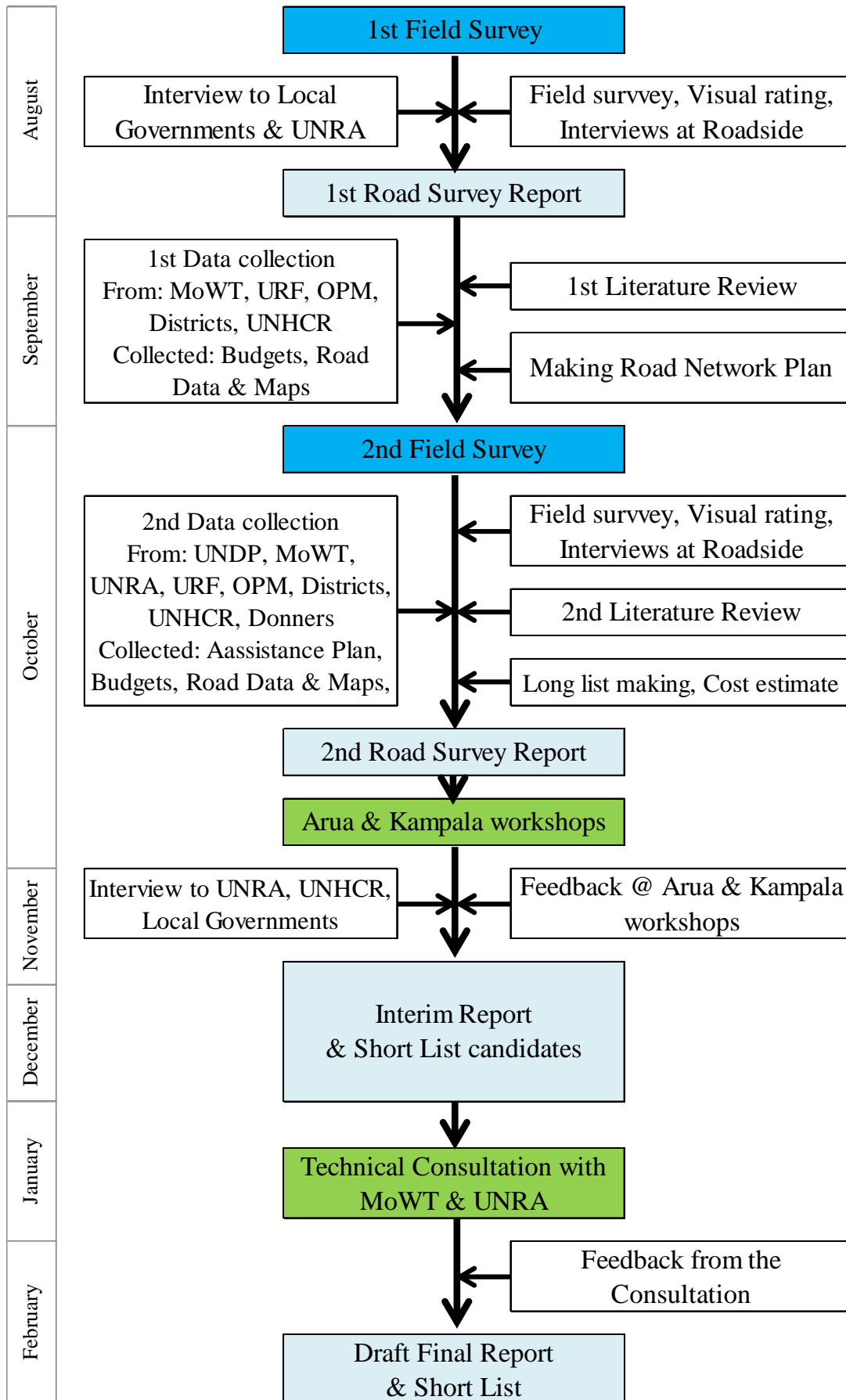


Figure 6.2-2 Flow of the Data Collection

6.2.2 Challenges

1) Poor Road Condition

The assessed roads in the 5 Districts in West Nile are being damaged rapidly due to poor maintenance caused by the shortage of the District budget and rapid increase in big and heavy transportation vehicles serving the refugee settlements.

Main causes of damages of the road surface are considered as follows:

- i. Deficient drainage function and facilities
- ii. Delay of appropriate maintenance (leave pot holes and/or ruts)
- iii. Inadequacy of the road structure itself (flooding the road surface during rainy season)

i) Deficient Drainage Function and Facilities

The following are observed during the survey:

- ✓ Deficiency of drainage facility: Closure of drainage, Undeveloped drain terminal
- ✓ Damage the drainage facility due to running heavy vehicles
- ✓ Retention of rain due to the shortage of appropriate crown

These deteriorations of the road condition derived from deficient drainage function and facilities are common in West Nile Sub-Region. For instance, road condition in West Nile Sub-Region will be improved drastically by maintaining the drainage facilities.

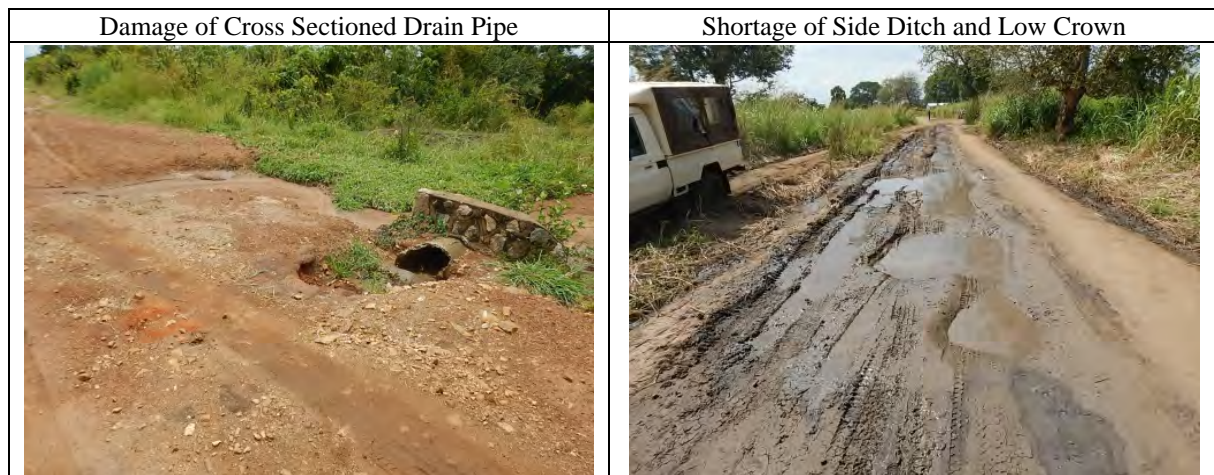


Photo 6.2-1 Cases for Insufficient of Drainage Facilities Maintenance

ii) Delay of Appropriate Maintenance (leave pot holes and/or ruts)

- ✓ Well maintained road surface by the grader shaping was observed during this survey.
- ✓ Another case was also observed that the swamped road condition by raining has been drastically improved after the repair.
- ✓ The road condition varied between the National road: Yumbe- Manibe whether the maintenance was done or not.

Above road situation explains the importance of frequent maintenance.

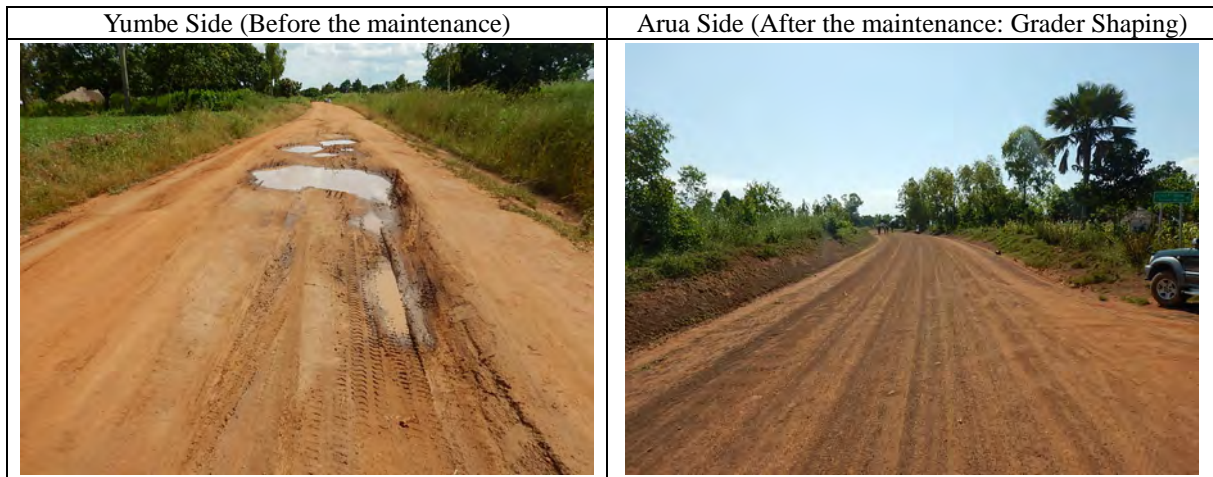


Photo 6.2-2 National Road Class B Yumbe – Manibe: Road Surface Differences Derived from the Maintenance

iii) Inadequacy of Road Structure Itself (flooding of the road surface during rainy season)

There are cases in which the roads become inaccessible due to the surface flooding. Although other segments of the road are passable, the road function is compromised if some parts cannot be accessed and is considered as entirely unpassable. These cases were observed in 1) Itula section of the national road in Moyo, Moyo – Obongi and 2) Ariwa section of the community road, Yumbe; Bidibidi Zone 4 Abara - Zone 5 Ariwa. In the case of Moyo – Obongi road, due to the flooding in Itula section, going to Obongi from Moyo side was closed and passengers who go to Obongi from Moyo are forced to take another route.

- ✓ The surface of these roads needs to be elevated and the height of the road surfaces must be higher than surrounding water surface
- ✓ The ditches on both sides of the road must be maintained including the cross sectioned drain pipes and drainage terminals



Photo 6.2-3 Flooding Situation Derived from the Deficiency of Road Surface Height

2) Necessity for Construction of New Bridges

There are some cases where people can hardly cross the river during rainy season due to lack of bridges on national roads in Yumbe and community roads in Arua. Without bridges, these roads do

not serve the function of facilitating logistics. Moreover, the movement between the settlement and host communities are limited to only one direction, which does not involve crossing the river. In other words, movement from both directions is not secured. In case of car accidents or disaster, transportation of people and supplies to and from the settlements and host communities is severely hampered. Therefore, it is crucial and urgent to build the bridges. Furthermore, the bridge construction on the community road which connects to the settlements in Adjumani have been pending which needs to be completed as soon as possible.

The following pictures show the situation of the rivers where bridges are required.


<p>Koro Bridge (National Road: Lomunga – Baraka, Yumbe)</p>	<p>Baringo Bridge (Tentative Name) (National Road: Baringo – Barakara, Yumbe)</p>
	
<p>Kena Road (Yumbe)</p>	<p>Yumbe – Arua District Boundary Bridge</p>
	
<p>Nara Bridge (Arua)</p>	<p>Olua 1 - Ayilo I Abandonment Bridge (Adjumani)</p>
	

Photo 6.2-4 Photos for the Required Bridges at the River Crossing Areas

6.3 Assessment Results (Priority Needs)

6.3.1 Assessment Results

(1) Unpaved Road Condition

List of Road condition assessment results by visual rating is shown in g Table 6.3-1. Results on the District and community access roads are described in Result 1 and the national roads in Result 2.

Table 6.3-1 -Survey Result 1-

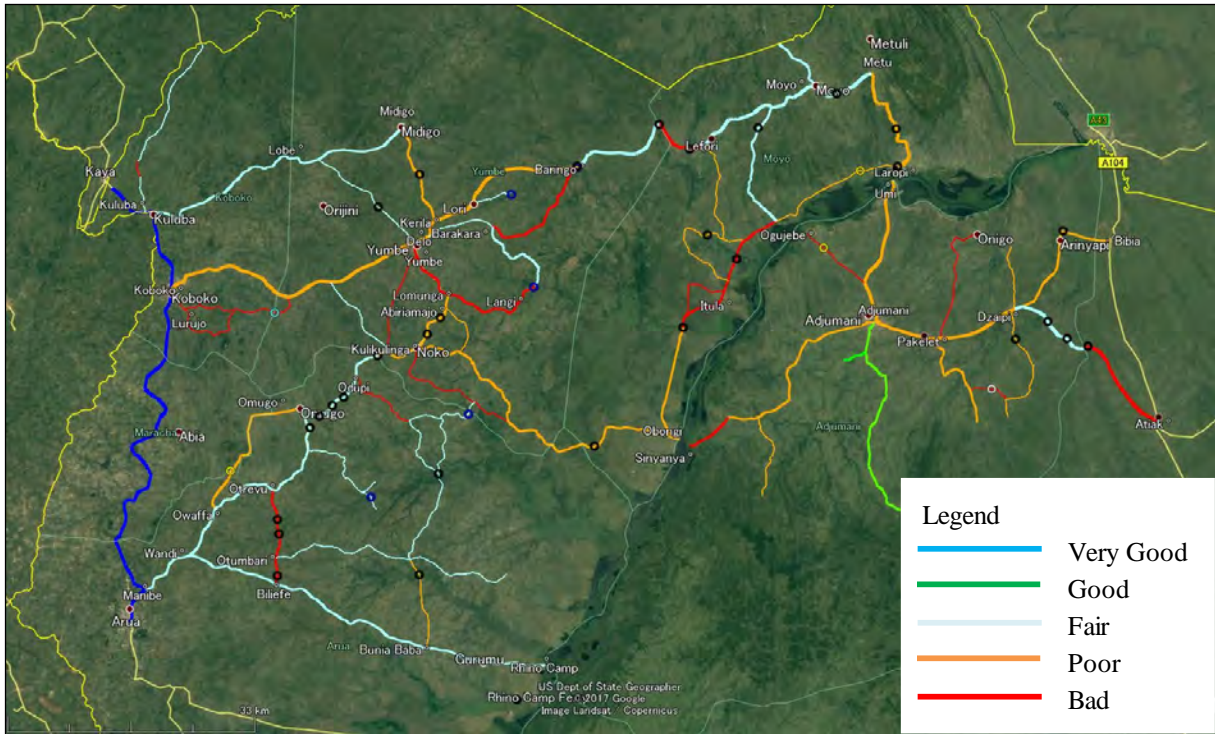
District	Road Name / Road Section	Existing Road			
		Length (km)	Width (m)	Road Surface	Condition
Adjumani	Maaji I - Maaji III	12	5.5	Gravel/Murrum	Poor
	Pakele - Elema - Baratuku - Onigo	17	6.0	ditto	Bad
	Dzaipi - Nyumanzi	9	5.5	ditto	Poor
	Olua I - Ayilo I	6	4.0	ditto	Bad
	Dzaipi - Aylo I - Aylo II	18	5.5	ditto	Poor
	Pachara - Allere 2 - Olijj - Ogujebe	10	7.0	ditto	Bad
Arua	Bunia Baba - Yoro base	12	4.5	Gravel/Murrum	Poor
	Yidu - Omugo Zone	14	8.0	ditto	Fair
	Omugo Zone - Nara Bridge - Ofua Zone	4	8.0	ditto	Fair
	Odupi - Lugbari	10	8.0	ditto	Bad
	Lugbari - Imvepi RC - Enwau Br	13	8.0	ditto	Fair
	Lugbari ~ Yoro base	22	8.0	ditto	Fair
	Yoro base - Ocea Zone	15	8.0	ditto	Fair
	Yoro base - Otumbari	19	7.0	ditto	Fair
Koboko	Lurujo - Lobule BC - Lodonga	17	4.0	Gravel/Murrum	Bad
	Keri - Busia	26	5.0	ditto	Fair & Bad
	Lurujo - Kudzia - Lobule	10	5.0	ditto	Bad
	Koboko - Lurujo - Lobule	15	5.0	ditto	Bad
Moyo	Laropi - Palorinya	19	3.0	Gravel/Murrum	Poor
	Lefori - Belameling	14	6.0	ditto	Poor
	Orinya - Kali	11	6.0	ditto	Poor
	Kali - Belameling	9	6.0	ditto	Poor
	Palorinya Zone 2 - Zone 3 Circular	9	6.0	ditto	Bad
Yumbe	Yumbe - Lobe	17	4.5	Gravel/Murrum	Fair
	Delo - Barakara	9	7.0	ditto	Fair
	Yunbe - Odravu	15	6.0	ditto	Fair
	Lodonga - Odravu	12	6.0	ditto	Bad
	Bidibidi Z4 Abara - Imvepi RC	7	6.0	ditto	Fair
	Kulikulinga - Bidibi Z4 Abara - Z5 Ariwa	19	8.0	ditto	Bad
	Abiriamajo - Bidibidi Z4 Abiramajo - Z5 Okuyo	8	6.0	ditto	Poor
	Lori - Bidibidi Z2	7	7.0	ditto	Fair
District / Community Access Roads Total (A)		405			

Table 6.3-2 -Survey Result 2-

Road Name / Road Section	Existing Road			
	Length (km)	Width (m)	Road Surface	Condition
Vurra – Arua – Koboko – Oraba Road	92	11.2	DBST	Very Good
Atiak – Adjumani – Moyo Road	92	7.0~9.0	Gravel/Murram	Fair ~ Bad
Koboko – Yumbe – Moyo Road	102	10.0	ditto	Fair ~ Bad
Adjumani - Sinyanya Road	35	4.0	ditto	Poor ~ Bad
Adjumani - Mungula II Road	25	7.5	ditto	Good
Adjumani Airfield Road	4	7.0	ditto	Good
Dzaipi - Bibia Road	20	5.5	ditto	Poor
Pakele - Olua I Road	19	6.5	ditto	Poor
Moyo - Obongi Road	53	7.0~9.0	ditto	Fair ~ Bad
Moyo - Afoji Road	9	5.5	ditto	Fair
Baringgo - Barakara Road	18	7.0	ditto	Bad
Lomunga - Langi - Koro Br Road	15	7.0	ditto	Bad
Koro Bridge - Barakara Road	13	7.0	ditto	Fair
Midigo - Kerila Road	13	5.5	ditto	Poor
Kuluba - Lobe - Midigo	38	5.0	ditto	Fair
Kulikulinga - Obongi Road	46	7.0	ditto	Poor
Yumbe - Manibe Road	77	7.0	ditto	Fair ~ Bad
Biliafe - Otrevu Road	13	6.0	ditto	Bad
Owaffa - Kubula - Omugo Road	22	6.0	ditto	Poor
Wandi - Bunia Baba - Rhino Camp Road	52	8.0	ditto	Fair
National (UNRA) Roads Total (B)	743			

Source: The Study Team

The results of the road condition assessment in both Result 1 and 2, are shown in Figure 6.3-1. The survey was done by visual rating.



Source: The Study Team

Figure 6.3-1 Road Condition Map

(2) Roads to be paved (Upgrading to Bitumen Standards)

Table 6.3-3 shows the assessment results on needs of upgrading from unpaved to paved. The red lines, Vurra–Arua–Koboko–Oraba Road, Atiak–Adjumani–Moyo Road, Koboko–Yumbe–Moyo Road, are the most important roads to be upgraded; the yellow line, Yumbe–Omugo–Manibe Road, the second most important, the light blue line, Kulikulinga–Obongi Road and Adjumani–Sinyanya Road, the third and the light green line, Wandi–Rhino Camp Road, in the fourth.

Table 6.3-3 Upgrading Needs Assessment

Lines	Roads	Length (km)	Survey Results Regarding Upgrading	Ferry Connection	Importance Rating	Supposed Upgrading
Bad	Vurra - Arua - Koboko - Oraba	92	Already upgraded & completed	-	—	DBST
	Atiak - Adjumani - Moyo	92	Committed project in SIP Atiak - Laropoi: EU Aid Laropi - Moyo: AfDB Aid	Laropi Ferry	1 ①	HMA
	Koboko - Yumbe - Moyo	102	Koboko - Yumbe: Matching Project in SIP Yumbe - Moyo: President's Pledge		② ③ ④	
Yellow	Yumbe - Omugo - Manibe	77	Matching in SIP	-	2 ②	HMA
Fair	Kulikulinga - Obongi	46	High potentiality being main trunk road	Obongi Ferry	3	HMA
	Adjumani - Sinyanya	35			④	HMA
Good	Wandi - Rhino Camp	52	Ferry is already stand-by, high potentiality being main trunk road	Rhino Camp Ferry	4 ⑤	DBST

Note: ①-⑤ shows the reasons of importance rating
SIP : Strategic Implementation Plan 2015-2023, Ministry of Works and Transport
HMA: Hot Mix Asphalt
DBST : Double Bituminous Surface Treatment

In regard to the decision of importance rating, below reasons are mentioned.

- ① Upgrades is committed by the national policy
- ② The importance of upgrades is recognized by the national policy (matching)
- ③ Roads mentioned its importance to be upgraded by the government though they are not recognized by the national policy (For example, president's pledge)
- ④ Trunk roads which connects to ferries
- ⑤ Roads which have high potentiality being main trunk roads near future

Transportation function does not work well if unpaved roads remain within the section. Therefore, Koboko – Yumbe section as ② and Yumbe – Moyo section as ③ ranked its importance as 1. Moyo – Afoji (Border to South Sudan) section is an exception. Though Moyo – Afoji section is ①, it is excluded from the rating due to a few traffic volume.

The Roads considered to be upgraded from unpaved to paved are shown in the following map.



Source: The Study Team

Figure 6.3-2 Roads to be paved (Upgrading to Bitumen Standards)

6.3.2 List of Priority Needs

(1) Criteria for the List

The roads that are in the list of priority needs are selected based on the following criteria.

Table 6.3-4 Criteria for the List

Criteria		Remarks		Reference
1	Road Conditions (Road Surface Rating)	Very Good	No need further investigation.	
		Good	To be routine-maintained.	
		Fair	ditto	
		Poor	Need further investigation.	Sec. 2.1-3
		Bad	These roads are to be included in Long List.	
2	Pavement Upgrading Needs (Gravel to Bitumen Standards Upgrading)	Roads to be paved	Important roads for the transportation in West Nile Sub-Region. These roads are to be Included in Long List regardless of the road surface rating result.	Sec. 2.2-2

Note: The roads that are highlighted in yellow are target roads, included in the list of priority needs.

(2) List of Priority Needs

List of priority needs are shown in Table 6.3-5. The District and community access roads are described in List 1 and the national roads are described in List 2.

Table 6.3-5 List 1: District / Community Access Roads

District	Road Name / Road Section	Project Outline		
		Length (km)	Construction Type	Road Surface
Adjumani	Maaji I - Maaji III	12	Rehabilitation	Gravel
	Pakele - Elema - Baratuku - Onigo	17	ditto	ditto
	Dzaipi - Nyumanzi	9	ditto	ditto
	Olua I - Ayilo I	6	ditto	ditto
	Dzaipi - Aylo I - Aylo II	18	ditto	ditto
	Pachara - Allere 2 - Olijj - Ogujebe	10	ditto	ditto
Arua	Bunia Baba - Yoro base	12	Rehabilitation	Gravel
	Nara Bridge		New Construction	
	Odupi - Lugbari	10	Rehabilitation	Gravel
Koboko	Lurujo - Lobule - Lodonga	17	Rehabilitation	Gravel
	Keri - Busia (middle section)	3	ditto	ditto
	Koboko - Lurujo - Lobule	15	ditto	ditto
Moyo	Laropi - Palorinya	19	Rehabilitation	Gravel
	Lefori - Belameling	14	ditto	ditto
	Orinya - Kali	11	ditto	ditto
	Kali - Belameling	9	ditto	ditto
	Palorinya Zone 2 - Zone 3 Circular	9	ditto	ditto
Yumbe	Kulikulinga - Bidibi Zone 4 Abara	14	Rehabilitation	Gravel
	Abiriamajo - Bidibidi Zone 4 Abiramajo	5	ditto	ditto
	Yumbe - Arua District Border Bridge		New Construction	
	Kena Bridge		New Construction	
District / Community Access Roads Total (A)		210		

Table 6.3-6 List 2: National Roads

Road Name / Road Section	Project Outline		
	Length (km)	Construction Type	Road Surface
Atiak – Adjumani – Moyo Road	92	Upgrading	HMA
Koboko – Yumbe – Moyo Road	102	ditto	ditto
Yumbe – Omugo – Manibe Road	77	ditto	ditto
Kulikulinga – Obongi Road	46	ditto	ditto
Adjumani – Sinyanya Road	35	ditto	ditto
Wandi – Bunia Baba – Rhino Camp Road	52	ditto	DBST
Dzaipi – Bibia Road	20	Rehabilitation	Gravel
Pakele – Olua I Road	19	ditto	ditto
Palorinya – Obongi Road	35	ditto	ditto
Baringo – Barakara Road	18	ditto	ditto
Baringo – Barakara Bridge		New Construction	
Lomunga – Langi	15	Rehabilitation	Gravel
Koro Bridge		New Construction	
Midigo – Kerila Road	13	ditto	Gravel
Biliafe – Otrevu Road	13	ditto	ditto
Owaffa – Kubula – Omugo Road	22	ditto	ditto
Laropi Ferry Enhancement		Enhancement	
Obongi Ferry Enhancement		ditto	
National (UNRA) Roads Total (B)	559		

Note: The roads that are highlighted in colors are included in the list because of the needs to be upgraded to Bitumen Standard.

Survey result of list of priority needs are shown in the following map.

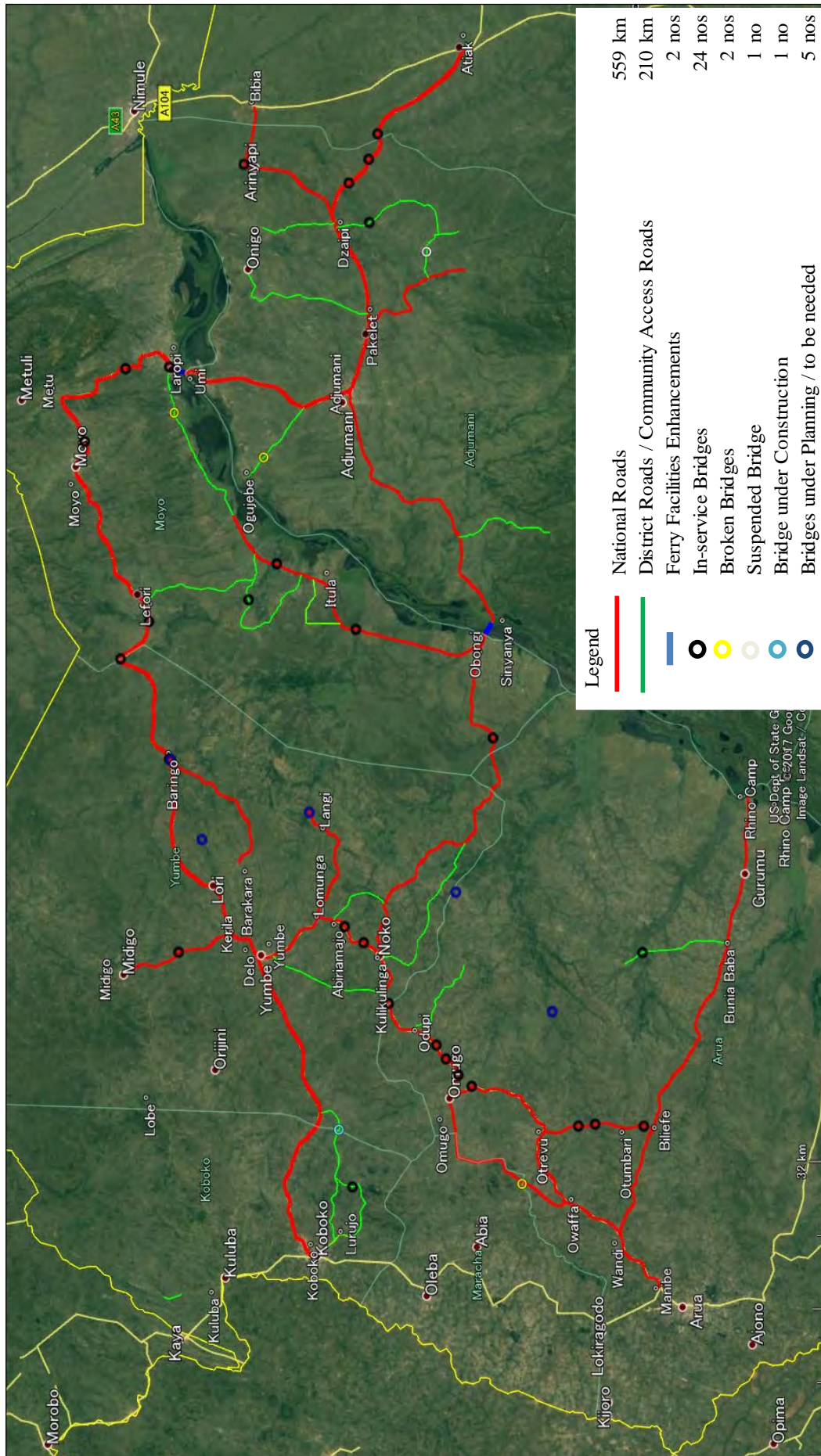


Figure 6.3-3 List of Priority Needs: Map

Source: The Study Team

6.4 Formulation of Priority Projects

6.4.1 Categorization of Priority Projects

Priority Projects are selected from the roads and small-scale bridges and are mentioned in the list of priority needs in 6.3.2. In the process of the selection, priority projects are carefully chosen in point of view not to be focused in particular Districts or regions. Selection was made based on the category shown in table 6.4-1.

Table 6.4-1 Categorization of Priority Projects

First Category	Second Category		Description
1 Priority Projects under Districts	1-1	Rehabilitation and improvement of unpaved roads	Districts and Community Roads mentioned in Table 6.3-5 in List 1
	1-2	Construction of new small-scale bridges	Small-scale Bridges mentioned in Table 6.3-5 in List 1
2 Priority Projects under Central Government	2-1	Rehabilitation and improvement of unpaved roads	National Roads mentioned in Table 6.3-6 in List 2
	2-2	Upgrading of roads	Upgrading Roads mentioned in Table 6.3-6 in List 2 Replacement of existing bridges are also included.
	2-3	Construction of new small-scale bridges	Small-scale Bridges mentioned in Table 6.3-6 List 2

6.4.2 Priority Projects under Districts

(1) Rehabilitation and Improvement of Unpaved Roads

One priority project from each District was selected from Table 6.3-5 in List 1. In the case of the District which has several candidate projects, selection was based on below criteria.

- Appropriate project scale as a Grant Aid through Procurement Agency
- Benefit to host communities and refugee settlements

Table 6.4-2 Rehabilitation and Improvement of Unpaved Districts and Community Roads

Profile. No	District	Name of Roads/Section	Reason of the Selection
RB-1	Adjumani	Dzaipi-Aylo I-Aylo II	<ul style="list-style-type: none"> ✓ Total population of Pakele SC includes Dzaipi SC and Aylo I and Aylo II occupy forty percent of District population (233,000). ✓ The number of refugees in those SCs occupy seventy percent of total number of refugees in Adjumani District (180,000). Therefore, RB-1 can impose a large benefit effect to host communities and refugee settlements.
RB-2	Arua	Bunia Baba-Yoro base and Odupi-Lugbari	<ul style="list-style-type: none"> ✓ Road condition of RB-2 in Arua District receiving Rhino Camp, Rhino Camp Extension and Imvepi has been deteriorated so the road condition so that its road condition prevents smoother traffic flow to the S/Z(s) and to host communities. Therefore, an urgent response is required.
RB-3	Koboko	Lurujo-Lobule-Lodonga and Koboko-Lurujo-Lobule	<ul style="list-style-type: none"> ✓ Road condition of RB-3 which connects to Lobule SC, only holding a refugee S/Z(s) within a District, has been deteriorated so the road condition so that its road condition prevents smoother traffic flow to the S/Z(s) and to host communities. Therefore, an urgent response is required.

Profile No	District	Name of Roads/Section	Reason of the Selection
RB-4	Moyo	Orinya – Kali, Kali – Belameling, and Palorynia Zone 2 - Zone 3 Circular	<ul style="list-style-type: none"> ✓ Itula SC accepts all refugees in Moyo where its population scale prevails 1.3 times bigger than District population. ✓ RB-4 is located in near refugee S/Z(s), its road condition is in bad condition as it occurs flood during rainy season. Therefore, an urgent response is required.
RB-5	Yumbe	Kulikulinga - Bidibidi Zone 4 Abara and Abiriamajo - Bidibidi Zone 4 Abiramajo	<ul style="list-style-type: none"> ✓ RB-5 in Yumbe District where it accepts world largest settlement, Bidibidi, is in bad condition as flood occurs during rainy season. ✓ Its road condition prevents smoother traffic flow to the S/Z(s) and to host communities. Therefore, an urgent response is required.

(2) Small-Scale Bridges

Priority Projects were selected from Table 6.3-5 in List 1. Priority Projects were selected from the several small-scale bridges from the combined 5 Districts of West Nile Region. Selection of respective bridges were carefully chosen based on below criteria.

- Appropriate project scale as a Grant Aid through Procurement Agency
- Benefit to host communities and refugee settlements
- Request from the District or UNHCR

Table 6.4-3 New Construction of Small-Scale Bridges Belong to District Roads/Community Roads

Profile No	Bridge	Location (District/SC)	Reason of the Selection
RB-6	Kena Bridge	Yumbe District Kochi SC	<ul style="list-style-type: none"> ✓ It is located near Bidibidi Zone 2 ✓ Access to Bidibidi Zone 2 is only one entrance as of now, it will be applicable to access two entrances after constructing Kena bridge ✓ A request has been made from UNHCR
	Yumbe/Arua District Border Bridge	District Border between Ariwa SC in Yumbe District and Odupi SC in Arua District	<ul style="list-style-type: none"> ✓ It is located between Imvepi settlement and Bidibidi settlement adjacent to Arua District, it will be created for refugees and host communities for a smoother transport of goods and supplies
	NaraBridge	Arua District Uriama SC	<ul style="list-style-type: none"> ✓ It is located between Rhino Camp Ofua Zone and Rhino Camp Extension in Aura District. ✓ It will be created for refugees and host communities a smoother transport and will be able to of goods and supplies ✓ A request has been made from UNHCR
	Olua I~Aylo I Connecting Bridge	SC between Pakele and Dzaipi in Adjumani District	<ul style="list-style-type: none"> ✓ It is located between Pakele and Dzaipi where seventy percent of refugees in Adjumani are located. ✓ Bridge Construction has been started by Adjumani District as it has been expected to smoothen the transport of people and goods for both SCs. ✓ However, it was abandoned during construction process. Therefore, a request of bridge completion has been made from Adjumani District.

6.4.3 Priority Projects under Central Government

(1) Rehabilitation and Improvement of unpaved Roads

Two projects are selected after consideration of national roads in 5 Districts in West Nile sub-region in table 6.3-6 in List 2. Selection of national roads were carefully chosen based on below criteria and organized by each District where national roads are located.

- Appropriate project scale as a Grant Aid through Procurement Agency
- Benefit to host communities and refugee settlements
- Road condition and its urgency

Table 6.4-4 Projects on Rehabilitation and Improvement of Unpaved National Roads

Profile No	Name of the National Roads/Section	Location (District/SC)	Reason of the Selection
RB-8	Moyo-Obongi Road (Class C) of Itula-Bridge Section (9km)	Moyo District Itula SC	<ul style="list-style-type: none"> ✓ RB-8 connects from Moyo District to Obongi where ferry platform exists. ✓ Though RB-8 is an important truck road (Class-C) for Moyo District, it does not function well because it has been for a long period due to flooding during rainy season. This caused trouble for transport of goods to the S/Z(s) and host communities. ✓ Also, UNHCR vehicles for the delivery of goods face the difficulty in transportation. ✓ Therefore, rehabilitation of the road and drainage facilities on this section are urgently required.
RB-9	Biliafe-Otrevu Road (Class C) (13km)	Arua District Uriama SC	<ul style="list-style-type: none"> ✓ RB-9 is a road (Class-C) access to Rhino Camp from Arua District side. ✓ Due to deficiency of drainage facilities, deep ruts are observed on the surface of the road. ✓ Road condition gets worse during rainy season because of the flooding. It causes troubles for smooth transportation to both S/Z(s) and host communities. Therefore, an urgent response is required.

(2) Upgrading of Roads

One project for upgrading to paved road has been selected from Table 6.3-6 in List 2 with the consideration of below matters.

- Appropriate project scale as a general Grant Aid
- Existence of Refugee S/Z along the targeted roads
- Benefit to host communities and refugee settlements
- Expectancy for the increment of traffic volume in the future
- Priority of upgrading roads by the government of Uganda
- Duplication of aid by other donors
- Importance of national road classification

Table 6.4-5 Upgrading of National Roads from Unpaved to Paved

Profile. No	Name of the National Roads/Section	Section	Reason of the Selection
	Atiak-Adjumani-Moyo Road (Class B)	Atiak – Laropi	✓ Though it is authorized by SIP, it is eliminated due to assurance of aid from EU
		Laropi – Moyo	✓ Though it is authorized by SIP, it is eliminated due to the middle of discussion of aid with AfDB
	Koboko-Yumbe-Moyo Road	Koboko – Yumbe (Class C)	<ul style="list-style-type: none"> ✓ This is a compatible project to SIP ✓ However, this is eliminated because 1) the increment of traffic volume cannot be compared to Yumbe-Omugo-Manibe, and 2) only one refugee S/Z(s) exists along the road
		Yumbe – Moyo (Class B)	✓ This is eliminated because 1) the president of Uganda assured to upgrades its road, national road Class-B, 2) refugee S/Z(s) only one refugee S/Z(s) exists along the road
RB-10	Yumbe-Omugo-Manibe Road (Class B)	All Section	<ul style="list-style-type: none"> ✓ RB-10, national road Class-B, is a compatible project to SIP and it includes replacement of existing six bridges. ✓ Since main refugee S/Z(s) in West Nile such as Bidibidi, Imvepi, Rhino Camp, Rhino Camp Extension exists along the road, high benefit effect can be expected. ✓ Smoother transport of crops along the road can be expected which will result to increase in the income of the farmers. ✓ Based on the survey results of the traffic volume, higher traffic volume is expected than Koboko-Yumbe road in the future, it emphasizes the significance of upgrades. ✓ Priority for upgrading road in Yumbe District is higher among RB-10 since road condition in Yumbe (from Yumbe town to District bound of Arua) is extremely bad. ✓ Upgrading of this road has been already shared among MoWT and UNRA, also an agreement has been obtained.
	Kulikulinga-Obongi Road (Class C)	All Section	<ul style="list-style-type: none"> ✓ It is a national road Class-C Connecting to Obongi ferry in Yumbe District and it is the shortest route going to both Arua District and Yumbe District from Gulu District side. ✓ It is a potential road to be a future Linking road but to make it functional, it requires the upgrading together with Adjumani-Sinyania and Yumbe-Omugo-Manibe. ✓ Therefore, it is too early to decide if upgrading is needed or not.
	Adjumani-Sinyanya Road (Class C)	All Section	<ul style="list-style-type: none"> ✓ It is a national road Class-C Connecting to Obongi ferry in Adjumani District. ✓ It has high a potential to be a future Linking road by connecting to Kulikulinga-Obongi road in Yumbe District side but to make it functional, it requires the upgrading together with above mentioned two roads and Yumbe – Omugo - Manibe. ✓ Therefore, it is too early to decide if upgrading is needed or not

Profile. No	Name of the National Roads/Section	Section	Reason of the Selection
	Wandi-Bunia Baba-Rhino Camp Road (Class C)	All Section	<ul style="list-style-type: none"> ✓ It is a national road Class-C crossing Arua District from east to west. At the end of road, Rhino Camp, ferry operation service from this point as third operation in West Nile has confirmed and launched its preparation. ✓ It will be directly connected to Arua District from Gulu District side by this ferry and it will be expected high potential to be a trunk road in the future. ✓ However, road of Adjumani side, opposite shore crossing the river, is still undeveloped as of now. Therefore, it is too early to decide if upgrading is needed or not

(3) Small Scale Bridges

Two small scale bridge projects in Yumbe District in Table 6.3-6 in List 2 were combined as one priority project. Selection of the bridge was carefully chosen based on below criteria.

- Appropriate project scale as a Grant Aid through Procurement Agency by combining several bridges
- Benefit to host communities and refugee settlements
- Request from Central Government, Districts or UNHCR
- Function as a National road by completion of the bridge

Table 6.4-6 New Construction of Small-scale Bridge Projects belong to National Roads

Profile. No	Bridge	Location	Reason of the Selection
RB-7	Koro Bridge	Yumbe	<ul style="list-style-type: none"> ✓ It is located between Lomunga-Barakara, class-C road but the bridge has not been crossed yet. ✓ Though it connects Zone 1 and Zone 3 in Bidibidi settlements, national road is divided at the location of the bridge. ✓ It will be created for refugees and host communities a smoother transport and will be able to transport sustain supply goods by crossing the bridge. ✓ A request of connecting the bridge has been made from UNHCR
	Baringo Bridge (Tentative)	Yumbe	<ul style="list-style-type: none"> ✓ It is located at beginning of Baringo-Barakara, class-C road but the bridge has not been crossed yet. ✓ Though it is the national road accesses to Bidibidi settlement Zone 1, its access is limited only from Barakara, at the end of this road. ✓ The road will be completed by crossing the bridge and it will be able to access from two directions to both S/Z(s) and host communities. ✓ It will be created for refugees and host communities will have a smoother transport.

6.5 Outline of Priority Projects

Outline of the Shortlist of Priority Projects for the roads and small-scale bridges selected in 6.4 are shown in Table 6.5-1. Description of each project (RB-1 ~ RB-10) are written in Chapter 13.

Table 6.5-1 Outline of Shortlist of Priority Projects

Profile No.	Projects	Location (District)	Authority	Assistant Method	Project Outline
RB-1	Adjumani District Road Rehabilitation Project	Adjumani	District	Grant Aid through Procurement Agency	Rehabilitation and improvement of unpaved roads (Total 18km)
RB-2	Arua District Road Rehabilitation Project	Arua	District	Grant Aid through Procurement Agency	Rehabilitation and improvement of unpaved roads (Total 23km)
RB-3	Koboko District Road Rehabilitation Project	Koboko	District	Grant Aid through Procurement Agency	Rehabilitation and improvement of unpaved roads (Total 22km)
RB-4	Moyo District Road Rehabilitation Project	Moyo	District	Grant Aid through Procurement Agency	Rehabilitation and improvement of unpaved roads (Total 28km)
RB-5	Yumbe District Road Rehabilitation Project	Yumbe	District	Grant Aid through Procurement Agency	Rehabilitation and improvement of unpaved roads (Total 27km)
RB-6	West Nile Sub-Region New Construction of Small Scale Bridges Plan on Community Roads Project	Adjumani Arua Yumbe	District	Grant Aid through Procurement Agency	New Construction of small-scale bridges (4)
RB-7	Small Scale Bridges Project on National Roads in Yumbe District	Yumbe	Central	Grant Aid through Procurement Agency	New Construction of small-scale bridges (2)
RB-8	National Road Rehabilitation Project in Moyo District	Moyo	Central	Grant Aid through Procurement Agency	Rehabilitation and improvement of unpaved roads (Total 9km)
RB-9	National Road Rehabilitation Project in Arua District	Arua	Central	Grant Aid through Procurement Agency	Rehabilitation and improvement of unpaved roads (Total 13km)
RB-10	Class B Inter-regional Trunk Road Upgrade Project in Western West Nile(Yumbe – Manibe road)	Arua Yumbe	Central	General Grant Aid	Upgrading from unpaved to paved road (77km)

The location map of the shortlist of priority projects above table are shown in Figure 6.5-1.

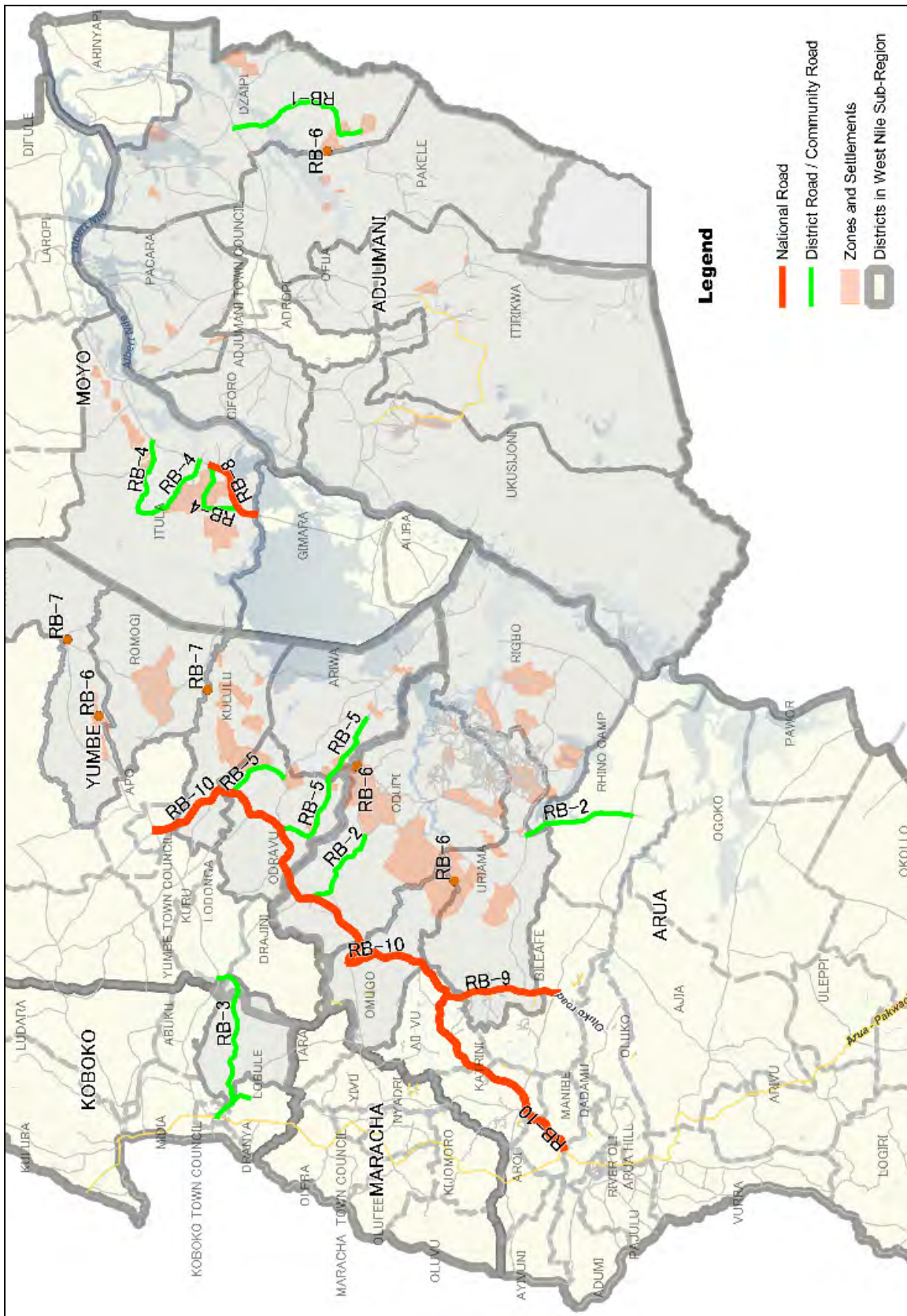


Figure 6.5-1 Location Map of Shortlist of Priority Projects

CHAPTER 7 SOCIAL INFRASTRUCTURE SURVEY: HEALTH

7.1 Overview of Health Sector

7.1.1 Health Sector Policy and Development Plans

(1) National Development Plans

NDP II (2015/16-2019/20) is the sixth five-year development plan currently underway in Uganda. The objective of NDP II, as the successor to NDP, is to “propel Uganda towards middle-income status by 2020.” In the plan, development of the health sector is classified under “Enhancing Human Capital Development” along with other sectors such as education and water sanitation, which are regarded as important factors in achieving the above goal.

(2) Health Sector Development Plans

Ministry of Health (MoH) formulated two development plans for the Health Sector in reference to the NDP II: ‘The Second National Health Policy’ is to stipulate the health policy and ‘Health Sector Strategic and Investment Plan’ (HSSIP) 2010/11-2014/15 is to set the specific target value and the investment plan. In HSSIP, four (4) fields - human resource, infrastructure, medical products, and operation - preferentially set to be invested under the overall goal of which target is “To attain a good standard of health for all people in Uganda in order to promote a healthy and productive life”. With regard to infrastructure, access to health facilities was improved as the result of quantitative expansion¹ such as the construction of health facilities aimed to expand ‘Universal Health Coverage’ (UHC) that means “Ensuring that all people receive essential and good quality health services they need without suffering financial hardship. It is how to extend health care to more citizens in a way that guards against the risk of catastrophic out-of-pocket expenditures, improves health outcomes equitably and use available resources efficiently” (Health Sector Development Plan (HSDP) 2015/16-2019/20). The HSDP 2015/16-2019/20 which is currently being implemented was formulated based on the results of HSSIP. In view of problems with the uneven distribution of health facilities², lack of medical personnel, and difficulty maintaining the quality of health care, the four objectives listed below were set to achieve the goal of HSDP 2015/16-2019/20 that “accelerate movement towards UHC with essential health and related services needed for promotion of a healthy and productive life”.

- To contribute towards the production of a healthy human capital for wealth creation through the provision of equitable, safety, and sustainable health services.
- To address the key determinants of health (Including safe water, health education, etc.).
- To strengthen financial risk protection of households against impoverishment due to health expenditure.
- To enhance the competitiveness of the international and regional health sector.

With regard to key health indicators such as mortality rate under 5-years old, infant mortality rate, and maternal mortality rate, they have been showing steady improvement towards achieving the 2020 targets as shown in the following table although its progress was at a slow pace³.

¹ The number of public and non-profit HCIs was increased from 1,321 sites at the year of 2013 to 2,941 sites at the year of 2015 (reported on HSDP 2015/16-2019/20).

² In HSDP 2015/16-2019/20, it was reported that for every population of 10,000, Kampala had 8.4 facilities while Yumbe had only 0.4 facilities.

³ Government of Uganda (2016), ‘INVESTMENT CASE Reproductive, Material, New-born, Child and Adolescent Health Sharpened Plan for Uganda 2016/17-2019/20’

Table 7.1-1 Improvement in Key Health Indicators (Health Sector)

Health Development Indicator	Life Expectancy at Birth	Infant Mortality Rate (per 1,000 persons)	Child Mortality Rate Under 5 (per 1,000 persons)	Maternal Mortality Rate (per 1,000 persons)
2012/2013 Baseline	54.5	54	90	438
2015, 2016/2017	60 ⁽¹⁾	43 ⁽²⁾	64 ⁽²⁾	336 ⁽²⁾
2019/2020 (NDPII target value)	60	44	51	320
Vision 2040 target value	85	4	8	15

Source: ① Retrieved from 'https://data.worldbank.org/indicator/SP.DYN.LE00.IN' accessed on October 8, 2017

② The Uganda Bureau of Statistics (UBOS) and ICF (2017), 'Uganda Demographic and Health Survey 2016: Key Indicators Report'

With regard to the challenge of improving health care quality, 'Service Standards and Service Delivery Standards for the Health Sector' was established in 2016. Alongside this, the 'Strategy for Improving Health Service Delivery 2016-2021' has been implemented in line with the objective to provide the best health services as possible for all of the citizens who received it and to improve satisfaction with received health services by 2020.

Reflecting this backdrop, the policies of the 'Primary Health Care Grant' (PHC Grant), which is mainly devoted to health facility operating expenses, and the 'Discretionary Development Equalization Grant' (DDEG) have focused on improving the quality of existing facilities rather than building new health facilities for three (3) years from 2016, except in areas lacking any access to health services. Through activities such as rehabilitation or upgrading of existing facilities and allocation of equipment, the policy has demonstrated its prioritization of improving maternal and child health facilities, staff housing, water supply and drainage, and ambulance services in particular⁴.

(3) Development Plans of the Surveyed Districts

The five-year development plan has been formulated by each District reflecting the instruction from the 'National Planning Authority' (NPA). The latest one is that of Fiscal Year (FY) 2015/16-2019/20. A medium-term health sector development plan is specified in the plan. It emphasizes that, even when a District applies for a budget to the central government, the application content must be in alignment with the same goals. In order to strengthen the delivery of the 'Uganda National Minimum Health Care Package' (UNMHCP), the objectives of health sector development of each 5 target Districts have been defined as follows: securing qualified personnel, enhancing referral systems, improving facilities, improving the pharmaceutical supply chain, and upgrading health data management.

7.1.2 Health Facilities

Uganda's medical services are delivered based on a referral system comprising of the private, public, and non-profit health facilities. These health facilities are classified into two levels: the central level and the local level. The former provide advanced medical treatment that requires medical specialists, while the latter handles disease prevention, initial treatment, and general medical services.

'Ministry of Health' (MoH) is the authority responsible for overall health administration and supervises other health facilities at the central level are as follows: 'National Referral Hospital' (NRH) as semi-independent authority to provide advanced medical treatment, 'Regional Referral Hospital' (RRH), 'Health Service Committee' (HSC), 'Uganda Blood Transfusion Service' (UBTS).

The other hand, medical service delivery at the local level is under the jurisdiction of the 'District Health Officer' (DHO). That comprises 'Village Health Team' (VHT) which communicates with local communities and health facilities and primary level facilities such as 'Health Centre' (HC) II-IV that

⁴ MoH (2016), 'Guideline to Local Government Planning Process Health Sector Supplement'

local people can easily access and ‘General Hospital’ (GH) to which patients are referred from lower HCs.

Table 7.1-2 Health Facilities in Uganda

Medical Level	Medical Facilities	Number of Medical Staff	Population Covered	Overview
Tertiary	NRH	600 or over	10,000,000	It provides especially advanced medical exams and services, and also a place for a medical internship and advanced research. The service the lower level facilities provide is also available.
Secondary	RRH	500	2,000,000	A referral hospital that receives patients from GH and HCs and provides specialized medical services. It provides medical care related to psychiatry, otolaryngology, ophthalmology, dentistry, intensive care, advanced treatment and surgery, and also a place to conduct continued training for health workers, internships for new health workers, and basic research. The service the lower level facilities provide is also available.
Primary	GH	190	500,000	A referral hospital that receives patients from lower-level HCs. It provides medical care related to treatment with non-conventional medicine, surgery, paediatrics, obstetrics and gynaecology, and also a place to conduct continued training for Health workers and basic research. Available 24/7 year-round. The service the lower level facilities provide is also available.
	HC IV	48	100,000	A referral hospital that receives patients from lower-level HCs. It provides ultrasound exams, emergency and basic surgery, emergency obstetric surgery (including Caesarean section), emergency lifesaving surgery, blood transfusions, etc. Available 24/7 year-round. The service the lower level facilities provide is also available.
	HC III	19	20,000	It provides medical care related to inpatient treatment (48 hours), examination, normal childbirth, and emergency treatment. Available 24/7 year-round. The service the lower level facilities provide is also available.
	HC II	9 + 2 CHEW	5,000	It provides ambulatory care, medical treatment, preventative care, and emergency childbirth. Treatment hours 8:00–17:00 (Mon–Fri), 8:00–12:00 (Sat) CHEW: (paid) Community Health Extension Worker
	VHT	(2 people)		Village Health Team (VHT) has no facility but instead performs humanitarian activities in the community such as preventative care and its promotion, sanitary management, and improvement of daily living. There are generally two people stationed per Parish.

Source: MoH (2016), ‘Service standards and Service Delivery Standards for the Health Sector’

7.1.3 Health Personnel

The national average of the sufficiency rate of health worker staffing in Uganda is 73% in 2015, which indicate many facilities provide medical services with less personnel than necessary. However, the rate is different between the urban and rural: 81% and 63% respectively. The rate also different among health facility level: 81% for RRH; 69% for GH; 85% for HC IV; 75% for HC III; and 49% for HC

II. The sufficiency rate of 65 % is a minimum requirement for providing the health service in Uganda. Therefore, those differences in the rate can be inferred that many HC IIs in rural areas are providing medical services by less the number of staff⁵.

As for sufficiency rates of health workers in specialized fields, there is a lack of professional health workers while the numbers of general office workers⁶ and sanitation supervisors are sufficient.

The comparison of statistics between 2015 and 2017 shows improvement in the sufficient rate. However, a JICA study points out that the degree of improvement among job categories is different: most of job categories are ubiquitously arranged in the large hospital of the capital Kampala⁷.

Table 7.1-3 Sufficiency Rates of Health Workers (Excerpt Version)

Job Category	April in 2015	June in 2017
Doctors	72%	57.5%
Nurses	83%	87%
Midwives	76%	80%
Assistant Doctors	101%	100.6%
Clinical Laboratory Technicians	87%	93.4%
Anaesthetist	30%	28.9%
Pharmacists	8%	55.2%
Cold Chain Engineers	40%	43.9%
...		
Total Sufficiency Rates	73%	78.9%

Source: MoH (2015), 'Human Resources for Health Bi-Annual Report October 2014 – March 2015' P.11,
And the data extracted by the survey team based on 'Annual Health Sector Performance Report 2016/2017

As a goal for increasing health workers, HSDP 2015/16-2019/20 sets target beneficiary population per a health worker in 2020 as shown in the table below.

Table 7.1-4 Target Beneficiary Population per a Health Worker in 2020

	Based on 2013/14	Target value in 2019/20
Doctors	24,725	23,500
Midwives	11,000	9,500
Nurses	18,000	17,000

Source: HSDP 2015/16-2019/20

VHTs, which connect health facilities with a local community, have been deployed in to assist with objectives such as local disease prevention and sanitary conditions improvement. Volunteers are selected from the community. However, there is a limitation to ensure quality and efficiency in activities⁸ with volunteers, so that they are now being employed as 'Community Health Extension Worker' (CHEW) by DHO and two of them are deployed at each HC II of two each. The HSDP sets a goal of dispatching 6,000 CHEWs in 3,000 Parishes by 2020.

⁵ During the field survey, Andelizu HCII in Arua District was being operated by only two medical staff.

⁶ There is difference between human resources that are necessary to achieve the goal of the governmental policy and actual health workers related in health administration because 80% of health workers are general office workers. –Based on "Ministry of Public Service (2016), 'Comprehensive Review of Local Governments'"

⁷ JICA (2017), 'Preparatory survey report on the project for the rehabilitation of hospitals and supply of medical equipment in the northern region in Uganda in the Republic of Uganda – Draft. '

⁸ MoH (2016), Ministry of health Community Health Extension Workers Strategy in Uganda (2015/16- 2019/20)

7.1.4 Institutional Setup for Operation and Maintenance

PHC Grants allocated to each health facility are used for minor repairs of the facility. For major repairs and renovation, the facility needs to raise a budget request to DHO via ‘Health Unit Management Committee’ (HUMC) which is usually composed of health workers, local community leaders, and local government officials⁹. Since the DHO’s budget is limited, many health facilities which are unable to obtain sufficient O&M budget are being forced to provide medical services in the dilapidated environment¹⁰.

Central Medical Equipment Maintenance Workshop (CW) and Regional Medical Equipment Maintenance Workshop (RWs), both under the Ministry of Health and set up at the regional level in 11 location, maintain equipment. If some problems with equipment are found at HC II or HC III, the director of the HC will bring it to HC IV or the RW responsible for the area where the HC locates for the repair. There is also a system that RWs staff visit HCs once every six months to repair equipment such as generators and photovoltaic panels that is too difficult to transport¹¹.

As for the supply of medicines, they are supplied from the DHO to GH and HC II- HC IV located under the jurisdiction of the DHO at a rate of once every two months¹².

7.2 Current Situations and Issues of 5 Target Districts in West Nile Sub-Region

7.2.1 Current State of the Health Sector in West Nile’s 5 Districts

Table 7.2-1 Scores and Rankings of Medical Services by Districts

District	Adjumani	Koboko	Moyo	Yumbe	Arua
Score (%)	80.9	74.0	73.7	68.6	67.9
Rank	1	10	13	48	60

Source: MoH (2017), ‘Annual Health Sector Performance Report 2016/17’

According to the Ministry of Health’s health indicators by Districts for the 2016/2017 budget year, the health sector development score of each of the 5 Districts in West Nile Sub-Region was rated higher than the national average of 66.8 shown in the table above.

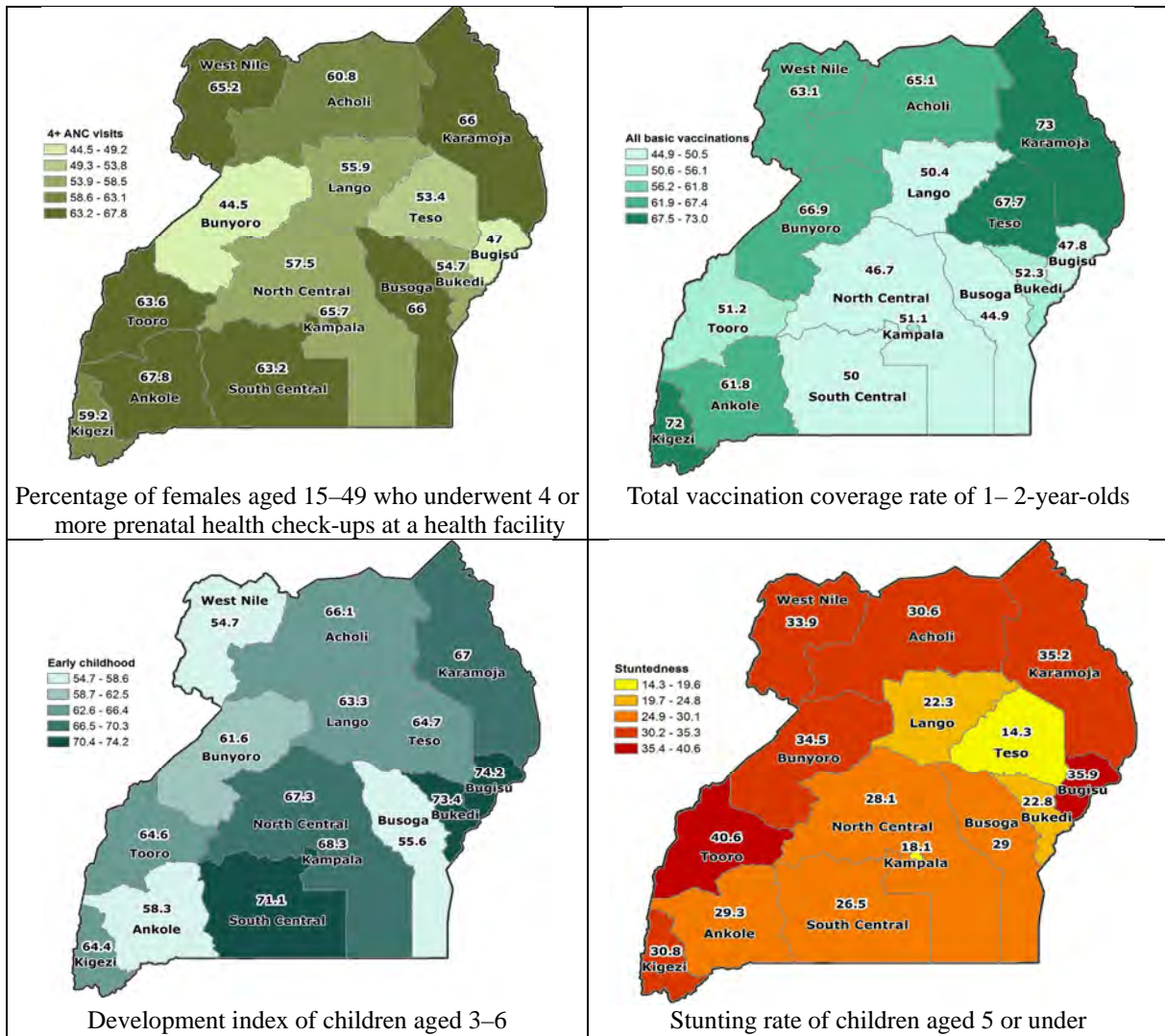
Adjumani District (80.9) was ranked at the top in the country and followed by Koboko District (74.0) and Moyo District (73.7) which scored over 70 points; whereas Yumbe District (68.6) and Arua District (67.9) stayed slightly higher than the national average.

⁹ It was confirmed that a local school principal was included as a member of the HUMC at Siripi HC III.

¹⁰ The ceiling had collapsed at Maaji B HC II. Itula HC III was also found to have broken windows with rain blowing into the inpatient ward.

¹¹ MoH (2013), Operation Manual for Regional Medical Equipment Maintenance Workshops and Medical Equipment Maintenance Guidelines. Many health facilities visited during the field survey were found to have degraded storage batteries connected to the solar panels, were non-functional, and unable to supply power to the facility (Maaji A HC II).

¹² The field survey found that medical supplies were in a state of chronic shortage before bi-monthly supplies were provided, forcing facilities to contact and barter with nearby HCs for supplies, or in the case of HCs near refugee settlements, to request medical supplies from the IP or OP operating in the refugee settlement (Maaji B HC II, Maaji A HC II, Moyo GH).



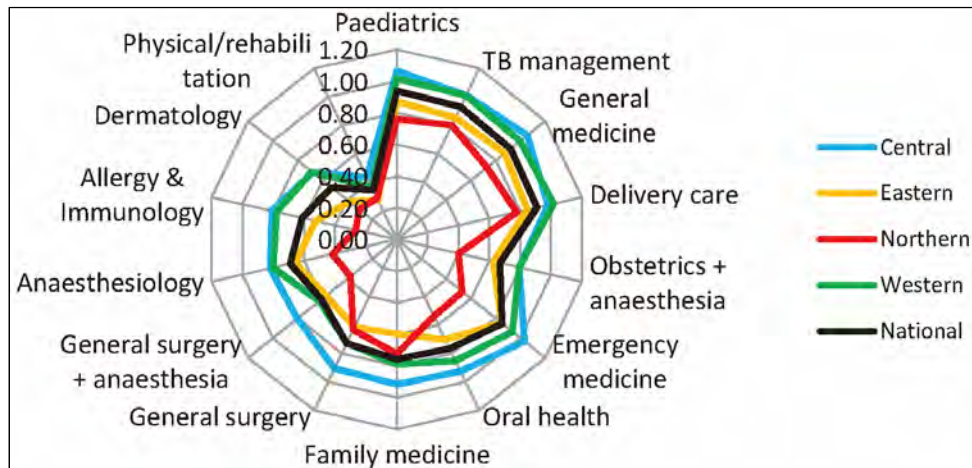
Source: Uganda Bureau of Statistics (UBOS) and ICF (2017) ‘Uganda Demographic and Health Survey 2016: Key Indicators Report’

Figure 7.2-1 Comparison of Medical Indicators by Region in 2016

HSDP 2015/16-2019/20 set a target of 45% for 2019/20 for the percentage of women taken 4 or more prenatal health check-ups. By 2016, all Districts except Bunyoro had already achieved the target. Even West Nile Sub-Region achieved 65.2%. Similarly, total vaccination coverage for age 1-2 children was 55% on average nationwide, while West Nile Sub-Region exceeded the average at 63.1%. Nevertheless, the human development index for children aged 3-6 and stunting rate of children under 5 years old stayed below the national average.

7.2.2 Issues in the Health Sector at the Target Districts

‘Uganda Hospital and Health Centre IV Census Survey 2014’ issued by MoH overviews situation of medical service provision at HC IV and GH by regions. It reports that the Northern region that includes West Nile Sub-Region stayed in the lower status than other regions. This is especially shown in the field of Allergy and Immunology, Anaesthesiology, Dermatology, Physical/rehabilitation, Obstetrics anaesthesia, and Emergency medicine.



Source: Uganda Hospital and Health Centre IV Census Survey 2014

Figure 7.2-2 State General Medical Service Provision at HC IV and GH by Regions in Uganda

(1) Facilities

The Study Team conducted site surveys at Omugo HC IV and Rhino Camp HC IV, both are referral destination from HC II and HC III in Arua District and found that the facilities were not insufficient to provide medical services, and upgrading operating rooms and construction of new labs were being implemented to improve the situation.

The situation was much worse at HC II and HC III facilities, many of which were in a dilapidated condition with falling ceilings and broken windows wind from which rain and wind blowing in. Under such a situation, it is apparently difficult to maintain the clean medical environment required for a health facility. It was also found that they were unable to secure reliable power and water¹³. Several HC IIIs were upgraded from HC IIs by modifying or partitioning the existing facility to add functions such as obstetrics and inpatient wards required for an HC III. Hereby, it was impossible to provide well prepared gender-specific inpatient wards.

Moreover, an isolated ward for legal communicable diseases was unable to be prepared. Therefore, diagnosis and treatment of patients with tuberculosis and HIV/AIDS had been carried out in an outpatient ward by limiting days of the week. From these facts, it is confirmed that many health facilities lack necessary function to deliver adequate medical services.

Furthermore, in many HC IIs and HC IIIs, building has repeatedly been expanded to deliver required medical services as they arise. In such case, design and planning should be made considering the continuity among the facilities and functional improvement of the existing facilities to properly keep a clean medical environment, rather than merely adding a facility.¹⁴

(2) Facilities and Equipment

With regard to power supply, although photovoltaic power generation panels had been installed in many facilities, it was found that storage batteries were expired and not functional. As for medical equipment, RWS checks the condition of equipment. However, the sample survey found that in many health facilities, equipment was not given the expected timely repairs due to the budget shortage and

¹³ The poor condition in the refugee settlements was noticeable which was found inundation when it rained because inpatient wards remained an earth floor, such as shown the example of Idiwa Camp HC III in Moyo District, Siripi Camp HC III in Arua District etc.

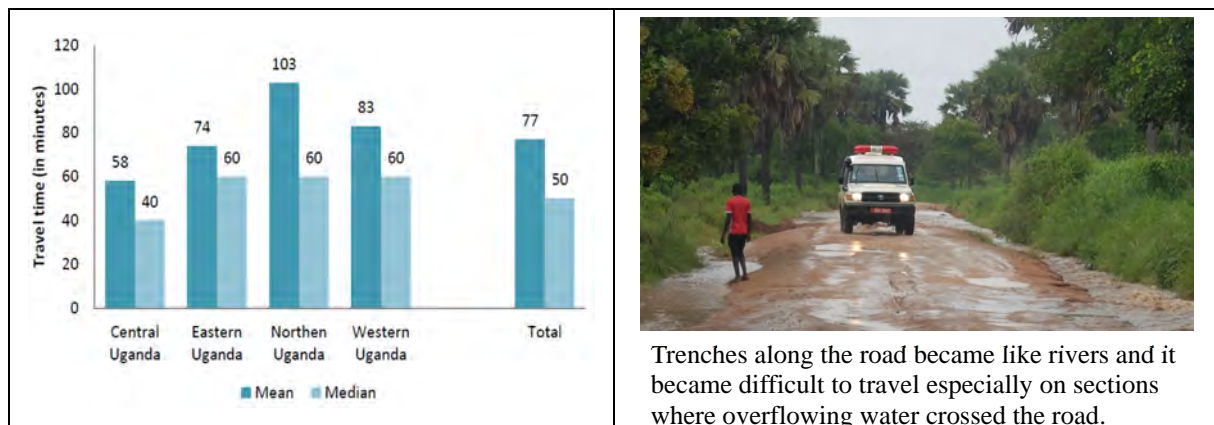
¹⁴ As an example, despite having slopes at the entrance of each building, no pavement had been installed on routes to other hospital wards or latrines. Hereby, it made them impossible to access from a building to another one with a wheelchair. In addition, although the minimum required functions had been planned for individual wards, no waiting rooms were available and it had been seen that patients sit along the corridor to wait for their exams.

the difficulty in acquiring spare parts.

(3) Ambulance Service

The average emergency transport time is reported 60 minutes in the Northern Region while nationwide average is 50 minutes. The median emergency transport time, which is the middle of the value listed according to ambulance travel time to the referral hospital from ubiquitous health facilities, is reported 103 minutes in Northern Region that means 26 minutes longer than that of the national average of 77 minutes. As this result, it could be assumed that more than half of HCs in Northern Region require 103 or more minutes for emergency transport.

Emergency transport to the upper-level health facilities is one of the principles of the referral system. In case of Adjumani District, Gulu RRH in Acholi Sub-Region has been being chosen as the destination for the emergency transport to reduce travel time since it is nearer than Arua RRH without crossing Nile River. As for other 4 Districts – Arua, Koboko, Moyo, and Yumbe, Arua RRH is the destination of referring patients. For the case of the 4 Districts, the travel time varies according to road conditions and weather condition due to few paved roads and a long distance to the RRH. It was also found that some emergency tri-cycles were deployed in rural areas though the use of tri-cycles for emergency transport seems an unsuitable because these vehicles sometimes stuck or toppled on rough roads during the rainy season. (By sample survey conducted at Ukusijoni HC III of Ukusijoni Sub-County, Adjumani District, etc.) The road conditions in Yumbe and Moyo Districts were not good as well. Therefore, it is inferred that the problems similar to the ones found through the survey would occur under such a condition.



Source: MoH (2014), 'Uganda Hospital and Health Centre IV Census Survey' (left side), and Photo by Survey Team taken August 24, 2017 (Right side)

Figure 7.2-3 Emergency Transport Times to Upper-level Referral Hospitals (Left Side) Emergency Transport Case in Moyo District (Right Side)

(4) Lack of Medical Personnel

The shortage of medical personnel is particularly prominent in health facilities inside and around S/Z. Although it was ascertained that 48-50 medical exams with consultation (10 minutes/patient x 8 hours) per medical staff were the maximum number of patient to be accepted per day according to the field interviews¹⁵, there were far exceeding the number of patients in many health facilities. Reflecting this situation, UNICEF, from an aspect of nutritional management, and UNHCR have been dispatching health personnel to strengthen the capacity of health facilities being operated by government staff. However, there is still a shortage of health personnel compared to patients.¹⁶

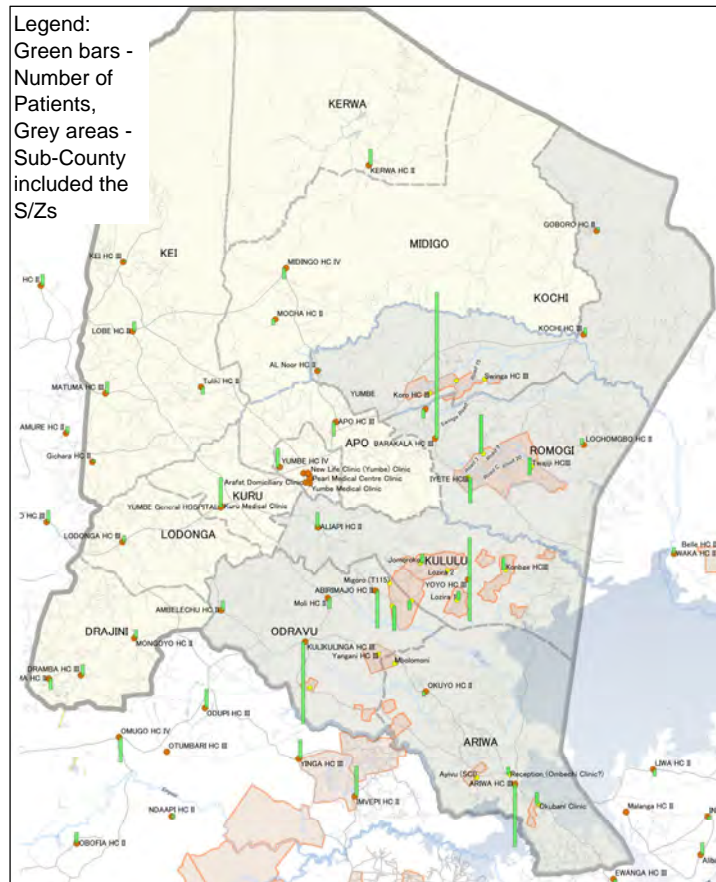
¹⁵ By the survey in Yumbe UNHCR Health Officer, Adjumani District, and Ayiri HC III of Ukusijoni Sub-County

¹⁶ The Study Team ascertained that 300 or more patients had been examined with 2 doctors per day because a number of patients was much than what of health workers in Adjumani District and Ayiri HC III of Ukusijoni Sub-County.

(5) Disparities in Medical Services

In some cases, public health facilities around the S/Z were found to be dealing with less number of patients than temporary health facilities in the adjacent S/Zs. As one of the factors behind this, health facilities in the S/Z provide better health services than public health facilities. For example, they provide ‘Dignity Kits’¹⁷ or ‘Mama Kits’¹⁸ for maternity care and also fulfilling care for the perinatal period. Furthermore, the state of pharmaceutical supply is preferable in health facilities in the S/Z although which in public health facilities is normalized the case of out of supply. Therefore, many patients living in the host community will have access to these facilities to ask for better healthcare although they need to travel far.¹⁹

Refugees can enjoy health services in the same way the patients of the host community do. Furthermore, some health facilities have supporting staff because some refugees faced a language barrier. In such case, refugees having a language barrier would go health facilities where sufficient supporting staff are allocated rather than facilities not having such staff.



Source: Prepared by the Study Team

Figure 7.2-4 Number of Outpatients in July 2017 at Yumbe District Health Facilities

(6) Access to Medical Services

‘Guidelines for Designation, Establishment and Upgrading of Health Units’ sets the policy that all household can access to the nearest HC from less than 5 km away. According to the household census implemented in 2014, Ukusijoni Sub-County in Adjumani District has 35.6% of the households located more than 5 km away from the nearest HC. In contrast, in the S/Zs in Adjumani District and Yumbe District, the nearest health facility generally located within 3 km walking distance from all households. (Confirmed by the interviews with UNHCR-Adjumani Sub-Office and UNHCR Yumbe Field Office).

Therefore, residents adjacent to the S/Z also can benefit from the medical services provided by UNHCR-supporting HCs. However, it is inferred that those living in remote areas even in the same Sub-Counties which S/Z locates have remained without any improvement regarding accessibility due to a delay of health sector development.

¹⁷ According to the interview for Maaji B HC II, they are composed of Clothes for new-borns/pregnant women, Towels/ Buckets/Basins/Soaps for new-borns etc. although it depends on support group.

¹⁸ ‘Mama Kits’ are also provided for pregnant women in facilities operated by DHO. However, according to the interview for Ukusijoni HC III, they cannot be to provide due to out of stock even though they are supplied 50 sets per ounce at pharmaceutical supply.

¹⁹ It was confirmed by the interview with Odupi HC III, Maaji A HC II, and Ukusijoni HC III etc.

(7) Pharmaceutical Supply

Pharmaceuticals are delivered to health facilities every other month. However, these will be out of stock within three weeks after the receipt. Thus it has become a routine for health staff, not only in remote areas but in General Hospitals, to contact nearby health facilities to ask for medicines which would be surplus for them until next supply²⁰. Hence, the entire pharmaceutical supply chain may need the improvement.

Also, there is a shortage of analgesics, malaria test drugs, AIDS test drugs, and therapeutic drugs. According to the survey results²¹ on the inventory status of medicines at health facilities conducted by MoH, especially cardiac aspirin which is used as preventive for heart diseases and anti-HIV therapeutic drug (NVP) are frequently out of stock. On the other hand, Depo-Provera which is a contraceptive drug, dequalinium chloride (SP) used for prevention of infection of oral wounds, and "ACT" for blood diseases are left. These are the current state of the health facilities where the survey results are obtained, but it is recognised as a typical situation. Therefore, it can be assumed that that HCs in the West Nile sub-region are as well.

(8) Budget

Financial resource to operate public health facilities is the PHC Grant that is allocated according to the number of the local population in the respective coverage area, without considering refugees population. Since the refugee influx occurred, health facilities have to be forced to operate with not sufficient budget. At the same time, to meet the government policy of upgrading from HC II to HC III, it requires two times more for medical staff and three times more for the budget. In the current situation, around 80% of the District budget for the health sector has already been allocated to personnel expenses. Unless the budget for personal expenses is significantly increased, more strategic personnel dispatch plan should be required, as well as further improvement of the internal efficiency.

Table 7.2-2 Average Annual Budget Required for Each Facility

Facility-level	Number of personnel required	Average budget allocation/facility (UGX)	Increase rate when HC II is at 100%
General Hospitals	190	321,989,798	4,335%
HC IV	48	52,561,792	708%
HC III	19	22,364,882	301%
HC II	11	7,427,474	100%

Source: Prepared by the Study Team based on MoH (2017), Annual Health Sector Performance Report-FY 2016/17

7.3 Assessment Methodology and Data

7.3.1 Assessment Scope

Health facilities in Uganda are classified from primary to tertiary. Among these, primary health facilities are considered to be influenced the most by the refugee influx since they are the most accessible health facilities for the people living in remote areas. Therefore, the Study Team decided to evaluate the impact of refugee influx by focusing on HC II to HC IV. GH is excluded as it locates in the urban area and receives patients in serious conditions referred by lower-level HCs.

²⁰ The field survey also found that it had become the daily routine at Adjumani GH to contact numerous health facilities to attempt to secure medicines.

²¹ Ministry of Health (2017), 'PHARMACY DEPARTMENT August-September 2017 FACILITY TRACER MEDICINES STOCK STATUS REPORT'

7.3.2 Assessment Methodology

Since the target areas in this survey are Sub-Counties including refugee zones/settlements, a holistic approach was adopted to examine the impact on the health sector. This approach is in line with the ‘Settlement Transformation Agenda’ (c) which is the refugee assistance policy of the Ugandan government. About the impact on health facilities, it was decided to assess the situation from two aspects: (1) Impact of the refugee influx; and (2) The state of the health sector development from before the refugee influx to date.

The table below shows the overview of the survey method. And also, the flow of the survey is shown in Figure 7.3-1.

Table 7.3-1 Outline of the Survey

The range of Survey	Adjumani District	Total 7 Sub-Counties	Ciforo, Dzaipi, Itirikwa, Ofua, Pachara, Pakele, Ukusijoni
	Arua District	Total 4 Sub-Counties	Odupi, Omugo, Rigbo, Uriama
	Koboko District	Total 1 Sub-County	Lobule
	Moyo District	Total 1 Sub-County	Itula
	Yumbe District	Total 5 Sub-Counties	Romogi, Kochi, Kululu, Odravu, Ariwa
Survey Method	Collection and analysis of existing statistics and documentation; Field and interview surveys; Data conversion and analysis of map information		
Survey Targets	DHO of the 5 Districts and health facilities of the Sub-County judged to be most impacted by population influx. UNHCR-Arua Office, Adjumani Office, Yumbe Field Office, Moyo Field Office MTI, RMF and IRC as UNHCR’s IPs		
Population	The last day of July 2017 as the Cut-off data		

Source: Prepared by the Study Team

7.3.3 Data Collection Methods and Issues

(1) Impact of the Refugee Influx

1) The Data to Collect

Focusing on the physical effects on health facilities by Refugee influx, this quantitative change in the most recent year from June 2016 when a mass refugee influx began in July 2017 was captured. To quantitatively grasp the impact of the refugee influx on health services is the primary focus of the study, the Study Team delimited the collection of health indicators - the number of outpatients, number of inpatients, and number of birth in a health facility. In parallel with them, the Team checked the location information of each health facilities and integrated them with map data and each DHIS/HMIS for clearly verifying the significance of impact on each health facility, the impact on the overall Sub-County hosting refugee settlements, and differences of impact among Sub-Counties.

2) The Collection Method of Data

Despite the health sector which relatively well manages statistical data, the most recent data has not been coordinated. Therefore, the below measure were set;

1. The data of Districts and Sub-Counties: Collected by ‘District Health Information Software’ (DHIS) of each DHOs
2. The data of the refugee settlements: Collected and confirmed by HMIS of the partners which support health facilities under or cooperated with UNHCR
3. Integrated 1. and 2. Above

3) The Issues and Measures on the Data Collection

As described, pharmaceutical supply in public health facilities is provided once in every two months. Among these facilities, it was found through the sample survey that especially outpatients were decreasing until next pharmaceutical supply in the health facilities as the stock got out within 3 to 4 weeks after the supply²². Hereby, the Study Team decided to confirm also the number of inpatients and the number of birth, which were considered that they accessed to health facilities in their acute needs regardless of the inventory of medicines.

(2) Health Sector Development Status

1) The Data to Collect

As for the data indicating the status of health sector development, the Study Team decided to focus on the condition of health facilities and related indicators. There are many issues in the health facilities as described in 7.2 among those, health personnel dispatch and budget allocation can be considered indispensable for health/medical services delivery at the health facilities.

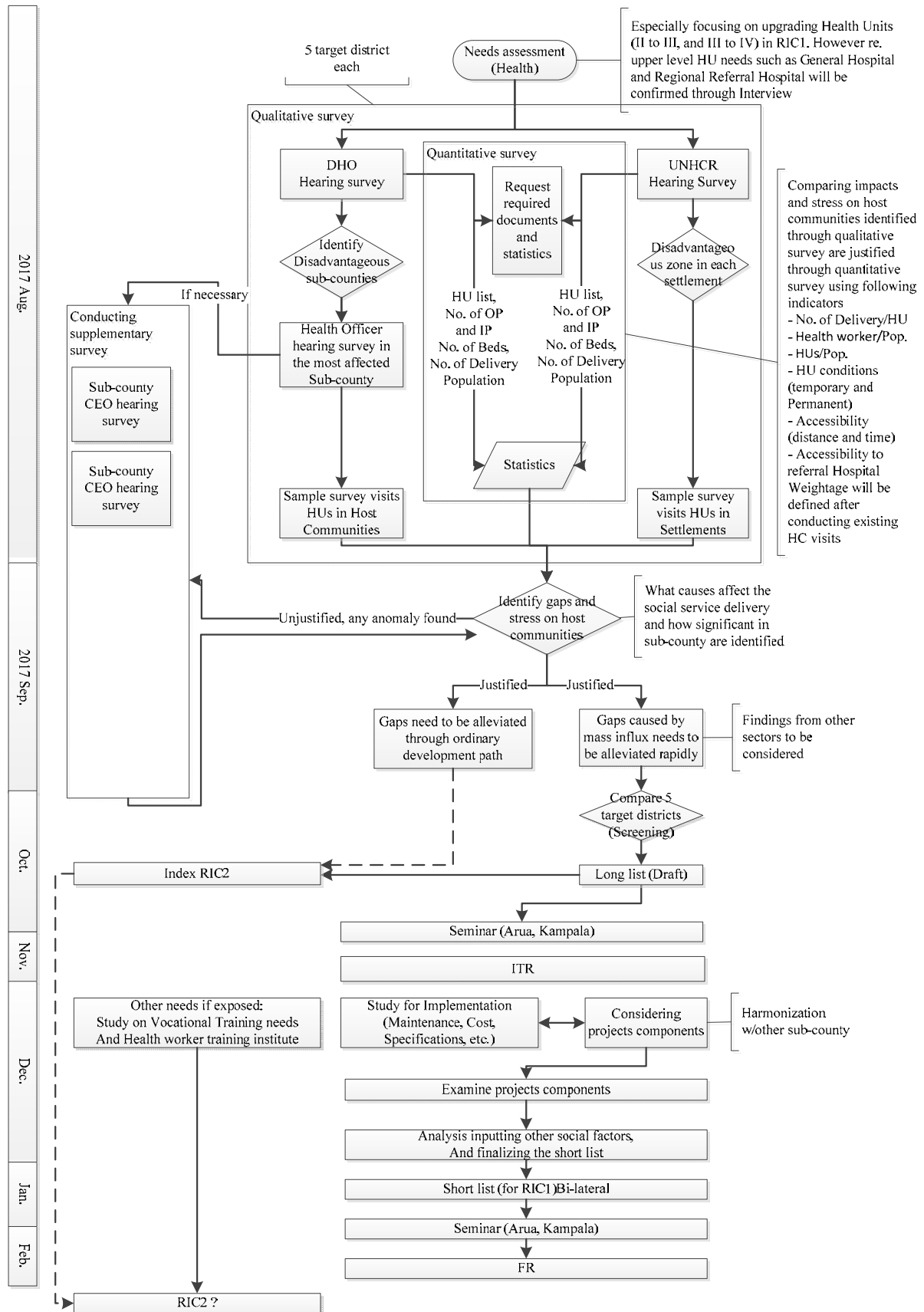
2) The Data Collection Method

- (i) To assess the health sector development of each Sub-County quantitatively, the Study Team decided to refer the 2014 Household Census, which presents the situation before the refugee inflow occurred, and the health facility list issued in 2017 by MOH to confirm facility level and development condition of each level.
- (ii) Fact-finding interviews were also conducted with each DHO and UNHCR. Based on the information obtained thereby, the Study Team qualitatively grasped the situation of health service delivery in the host Sub-Counties whose health sector development was hindered due to the influence of population inflows that is primarily due to the refugee influx and then carried out sample survey in several health centres in these Sub-Counties.
- (iii) From the survey results of the above (ii), the Study Team verified the appropriateness of quantitative survey results of the above (i), then identified essential points in considering facility planning.
- (iv) Impacts of the population inflow and the progress of health sector development in each Sub-County was quantified based on the collected statistical data through (i). Finally, and the most affected Sub-Counties in each target District were identified by conducting a comparative analysis.

7.4 Assessment Results (Priority Needs)

Before quantifying refugee influx's impact on health services at the Sub-County level, the Study Team verified the impact on the target Districts as a whole to assess the background and difference of the impact of the refugee influx at District level.

²² According to HMIS Log book in Odupi HC III, by confirming the factor that greatly affected the number of outpatients per month, it was found that a number of outpatients per a month was much in case of supplying medicine at the beginning of a month while total number of outpatients per a month was relatively less because few outpatients came until next supply in case of supplying at the middle or end of a month.



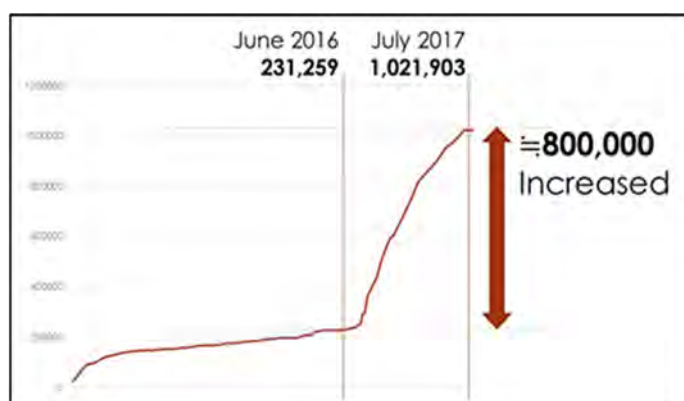
Source: Prepared by the Study Team

Figure 7.3-1 Survey Flow

7.4.1 Assessment Results

(1) Impact of Refugee Influx on the Target Districts

As shown in the figure on the right, the population of refugees from South Sudan - both registered and asylum seekers - in Uganda has increased some 800,000 people²³ since June 2016. And 745,000 people, which are more than 90% of this increased population, were accepted in the 5 target Districts. This figure will be much larger if it includes the non-registered refugees who do not appear on demographic statistics²⁴.



Source: Prepared by the Study Team based on; UNHCR, 'South Sudanese Situation' <http://data.unhcr.org/SouthSudan/country.php?id=229>, accessed on Sep 21, 2017

Figure 7.4-1 Refugee Population and Asylum Seekers from South Sudan Increased in Uganda from June 2016 to July 2017

In order to holistically grasp sufficiency of health facilities at District level as the first step of the assessment, the Study Team decided to compare 2017 population estimates for the 5 Districts against the total target population coverage of HC II–

HC IV level facilities (public and non-profit private facilities: PNFP, as of 2017) which were the most accessible. Likewise, 'population coverage by health facility' designated by MoH was applied to identify the number of health facilities and the population which can be covered by each health facility to grasp the situation

As shown in the following table, although the population as of 2017 slightly exceeded the target population coverage of existing PNFP facilities, this number of the health facilities seems appropriate to deliver health services delivery only if the location of facilities is well arranged in a way function of the facilities could be optimally used.

Table 7.4-1 Comparison of 2017 Population Estimates for the 5 Districts and Target Population Coverage²⁵ of Health Facilities (HC II - IV)

2017 Population Estimates for the 5 Districts	2,919,663= (2,009,800 (Ugandan people) + 909,863 (Refugee population including asylum seekers)
Target Population Coverage of health facilities (HC II - IV)	2,915,000= (100,000 x 8*(HC IV) + 20,000 x 79*(HC III) + 5,000 x 107*(HC II)

Source: Prepared by the Study Team

In addition to the above-mentioned number of health facilities, medical services are also provided by temporary health facilities mainly in refugee settlements due to support from UNHCR to respond to

²³ Number of refugee (included non-registered) in the target 5 Districts: Total 165,509 people as of June in 2016; 134,620 in Adjumani (based on 'South Sudanese situation'), 26,493 in Arua (same as above), and 4,396 in Koboko (based on interview to OPM, Adopted the statistics of June in 2016 because of which was confirmed not increasing from 2016 to 2017). Total 909,863 people as of July in 2017; 225,072 (included 45,208 non-registered) in Adjumani (OPM Stat. June 30, 2017), 174,348 (included 86,087 non-registered) in Moyo (same as above), 233,841 in Arua (based on the collected value by interview to OPM by the survey team), 4,396 in Koboko (OPM Stat. June, 2017), 272,206 in Yumbe (based on UNHCR HMIS as of May 2017). These factors mean 744,354 people increased for a year around.

²⁴ There are 4396 registered refugees in the Lobule in Koboko District. Near the Kuluba Sub-County Busia Collecting Point located at the border with South Sudan there are up to 500 thatched roof huts that are rented from South Sudan to refugees and voluntary evacuees. Based on interviews, 5 to 6 people live in each hut and 2500 people are forecasted to be living near Busia alone. There is judged to be a large impact on providing social services near the border due to the collection point as well as large numbers of voluntary evacuees in the urban area.

²⁵ It is regulated based on MoH (2016), 'Service Standards and Service Delivery Standards for the Health Sector': HC II; 5,000 people, HC III; 20,000 people, HC IV; 100,000 people, GH; 500,000 people, RRH; 1,000,000 people.

the surge of the refugee influx. Since some of these health facilities have been requested to register as permanent facilities²⁶, it is judged possible to secure the population coverage by health facilities sufficiently. Reflecting this result, the general approach of this study concerning what assistance can be proposed is that it is considered more appropriate to focus on strengthening the medical service delivery at existing facilities along the health policy than it is to build new facilities.

(2) Impact of the Population Influx on the Target Districts

The increase of population (nationals and refugees) in a year from June 2016 to July 2017 was as follows: Adjumani District, 40.6%; Arua District, 27.9%; Koboko District, 3.8%; Moyo District, 122.6%; and Yumbe District, 56.4%. The population of Moyo District, in particular, increased more than twice. Although the percentages varied considerably, population in the target Districts increased considerably except Koboko District. The combined population of registered and non-registered refugees has exceeded the growth of Uganda citizens. In Adjumani and Moyo Districts, the refugee population had already been beyond the half of the total population.

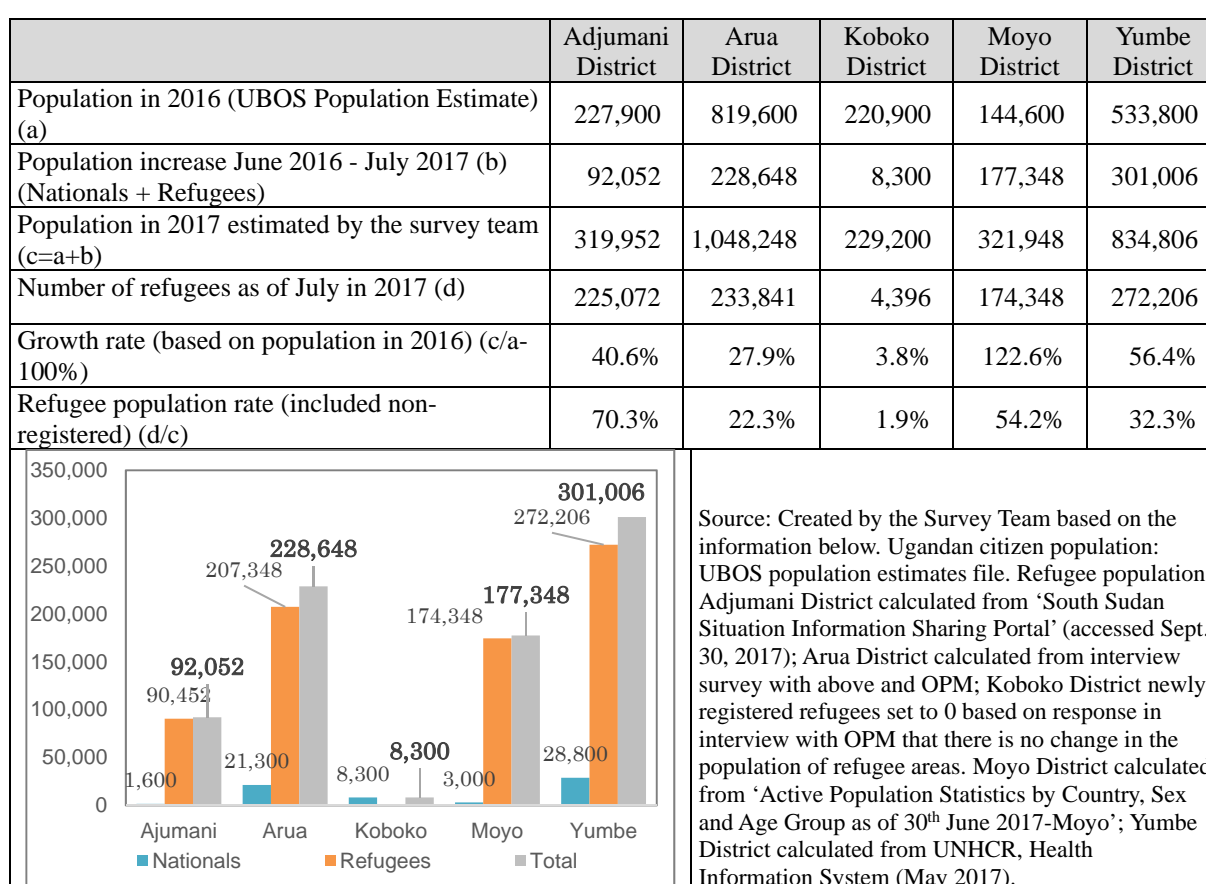


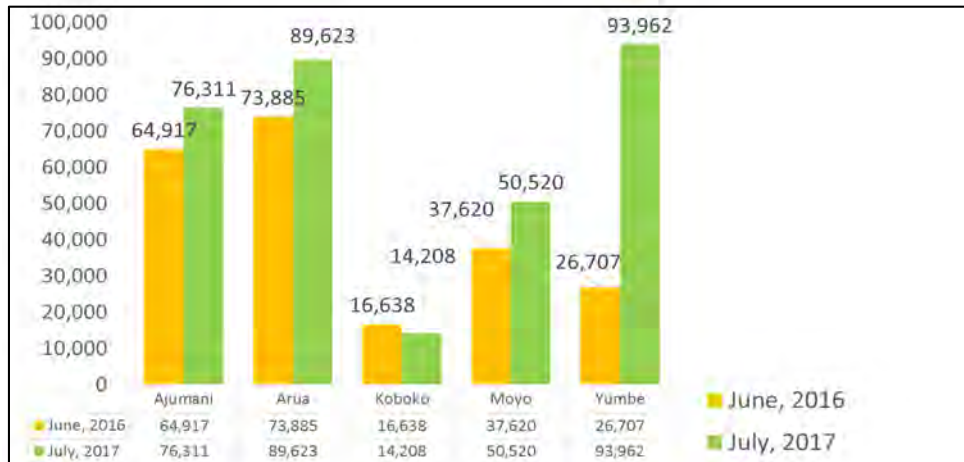
Figure 7.4-2 Population Increase in the 5 Target Districts from June 2016 to July 2017

- Study 1: Comparison of monthly outpatients in each District (June 2016, July 2017)

While the number of outpatients varied considerably depending on contagious disease outbreaks and such, the results showed that in Koboko District, which had no change in refugee population according to the statistics, the number of outpatients decreased slightly while all other Districts increased outpatient numbers. Therefore, it is judged that there were no particular external factors rather than population increase to consider in comparing the two periods. Except for Koboko

²⁶ DHO Yumbe submitted a letter dated on 13th March 2017 to CAO on his plan to register total 17 health facilities (340,000 people: 17 x 20,000, HC III) located in and around refugee settlements and supported by UNHCR as permanent facilities.

District, all other Districts showed a rise in outpatients of more than 20%. Yumbe District, in particular, showed a remarkable increase which had expanded approximately at a rate of 350%.



Source: Created by the Survey Team based on DHIS2

Figure 7.4-3 Comparison of Outpatient Numbers in 5 Target Districts in June 2016 and July 2017

As for the background of the remarkable increase in Yumbe District, the Bidi Bidi refugee settlement in the District had been newly developed over a wide area, UNHCR established more health centres compared to S/Z in other Districts, and medical services were accessible within walking distance of about 3 km. Moreover, from a statistical point of view, the number of health facilities per 10,000 population was 0.4 as of 2014, it was improved to 0.68 facilities as of 2017 (Estimated value by the Study Team). Therefore, in addition to the refugee influx, it is presumed that accessibility to medical services had been improved²⁷ to the Ugandans living in or adjacent to the refugee settlements, which was previously prohibitive, was a contributing factor of remarkable increase of the number of the outpatient in Yumbe District.

- Study 2: Comparison of the population and the population coverage by health facilities

Based on study results, it was judged that only in Koboko District and Yumbe District, HC II - IV, which are most easily accessed by residents for primary health care, had a difficulty of covering their respective population. By this fact, these Districts rely heavily on General Hospitals which are the highest-level referral hospital in these Districts and their capacities.

However, in Yumbe District, given that temporary health facilities, which are counted up to 19, set up by various organisations and their capacities of population coverage are taken into account, it can be expected to improve the figure indicated in the following table.

As for Koboko District, although the impact of the refugee influx is not visible in statistics, its GH can be judged to bear a more substantial burden than other GHs due to following causes: there is insufficient population coverage by HCs of which level is from II to III due to a delay of health sector development; there is no HC IV in the District; and the current GH was upgraded from a HC IV and is not sufficiently large enough.

²⁷ Although it was listed as "0.4 facilities per 10,000 population" in HSDP2015/16–2019/20 issued in 2015, currently at 2017 this had increased to 0.68 (Survey Team estimate: 59 facilities/865,000 people). Thus, it is judged that access was improved.

Table 7.4-2 Comparison of Population versus Target Population Coverage in the 5 Target Districts

	Population 2017 [a]	Number of Health Facilities				Target Population Coverage (HC III/IV) [b]	Population/Target Population Coverage [a/b]		Target Population Coverage (HC II-GH) [c]	Population/Target Population Coverage [a/c]	
		GH	HC IV	HC III	HC II						
Adjumani District	428,835	1	1	12	25	465,000	OK	92%	965,000	OK	44%
Arua District	1,046,800	2	4	37	29	1,285,000	OK	81%	2,285,000	OK	46%
Koboko District	287,900	1	0	7	8	180,000	NG	160%	680,000	OK	42%
Moyo District	325,248	1	1	13	28	500,000	OK	65%	1,000,000	OK	33%
Yumbe District	865,006	1	2	10	17	485,000	NG	178%	985,000	OK	88%
Total: 36, 058	2,953,789	6	8	79	107	2,915,000	NG	101%	5,915,000	OK	50%

Target population coverage: GH, 500,000; HC IV, 100,000; HC III, 20,000; HC II, 5,000.

An aggregate number of government-controlled and non-profit private health facilities from MoH (2017), 'National Health Facility Master List' (Draft ver.)

Source: Prepared by the Study Team

(3) Impacts from the Influx by Sub-County

To verify the impacts of the population influx at a Sub-County level, the following indicators were set to evaluate the impacts from two perspectives: (1) impact due to refugee influx; and (2) state of development in the health sector.

In scoring, for numerical values derived from each indicator, a proportional scale was set for each indicator. And it was evaluated by the scale such that each score generally fell in a range of 0 - 10 in order to eliminate subjective weighting among indicators.

Regarding Indicator 4, it should be noted that these figures are subject to change along with the change of the refugee population. The figures are derived from the equation applying to the total population including the refugees. The figures are, therefore, shows not only the state of health sector development but also the impact of the refugee influx.

Table 7.4-3 Indicators Assessed by the Study

Evaluation Category	Indicators	Overview
Indicators on the Impact of the Refugee Influx	Indicator 1	The ratio of registered refugee population to the total population including both Nationals and Refugees in each Sub-County (July 2017). It could show the impacts of the medical services provision could be varied on the ratio of refugee population to the national population.
	Indicator 2	Changes in the number of outpatients (comparing June 2016 and July 2017) To understand the impact of population changes on providing medical services.
	Indicator 3	Changes in the number of childbirth deliveries at health facilities (comparing June 2016 and July 2017) To understand the impact of population changes on providing medical services.
Indicators on the State of the Health Sector Development	Indicator 4	The exceeding rate of the population in 2017 against the population can be covered by public and non-profit health facilities. That is calculated using the formula below (number of health facilities includes public and non-profit facilities from health facility data (2017)). $\text{Population (2017)} / [(\text{Number of HC II facilities} \times \text{Target population coverage } 5,000 + \text{Number of HC III facilities} \times \text{Target population coverage } 20,000 \text{ people} + \text{Number of HC IV facilities} \times \text{Target population coverage } 100,000)]$
	Indicator 5	Percentage of households living 5 km or more from the nearest health facility (2014 census data)

Source: Prepared by the Study Team

(4) Evaluation Results of Each Indicator

Table 7.4-4 Assessment Results of Target Sub-Counties

	National Pop. Total (2017 Prodi.)		Refugees Pop. Total (2017 June)		Total Population (2017)	Indicator①		Indicator②		Indicator③		Indicator④		Indicator⑤		Preliminary Evaluation		
	(2017 Proj.)	(2017 June)	(2017)	(Score)		(Score)	(Score)	Sub-total 1-3	Cap.		Cap.of HUs (HCII to IV) (***)	HHs 5km and Over to the nearest Public Health Facility (2014) (****)	(Score)	(Score)	Score	Rank		
					RRH				2,000,000									
					GH				500,000									
								HCIIV	100,000									
[a]	[b]	[c=a+b]	[d=b/c]	[e]	[f]	[g=#HCs*Cap.]	[h=c/g]	[i]										
Adjumani total	229,500	179,520	409,020															
Ciforo	14,800	3,752	18,552	20.2%	3	123%	1	163%	2	6	35,000	OK	53%	0	17.0%	3	9.00	5
Dzaipi	43,700	71,153	114,853	62.0%	7	103%	1	90%	0	8	60,000	NG	191%	3	23.0%	4	15.00	1
Itirikwa	17,400	5,950	23,350	25.5%	3	117%	1	169%	2	6	115,000	OK	20%	0	22.8%	4	10.00	4
Ofua	14,300	4,521	18,821	24.0%	3	101%	1	133%	1	5	25,000	OK	75%	0	21.4%	4	9.00	5
Pachara	17,500	7,470	24,970	29.9%	3	91%	0	95%	0	3	40,000	OK	62%	0	15.9%	3	6.00	7
Pakele	50,400	52,477	102,877	51.0%	6	117%	1	97%	0	7	95,000	NG	108%	1	29.7%	5	13.00	3
Ukusijoni	11,600	34,197	45,797	74.7%	8	100%	1	93%	0	9	55,000	OK	83%	0	35.6%	6	15.00	1
Arua Total	840,900	233,841	1,074,741															
Odupi	41,600	145,296	186,896	77.7%	8	233%	2	301%	6	16	85,000	NG	220%	3	23.80%	4	23.00	2
Omugo	46,900	6,637	53,537	12.4%	2	96%	0	103%	1	3	105,000	OK	51%	0	23.50%	4	7.00	4
Rigbo	27,900	29,770	57,670	51.6%	6	137%	1	112%	1	8	50,000	NG	115%	1	68.30%	10	19.00	3
Uriama	25,100	52,138	77,238	67.5%	7	420%	4	40%	0	11	25,000	NG	309%	6	62.30%	9	26.00	1
Koboko total	229,200	4,396	233,596															
Lobule	37,400	4,396	41,796	10.5%	2	91%	0	100%	1	3	25,000	NG	167%	2	15.80%	3	8.00	1
Moyo total	147,600	174,348	321,948															
Itula	14,000	174,348	188,348	92.6%	10	277%	2	526%	10	22	125,000	NG	151%	2	18.80%	3	27.00	1
Yumbe total	562,600	272,206	834,806															
Ariwa	27,900	53,206	81,106	65.6%	7	378%	3	228%	4	14	25,000	NG	324%	6	45.20%	7	27.00	3
Kochi	48,000	48,000	96,000	50.0%	6	76%	0	68%	0	6	45,000	NG	213%	3	65.00%	10	19.00	5
Kululu	42,900	65,000	107,900	60.2%	7	581%	5	203%	3	15	25,000	NG	432%	9	35.40%	6	30.00	2
Odravu	49,100	50,000	99,100	50.5%	6	512%	5	106%	1	12	35,000	NG	283%	5	56.40%	6	23.00	4
Romogi	53,000	56,000	109,000	51.4%	6	1033%	10	246%	4	20	25,000	NG	436%	9	49.80%	8	37.00	1
5 district total	2,009,800	864,311	2,874,111															

Score*: 1: X ≤ 10%, 2: X ≤ 20%, 3: X ≤ 30%, 4: X ≤ 40%, 5: X ≤ 50%, 6: X ≤ 60%, 7: X ≤ 70%, 8: X ≤ 80%, 9: X ≤ 90%, 10: X > 90%

Score**: 0: X ≤ 100%, 1: X ≤ 200%, 2: X ≤ 300%, 3: X ≤ 400%, 4: X ≤ 500%, 5: X ≤ 600%, 6: X ≤ 700%, 7: X ≤ 800%, 8: X ≤ 900%, 9: X ≤ 1000%, 10: X > 1000%

Score***: 0: X ≤ 100%, 1: X ≤ 140%, 2: X ≤ 180%, 3: X ≤ 220%, 4: X ≤ 260%, 5: X ≤ 300%, 6: X ≤ 340%, 7: X ≤ 380%, 8: X ≤ 420%, 9: X ≤ 460%, 10: X > 500%

Score****: 1: X ≤ 7%, 2: X ≤ 14%, 3: X ≤ 21%, 4: X ≤ 28%, 5: X ≤ 35%, 6: X ≤ 42%, 7: X ≤ 49%, 8: X ≤ 56%, 9: X ≤ 63%, 10: X > 63%

Source: Prepared by the Study Team

- Indicator 1: Ratio of Accepted Refugee Population Relative to the Total Population included both of Nationals and Refugees (July 2017)

When a Sub-County has a value of over 50%, there are more refugees than Ugandan citizens in the Sub-County.

Itula Sub-County in Moyo District indicates 92.6% significantly more refugees live in than Ugandan citizens.

In Adjumani District, it varies significantly among Sub-Counties. Refugee population has stayed within a range between 20 to 30 % of the total population in these Sub-Counties – Ciforo (20.2%), Itirikwa (25.5%), Ofua (24.0%), Pachara (29.9%), while more refugees than Ugandan citizens have lived in the following Sub-Counties – Ukusijoni (74.7%), Dzaipi (62.0%), and Pakele (51.0%).

In Yumbe District, all five target Sub-Counties – Ariwa (65.6%), Kochi (50.0%), Kululu (60.2%), Odravu (50.5%), and Romogi (51.4%) – accommodate slightly more refugees than Ugandan citizens.

Regarding Arua District, except Omugo (12.4%), other three target Sub-Counties – Odupi (77.7%), Rigbo (51.6%), Uriama (67.5%) - have more refugees than Ugandan citizens. However, it is worth noting that Rhino Camp Extension in Omugo Sub-County started receiving refugees from August 2017, and then it has been with 45,000 refugees (according to an interview with the UNHCR Arua Health Officer as of November 2017). Hence, the Study Team can assume that it has reached to almost the half of total population as of November 2017.

Regarding Lobule Sub-County in Koboko District, it shows the smallest value (10.5%) among all target Sub-Counties.

- **Indicator 2: Changes in Number of Outpatients (comparing June 2016 and July 2017)**

If the value was less than 100%, this indicates that the number of patients in July 2017 did not exceed the ones in June 2016 as was the case with following Sub-Counties that Pachara (91%) in Adjumani District, Omugo (96%) in Arua District, Lobule (91%) in Koboko District, and Kochi (76%) in Yumbe District. However, all other Sub-Counties showed an increasing trend.

Regarding Sub-Counties in Yumbe District – Ariwa (378%), Kululu (581%), Odravu (512%), Romogi (over 1,000%), they showed notably higher values. Following Yumbe District, Itula in Moyo District (277%), Uriama (420%) and Odupi (233%) in Arua District showed an increase of more than 200%.

A sample survey was conducted in Romogi Sub-County (Yumbe District) as it showed the highest increase rate and found that although the area is no longer accepting new refugees, it has a refugee reception centre in which a HC III health facility is operating. The increase can be attributable to the following facts. Firstly, many refugees transferred from the collection point takes initial medical check and refugees who began settling in the area have been accessing the health services. Secondly, although only about 10% of the total outpatient numbers, surrounding residents who had been difficult in accessing health services until the reception centre opened have become able to access health services. Also, regarding refugees who are suspected as patients of tuberculosis and HIV/AIDS etc. by initial medical check in the reception centre, they are referred to Barakala HC III adjacent to a refugee settlement for taking medical treatment of legal infectious diseases.

- **Indicator 3: Changes in Number of Childbirth Deliveries at Health Facilities (comparing June 2016 and July 2017)**

The changes in the number of childbirth deliveries, Lobule (100%) in Koboko District stayed at the almost same.

Regarding target Sub-Counties in Adjumani District, Ciforo (163%), Itirikwa (169%), and Ofua (133%) showed an increasing trend. Dzaipi (90%), Pachara (95%), Pakele (97%), and Ukusijoni (93%) showed a slightly decreasing trend. In case of Arua District, Omugo (103%) and Rigbo (112%) have a slightly increasing trend, but in Odupi (301%) it has reached to 300% at an exceptionally high rate. On the contrary, Uriama (40%) showed remarkably plunged to a low level although its outpatient number has increased to 400% during the same period. Uriama Sub-County showed an anomaly among all target Districts. The Study Team, therefore, examined to find possible causes of its decreasing trend of the childbirth delivery. Firstly, from statistics of the health facility located in Rhino Camp which is included in Uriama Sub-County and is managed by OPM/UNHCR, it also decreased to 77% – from 213 cases in June 2016 to 166 cases in July 2017 – but not dropped to 40%. Therefore it can be inferred that decreasing trend itself is justifiable. Secondly, it was examined from a geographical characteristic: there are two HCs - Andelizu HC II and Bileafe HC III - located in Uriama Sub-County. However, normal delivery can be treated only in Bileafe HC III situated in the far western part of the Sub-County which stretches from east to west. From these facts, the Study Team can surmise the primary cause that residents living in the eastern part of the Sub-County have been accessing the health facilities in the neighbouring Rigbo Sub-County or Odupi Sub-County. Furthermore, since both HCs are located a certain distance away from the refugee settlements, they do not receive support from UNHCR. The sample survey conducted at Andelizu HC II revealed that the residents tend to access health facilities located in or adjacent to S/Z that receive UNHCR support and have IPs involved in their operation which reportedly offer better health care than HCs not supported by UNHCR. Therefore, HCs - Andelizu HC II and Bileafe HC III – can be inferred that the surge of refugee influx did not effect on it. Through the examination, it can be concluded that the primary causes behind the decrease of the delivery number of these HCs are the geological factor and residents not only refugees accessed the HCs located in or adjacent to S/Z especially asking for better care for childbirth delivery.

Itula Sub-County in Moyo District (526%) showed an increase over five times. Regarding target Sub-Counties in Yumbe District, Odravu (106%) stayed within the almost same state, and Ariwa

(228%), Kululu (203%), and Romogi (246%) increased over 200%. Only Kochi (68%) showed a decrease to around 30%.

- Indicator 4: The exceeding rate of the population in 2017 against the population which can be covered by public and non-profit health facilities.

When the health facility's target population coverage is larger than the population in 2017, a value is shown under 100%.

Regarding the Impact of the refugee influx in Adjumani District, although refugee settlements themselves were located over the whole District, the impact of refugee influx considered to be on the limited areas, since new settlements established after 2016 were only Pagirinya Settlement in Dzaipi and Maaji III Settlement in Ukusijoni Sub-Counties. In fact, except for Dzaipi (191%) and Pakele (108%) Sub-Counties, all other target Sub-Counties showed values under 100%.

Regarding in Lobule Sub-County in Koboko District (167%) and Itula Sub-County in Moyo District (151%), the population exceeded the population coverage of HCs.

In Arua District, these Sub-Counties – Odupi (220%), Rigbo (115%), Uriama (309%) exceeded 100%, whereas, Omugo (51%) far dropped below 100%. However, as described it had been with 45,000 refugees living there as of November 2017. Therefore, the value of Omugo can be expected to exceed over 100%.

In Yumbe District, all target Sub-Counties – Ariwa (324%), Kochi (213%), Kululu (432%), Odravu (283%), and Romogi (436%) – showed far exceeded 100%. However, those values can be expected to be decreased since other 12 health centres established under the support of UNHCR were not officially registered on a government health facility list but they had been operating as of November 2017.

As earlier explained, figures of the Indicator 4 are subject to change along with the change of the refugee population. The figures are derived from the equation applying to the total population including the refugees. The figures are, therefore, shows not only the state of health sector development but also the impact of the refugee influx.

- Indicator 5: Percentage of households living 5 km or more from the nearest health facility (2014)

Facility construction is being implemented to enable any household to access the nearest health facility within a 5 km radius, according to the Ministry of Health standard. However, besides physical accessibility to the health facilities, it is also important to consider matters such as secured health personnel and optimal management of the health facilities. There is still a large proportion of households living farther than 5 km from the nearest health facility, especially in remote areas far away from the cities. This is the case for the following Sub-Counties in Arua District – Rigbo (68.3%) and Uriama (62.3%), and Kochi Sub-County (65.0%) in Yumbe District as well.

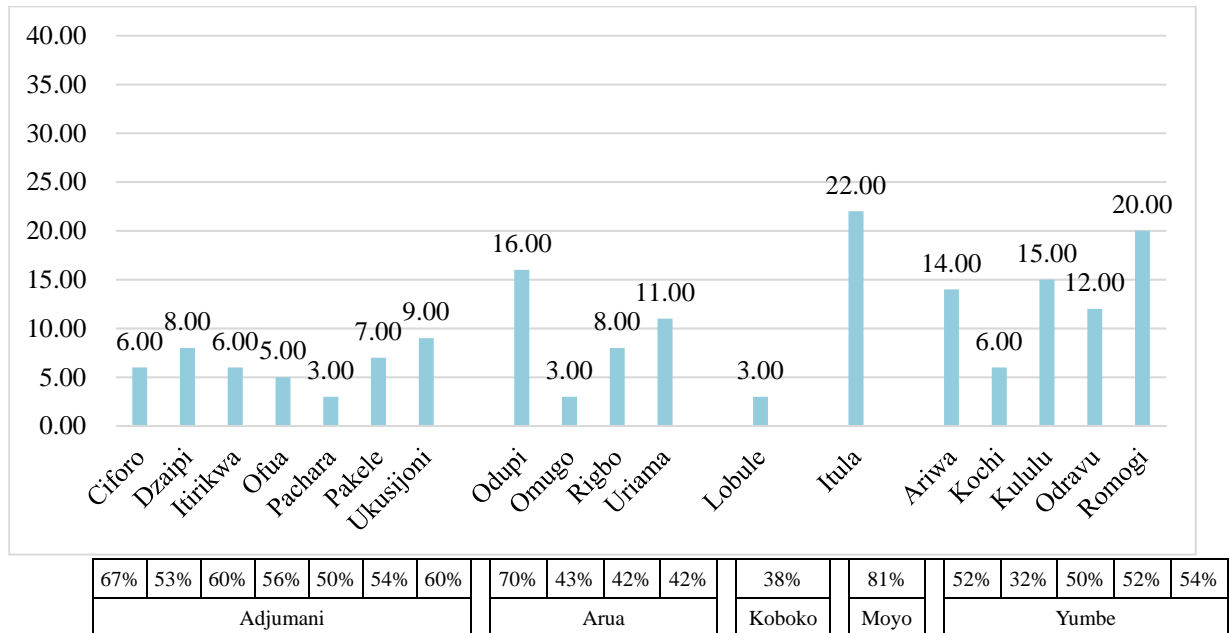
Furthermore, these Sub-Counties - Ukusijoni (35.6%) and Pakele (29.7%) – in Adjumani District showed relatively higher values, compared to other Sub-Counties (stayed below 25%) in the same District. All target Sub-Counties in Yumbe District showed over 35% which are relatively higher than ones in other Districts. In fact, it is impossible to capture current state as of 2017 in this study. however, it is assumed that these values can be expected to be significantly improved should many temporary health facilities, which UNHCR has constructed in the Bidi Bidi Settlement, be operated as permanent ones.

7.4.2 List of Priority Needs

The following figure presents the scores of Indicators 1 to 3 that are indicators concerning the impact of the refugee influx in the assessment. For example, the score of Lobule Sub-County in Koboko District (3) accounted for 38 % of its total score (8), which shows the Sub-County is not affected by

the refugee influx much according to the statistics as no additional refugee registration has been made since 2016.

The opposite case is Itula Sub-County in Moyo District: the score (22) derived from causes of refugee influx for reached to 81% of its total score (27). By these facts, as the following figure indicates, Itula Sub-County shall be the most prioritised when the impact on health service delivery is evaluated by only the causes of refugee influx.



Figures on the bar chart: Subtotal assessment scores derived from Indicators 1-3
Percentages in the table: Ratio of those scores against the total scores obtained from Indicators 1-5)
Source: Prepared by the Study Team

Figure 7.4-4 Assessment Scores Derived from Refugee Influx Related Indicators, and the Proportion of Those Scores in the Total Scores

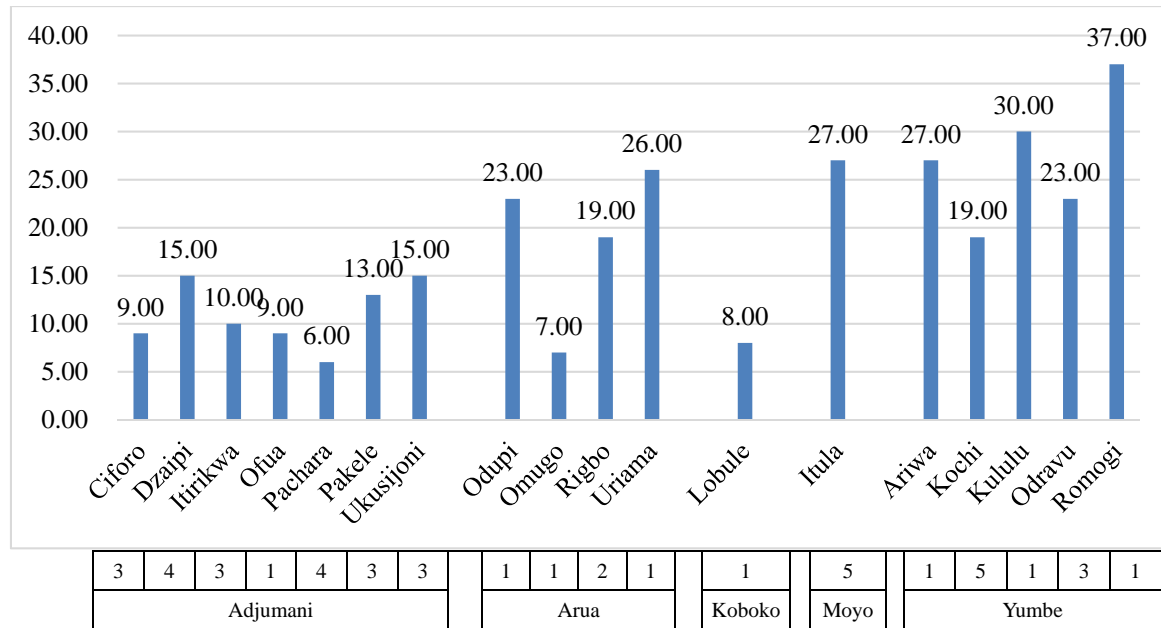
On the other hand, the below figure and table show the result of the evaluation using all the 5 indicators: Indicators related to the refugee influx and those related to a delay of health sector development. The result of this evaluation with 5 indicators is different from that of the refugee-related 3 indicators only.

For example, 3 Sub-Counties in Yumbe District – Romogi, Kululu, and Ariwa – exceed the score for Itula Sub-County in Moyo District which is the most prioritised Sub-County identified by the previous evaluation (See Figure 7.4-5). Consequently, these scores derived from all five indicators can be suitable to prioritise Sub-Counties in considering further assistance.

This assessment can take account of health sector development status and the impacts of refugee influx at the same time, which is in line with STA which is the refugee assistance policy of Uganda government.

Although the scores of each Sub-County are set at this stage, it is necessary to consider what assistance can be feasible for the existing primary health facilities in the higher scored Sub-Counties as a part of health sector development.

Among primary health facilities, HC IV are referral destinations from other facilities, and their functions differ from HC II and HC III level health facilities. Thus, targeting HC III and II that are the more easily accessible facilities is considered appropriate.



Figures on the bar chart: Grand total assessment scores derived from Indicators 1-5
Figures in the table: the number of HC II in each Sub-County tentatively considered for the assistance
Source: Prepared by the Study Team

Figure 7.4-5 List of Priority Needs

One of the options is to expand functions of HC III handling a large number of patients. However, it is judged to be more effective to eliminate the uneven distribution of health services among regions when considering the accessibility. This can be accomplished by carrying out the upgrade of the existing HC IIs to HC IIIs. Then it will also make possible to alleviate work conditions at neighbouring HC IIIs by equalising the workload they have. For these reasons, the Study Team has analysed that HC II is suitably targeted when considering further assistance.

However, existing HC II facilities are surrounded by a respective situation. Furthermore, health facilities must be planned to fit within the framework of the referral system. As is the case with these, many factors need to be identified and then be taken into account. Therefore, a further precise survey is necessary in planning projects and components, as well as consultation with DHO.

Hence, even if a list of all HC II planning targets is prepared at this stage, its validity and feasibility cannot be guaranteed. Therefore, in this survey, the Study Team decided to make it as a list of priority needs which indicates the score of each Sub-County in the above result with the District wise number of HC II facilities that can be considered as potential planning targets.

7.5 Formulation of Priority Projects

7.5.1 Examining the Contents of Proposed Projects

West Nile Sub-Region has been receiving the massive influx of refugees from South Sudan since June 2016. This increased the number of outpatients at health facilities in Arua by over 20% from June 2016 to July 2017. The number increased by as much as 350% in Yumbe over the same period. Because of this, HC II - IV facilities, the most easily accessible facilities for residents for primary health care, have to handle increased patients with limited health personnel. This workforce shortage, together with deteriorated existing health facilities, has caused concern about the quality of health care for refugee settlements and neighbouring communities. Apart from this, though Koboko seems to be less affected by the influx on the statistics, the population is much beyond the receiving capacity of the District's HC II - IV. Then approximately 60% of the population cannot be covered by these HCs. From this fact, HCs in the District can be assumed to be in the situations similar to those in the other Districts.

Meanwhile, the HSDP 2015/16 – 2019/20 has set a goal of establishing at least one HC III in every Sub-County. It is also aiming to upgrade the existing HC II facilities to HC III to make it easier for local citizens to receive better medical care services.

Considering these circumstances, this study will propose upgrading the existing HC IIs to HC IIIs which can provide medical services related to childbirth and inpatient treatment, to make quality medical services easily accessible in host communities, and to equalize the burden HCs within Sub-Counties.

7.5.2 Contents of Proposed Projects

This study has considered prospective objectives, outcomes, and details of assistance in line with the consideration made above.

(1) Objective

Facilities and equipment are supplied to target HC IIs in regions near refugee settlements, which have difficulty offering appropriate medical services because of the influx of refugees, and target HC IIs offer quality medical services related to childbirth and inpatient treatment.

(2) Outcome

Facilities and equipment are supplied to the target HC IIs, and they are upgraded to HC IIIs.

(3) Components included in the Project

The target sites will be the existing HC IIs, which will be equipped with functions necessary for HC IIIs. Because HC IIIs have functions for normal childbirth delivery and inpatient treatment, the target facilities will be equipped with maternity wards and their auxiliary facilities. More specifically, proposed facilities will consist of the following components.

- Maternity ward: 1 building
- Outpatient lavatories (8 toilets/ward): 2 buildings (one each for men and women)
- Maternity ward lavatories/showers (8 toilets/1 shower booth/ward): 1 building
- Staff housing lavatories (2 toilets and 2 shower booths/building): 2 buildings
- Staff housing (2 housing units/building): 2 buildings
- Nursing care staff kitchen: 1 building
- Non-utility power generation room: 1 building
- Nursing care staff laundry room: 1 place
- Afterbirth pit: 1 place
- Medical waste receptacle pit: 1 place
- Security guard room: 1 building
- Furniture, and equipment related to the construction of the maternity ward: 1 set
- Planned area: approx. 966.37m²/site (existing HC site)

7.5.3 Determining the Project Package and Its Size

The scale of assistance will be considered from two perspectives: the first perspective is that the assistance will seek to minimize the unevenness of the qualities among the target facilities and secure a constant level of quality, while also reducing the management costs. The second perspective is related to the fact that the target area, West Nile Sub-Region, is vast and target sites will be sparsely

located. With an aim to minimize traveling times and indirect expenses, the entire construction package will be divided into two sections consist of 10 sites each. It is recommended to assign one supervision consultant to each construction section to secure effective supervisory schemes: namely each supervision consultant will cover 10 sites. It will also be assumed that each supervision consultant will be stationed at a supervisory base, and patrol target sites.

The target HCIIIs will need new facilities and equipment in accordance with functions to be expanded. Regarding medical equipment, part of which cannot be procured within the target Districts. Therefore, those shall be procured in the capital city of Kampala. Transport of the equipment to each site is likely to require certain time and workload for its supervision. Thus, the number of sites in each construction section will be reduced from about 10 to 8. Then, one Construction Package will be composed with a set of facility construction on the 8 sites and a set of equipment procurement. In other words, the scale of assistance will be approximately 16 sites divided into two Construction Packages for the above sated reasons.

Table 7.5-1 Construction Package for Prioritised Projects

Construction Package	Target Districts	Consultant office
The First package (Western Districts)	Arua District, Koboko District, and Yumbe District	In Arua urban centre
The Second package (Eastern Districts)	Adjumani District, Moyo District	In Adjumani urban centre

Source: prepared by the Study Team

7.5.4 Criteria for Selecting Target Sub-Counties and Facilities

(1) Selecting the Target Sub-Counties

Sub-Counties that have earned the highest scores in the target Districts have been selected for assistance.

(2) Selecting the Target Facilities

First of all, the Study Team formulated the selection criteria as shown in Table 7.5-2: Priority Criteria were to select sites where higher effects are expected while Exclusion Criteria were to eliminate sites which would have problems at the project implementation stage or operation stage after completion of the project. Then, the Study Team selected a maximum of two prospective HC II in the Sub-County with the highest score by the priority criteria. Next, the team examined the states of these HC IIs if they were included in the District development plan or assistance schemes of other donors in reference to the exclusion criteria. Following this step, the Study Team repeated the same process for the Sub-County with the second highest score. Finally, eight HCs were selected for the two Construction Packages respectively.

The Study Team also discussed with the DHDs and incorporated their proposals into the selection process. This is because they are responsible for setting the function of these health facilities within their framework of ‘Health Sub-Districts’ (HSD) and broader referral system and considering budgets and personnel which should be increased in case the said facility is upgraded.

Table 7.5-2 Priority and Exclusion Criteria for Selecting Target Facilities

Priority Criteria
The initial assessment will be made on the Sub-County earning the highest score. However, a maximum of two HCs will be selected from a District, where multiple Sub-Counties are included refugee settlements. After this process, target HCs will be selected from the Sub-County earning the second highest score.
Priority will be given to HCs proposed by DHD in reference to the referral system and presence of assistance from other donors.
Priority will be given to HCs with many outpatients according to DHIS.

Exclusion Criteria	
	HCs inside refugee settlements will generally be excluded as they receive assistance from UNHCR.
	Private and non-profit health facilities – that is, except for public health facilities – will be excluded.
	HCs located within 10km from any existing HC III will be excluded. (A HC is expected to be within the distance of 5km from any resident. But the criterion of 10km is adopted so that residents covered will not be overlapped.)
	HCs, which have a track record of disasters, or are in geologically inappropriate locations (wetland, etc.) will be excluded.
	HCs, which cannot secure enough space to construct facilities, will be excluded.
	HCs, which cannot secure access roads for construction vehicles to transport construction materials and equipment, will be excluded. (However, no HC will fall under this category because they usually have an access road for vehicles to transport emergency patients.)
	HCs, which are developing or have any plan to establish facilities on their own or with assistance from donors, will be excluded to avoid redundant assistance.

Source: Prepared by the Study Team

7.5.5 Selected Sub-Counties and Facilities

(1) Western Districts (1st Construction Package)

1) Arua District

a) Uriama Sub-County, Arua District (Score: 26)

Uriama Sub-County earned the highest score among Sub-Counties in Arua District. Anelizu HC II was selected as a target HC, and the Study Team confirmed that it fell under none of the exclusion criteria.

b) Odupi Sub-County, Arua District (Score: 23)

Odupi Sub-County earned the second highest score next to Uriama Sub-County in Arua District. Imvepi HC II is the sole public HC II in the Sub-County, but the Study Team confirmed that it would receive assistance from UNHCR. Therefore, Imvepi HC II was excluded from the target HCs, and then the Study Team.

c) Rigbo Sub-County, Arua District (Score: 19)

Rigbo Sub-County earned a high score next to Odupi Sub-County. This Sub-County has two public HC IIs - Ocea HC II and Olivu HC II. The latter was selected as a target HC as it fell under none of the exclusion criteria. Judging from the map data, the Study Team concluded that Ocea HC II located on the edge of a refugee settlement and it should be excluded from the list. However, according to DHO, Ocea HC II locates outside the refugee settlement and has no assistance plan as of November 2017 although it plays a crucial role in the Sub-County. The Study Team finally decided to select Ocea HC II as a target HC considering that the map data showing the location of the HC is not officially approved, and the information from the DHO.

2) Lobule Sub-County, Koboko District (Score: 8)

Lobule Sub-County in Koboko District earned a low score but was selected as a target HC. This is because the capacity of the entire health facilities in Koboko District is small according to Table 7.4-2 “Comparison of Population versus Target Population Coverage in the 5 Target Districts”, and also to make the balance of assistance with other target Districts.

Among HC IIs in Lobule Sub-County, Anelizu HC II, the sole public HC II in the Sub-County, was selected as it falls under none of the exclusion criteria.

3) Yumbe District

a) Romogi Sub-County, Yumbe District (Score: 37)

Romogi Sub-County earned the highest score among Sub-Counties in Yumbe District. Lochomgbo HC II, the solo public HC II in the Sub-County, was excluded from the list because the Study Team confirmed that it would receive assistance from UNHCR for construction of a maternity ward, and residential building for staff members. Accordingly, the Study Team decided to consider HCs in the Sub-County earning the next highest score in the District.

b) Kululu Sub-County, Yumbe District (Score: 30)

Kululu Sub-County earned the second highest score next to Romogi Sub-County in Yumbe District. There is only one HC II in the District, but it is non-profit Aliapi HC II. Thus, it was excluded from the list. Accordingly, the study the Study Team decided to consider HCs in the Sub-County earning the next highest score in the District.

c) Ariwa Sub-County, Yumbe District (Score: 27)

Ariwa Sub-County earned a high score next to Kululu Sub-County in Yumbe District. Because Okuyo HC II the only one public HC II in the Sub-County, the Study Team proposed to DHD that it should be put on the list of assistance. But DHD showed the firm intention to enhance medical services of Ariwa HC III in Aringa South, an HSD (geographically it overlaps the county), where there is no HC IV. Thus, Ariwa HC III, together with Okuyo HC II, was selected as a target HC, although assistance to Ariwa HC III will be within the range and scope of assistance to other target HCs at level II.

As of November 2017, there was no committed assistance to Ariwa HC III. However, it is necessary to check if any assistance to be given to this HC when considering a definite project implementation plan.

d) Odravu Sub-County, Yumbe District (Score: 23)

Odravu Sub-County earned a high score next to Ariwa Sub-County. There are three public HC IIs in Odravu Sub-County: Abirimajo, Ambelechu, and Moli HC IIs. Thus, the Study Team discussed the priority order for assistance with DHD and confirmed that Abirimajo HC II had a plan to receive assistance under DDP II, and that Ambelechu HC II would receive assistance from UNHCR for construction of an obstetric ward. The Study Team also confirmed that Okuyo HC II falls under none of the exclusion criteria, and thus selected it as a target HC.

e) Kochi Sub-County, Yumbe District (Score: 19)

Kochi Sub-County earned a high score next to Odravu Sub-County. There are three public HC IIs in Kochi Sub-County: Lokpe, Goboro, and Ombachi HC IIs. First, Ombachi HC II was excluded from a candidate for assistance because it is 2.7km away from Barakala HC III, and also because its population coverage considerably overlaps the population coverage of other HCs and thus assistance would not be able to optimize the operations of HCs. The other two HC IIs, Lokpe and Goboro, were selected as target HCs because the Study Team confirmed that they fall under none of the exclusion criteria.

Lokpe HC II located across the border and geographically in Moyo District on map data. But its administrative location is Yumbe District, according to DHIS and the 2017 National Health Facility Master List of MoH²⁸. The Study Team did not confirm the border but will have to bear in mind the possibility of changes in the border and the administrative authority in charge of the HC when the assistance is planned and executed in future.

²⁸ MoH (2017), 'National Health Facility Master List-A complete list of all health facilities in Uganda-June 2017'

(2) Eastern Districts (2nd Construction Package)

Among Sub-Counties in Moyo and Adjumani Districts, Itula Sub-County is the sole target Sub-County in Moyo District. As argued by the Study Team, the Sub-County will have too many HC III if any of its HC IIs are upgraded to HC IIIs. Therefore, the Study Team considered the balance of the assistance with other Sub-Counties and selected four HCs located in a certain distance from other HCs on map data. These four HCs are relevant for optimal operations also to secure the population coverage of health facilities in the Sub-County²⁹. For other four target facilities, priority was given to HCs in Sub-Countries earning higher scores in Adjumani District.

1) Moyo District

a) Itula Sub-County, Moyo District (Score: 27)

Itula Sub-County earned the highest score among all the Sub-Counties surveyed for the second package. There are five public HC IIs in the Sub-County: Ibakwe, Iboa, Belameling, Kali, and Waka HC IIs. Thus, the Study Team discussed the priority order for assistance with DHD and confirmed that Belameling HC II located in a refugee settlement and, therefore, was excluded. The team considered excluding Iboa HC II because it is located in a refugee settlement on map data but decided to select it as a target HC because DHD argued that it is outside the refugee settlement, and also because it falls under none of the exclusion criteria. Other three HC IIs – Iboa, Kali, and Waka HC IIs – were also selected as target HCs.

2) Adjumani District

a) Ukusijoni Sub-County, Adjumani District (Score: 15)

Ukusijoni Sub-County earned the highest score, together with Dzaipi Sub-County, among Sub-Counties in Adjumani District.

There are three public HC IIs in the District: Maaji A, Maaji 3, and Maaji B HC IIs. Of these, Maaji 3 HC II is located in a refugee settlement, and Maaji B HC II only 1.2km away from Ayiri HC III, so they were excluded. On the other hand, Maaji A HC II was selected as a target HC because the Study Team confirmed that it fell under none of the exclusion criteria.

b) Dzaipi Sub-County, Adjumani District (Score: 15)

Dzaipi Sub-County earned the highest score, together with Ukusijoni Sub-County, among Sub-Counties in Adjumani District. There are three public HC IIs in the District: Elema, Ajugopi, and Nyumanzi HC IIs. Of these, Elema HC II was excluded since the number of its patient were not confirmed. Nyumanzi HCII and Ajugopi were evaluated as appropriate to be target HCIIIs due to the high outpatient number of Nyumanzi HCII and suitability for equalising the work burden on both Ajugopi HCII and Nyumanzi HCII. Accordingly, these HCIIIs were selected as target HCs because the Study Team confirmed that those fell under none of the exclusion criteria.

c) Pakele Sub-County, Adjumani District (Score: 13)

Pakele Sub-County earned a high score next to Dzaipi Sub-County in Adjumani District. There are two public HC IIs in the District: Lewa and Olia HC IIs. Olia HC II is located more or less at the midpoint of Dzaipi HC III and Pakele HC III, and just 6.0 - 6.5km away from the two HC IIIs, so that Olia HC II was excluded. Lewa HC II was also excluded because it was planned to receive assistance for its outpatient ward construction under DDP II. Accordingly, the Study Team decided to consider HCs in the Sub-County which earned the next highest score.

²⁹ Itula Sub-County has the population of 174,348 and the population coverage of health facilities (5 HCIIIs and 5 HCIIIs) in the Sub-County totals 12,000 at the moment. If these four HCII are upgraded to HCIIIs, the population coverage will be increased to 185,000 (9 HCIIIs and 1 HCII), which will outnumber the current population of the Sub-County.

d) Itirikwa Sub-County, Adjumani District (Score: 10)

Itirikwa Sub-County earned a high score next to Pakele Sub-County in Adjumani District. There are three HC IIs in the Sub-County: Zoka, Ajeri, and Aliwara HC IIs. However, the Sub-County has Mungela HC VI, and the three HC IIs are located within a 10km radius of Mungela HC VI. Because of this, DHD proposed that HC II to be upgraded should be selected from those in other Sub-Counties, rather than Itirikwa Sub-County. Accordingly, the Study Team decided to consider HCs in the Sub-County which earned the next highest score.

e) Ofua Sub-County, Adjumani District (Score: 9)

Ofua Sub-County earned a high score, together with Ciforo Sub-County, next to Itirikwa Sub-County. The Study Team considered the priority order among health facilities in these two Sub-Counties. The populations of these Sub-Counties are more or less the same: 18,821 people live in Ofua Sub-County, and 18,552 in Ciforo Sub-County. Ofua Sub-County has one each HC III and HC II, which means that the Sub-County's health facilities cover a total of 25,000 people. On the other hand, Ciforo Sub-County has one HC III and three HC IIs, so the population coverage of its health facilities totals 35,000 people, which is above the coverage of Ofua Sub-County. The Study Team thus concluded that health facilities in Ofua Sub-County is relatively less developed and decided to select HCs for assistance from among those in Ofua Sub-County.

Kureku HC II the sole public HC II in Ofua Sub-County and fell under none of the exclusion criteria, so it was selected as a target HC.

7.5.6 Determining the Project Scheme

This plan intends to procure equipment necessary for HC IIs to appropriately provide medical services after they are upgraded to HC III and have expanded facilities. These HC IIs are situated in Sub-Counties near refugee settlements, and their medical services are considerably affected by the influx of refugees. A facility plan for health facilities should be not just a plan for facilities to be procured under the plan, but a comprehensive plan. It should take into account the functional cooperation and complementary effects with existing facilities and facilities to be added under plans. It should also design the target health facilities as a whole so that it can give appropriate consideration to disabled persons and others. Therefore, the Study Team considers that the detailed design should be performed by a skilled consultant with extensive experience in the field of health facility planning. On the other hand, the Study Team considers that construction of facilities will not require advanced construction capability because health facilities to be built are not of advanced level. Therefore, the Study Team finds it appropriate to assign detailed design and construction supervision to a skilled consultant, and construction work to local contractors.

7.6 Outline of Priority Projects

Based on the results of considerations described in the previous sections, the Study Team proposes the following short-list of prospective projects.

- West Nile Sub-Region – Western Districts (Arua, Koboko and Yumbe Districts) Project for Improvement of Regional Health Facilities (H-1)
- West Nile Sub-Region – Eastern Districts (Adjumani and Moyo Districts) Project for Improvement of Regional Health Facilities (H-2)

The study team confirmed at discussions with MOH on January 24, 2018, that both proposed projects were consistent with the government's policy and that neither of them overlapped any aid program of any donor. However, judging from the trends of Uganda's assistance to refugees, it will be necessary to confirm the situations in detail, reselect target HCs, adjust components, and take other actions in

response to the situations before the actual implementation of any project.

7.6.1 Project Outline

This section will outline the two projects. For details, see the project profiles in Chapter 13.

(1) **West Nile Sub-Region – Western Districts (Arua, Koboko and Yumbe Districts) Project for Improvement of Regional Health Facilities (H-1)**

The project will construct a residential building for staff, toilets and other auxiliary facilities, and procure relevant equipment for improvements in the functions of a total of nine HCs and their maternity wards. It will aim at Arua and Yumbe Districts in the western Districts in West Nile Sub-Region. More specifically, it will aim at Sub-Counties in the Districts, which are included refugee settlements and considerably affected by the influx of refugees. The project will also aim at Sub-Counties in Koboko District, where their HCs of Levels II to IV (in practice, Levels II and III because there is no HC IV in the District) have a small capacity, and which are located near refugee settlements and considerably affected by the influx of refugees.

(2) **West Nile Sub-Region – Eastern Districts (Adjumani and Moyo Districts) Project for Improvement of Regional Health Facilities (H-2)**

Similar to the project above (H-1), this project will aim at Sub-Counties included refugee settlements and considerably affected by the influx of refugees. The target, however, will be eight HCs in Adjumani and Moyo Districts.

7.6.2 Target Health Centres and Location Map of the List of Priority Project (H-1)

Table 7.6-1 West Nile Sub-Region – Western Districts (Arua, Koboko and Yumbe Districts): List of Target Health Centres for Facilities Improvement Project

	District	Sub-County	Name of Health Centre	Monthly Number of Outpatients (July, 2017)
1	Arua	Rigbo	Ocea HC II	3652
2	Arua	Rigbo	Olivu HC II	248
3	Arua	Uriama	Andelizu HC II	542
4	Koboko	Lobule	Lurujo HC II	944
5	Yumbe	Kochi	Lokpe HC II	850
6	Yumbe	Odravu	Moli HC II	1094
7	Yumbe	Kochi	Goboro HC II	321
8	Yumbe	Ariwa	Okuyo HC II	514
9	Yumbe	Ariwa	Ariwa HC III	6273

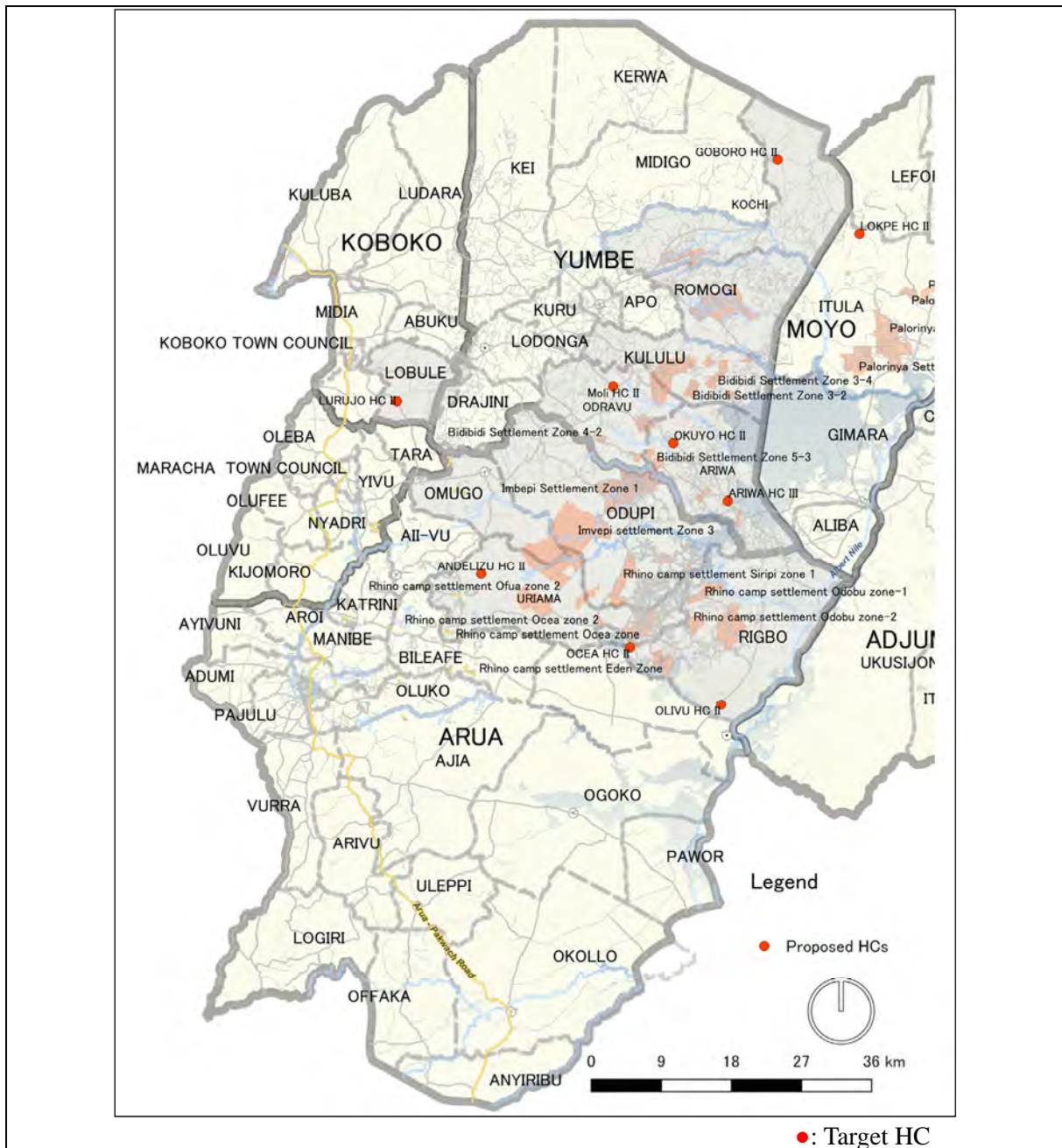
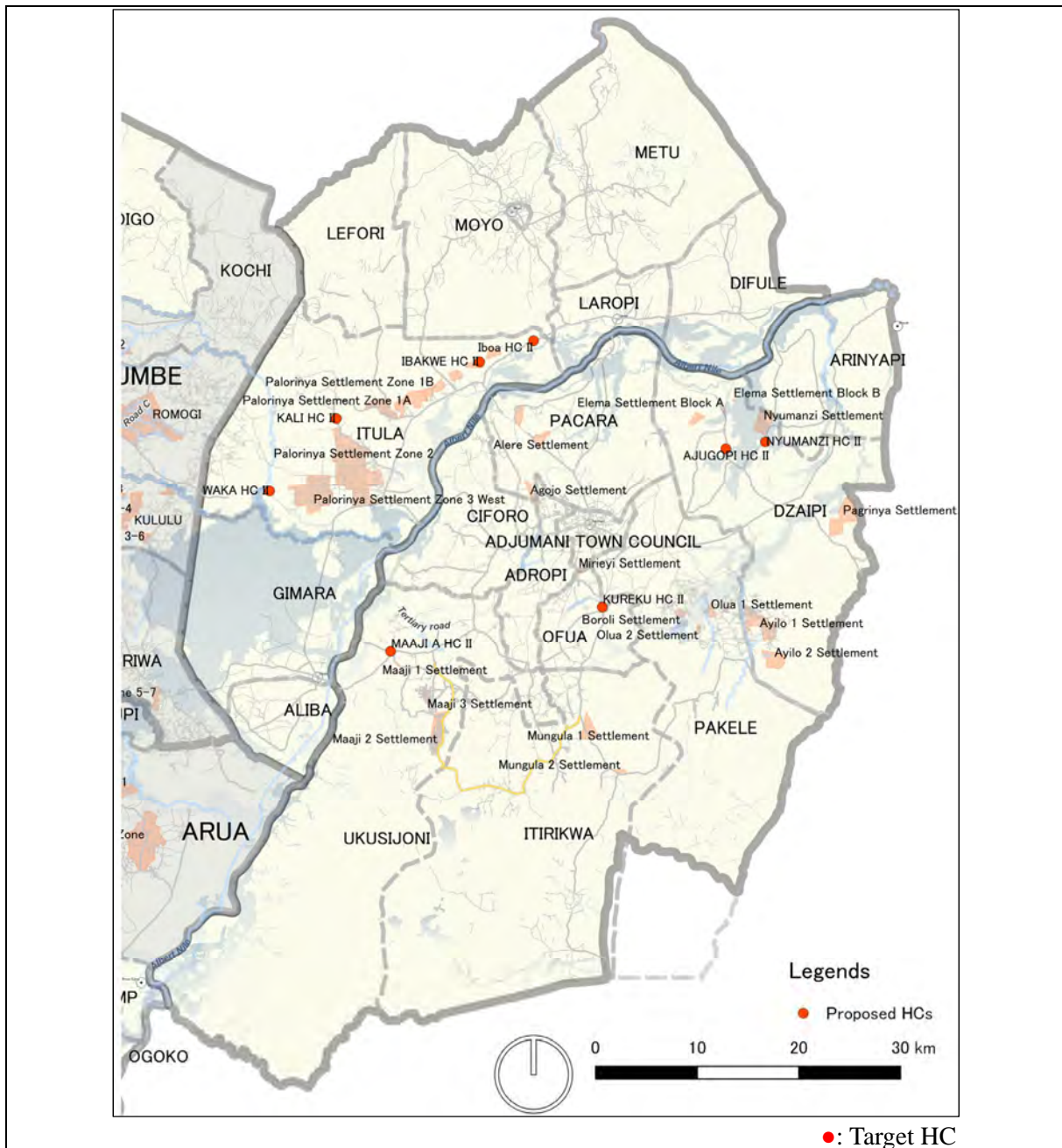


Figure 7.6-1 West Nile Sub-Region – Western Districts (Arua, Koboko and Yumbe Districts): Location Map of Health Centres Facilities Improvement Project

7.6.3 Target Health Centres and Location Map of the List of PRIORITY PROJECT (H-2)

**Table 7.6-2 West Nile Sub-Region – Eastern Districts (Adjumani and Moyo Districts):
List of Target Health Centres for Facilities Improvement Project**

	District	Sub-County	Name of Health Centre	Monthly Number of Outpatients (July, 2017)
1	Adjumani	Dzaipi	AJUGOPI HC II	708
2	Adjumani	Dzaipi	NYUMANZI HC II	4,727
3	Adjumani	Ofua	KUREKU HC II	1,415
4	Adjumani	Ukusijoni	MAAJI A HC II	512
5	Moyo	Itula	IBAKWE HC II	1,103
6	Moyo	Itula	IBOA HC II	547
7	Moyo	Itula	KALI HC II	1,011
8	Moyo	Itula	WAKA HC II	648



**Figure 7.6-2 West Nile Sub-Region – Eastern Districts (Adjumani and Moyo Districts):
Location Map of Health Centres Facilities Improvement Project**

CHAPTER 8 SOCIAL INFRASTRUCTURE SURVEY: EDUCATION

8.1 Overview of Education Sector

8.1.1 Development Plans

(1) National Development Plans

National Development Plan: NDP (2015/16-2019/20) was formulated in 2015 as a national development plan in line with Uganda Vision 2040, which set the goal of "a transformed Ugandan society to a modern and prosperous country within 30 years". Among the four objectives of the plan, the education sector was positioned with the goal of "Enhancing Human Capital Development" alongside other sectors such as health and water sanitation.

(2) Education Sector Development Plans

Current Education Sector development plan in force is the 'Education and Sports Sector Strategic Plan' (ESSP 2017/18-2019/20), which laid out the following three strategic goals:

Strategic Goal 1: In this goal concerning facility development, priority fields have been set to establish at least one primary school in each Parish (485 target Parishes), one secondary school in each Sub-County (385 target Sub-Counties), and one vocational training school in each District (55 target Districts). Under primary and secondary education, by 2020 approximately 16,000 primary classrooms and 850 secondary classrooms are to be built at existing schools to achieve student number less than 50 students per classroom. The plan also aims to raise the net enrolment rate of each curriculum to 13.4% for preschool education, 94.8% in primary education, and 30.3% for secondary education¹.

Strategic Goal 2: In this goal, a number of objectives have been set to ensure quality education and training. These include increasing the number of inspections at educational facilities, skill development of faculty members, managing learning outcomes, and establishing an international qualification system for vocational training.

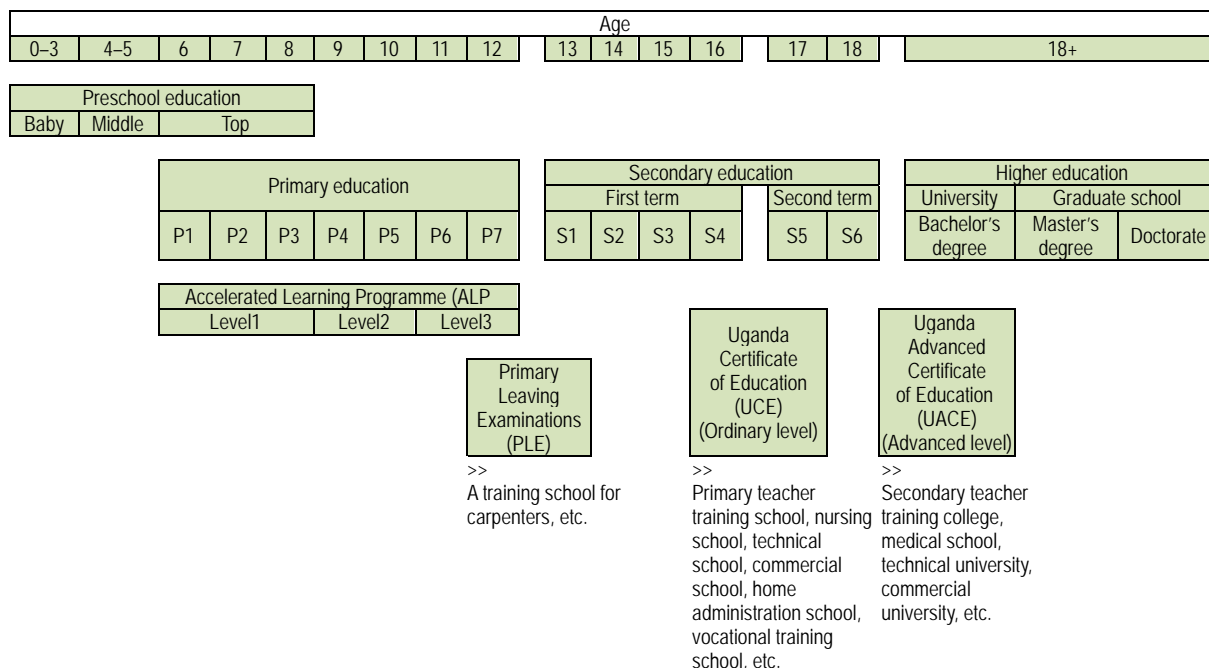
Strategic Goal 3: In this goal, a focus is placed on a management system. The following objectives are set: provide education and training by setting initiatives to develop a framework to evaluate the quality of education, recruit more teachers to reduce the number of students per teacher; develop an E-learning environment; and develop an Education Management Information System (EMIS) that will enable policymakers to accurately and quickly grasp the state of the learning environment.

8.1.2 Education System

The education sector in Uganda consists of seven Sub-Sectors (primary education, secondary education, higher education, vocational training, teacher training, science and technology innovation, and physical education). Concerned organisations are the Ministry of Education and Sports (MoES), non-governmental and social organizations, and development agencies². In the education system, the regular curriculum is 7 years of primary education followed by 6 years of secondary education which is split into the first term of 4 years and the second term of 2 years. After primary education, in addition to the regular curriculum, there are also opportunities provided for those wishing to pursue education and training based on a vocational skill.

¹ MoFPED (2017), 'Budget Framework Paper 2017/2018'

² NDP 2015/16-2019/20



Prepared by the Study Team

Figure 8.1-1 Education System in Uganda

With regard to primary education, since 1997, the seven years of primary education has been provided free under the Universal Primary Education (UPE) policy introduced in 1996, and later became compulsory education with the enactment of the Education Act in 2008. Secondary education consists of 6 years divided into two grades - 4 years in Lower Secondary (Ordinary level) and 2 years in Upper Secondary (Advanced level). This is also being made free gradually by the Universal Secondary Education (USE) policy enacted in 2007. These efforts have significantly improved access to education, boosting the number of enrolled students in primary education from 2.5 million (1997) to 8.66 million (2016). Also, the number of students enrolled has risen from 950,000 people (2007) to 1.46 million (2016) in secondary education although net enrolment rate still stalled at 24% (2016)³.

While the number of enrolled students has increased, classroom development is still lacking with more than 50% of primary education facilities being in the poor learning environment⁴. In particular, the Pupil Classroom Ratio (PCR) in many public primary schools exceeds the 53 students per classroom^{5,6} which is stipulated in the Minimum Quality Standards (MQS). Also, even though schools in Uganda are normally operated as a full-time schooling system, some schools are forced to run as double-shift schooling⁷ due to the extremely high number of students against the capacity of school facilities. As for the quality of education, many issues are still being faced such as low completion rates and learning outcomes⁸ in primary education, high absenteeism and low quality of teachers, and teaching methods that still emphasize memorization, etc.

Other education categories rather than basic education, the ‘Early Childhood Development Policy of Uganda’ for Pre-Primary education was introduced in 2016, advancing efforts towards the sound development of children and fostering the sort of intelligence and social skills that form the

³ These statistic values are based on ‘Fact Sheets 2002-2016’ of MoES (2016). However, the values of the year of 2016 are reference.

⁴ MoFPED (2016), ‘PUBLIC INVESTMENT PLAN 2016/17-2018/19’

⁵ It is expected that this situation will be improved because it aims for 50 students per classroom as the target value of 2020 in ESSP 2017/18-2019/20.

⁶ The national average PCR for 2016 was 69 students/class in educational statistics. In surveyed schools, it was confirmed that PCR was more than 400 students/class (Maaji III PS etc.).

⁷ In “BidiBidi Zone 1 Twajiji PS” etc.

⁸ It was reported 64.2% at P3 and 51.9% at P6 as the rates of students who reached the level for reading and writing along each school grade according to MoES (2016), ‘The Education and Sports Sector Annual Performance Report 2015/2016’.

preparedness for children's sound development and learning in primary school. The policy's goal is to raise the gross enrolment rate from 9.8% in 2015 to 21.1% by 2020⁹. Regarding vocational training, Uganda is focusing efforts on expanding learning and training opportunities for young people who have left the regular curriculum. This policy is reflected even more prominently in the current Education Sector Strategic Plan 2017/18-2019/20 (ESSP: 2017/18-2019/20).

8.1.3 Teacher Training and Placement

There has been a high demand for new teacher training against the backdrop of the UPE introduced in 1997, the launch of USE in 2007, and the increased number of students due to the high population growth rate of at least 3.0% per year. According to a 2013 evaluation report by the Department of Teacher Instructor and Education Training (TIET), MoES, which oversees teacher training administration, 315,846 primary and 166,060 secondary teachers will be needed by 2025. Consequently, it is estimated that 18,746 new primary and 12,211 new secondary teachers respectively need to be trained annually¹⁰. At the current rate of pre-service training output, it is far from being able to achieve the required number of teachers per year. It is judged necessary to take measures as soon as possible especially for secondary education, which is expected to continue sharp increase of student number due to efforts of improving completion rate of primary education and enrolment rate in secondary education.

Improving teacher quality is also an issue. However, it is reported that 80% of teachers are dissatisfied with their teaching jobs. Factors are not only dissatisfaction with salaries and living conditions, but also the limited career paths and recommended promotions that mean leaving teaching positions to take on supervisory positions¹¹.

8.1.4 Institutional Aspects of Operation and Maintenance

As for the maintenance of government-supported primary schools, minor repairs of facilities are mainly covered by the UPE Capitation Grant and school operating budgets come from tuition fees collected from students. In some cases, funds are raised from parents of the pupil (or the student) according to deliberation by the SMC¹² at primary schools or BOG¹³ at secondary schools. Nevertheless, repair or renovation that requires a more substantial amount of budget is implemented by funds from the DED. In reality, it is difficult to secure maintenance budgets for repair, retrofitting, etc., as only schools with the highest priority for maintenance in each Sub-County and District tend to be selected for budget allocation. As a result, many school facilities have fallen into deterioration¹⁴.

As decentralization progresses, the DED will become responsible for maintenance of primary and secondary schools in the District. Thus it is believed necessary for the DED to establish a more long-term maintenance plan and allocate the budget more efficiently.

⁹ MoES (2017), 'ESSP 2017-2020'

¹⁰ Teachers Initiative in Sub-Saharan Africa. (TISSA) (2013). *Teacher Issues in UGANDA: A Diagnosis for a Shared Vision on Issues and the Designing of a Feasible, Indigenous and Effective Teachers.*

¹¹ MoES (2017), 'The Uganda National Teacher Policy'

¹² SMCs (School Management Committee) are elected by individuals, organisations, or agencies that have established/operate the educational facility. They comprise 6 persons including a chairperson (at least 2 members being women), 1 District education official, and from the Sub-County or Parish: 1 education official, 1 Sub-County representative, and 1 parent representative. According to interviews in surveyed Sub-Counties, in actuality Sub-County education officials are acting as local primary school principals.

¹³ A BOG (Board of Governors) must be in place at educational facilities above primary education. BOGs are elected by a regional committee responsible for educational administration. They comprise 5 persons including a chairperson (at least 2 members being women), 1 local council representative, 2 PTA representatives (of which, 1 must be a PTA accountant), 2 staff representatives, and 1 graduate representative.

¹⁴ Some schools in this survey were found to be closed down and neglected due to structural safety issues due to facility aging (Adjumani Sub-County, Ukusijoni Sub-County Maasa PS).

8.1.5 School Establishment Process

The establishment of a school in Uganda is based on the wishes of the community, which also assume the primary role. It is necessary to apply to MoES for permission and obtain approval from the MoES Permanent Secretary (PS). Before applying to establish a school, it is necessary to certify, based on an inspection by the District Education Standards department, that the school to be opened meets the Basic Requirements and Minimum Standards (BRMS)¹⁵. The sanitary environment of the school must also be certified by a District health inspector to meet the standards¹⁶. A similar procedure is required when opening a school in a refugee settlement. However, establishing the autonomy of the community at the outset in a refugee settlement is judged to be difficult. For that reason, with the assistance of UNHCR's IP and others, a refugee community reach out to Refugee Welfare Committees (RWC), and then through RWC, they will pursue discussions with DED towards establishing schools (interview survey with Principal of Maaji III PS in Adjumani District).

Table 8.1-1 School Classification in Uganda

School Registration Category	
Primary School	Boys' school, girls' school, co-educational school Student dormitories can only be installed if approved by DED.
Secondary School	All day school system (daytime school), boarding school, commuting and boarding school, co-educational school, boys' school, girls' school

Source: Prepared by the Study Team based on MoES (2013), 'Guidelines for Establishing, Licensing, Registering, and Classification of Private Schools/Institutions in UGANDA

Also, since permission of operating a school is valid for five years, it is necessary to obtain approval from the Permanent Secretary of MoES for any extension, change of classification, or site relocation through a similar procedure as above. Furthermore, if converting from a community to public school, the District Inspector of Schools will first verify that the school has been capable of operating soundly for long-term, and then the DED will request registration of such a school as a public school to the Ministry of Education which will make the final judgment on whether to register¹⁷.

Refugees can receive the educational services at the level of which is provided at schools. However, it is inferred that there is a difference of education services that refugees receive, which depends on whether schools have staff who is assigned to assist them in case that refugees face a language barrier.

8.2 Current Situations and Issues

8.2.1 Current State of the Education Sector in the Targeted 5 Districts

Indicators for the education sector shows that the 5 target Districts have lower development status when e compared to the national average. For example, the attendance rate for primary education in the 5 target Districts has stayed between 70 to 80% (as of 2014) while the national average of Net Enrolment Rate (NER) exceeds 90 % (NER of the 5 District was not found.) These figure infer that there are many pupils who enrolled but not attend the school.

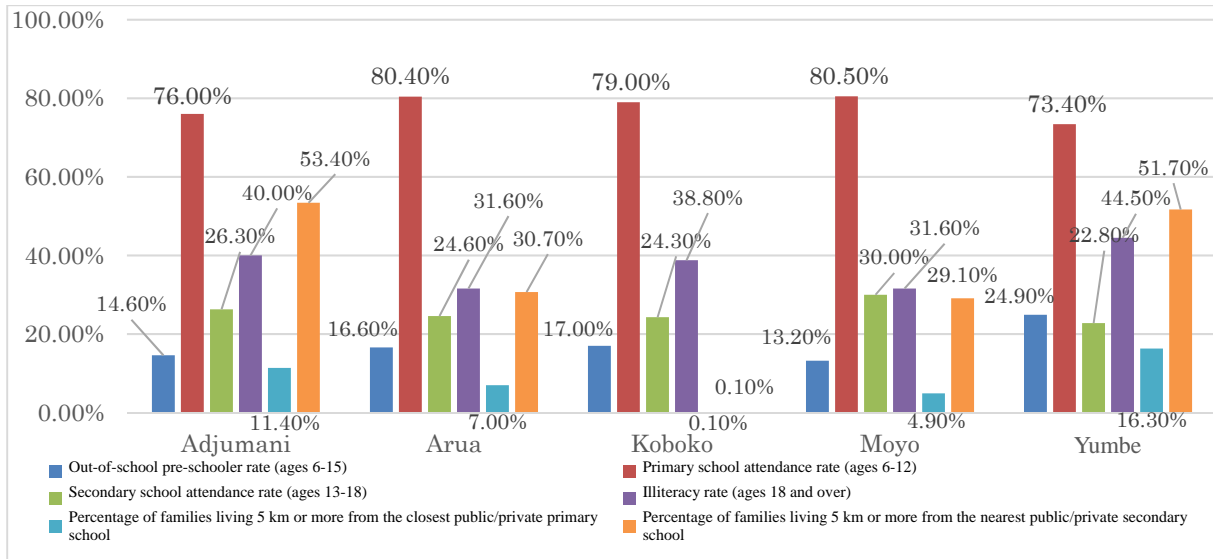
Another example is illiteracy rate: it is high in the 5 Districts, over 40% in Adjumani and Yumbe compared to the national average of 27.8% (NPHC 2014). In another indicator, over 10% of families in Adjumani (11.4%) and Yumbe (16.3%) Districts are living 5 km or more away from the nearest

¹⁵ Assessed items include placement of qualified teachers, financial stability, certain school land size (5 acres for primary; 10 acres for secondary school), whether student dormitories are available separately for males and females, whether it provides an appropriate, safe educational environment.

¹⁶ MoES (2014), 'Guidelines for Establishing, Licensing, Registering and Classification of Private Schools/Institutions in Uganda'

¹⁷ MoES (2014), 'Guidelines for Establishing, Licensing, Registering and Classification of Private Schools/Institutions in Uganda'

primary school, and this rate for secondary school particularly stands out at over 50% in Adjumani (53.4%), and in Yumbe (51.7%) District, respectively.



Source: Prepared by the Study Team based on 'National Population and Housing Census 2014 Area Specific Profiles',
Note: indicators of Percentage of families living 5 km or more from the nearest public/private primary (secondary) school for Koboko District can be implied as anomalies caused by statistical mistakes. However those are indicated as verbatim.

Figure 8.2-1 Comparison of Educational Indicators in the 5 Target Districts

8.2.2 Issues for the Education Sector in West Nile's 5 Districts

(1) Facilities

The problems of educational facilities are mainly divided into two points. The first is a shortage of educational facilities including classrooms and staff quarters for teaching staff providing education. The second is low quality and deteriorated dilapidation of existing classrooms and educational facilities.

With regard to the classroom shortage, in refugee settlements and surrounding schools accommodating a mass volume of refugee students due to the refugee influx, there is an acute increase of students in especially lower grade classes, making for extremely overcrowded classrooms (Tuajiji PS, Yangani PS in Yumbe, etc.).

Classrooms protecting students from rain and wind can be better than the schools being forced to conduct classes outdoor where desk and chairs are placed in a shade of tree due to the lack of facilities. Because of this situation in such a school, even teachers have set up furniture in the shade to do office work (School 5 PS, Idiwa SS in Moyo, etc.). Regarding staff quarter, there are few schools adequately providing it with good living environments. It was found that the shortage of teacher housing at schools was prevalent and so that some communities prepared makeshift thatched huts in schools (Maaji III PS in Adjumani).

The conditions of the educational facility are far from satisfactory. It was observed that schools had no proper floors installed, leaving dirt floors, broken windows allowing wind and rain into rooms, and structures having roofs but no ceiling. Furthermore, it made difficult to conduct classes in such as condition when rain reverberates loudly on the galvanized metal roofs (Ponyura PS in Koboko, etc.). Some classrooms were constructed through "Food for Work" programs with an aim to reduce poverty. However, it was found that local contractors had stopped construction unfinished, leaving some facilities with incomplete corridors and walls floors, walls and ceilings in some cases,. There might be in dire need of consideration from an aspect of proper social stock accumulation as to whether they

are to be built according to standards suitable for use as classrooms¹⁸. There are many problems regarding the appropriate educational environment in school buildings. However, what is worse is that many school facilities have been dilapidated. School was located in area where prohibited for the use by the District Inspector of Schools from safety concerns (Maasa PS in Yumbe, etc.).

Temporary classrooms are in deplorable conditions. Wood framing was termite-damaged, plastic sheeting covering the wall was damaged by student's mischief or torn away by surrounding residents to sell, rain and wind blew into classrooms, and rainwater flooded on classroom floors. Classrooms had no blackboards, desks and chairs, so students sat on wood stumps. Even when there were portable blackboards, they had bleached and could not be easily read due to reflections from the light (Tuajiji PS, Yangani PS in Yumbe, etc.). This situation can be judged as an unsuitable learning environment.

(2) Teaching Staff

The number of Pupil per Teacher was assessed in refugee settlements, and it was found that they have to teach over 400 pupils a class in some schools. Taking account of the pupil-teacher ratio (PTR) was 44.5 to 68.7 students¹⁹ in the 5 target Districts in 2010, it could be assumed that the workload of teachers have been completely changed and the impact of refugee influx is significantly huge.

Improvement of teacher's quality is also required from the aspect of ensuring quality education. In the few schools visited as sample survey, teacher's absence or lateness due to weather, unstable traffic conditions etc. are recognised problems. A prior survey conducted by World Bank in Uganda recorded 57% of teacher absenteeism rate²⁰, and given that remote areas are the target areas of this survey with worse traffic conditions, the Study Team can assume even worse results. Thus, it is judged that there is a significant impact on learning effectiveness. In some schools visited, efforts to encourage attendance were observed, such as by posting teacher attendance records in the staff room (School 4 PS in Moyo, etc.).

Table 8.2-1 The Main Factors of Satisfaction/Dissatisfaction, 2012: Percentage of Teachers per Region

Factor	Central	Eastern	Northern	Western	Nationwide	National Ranking
Salary	57%	36%	35%	67%	50%	1
Potential/opportunities for professional growth	14%	9%	16%	5%	11%	2
Recognition	4%	16%	17%	4%	10%	3
Quality of leadership and supervision of head teacher	7%	14%	7%	7%	9%	4
Benefits	6%	7%	6%	6%	6%	5
Interpersonal relationships with colleagues	5%	8%	9%	3%	6%	6
Working conditions	4%	7%	6%	4%	4%	7
Regular assessment of teacher performance	3%	3%	4%	4%	3%	8
Total	100%	100%	100%	100%	100%	

Source: TISSA (2013), 'Teacher Issues in UGANDA: A Shared Vision for an Effective Teachers Policy'

(3) Budget

In each District, 2017/18 education budget has applied, the ordinary budget accounted for at around 90%. Regarding the budget for investment in the education, it varied that 13.6% in Adjumani, 4.9% in Arua, 6.4% in Koboko, 7.1% in Moyo, and 10.3% in Yumbe. Even though it of Adjumani District showed a relatively higher percentage than other Districts, 7.9% out of 13.6% was carried over from

¹⁸ These situations were based on the interview with Lini PS in Arua. However, the detail information (construction year, implementing body, etc.) of these cases by "Food for Work" was unable to be confirmed.

¹⁹ TISSA (2013): Moyo 44.5 PTR, Yumbe 51.1 PTR, Koboko 68.7 PTR, Adjumani 60.1 PTR, Arua 64.2 PTR, as of 2010.

²⁰ Tessa Bold et.al, (2017), 'What Do Teachers Know and Do? Does It Matter? Evidence from Primary Schools in Africa'

the balance of donor funds in the previous fiscal year in fact. Proprietary funds, therefore, were low at 4.5% including the DDEG. Primary and secondary education, in particular, are delegated to the District from the Ministry. Given the difficulty in allocating a sufficient budget for school construction and maintenance, it is thought necessary to consider a maintenance management plan with a more medium-to-long term perspective that contributes to effective utilization of the limited budget.

8.3 Assessment Methodology and Data

8.3.1 Assessment Scope

To evaluate the impact of refugee influx, it was decided to focus on two educational levels. One is primary education which is a foundation of all level of education that became compulsory in 2007. And another is a secondary education for which the USE policy was enacted in 2007 to make it gradually be a free education.

8.3.2 Assessment Methodology

Since the target areas in this survey are Sub-Counties including refugee settlements in the 5 target Districts, a policy to examine from a holistic approach was adopted that was in line with the Settlement Transformation Agenda (STA)²¹, which is the refugee assistance policy of Ugandan government. Therefore, with regard to the impact on educational facilities, it was decided to assess the situation of those facilities from two perspectives: (1) the impact of refugee influx, and (2) the status of the education sector development. The outline of the Survey is shown in the following table. And also, Study flow is showed in the next figure.

Table 8.3-1 Outline of the Survey

The range of Survey:	Adjumani District	Total 7 Sub-Counties	Ciforo, Dzaipi, Itirikwa, Ofua, Pachara, Pakele, Ukusijoni
	Arua District	Total 4 Sub-Counties	Odupi, Omugo, Rigbo, Uriama
	Koboko District	Total 1 Sub-County	Lobule
	Moyo District	Total 1 Sub-County	Itula
	Yumbe District	Total 5 Sub-Counties	Romogi, Kochi, Kululu, Odravu, Ariwa
Survey Method	Collection and analysis of existing statistics and documentation; Field and interview surveys; Data conversion and analysis of positional information		
Survey Targets	The education department of the 5 Districts and Sub-County education facilities seemed most impacted by the influx UNHCR-Arua Office, Adjumani Office, Yumbe Field Office, Moyo Field Office WTU, which is UNHCR's IP: Adjumani, Arua, Moyo, Yumbe.		
Population	The cut-off date is the last day of July 2017.		

Source: Prepared by the Study Team

8.3.3 Data Collection Methods and the Related Issues

Regarding general data collection, the Study Team mainly referred to documents and statistics publicly available. Regarding data collection of the education sector, the Study Team minimised it since there are over 1,000 primary and secondary schools in the 5 target Districts. The reason is that the main focus of the study is to comprehend the impact on the education sector quantitatively. Therefore, we limited the following indicators to be collected - the number of enrolled students (the

²¹ STA aims to foster sustainable livelihoods for refugees and host communities and to create an enabling environment for refugees to live in safety, dignity and in harmony with the host communities.

refugees and the Ugandan as separately when possible), and the number of classrooms (permanent and temporary classrooms as independently when possible).

(1) Issues Related on Data Collection of the Refugee Influx

To identify the refugee population, we mainly referred documents and statistics publicly available. However, the Study Team faced a problem²² of how to determine the population of non-registered refugees²³ because they never appear in the statistics. This shall be taken into account if possible, but the Study Team decided not to take into account the population of not registered. The reason is that the impact of non-registered refugees can be quite limited since they live mainly in urban areas, but the target Sub-Counties in this Study are located in the remote area.

Regarding educational statistics of refugees, we cannot obtain precise data except aggregated ones from documents publicly available. Therefore, the Study Team collected educational indicators per the educational facilities sourced from UNHCR and its Implementation Partners (primarily Windle Trust Uganda), then the Study Team compiled the collected data as inventory. After this process, the Study Team assessed the situation of refugee intake and overcrowding at each educational facility, calculated the number of classroom shortages in the Sub-Counties, and identify the degree of impact based on the number of enrolled students and the number of classrooms at the end of July 2017.

(2) Issues Related on Data Collection of Education Sector Development

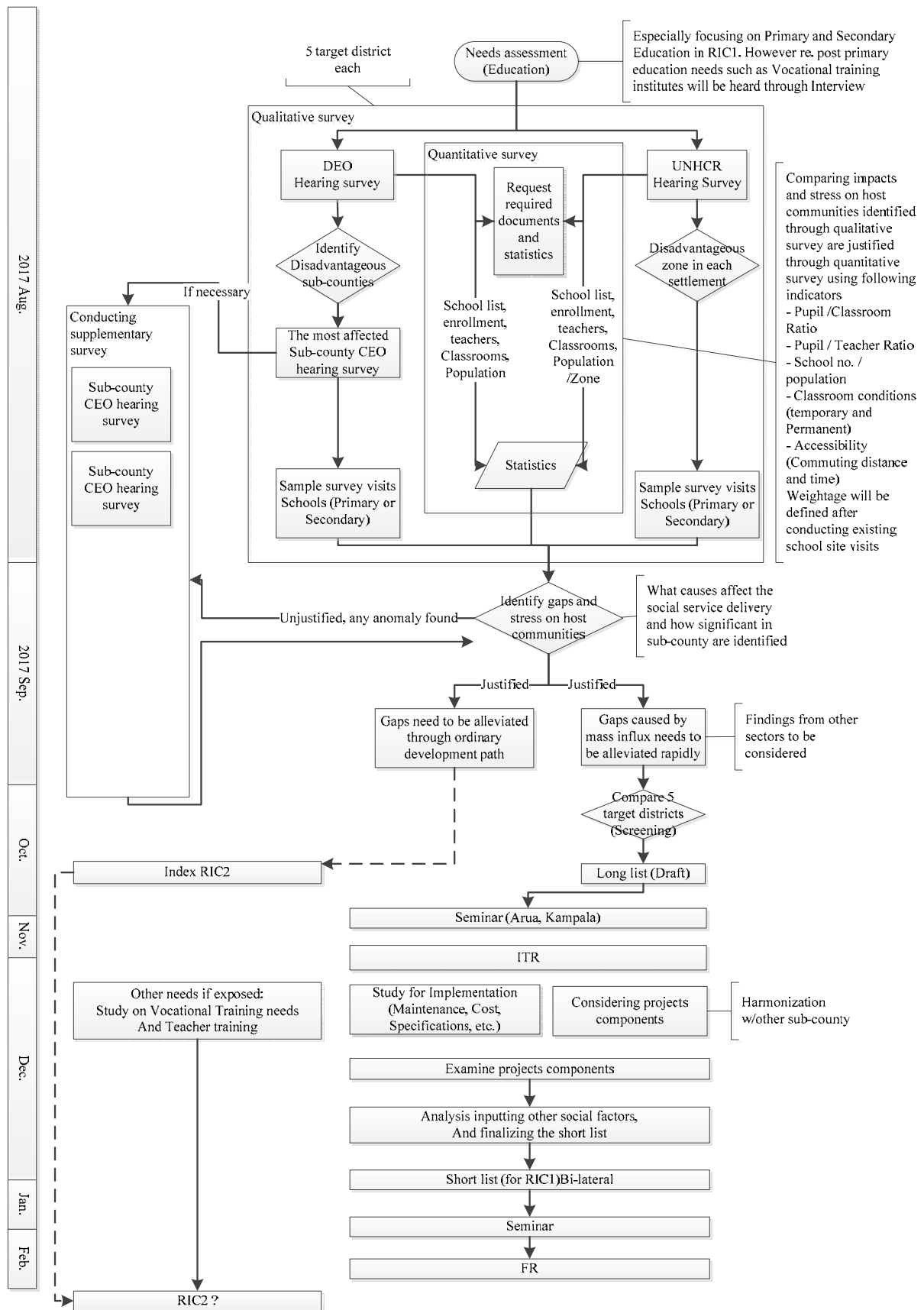
In general, a statistic showing the current situation cannot be possessed without well-organised data management. In fact, from the beginning of the Study, the Study Team faced a problem in that it was impossible to grasp the situation as of 2017 from the officially published documents. Educational statistics of 2017 were not yet compiled even in the DED of the 5 target Districts in that educational statistical data was not well-organised. Reflecting this, the Study Team decided to make inventory data by compiling data piled in DEDs and supplementary collecting data individually from each school. Simultaneously, each school location was identified to gather all data on a platform of Geographic Information System (GIS) to make easier in analysing the state of education sector development and proposing further assistance.

This survey work required a certain amount of time. Therefore, in parallel to this survey, the Study Team identified the Sub-Counties whose educational sector is affected by the refugee influx the most through the interviews with the DED. Then, a sample survey was conducted at education facilities within these Sub-Counties to comprehend deeply the current state of the education sector development to propose priority projects.

Supplementary, 2014 household census data is also referred to grasp the situation of the education sector development by Sub-County before the mass refugee influx occurred in 2016.

²² According to the interview with Kuluba Collection Point, refugees were registered once. However, non-registered refugees and the refugees who lived in urban areas as relying on relatives were not clearly grasped.

²³ According to the explanation by Koboko DED: The refugee enrolling students of Kuluba Sub-County and Ludara Sub-County in the northern area of Koboko District - 10,292 students based on the educational statistics of 2017 and estimated by the study team - were over double to the number of registered refugees (4,396 people) in Lobule Sub-County included refugee settlements. And also, in Kuluba Sub-County, some students came to schools across the national border because they lived in South Sudan.



Source: Prepared by the Study Team

Figure 8.3-1 Survey Flow

8.4 Assessment Results (Priority Needs)

8.4.1 Assessment Results of the prioritised Needs

(1) Number of Classrooms Required to Accommodate the Population Increased during June 2016 to July 2017 in the 5 Target Districts

In one year from June 2016 to July 2017, the population in the 5 target Districts increased by 745,000 refugees (see Figure 7.4-1 in the previous chapter) and 63,000 Ugandan citizens for a total estimated increase of about 800,000 persons. The number of new classrooms required to accommodate this increase in population was calculated with the following equation:

[63,000 (N)	x (21 - 28%)	+	745,000 (R)	x 25.1%]	x 110%	/	50	= 4,453
↑	↑		↑	↑		↑		↑	
Ugandan nationality resident increase 2016-2017	2017 ratio of Ugandan nationality school-aged population (age 6-12) in the target District		The increase of refugees 2016-2017	2017 ratio of school-aged population (age 6-12) to the refugee population		2016 gross enrolment rate for all Uganda		2020 target number of children per class	
About 4,500 new classrooms will be needed for the primary education curriculum.									Legend N: Ugandan citizens; R: Refugees

Source: Prepared by the Study Team

Figure 8.4-1 Number of Classrooms Required to Accommodate the Population Increased during June 2016 to July 2017 in the 5 Target Districts (Primary Education)

About 4,500 classrooms will be required for the primary curriculum. More classrooms will also necessary under given the fact that existing classrooms continue to deteriorate in conditions.

[63,000 (N)	x (15 - 17%)	+	745,000 (R)	x 23.1%]	x 27.1%	/	50	= 987
↑	↑		↑	↑		↑		↑	
Ugandan nationality resident increase 2016-2017	2017 ratio of Ugandan nationality school-aged population (age 13-18) in the target District		The increase of refugees 2016-2017	2017 ratio of school-aged population (age 13-18) to the refugee population		2016 gross enrolment rate for all Uganda		2020 target number of children per class	
About 1,000 new classrooms will be needed for the secondary education curriculum.									Legend N: Ugandan citizens; R: Refugees

Source: Prepared by the Study Team

Figure 8.4-2 Number of Classrooms Required to Accommodate the Population Increased during June 2016 to July 2017 in the 5 Target Districts (Secondary Education)

Comparing to Primary school, the number of new classroom required for secondary schools is lower but reached 1,000.

(2) Number of Classrooms Required to Accommodate the Population Increased during June 2016 to July 2017 in Each Target District

The number of classrooms required to accommodate the June 2016-July 2017 increase in population in each target District is shown in the table below. (Refer to Annex e-8-1 I. for the calculation formula). Based on the calculation results, the need for new classrooms in primary schools is highest in Yumbe at 1,683 classrooms, followed by Arua at 1,244, and Moyo at 977 classrooms. These 3 Districts account for 87% of needed classrooms and a similar trend is observed in secondary schools at 88%. Thus, it is judged that these 3 Districts have an especially high need to build education facilities.

Table 8.4-1 Number of Classrooms Required to Accommodate the Population Increased during June 2016 to July 2017 in Each of Target Districts

	Adjumani District	Arua District	Koboko District	Moyo District	Yumbe District
Number of classrooms required (primary education)	507	1,244	41	977	1,683
Number of required classrooms (secondary education)	115	278	7	221	367

Source: Prepared by the Study Team

(3) Impacts from the Influx by Sub-County (Primary Education)

To understand the impacts of the refugee influx at a Sub-County level, the following indicators were set to evaluate the impacts from two perspectives: (1) impact due to refugee influx, and (2) state of education sector development. In the scoring of numerical values derived from each indicator, a proportional scale was set for each indicator and evaluated such that each score generally fell within a range from 0 to 10 in order to eliminate subjective weighting among indicators.

Regarding Indicator 5, it should be noted that these figures are subject to change along with the change of the refugee population. The figures are derived from the equation applying to the total population including the refugees. The figures are, therefore, shows not only the state of health sector development but also the impact of the refugee influx.

Table 8.4-2 Indicators Assessed by the Study (Primary Education)

Evaluation Category	Indicators	Overview
Indicators Showing the Impact of the Refugee Influx	Indicator 1	The ratio of school-age refugee population (6-12) to the total school-age population (6-12) by Sub-County (July 2017) It was assumed that the impact on providing educational services depends on the ratio of the refugee population in the total population.
	Indicator 2	Level of classroom overcrowding believed attributable to refugee influx (July 2017): Students per classroom (July 2017) calculation: The following formula was used to calculate students per classroom in order to find the number of students outside the school-age population. Refugee and Ugandan school-age population (6-12) x gross enrolment rate 110% / number of classrooms (permanent + temporary facilities)
Indicators Showing the State of the Education Sector Development	Indicator 3	Attendance rate: Percentage of children attending school relative to primary school age population (age 6-12) The attendance rate was quoted from results of the household survey carried out in 2014.
	Indicator 4	Illiteracy rate: Literacy is considered as an indicator of educational outcome. Conversely, the illiteracy rate evaluates the illiterate portion of the population and can be thought of as an alternative indicator that shows access to education and low educational outcomes. The illiteracy rate was quoted from the results of the household survey carried out in 2014.
	Indicator 5	Classroom shortage severity: Since the absolute number depends mostly on the amount of population increase, the value obtained by dividing the classroom shortage by existing classrooms is adapted to grasp the severity of deficiency accurately. The classroom shortage rate is calculated with the following equation.

Evaluation Category	Indicators	Overview
		$\left[\frac{\text{number of Shortage of classrooms}}{\text{number of Existing classrooms}} \right] = \left[\frac{(\text{refugee and Ugandan citizen age 6-12 school-age population}) \times (\text{2016 national average 110\% gross enrolment rate})}{(50 \text{ student per class, the target value for 2020})} \right] - (\text{permanent classrooms in primary schools in Sub-County, from educational statistics 2017 which the Study Team compiled}) / \left[(\text{permanent classrooms of primary schools in Sub-County, from educational statistics 2017 which the Study Team compiled}) \right]$

Source: Prepared by the Study Team

(4) Evaluation Results for Each Indicator

Table 8.4-3 Assessment Results of Target Sub-Counties (Primary Education)

	Indicator 1			Indicator 2			Indicator 3	Indicator 4	Indicator 5		Preliminary Evaluation										
	Nationals Pop 6-12 Total (2017 Proj.)	Refugees Pop. 6-12 Total (2017 June)	N+R Pop. 6-12 Total (2017)	Classroom			PCR (GER:110%) (STD:50:CR) (Score**)	Sub - total 1-2	Attendance rate (%) (2014) (Score***)	Illiteracy rate (%) (2014) (Score*)	=	=Gap (Score****)	Score	Rank							
	[a]	[b]	[c=a+b]	[d=b/c]	Perm	Temp	total	[e=f]	[h=c*110%/g]	[i]	[j]	[k]	[l=(c*110%/50)-k]	[m=l/k]							
Adjumani	51,408	45,059	96,467																		
Ciforo	3,315	942	4,257	22.1%	3	55	4	59	79	1	4	84.3%	2	38.5%	4	55	39	71%	1	11	7
Dzaipi	9,789	17,859	27,648	64.6%	7	193	15	208	146	2	9	84.6%	2	48.3%	5	193	415	215%	3	19	2
Itirikwa	3,896	1,493	5,391	27.7%	3	62	5	67	89	1	4	70.7%	4	49.3%	5	62	57	92%	1	14	4
Ofua	3,203	1,155	4,358	26.2%	3	46	4	50	95	1	4	80.9%	2	39.0%	4	46	49	107%	2	12	6
Pachara	3,920	1,875	5,795	32.4%	4	67	0	67	95	1	5	87.8%	1	55.9%	6	67	60	90%	1	13	5
Pakele	11,290	13,172	24,462	53.8%	6	206	20	226	119	2	8	84.0%	2	32.9%	4	206	332	161%	2	16	3
Ukusijoni	2,598	8,583	11,181	76.8%	8	39	6	45	273	5	13	70.2%	4	48.8%	5	39	207	531%	6	28	1
Arua	178,271	58,694	236,965																		
Odopi	8,819	36,469	45,288	80.5%	9	117	64	181	275	5	14	80.5%	2	39.0%	4	117	879	751%	8	28	1
Omogo	9,943	1,666	11,609	14.4%	2	91	24	115	111	2	4	83.9%	2	39.4%	4	91	164	180%	2	12	4
Rigbo	5,915	7,472	13,387	55.8%	6	74	7	81	182	3	9	79.6%	3	44.9%	5	74	221	299%	3	20	3
Uriama	5,321	13,087	18,408	71.1%	8	75	23	98	207	4	12	74.2%	4	42.6%	5	75	330	440%	5	26	2
Koboko	51,570	1,103	52,673																		
Lobute	8,415	1,103	9,518	11.6%	2	92	18	110	95	1	3	84.1%	2	44.7%	5	92	117	127%	2	12	1
Moyo	32,620	43,761	76,381																		
Itula	3,094	43,761	46,855	93.4%	10	87	238	325	159	3	15	80.7%	2	34.1%	4	87	944	1085%	11	30	1
Yumbe	159,778	68,324	228,102																		
Arwa	7,924	13,355	21,279	62.8%	7	41	27	68	344	6	13	80.5%	2	44.8%	5	41	427	1041%	11	31	1
Kochi	13,632	12,048	25,680	46.9%	5	72	68	140	202	4	9	76.4%	3	44.8%	5	72	493	685%	7	24	4
Kululu	12,184	16,315	28,499	57.2%	6	69	72	141	222	4	10	78.5%	3	44.6%	5	69	558	809%	9	27	3
Odravu	13,944	12,550	26,494	47.4%	5	110	30	140	208	4	9	73.8%	4	42.7%	5	110	473	430%	5	25	5
Romogi	15,052	14,056	29,108	48.3%	5	55	65	120	267	5	10	70.0%	4	49.5%	5	55	585	1064%	11	30	2
5 district total	473,647	216,941	690,588														6,350				

Score*: 2.X ≤ 20%, 3.X ≤ 30%, 4.X ≤ 40%, 5.X ≤ 50%, 6.X ≤ 60%, 7.X ≤ 70%, 8.X ≤ 80%, 9.X ≤ 90%, 10.X ≤ 100%
 Score**: 0: 0.25<50, 1:X<100, 2:X<150, 3:X<200, 4:X<250, 5: X<300, 6: X<350, 7:X<400, 8: X<450, 9: X<450, 10: X<500, 11: X>500
 Score***: 0: X>=90%, 1: X>=85%, 2: X>=80%, 3: X>=75%, 4: X>=70%, 5: X<70%
 Score****: 1: X ≤ 100%, 2: X ≤ 200%, 3: X ≤ 300%, 4: X ≤ 400%, 5: X ≤ 500%, 6: X ≤ 600%, 7: X ≤ 700%, 8: X ≤ 800%, 9: X ≤ 900%, 10: X ≤ 1000%, 11: X ≤ 2000%

Source: Prepared by the Study Team

- Indicator 1: The ratio of school-age refugee population (6-12) to the total school-age population (6-12) by Sub-County (July 2017)

If a Sub-County has a value over 50%, this indicates that there are more school age (6-12) refugees than Ugandan population of its age cohort.

Itula Sub-County (93.4%) in Moyo District exceeds 90%, indicating there are significantly more refugees than Ugandan citizens.

In Adjumani District, although it varies significantly from Sub-County to Sub-County, the following Sub-Counties stayed within a range between 20 to 35%: Ciforo (22.1%), Itirikwa (27.7%), Ofua (26.2%), and Pachara (32.4%). On the contrary, Ukusijoni (76.8%), Dzaipi (64.6%), and Pakele (53.8%) accommodate more refugees than Ugandan citizens.

Regarding, Yumbe District, Kochi (46.9%), Odravu (47.4%), Romogi (48.3%) have almost same number of refugees. Ariwa (62.8%) and Kululu (57.2%) accommodate more refugees than Ugandan citizens.

In Arua District, Odupi (80.5%), Rigbo (55.8%), and Uriama (71.1%) also accommodate more refugees than Ugandan citizens, while Omugo (14.4%) has a low figure. However, it is worth noting that Rhino Camp Extension in Omugo Sub-County started accommodating refugees from August 2017, and it has been with 45,000 refugees (according to an interview with the UNHCR Arua Health Officer) as of November 2017. Hence, the Study Team can assume that it has reached to almost a half of total population of the Sub-County. Regarding Lobule Sub-County in Koboko District showed the smallest proportion (11.6%) among all target Sub-Counties.

- Indicator 2: Level of classroom overcrowding believed attributable to refugee influx (July 2017)

All the target Sub-Counties in Yumbe District, namely Ariwa (344), Kochi (202), Kululu (222), Odravu (208), and Romogi (267) show relatively higher values from 200 to 350 PCR.

In Adjumani District, Ukusijoni (273), Dzaipi (146), and Pakele (119) shows higher rates, while other Sub-Counties stayed below (100). Ciforo Sub-County in Adjumani District had the lowest ratio at (79) PCR among all the target Sub-Counties, being just 10 more than 69 of the national average of public school PCR 2016.

In Arua District, Omugo (111) shows lower PCR while other Sub-Counties of Odupi (275), Uriama (207), and Rigbo (182) stood out a higher rate.

In Moyo District, Itula Sub-County showed (159).

In Koboko District, Lobule Sub-County showed 95 PCR.

- Indicator 3: Attendance rates

The average attendance rate of all 5 Districts was 80.5% according to National Population and Housing Census 2014, meaning about 20% of the school-age population is not accessing education. While the situation varies by Sub-County, attendance rates tend to decrease as the Sub-County gets further from the District capital. Such Sub-Counties - Ukusijoni (70.2%) and Itirikwa (70.7%) in Adjumani District, and Romogi (70.0%) in Yumbe District showed approximately 10% lower than the average of the five District with about 30% of the school-age population not accessing education.

As a sample survey conducted at Yangani PS in Ariwa Sub-County, Yumbe District, number of pupils attending was less than 4,000 according to the explanation of Headteacher on the day of field survey while officially registered pupils were 4,937 (as of 1st term) which means over 20% of pupils were absent. There are several factors for the low attendance rate. For example, the attendance rate fell since a majority of the pupils were refugees (4,378 people). Furthermore, according to the Study, the attendance rate falls as the number of day pass from the day ration provided and the attendance rate in the afternoon classes decreased more than the morning session because some pupils do not come back from lunch. Even though the Study Team cannot confirm NER of West-Nile Sub-Region as of 2017, a certain higher value can be assumed, being taken into account of National Average of 92.1% in 2016.

From figures in statistics and the result of the sample survey, in West Nile Sub-Region, the Study Team can imply many pupils are registered but do not attend school.

- Indicator 4: Illiteracy rate

The illiteracy rate was for Pakele (32.9%) in Adjumani District and Itula (34.1%) in Moyo District were lower than it of other Districts. However, the Study Team can extrapolate that one-third of

people were illiterate. In other Sub-Counties, the rate was higher at about 40 to more than 50%. Prominently, Pachara Sub-County (55.9%) in Adjumani District showed the highest value that means more than half of people are illiterate.

- Indicator 5: Classroom shortage severity (Shortage of classrooms/Existing classrooms)

Classroom shortage severity tends to correspond to Indicator 1 (ratio of refugee to Ugandan population) and varies greatly from Sub-County to Sub-County. Classroom maintenance tends to be marginal in remote areas where the Ugandan population is formerly small. With the large refugee settlement planned in such areas, the classroom shortage in such areas is exceptionally high when compared to other Sub-Counties. Ariwa (1,041%) and Romogi (1,064%) in Yumbe District and Itula (1,085%) in Moyo District showed the number of classroom shortage that was equivalent to 10-times of the number of existing classrooms.

As a Sub-County wise evaluation in each District, In Adjumani, values stayed below as a whole when compared with ones in other target Districts. However, when the Study Team evaluate values following Sub-Counties: Ukusijoni (531%), Dzaipi (215%) and Pakele (161%) showed higher values. Ciforo (71%), Itirikwa (92%), Ofua (107%) and Pachara (90%) stayed within the relatively lower value. In Arua, except Omugo Sub-County (180%), Odupi (751%), Uriama (440%), and Rigbo (299%) showed relatively higher values. Regarding Lobule Sub-County in Koboko District, it showed 127% which is relatively lower than other target Sub-Counties. In Yumbe District, scores of all target Sub-Counties, Ariwa and Romogi, are indicated above. Kochi (685%), Kululu (809%), and Odravu (430%) stand out relatively higher values than other target Sub-Counties.

As earlier explained, figures of the Indicator 5 are subject to change along with the change of the refugee population. The figures are derived from the equation applying to the total population including the refugees. The figures are, therefore, shows not only the state of health sector development but also the impact of the refugee influx.

(5) Impacts from the Influx by Sub-County (Secondary Education)

To understand the impacts of the refugee influx at a Sub-County level, the following indicators were set to evaluate the impacts from two perspectives: (1) impact due to refugee influx, and (2) state of the education sector development. In the scoring, for numerical values derived from each indicator a proportional scale was set for each indicator and evaluated such that each score generally fell within a range of 0-10 in order to eliminate arbitrary weighting between indicators.

Regarding Indicator 5, it should be noted that these figures are subject to change along with the change of the refugee population. The figures are derived from the equation applying to the total population including the refugees. The figures are, therefore, shows not only the state of health sector development but also the impact of the refugee influx.

Table 8.4-4 Indicators Assessed by the Study (Secondary Education)

Evaluation Category	Indicators	Overview
Indicators for Understanding the Impact of the Refugee Influx	Indicator 1	The ratio of school-age refugee population (13-18) to the total school-age population (13-18) by Sub-County (July 2017) Same as primary education mentioned above.
	Indicator 2	Level of classroom overcrowding believed attributable to refugee influx (July 2017): Students per classroom (July 2017) calculation: The following formula was used to calculate students per classroom in order to find the number of students outside the school-age population. Refugee and Ugandan school-age population (6-12) x gross enrolment rate 110%/number of classrooms (permanent + temporary facilities)

Evaluation Category	Indicators	Overview
Indicators for Grasping Development in the Education Sector	Indicator 3	Percentage of persons with graduate qualifications above secondary education: The indicator is quoted from results of the household survey carried out in 2014.
	Indicator 4	Illiteracy rate: Literacy is considered as an indicator of educational outcome. Conversely, the illiteracy rate evaluates the illiterate portion of the population and can be thought of as an alternative indicator that shows access to education and low educational outcomes. The illiteracy rate was quoted from the results of the household survey carried out in 2014.
	Indicator 5	Classroom shortage severity: Since the absolute number depends mostly on the amount of population increase, the value obtained by dividing the classroom shortage by existing classrooms was adopted to grasp the severity of deficiency accurately. The classroom shortage rate is calculated with the following formula. [the number of Shortage of classrooms] / [the number of Existing classrooms] = [(refugee and Ugandan citizen age 13-18 school-age population) x (2016 national average 27.10% gross enrolment rate) / (50 student per class, the target value for 2020) - (permanent secondary school classrooms in Sub-County, from educational statistics 2017 which the Study Team compiled)] / [(secondary school classrooms in Sub-County, from educational statistics 2017 compiled by the Study Team)]

Source: Prepared by the Study Team

(6) Evaluation Results for Each Indicator

Table 8.4-5 Assessment Results of Target Sub-Counties (Secondary Education)

	Indicator①				Indicator②			Indicator③	Indicator④	Indicator⑤		Preliminary Evaluation									
	Nationals Pop. 13-18 Total (2017 Proj)	Refugees Pop. 13-18 Total (2017 June)	N+R Pop. 13-18 Total (2017)	Ratio Refugees/ Total (Score*)	Classroom			SCR (GER:27.1%) (STD:50/CR) (Score**)	Cert. above SS (%) (2014) (Score***)	Illiteracy rate (%) (2014) (Score*)	#	#Gap (Score****)	Score	Rank							
	[a]	[b]	[c=a+b]	[d=b/c]	Perm.	Temp.	total	[h=c*27.1%/g]	[i]	[j]	[k]	[l=(c*27.1/50)-k]	[m=l/k]								
					[e]	[f]	[g=e+f]														
Adjumani	36,491	41,469	77,960																		
Ciforo	2,353	867	3,220	26.9%	3	16	0	16	55	1	4	24.5%	3	38.5%	4	16	1	6%	1	12	7
Dzaipi	6,948	16,436	23,384	70.3%	8	6	0	6	1056	10	18	21.1%	3	48.3%	5	6	121	2017%	12	38	1
Itrikwa	2,767	1,374	4,141	33.2%	4	9	0	9	125	2	6	19.1%	4	49.3%	5	9	13	144%	2	17	4
Ofoa	2,274	1,044	3,318	31.5%	4	8	0	8	112	2	6	22.8%	3	39.0%	4	8	10	125%	2	15	5
Pachara	2,783	1,726	4,509	38.3%	4	12	0	12	102	2	6	31.0%	1	55.9%	6	12	12	100%	2	15	5
Pakele	8,014	12,122	20,136	60.2%	7	29	3	32	171	3	10	22.9%	3	32.9%	4	32	77	241%	3	20	3
Ukusijoni	1,844	7,900	9,744	81.1%	9	4	5	9	293	5	14	16.1%	4	48.8%	5	9	44	489%	5	28	2
Arua	133,703	54,017	187,720																		
Odopi	6,614	33,563	40,177	83.5%	9	14	6	20	544	10	19	19.9%	4	39.0%	4	20	198	990%	10	37	2
Omugo	7,457	1,533	8,990	17.1%	2	17	0	17	143	2	4	22.9%	3	39.4%	4	17	32	188%	2	13	4
Rigbo	4,436	6,877	11,313	60.8%	7	7	1	8	383	7	14	16.9%	4	44.9%	5	8	53	663%	7	30	3
Uriama	3,991	12,044	16,035	75.1%	8	0	0	0	N/A	10	18	19.6%	4	42.6%	5	0	87	N/A	19	46	1
Koboko	36,443	1,015	37,458																		
Lobule	5,947	1,015	6,962	14.6%	2	1	0	1	1887	10	12	8.5%	6	44.7%	5	1	37	3700%	13	36	1
Moyo	23,468	40,274	63,742																		
Itula	2,226	40,274	42,500	94.8%	10	17	8	25	461	9	19	27.7%	2	34.1%	4	17	213	1253%	11	36	1
Yumbe	89,453	62,880	152,333																		
Ariwa	4,436	12,291	16,727	73.5%	8	0	6	6	756	10	18	18.3%	4	44.8%	5	6	85	1417%	11	38	1
Kochi	7,632	11,088	18,720	59.2%	6	11	4	15	338	6	12	22.9%	3	44.8%	5	15	86	573%	6	26	4
Kululu	6,821	15,015	21,836	68.8%	7	6	12	18	329	6	13	23.1%	3	44.6%	5	18	100	556%	6	27	3
Odravu	7,807	11,550	19,357	59.7%	6	8	9	17	309	6	12	22.9%	3	42.7%	5	17	88	518%	6	26	4
Romogi	8,427	12,936	21,363	60.6%	7	4	10	14	414	8	15	22.0%	3	49.3%	5	14	102	729%	8	31	2
5 district total	319,558	199,655	519,213													Total	1,359				

Score*: 2:X ≤ 20%, 3:X ≤ 30%, 4:X ≤ 40%, 5:X ≤ 50%, 6:X ≤ 60%, 7:X ≤ 70%, 8:X ≤ 80%, 9: X ≤ 90%, 10: X ≤ 100%

Score**: 0: 025<50, 1: X<100, 2: X<150, 3: X<200, 4: X<250, 5: X<300, 6: X<350, 7: X<400, 8: X<450, 9: X<450, 10: X<500, 11: X>500

Score***: 1: X ≥ 30%, 2: X ≥ 25%, 3: X ≥ 20%, 4: X ≥ 15%, 5: X ≥ 10%, 6: X < 10%

Score****: 0: X ≤ 100%, 1: X ≤ 200%, 2: X ≤ 300%, 3: X ≤ 400%, 4: X ≤ 500%, 5: X ≤ 600%, 6: X ≤ 700%, 7: X ≤ 800%, 8: X ≤ 900%, 9: X ≤ 1000%, 10: X ≤ 1000%,

11: X < 2000%, 12: 3000%, 13: 4000%, 14: 5000%, 15: 6000%, 16: 7000%, 17: 8000%, 18: > 9000%, 19: > 10000%

Source: Prepared by the Study Team

- Indicator 1: Ratio of school-age refugee population (13-18) relative to the total population (13-18) by Sub-County (July 2017)

If a Sub-County has a value over 50%, this indicates that there is more school age (13-18) refugees than Ugandan of its age cohort. As a District wise evaluation, Itula Sub-County (94.8%) in Moyo District exceeds 90%, indicating significantly more school age (13-18) refugees than its Ugandan population.

Although it varies significantly from Sub-County to Sub-County in Adjumani District, the following Sub-Counties stayed within a range between 25 to 40% - Ciforo (26.9%), Itirikwa (33.2%), Ofua (31.5%), and Pachara (38.3%). On the contrary, in these Sub-Counties - Ukusijoni (81.1%), Dzaipi (70.3%), and Pakele (60.2%) - there are more school age (13-18) refugees than that of Ugandan nationals. Regarding, Yumbe District, all target Sub--Counties - Kochi (59.2%), Odravu (59.7%), Romogi (60.6%), Kululu (68.8%) and Ariwa (73.5%) - accommodate more refugee school age (13-18) population than that of Ugandan nationals. In Arua District, three target Sub-Counties - Odupi (83.5%), Rigbo (60.8%), Uriama (75.1%) - except Omugo (17.1%) also accommodate more school-age refugee population than Ugandan's its cohort.

However, it is worth noting that Rhino Camp Extension in Omugo Sub-County started accommodating refugees from August 2017, and has been with 45,000 refugees (according to an interview with the UNHCR Arua Health Officer) las of November 2017, Hence, the Study Team can imply that it has reached to almost a half of total population of the Sub-County. Considering this situation, it can be implied that school age (13-18) has followed the same trend. Regarding Lobule Sub-County in Koboko District showed the smallest proportion (14.6%) among all target Sub-Counties.

- Indicator 2: Level of classroom overcrowding possibly attributable to refugee influx (July 2017)

Private schools had been established as many as public schools, but many of them have not submitted statistics to the DED. It was difficult for the Study Team to carry out another survey on the private school to confirm the enrolment state of students and the improved state of facilities. Thus, secondary schools that did not submit educational statistics were excluded from the targets. The number of the schools that have not submitted statistics accounts for 1/10th of all schools (16 out of 156) and such school exists some Districts evenly, not concentrating a particular District. Therefore excluding such school will not affect the entire assessment.

As national average of PCR in 2016 was 53 according to EMIS. In Regarded to each District, SCR (55 students per classroom) in Ciforo Sub-County in Adjumani District was shown nearly as the same way as what of the national average. SCR of the other Sub-County were (102) in Pachara Sub-County, (112) in Ofua Sub-County, (125) in Itirikwa Sub-County, (171) in Pakele Sub-County, which were shown around (100-200) SCR per each Sub-Counties. Especially, SCR (1,056 students per classroom) in Dzaipi Sub-County was plenty high even though (293) in Ukusijoni Sub-County. The primary factor which showed this SCR was conjectured the refugee influx occurred due to being established new settlement for refugees.

As a Sub-County wise evaluation, in Arua District, the following Sub-Counties - Omugo (143), Rigbo (383), and Odupi (544) - showed significantly higher values despite various. It can be judged from the figures that many students were being packed in a classroom due to lack of classroom. Regarding Uriama Sub-County, there are no public secondary schools. Although the number of classrooms is impossible to be calculated as several private secondary schools did not submit educational statistics, it can be judged with an absolute shortage of classroom of a public secondary school in the Sub-County.

In Lobule Sub-County (1,887), Koboko District, there is a community secondary school operating borrowing classroom from a primary school and small room from a church nearby. It, therefore, showed an extremely high value.

In Itula Sub-County (461), Moyo District also shows high value. According to a sample survey

conducted in this study, the number of student in Itula secondary school was around 200 in 2016 while its number soared to 2,000 in 2017, which became almost 10-times higher value than that of 2016 within a year. Therefore, the refugee influx can be considered as the leading cause of this significant increase of the value.

In Yumbe District, all target Sub-Counties - Ariwa (756), Kochi (338), Kululu (329), Odravu (309) and Romogi (414) - also show high values as a whole.

These values are derived being taken into account of following factors: the number of people who potentially commute to Secondary school, Gross Enrolment Rate (GER), and the current number of the classroom. As a result, extremely high values were derived for some Sub-Counties. From such high values, substantially it can be judged that such Sub-Counties are being a severe deficit of classroom to accommodate the potential number of students.

- Indicator 3: Percentage of people with a certificate of UCE or above:

Since the 2016 national average gross enrolment rate is 27.1%, it is deemed reasonable that the percentage of people with a certificate of UCE or above would generally be around 20%. According to Sub-County wise evaluation, as a distance from District capital becomes far, this value decreases. For example, these Sub-Counties in a remote area - Ukusijoni (16.1%) in Adjumani District, Uriama (19.6%) in Arua District, and Ariwa (18.3%) in Yumbe District - showed relatively lower values among target Sub-Counties.

Lobule Sub-County (8.5%) in Koboko District shows especially lower value when compared with other target Sub-Counties. Causes of deriving this value cannot be identified clearly. However, it can be assumed as one of the causes that there are few Secondary Schools to access.

- Indicator 4: Illiteracy rate

The illiteracy rate was for Pakele (32.9%) in Adjumani District and Itula (34.1%) in Moyo District were lower than it of other Districts. However, the Study Team can extrapolate that one-third of people were illiterate. In other Sub-Counties, the rate was higher at about 40 to more than 50%. Prominently, Pachara Sub-County (55.9%) in Adjumani District shows the highest value that means more than half of people are illiterate. Incidentally, the assessment result is the same to primary education and secondary education since the illiteracy rate is used for the same data.

- Indicator 5: Classroom shortage severity (Shortage of classrooms/Existing classrooms)

Classroom shortage severity tends to be linked to Indicator 1 (The ratio of school-age refugee population (13-18) to the total school-age population (13-18)) and varies significantly from Sub-County to Sub-County. Values identified for these indicators heavily depend on the number of classrooms, since there are few classrooms for Secondary education as a whole. As is the case with the value for Lobule Sub-County in Koboko District with only one classroom, therefore, it became extremely of high value.

Severe classroom shortage, which required classroom reaches around 10-times more than the number of existing classrooms, is apparent in following Sub-Counties - Lobule (3,700%) in Koboko District, Dzaipi (2,017%) in Adjumani District, Odupi (990%) in Arua District, Itula (1,253%) in Moyo District, and Ariwa (1,417%) in Yumbe District.

As earlier explained, figures of the Indicator 5 are subject to change along with the change of the refugee population. The figures are derived from the equation applying to the total population including the refugees. The figures are, therefore, shows not only the state of health sector development but also the impact of the refugee influx.

8.4.2 List of Priority Needs

(1) List of Priority Needs (Primary Education)

The following table shows the scores derived from the assessment (8.4.1 (4)). Firstly, when focusing on the refugee influx impact on Education sector development, the score of Lobule Sub-County in Koboko District shall be mainly showing the impact caused by a delay of Education sector development due to no additional refugee registration from June 2016. This also can be seen from the score composition that score (3) that is only 25% of the total score (12) can be derived from the Refugee influx related indicators. On the contrary, the score derived from refugee influx related indicators for Odupi Sub-County in Arua District reached to (14), which is equivalent to 50% of its total score (28). As the following scores indicate, Odupi Sub-County (14) in Arua District shall be mostly prioritised when the impact on Education service delivery is evaluated with only refugee influx related indicators.



Figures on the bar chart: Subtotal assessment scores derived from Indicators 1-2

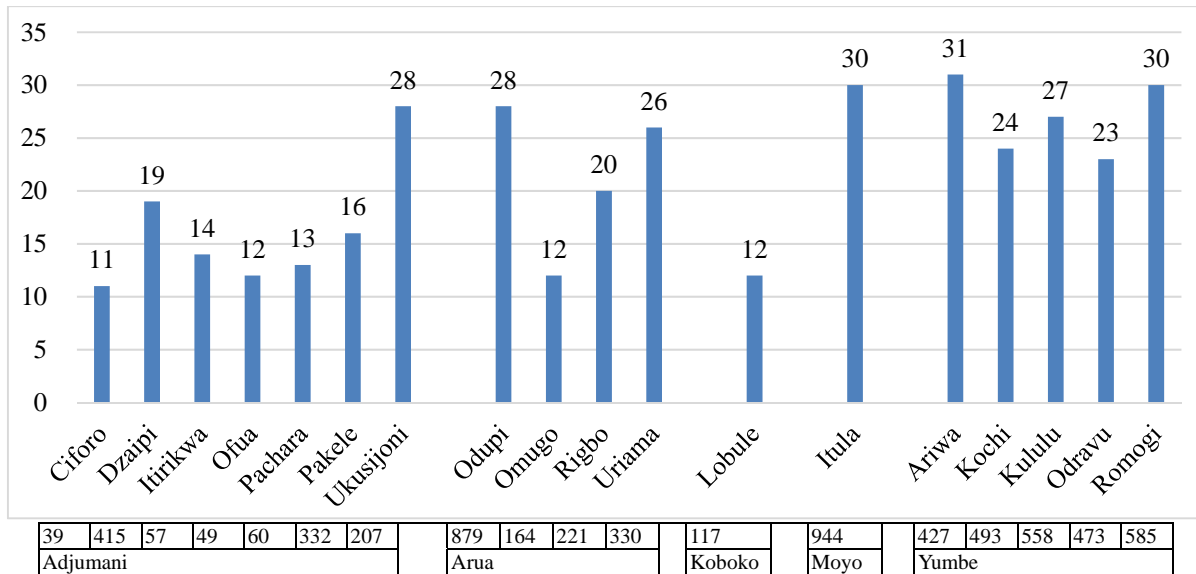
Percentages in the table: Ratio of those scores against the total scores derived from Indicators 1-5

Source: Prepared by the Study Team

Figure 8.4-3 Assessment Scores Derived from Refugee Influx Related Indicators, and the Proportion of Those Scores in the Total Scores (Primary Education)

When all five indicators - two indicators are Refugee influx related and other three are education sector development status related - are taken into account in an evaluation, the result becomes different from the conclusion derived from only refugee influx related indicators. As seen from the following table, Sub-Counties - Ariwa (31), Romogi (30) in Yumbe District, Itula (30) Moyo District, and Ukusijoni (28) in Adjumani District - exceed the score of Odupi Sub-County (28) in Arua District which shows the highest score when evaluated with only Refugee influx related indicators.

From this analysis, it can be verified that this assessment in this study is in line with STA which is refugee assistance policy of Uganda government. Consequently, these scores derived from all five indicators can be used as an indicator to prioritise Sub-Counties having higher values in considering project components for assistance



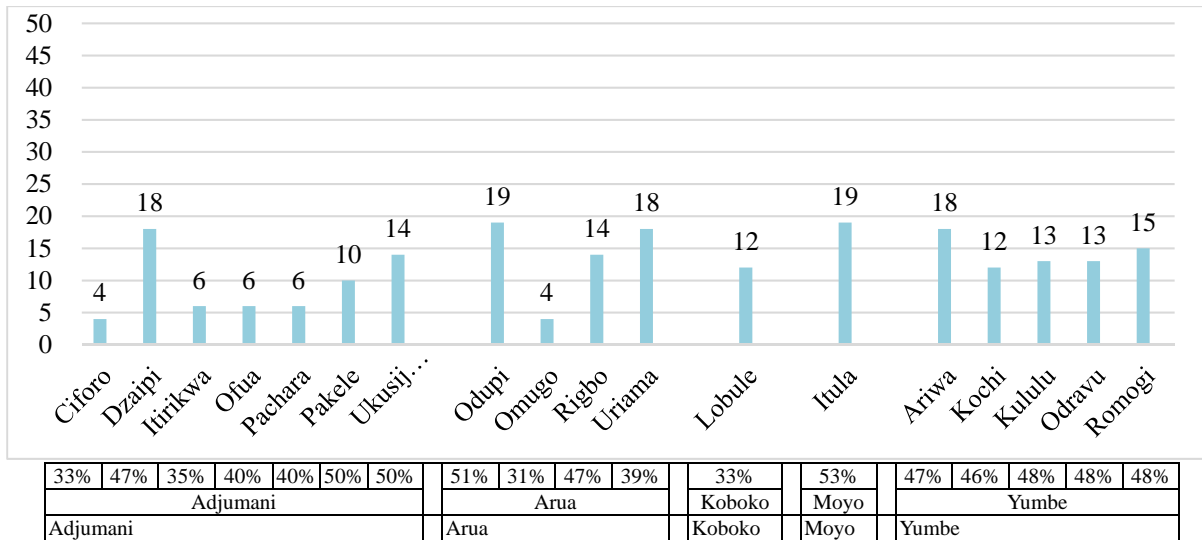
Figures on the bar chart: Grand total assessment scores derived from Indicators 1-5
 Figures in the table: the number of classroom required in each Sub-County: [(refugee and Ugandan citizen age 6-12 school-age population) x (2016 national average 110% gross enrolment rate) / (50 student per class, the target value for 2020) - (permanent classrooms in primary schools in Sub-County, from educational statistics 2017 which the Study Team compiled)]
 Source: Prepared by the Study Team

Figure 8.4-4 Assessment Results: 5 Target District Scores and the Number of Classroom Required (Primary Education)

At this stage, each Sub-County’s score and classroom shortages have been identified. The challenge going forward is how to reduce the classroom shortage, improve access to education, and improve internal efficiency. There are many problems to solve in order to achieve this, such as improving classroom development, planning teacher placement, securing the budget to employ new teachers, and improving classrooms as well as teacher housing. In selecting the target schools for assistance, it is essential to discuss matters with the DED who has a more accurate grasp of the situation. Because of this, even if a list of projects is prepared based solely on classroom shortage, its validity and feasibility cannot be guaranteed. Therefore, in this survey, it was decided to expound the above results as the priority needs a list.

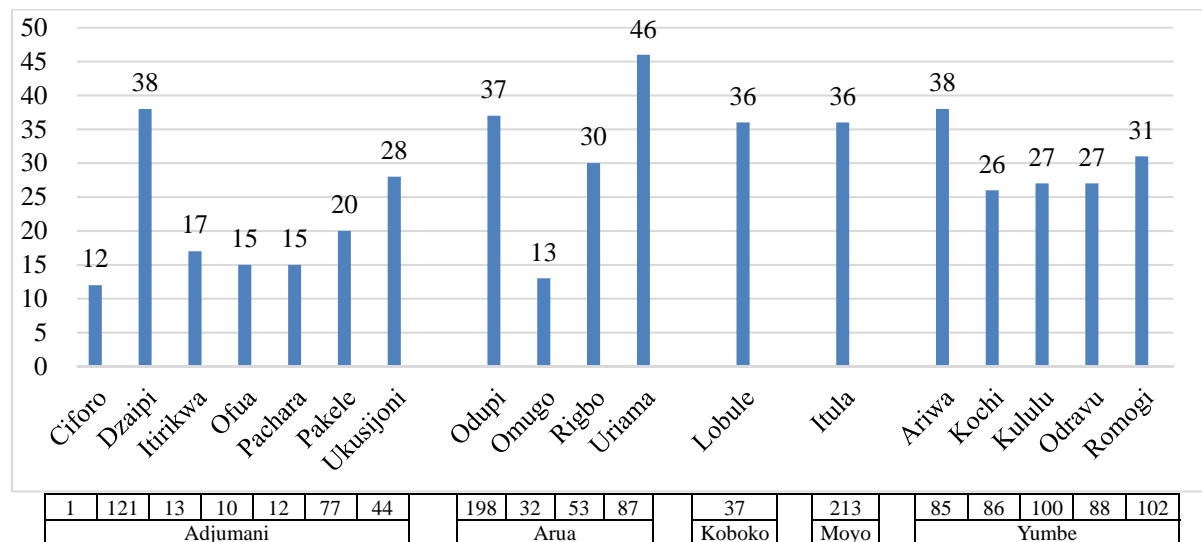
(2) List of Priority Needs (Secondary Education)

The following table shows the scores derived from the assessment (8.4.1 (6)). First of all, when focusing on the refugee influx impact on Education sector development, the score of Lobule Sub-County in Koboko District can be interpolated as the significance of the impact caused by a delay of Education sector development due to no additional refugee registration from June, 2016. This also can be seen from the score composition that score (12) derived from the Refugee influx related indicators is only 33% of the total score (36) derived from all five indicators. On the contrary, the score obtained from indicators indicators with refugee influx for Itula Sub-County in Moyo District reached to (19), which is equivalent to 53% of its total score of (36). As the following table indicates, Odupi Sub-County (19) in Arua District and Itula Sub-County (19) in Moyo District shall be mostly prioritised when the impact on Education service delivery is evaluated by focusing on only refugee influx related Indicators.



Figures on the bar chart: Subtotal assessment scores derived from Indicators 1-2
Percentages in the table: Ratio of those scores against the total scores derived from Indicators 1-5
Source: Prepared by the Study Team

Figure 8.4-5 Assessment Scores Derived from Refugee Influx Related Indicators, and the Proportion of Those Scores in the Total Scores (Secondary Education)



Figures on the bar chart: Grand total assessment scores derived from Indicators 1-5
Figures in the table: the number of classroom required in each Sub-County [(refugee and Ugandan citizen age 13-18 school-age population) x (2016 national average 27.10% gross enrolment rate) / (50 student per class, the target value for 2020) - (permanent secondary school classrooms in Sub-County, from educational statistics 2017 which the Study Team compiled)]
Source: Prepared by the Study Team

Figure 8.4-6 Assessment Results: 5 Target District Scores and the Number of Classroom Required (Secondary Education)

When all five indicators - two indicators are Refugee influx related and other three are education sector development status related - are taken into account in an evaluation, the result becomes different from the conclusion derived only from refugee influx related indicators. Notably, the scores for following Sub-Counties - Uriama (46) in Arua District and Lobule (36) in Koboko District - soared. In addition to these Sub-Counties, Dzaipi (38) in Adjumani District, Odupi (37) and Uriama (46) in Arua District and Ariwa (38) in Yumbe District exceed the Itula (36) in Moyo District which is evaluated as the highest-scored District when evaluated with only refugee influx related indicators.

As the analysis indicated above, assessment result became different in taking account of sector

development status. From this analysis, it can be verified that this assessment in this study is in line with STA which is refugee assistance policy of the government of Uganda.

Consequently, these scores derived from all five indicators can be used as an indicator to prioritize Sub-Counties having higher values in considering precise project components for assistance.

The following actions should be pursued: reduce the classroom shortage by prioritizing Sub-Counties with the highest actual score, improve access to education, and improve internal efficiency. There are many problems to be solved in order to achieve this, such as improving classroom development, planning teacher placement, securing the budget to employ new teachers, and improving classrooms as well as teacher housing. In selecting the target schools for assistance, it is essential to discuss matters with the DED who has accurately grasped of the situation. Because of this, even if a list of projects is prepared based solely on classroom shortage, its validity and feasibility cannot be guaranteed. Therefore, in this survey, it was decided to position the above results as a list of priority needs.

8.5 Formulation of Priority Projects: Primary Education

8.5.1 Examining the Contents of Proposed Projects: Primary Education

The demand for primary education is high due to the continuing influxes of refugees, and the high population growth rate of 3.0%, etc. In the target Districts, around 4,500 new classrooms are required, to accommodate the potential school enrolled population, which is derived from the calculation that the potential school enrolled population is divided by the government's target PCR (50 pupils/classroom) of 2020 (as discussed in 8.4.1 (1)). Considerin this situation, this study proposes projects to construct new classrooms with staff quarters and other auxiliary facilities at existing school sites.

8.5.2 Contents of Proposed Projects: Primary Education

(1) Objective

The objective of the proposed Project is to improve the accessibility to primary education and the learning environment in the Sub-Counties including the refugee settlements that are severely affected by the influx of refugees.

(2) Outcome

As a result of the project, the accommodating capacity of primary education facilities will be expanded in the Sub-Counties included refugee settlements, which are severely affected by the influxes of refugees.

(3) Components Included in the Project

Target sites will be selected from existing schools rather than new sites which might hinder the implementation of the Program due to the requirement of environmental impact assessment, transfer/registration of land titles, and other procedures. However, since the existing schools already have permanent and temporary classrooms, the Project will consider adding seven regular classrooms and auxiliary facilities based on one stream per grade so as not to provide excessive classrooms compared to the number of pupils.

Each target school will consist of the following facility components:

- Classrooms (2 classrooms per bldg.) x 2 bldgs.
- Classrooms (3 classrooms per bldg.) x 1 bldg.
- Administration office x 1 bldg.
- Latrines (5 stance pit latrines per bldg.) x 3 bldgs. (1 each for boys, girls, and staff)

- Latrines for staff quarters (2 stances and 2 shower booths per bldg.) x 2 bldgs.
- Staff Quarters (Semi-detached type - 2 housing units per bldg.) x 2 bldgs.
- Educational equipment (excluding textbooks) and furniture
- Site area: 1,090 sq.m /site (existing school sites; no land acquisition required)

8.5.3 The Project Package: Primary Education

To enable proper quality management during project implementation, the Study Team will determine the appropriate project size from two aspects. The first one is the number of project sites that one supervision consultant can manage simultaneously to secure the quality while minimizing the cost by efficient supervision. The number of the site could be approximately 10. The second perspective is related to the location of the sites which are scattered over the vast West Nile Sub-Region. So, the target sites shall be divided into two packages. Eventually, two packages cover 10 sites respectively, total of 20 sites. The target sites will be selected basically from existing school sites to avoid regulative requirements such as environmental and social impact assessment, transfer/registration of land titles, and other potential hindrances to project implementation.

Table 8.5-1 Construction Package for Prioritised Projects

Construction Package	Target Districts	Consultant Office
The First package (Western Districts)	Arua District, Koboko District, Yumbe District	In Arua urban centre
The Second package (Eastern Districts)	Adjumani District, Moyo District	In Adjumani urban centre

Source: Prepared by the Study Team

8.5.4 Criteria for Selecting Target Sub-Counties and Schools: Primary School

(1) Selecting the Target Sub-Counties

Target Sub-Counties were selected based on the scores shown on the list of priority needs.

(2) Selecting the Target Schools

1) Distribution of Target Schools Based on District-level Classroom Shortage Rates

In selecting the target schools, the maximum number of target schools for each District was firstly determined based on its classroom shortage rate. 10 specific schools were then selected for each project package by descending order of scores for priority needs. However, as the use of the scores alone would lead to concentration of target schools in 1 District, adjustments were made to the number of target schools in each District so as not to aggravate aid disparities among them.

More specifically, in case of Western Districts, the Study Team derived the ratios among the 3 Districts based on the insufficient number of classrooms of each District to determine the maximum number of target schools for each District. In case of eastern Districts, the ratio was identified so did the same with 2 Districts.

- Western Districts

Arua: Koboko: Yumbe = 1,594: 117: 3,695 = 29.1%: 2.2%: 68.3%

Based on the above, the ratios among the 3 Districts were set at 3:0:7. As a result, Koboko District was excluded from the Project.

- Eastern Districts

Adjumani : Moyo = 1,159 : 944 = 45% : 55%

Based on the above, the ratios can be interpolated as 5:5 or 6:4. The Study Team, therefore,

determined the 5:5 ratio giving priority to Moyo District, as Itula Sub-County of the District had the highest score.

2) Priority and Exclusion Criteria for the Selecting Target Schools

Before selecting specific schools, the Study Team established the “priority and exclusion criteria for selecting target schools” as shown in the table below. The priority criteria were adopted to preferentially select the school sites that were expected to highly benefit from the Project, whereas the exclusion criteria were established to exclude sites that have potential problems in implementing the project, and in operating the school after completion of the project.

The Study Team then selected on a provisional basis up to two schools with high PCR, which indicated great potential benefits, from target Sub-Counties with higher scores on the list of priority needs and were finalized the target school sites after discussing with DED and incorporating their views.

**Table 8.5-2 Priority and Exclusion Criteria for Selecting Target Schools
(Primary Education)**

Priority Criteria	
	Schools, whose PCR is 50 pupils or more, the target value for 2020 in the educational statistics 2017 compiled by the Study Team, shall be selected in the order of higher PCR and greater classroom crowdedness.
	In case minimizing the disparities between or among Sub-Counties shall be considered, one school from Sub-Counties which having lower score among them will be selected even though the higher score Sub-County has 2 eligible schools
Exclusion Criteria	
	Schools located in refugee settlements that are receiving assistance from UNCHR shall be excluded.
	Schools that are owned by non-government entities shall be excluded.
	Sites, in which water supply to staff quarters and water utility is impossible, or sites having no water sources nearby, shall be excluded.
	When two candidate target schools are situated within 4km from each other, the less crowded one shall be excluded to avoid overlap of the catchment area of both schools. (4km distance: from the midpoint of which pupils can access to either school in 30 minutes on foot).
	Sites with natural disaster records or topographic conditions not fit for construction (wetland, etc.) shall be excluded.
	Sites without sufficient space for constructing the proposed facilities shall be excluded.
	Schools that cannot be accessed by construction vehicles carrying in building materials shall be excluded (Since all the target sites are existing schools, most of them are accessible by vehicles. while some of them can be accessed only on foot, in such a case the school shall be excluded due to difficulty delivering construction equipment/materials to.
	Schools that are currently, or scheduled to be, constructing facilities independently or with assistance from other organisations shall be excluded to avoid redundancy of assistance.

Source: Prepared by the Study Team

8.5.5 Selected Target Schools: Primary Education

(1) Western Districts (1st Construction Package)

Below points were taken into account in selecting target schools.

- Determining the allocation of target schools: Three target schools were allocated to Arua District and to be selected from two Sub-Counties (two schools from the highest-scored Sub-County and one from the Sub-County with the second highest score) in accordance with the principle of selecting two schools from a Sub-County with the descending score order. In the case of Yumbe District, which encompassed seven target schools, two schools each, in principle, were to be selected from the three highest-scored Sub-Counties and one from the Sub-County with the fourth highest score. However, in order to keep the balance among all of the five Sub-Counties, the Study Team decided to select two schools from the two highest-scored Sub-Counties and one each from

the third to fifth-ranked Sub-Counties, as the difference in score between the fourth (Kochi:24) and the fifth (Odravu:23) is only one point. As mentioned earlier, Koboko District was excluded from the Project.

1) Arua District

a) Odupi Sub-County, Arua District (Score: 28)

The Study Team proposed to select target schools with the highest PCR to DED, which in return suggested Ajivu PS and Torit PS instead, as they would not be covered by any other assistance unlike the schools with the highest PCR. The Study Team concurred with DED's suggestion.

Table 8.5-3 List of Candidate and Selected Target Schools (Odupi, Arua)

District	Sub-County	School Name	Registration	Refugee	National	Total	CR	CR_Temp.	PCR1	PCR2
Arua	Odupi	Otumbari PS	Gov't	0	1440	1,440	4	3	360	206
Arua	Odupi	BELIA PS	Gov't	0	1365	1,365	4	8	341	114
Arua	Odupi	CHAKAI PS	Gov't	0	630	630	2	0	315	315
Arua	Odupi	Yelulu PS	Gov't	430	640	1,070	4	4	268	134
Arua	Odupi	ELEFE PS	Gov't	0	999	999	4	4	250	125
Arua	Odupi	Ajivu PS	Gov't	0	908	908	4	2	227	151
Arua	Odupi	WANGURU HILL PS	Gov't	0	1541	1541	7	0	220	220
Arua	Odupi	TORIT PS	Gov't	432	399	831	0	4	N/A	208
Arua	Odupi	Afeya PS	Gov't	0	1454	1454	7	0	208	208
Arua	Odupi	ARIWA PS	Gov't	943	514	1457	8	3	182	132
Arua	Odupi	KIRIDOAKU PS	Gov't	1	673	674	4	0	169	169
Arua	Odupi	Oyoze PS	Gov't	0	1296	1296	8	0	162	162
Arua	Odupi	BIDI PS	Gov't	0	1132	1132	8	1	142	126
Arua	Odupi	Inyau PS	Gov't	352	515	867	7	0	124	124
Arua	Odupi	Supiri PS	Gov't	0	834	834	0	7	N/A	119
Arua	Odupi	Odupi PS	Gov't	0	1952	1952	17	0	115	115
Arua	Odupi	Lugbari PS	Gov't	0	1225	1225	12	0	102	102
Arua	Odupi	Lanya PS	No data						N/A	N/A

PCR1: PCR derived based on the number of permanent classrooms

PCR2: PCR derived based on the number of permanent and temporary classrooms

Source: prepared by the Study Team

b) Uriama Sub-County, Arua District (Score: 26)

Ejome PS, which has the highest score with overcrowded classrooms, and to which none of the exclusion criteria apply as confirmed by DED, was selected as a target school.

Table 8.5-4 List of Candidate and Selected Target Schools (Uriama, Arua)

District	Sub-County	School Name	Registration	Refugee	National	Total	CR	CR_Temp.	PCR1	PCR2
Arua	Uriama	Ejome PS	Gov't	0	1652	1652	2	0	826	826
Arua	Uriama	Cinya PS	Gov't	859	576	1435	7	0	205	205
Arua	Uriama	Ocea PS	Gov't	1654	812	2466	11	3	224	176
Arua	Uriama	LINI PS	Gov't	0	1414	1414	4	5	354	157
Arua	Uriama	Alio PS	Gov't	0	905	905	7	0	129	129
Arua	Uriama	NGAZIKU PS	Gov't	0	1329	1329	7	5	190	111
Arua	Uriama	Yoro PS	Gov't	361	689	1050	11	0	95	95
Arua	Uriama	Perea PS	Gov't	0	741	741	8	0	93	93

PCR1: PCR derived based on the number of permanent classrooms

PCR2: PCR derived based on the number of permanent and temporary classrooms

Source: prepared by the Study Team

2) Yumbe District

a) Ariwa Sub-County, Yumbe District (Score: 31)

Ayago PS and Ariwa PS have higher PCR. However, DED explained that Ariwa PS, Ombechi PS, and Okuyo PS were scheduled to receive assistance from other organizations, and suggested Ariwa PS be replaced with Tokuro PS, as any other assistance would not cover it. Accordingly, Ayago and Tokuro PS were selected as target schools.

Table 8.5-5 List of Candidate and Selected Target Schools (Ariwa, Yumbe)

District	Sub-County	School Name	Registration	Refugee	National	Total	CR	CR_Temp.	PCR1	PCR2
Yumbe	Ariwa	Ayago PS	Gov't	0	743	743	4	0	186	186
Yumbe	Ariwa	Ariwa PS	Gov't	959	812	1771	10	0	177	177
Yumbe	Ariwa	Ombechi PS	Gov't	0	793	793	6	0	132	132
Yumbe	Ariwa	Okuyo PS	Gov't	0	957	957	8	0	120	120
Yumbe	Ariwa	Tokuro PS	Gov't	0	453	453	5	0	91	91
Yumbe	Ariwa	Awinga PS	Gov't	0	621	621	8	0	78	78

PCR1: PCR derived based on the number of permanent classrooms

PCR2: PCR derived based on the number of permanent and temporary classrooms

Source: prepared by the Study Team

b) Romogi Sub-County, Yumbe District (Score: 30)

Although Barakala PS and Legu PS have higher PCR, the Study Team selected Legu PS and Obero West PS as target schools instead of Barakala PS which was scheduled to receive assistance from other organization according to DED.

Table 8.5-6 List of Candidate and Selected Target Schools (Romogi, Yumbe)

District	Sub-County	School Name	Registration	Refugee	National	Total	CR	CR_Temp.	PCR1	PCR2
Yumbe	Romogi	Barakala PS	Gov't	0	1414	1414	10		141	141
Yumbe	Romogi	Legu PS	Gov't	0	493	493	4		123	123
Yumbe	Romogi	Obero West PS	Gov't			487	4		122	122
Yumbe	Romogi	Swinga PS	Gov't	743	0	743	8		93	93
Yumbe	Romogi	East Alipi PS	Gov't	0	674	674	8		84	84
Yumbe	Romogi	Locomgbo PS	Gov't	0	514	514	7		73	73
Yumbe	Romogi	Iyete PS	Gov't	0	520	520	8		65	65

PCR1: PCR derived based on the number of permanent classrooms

PCR2: PCR derived based on the number of permanent and temporary classrooms

Source: prepared by the Study Team

c) Kululu Sub-County, Yumbe District (Score: 27)

Yoyo PS with the highest PCR, to which none of the exclusion criteria apply, was selected as a target school.

Table 8.5-7 List of Candidate and Selected Target Schools (Kululu, Yumbe)

District	Sub-County	School Name	Registration	Refugee	National	Total	CR	CR_Temp.	PCR1	PCR2
Yumbe	Kululu	Yoyo PS	Gov't	899	501	1400	7		200	200
Yumbe	Kululu	Dradranga PS	Gov't	375	664	1039	7		148	148
Yumbe	Kululu	Geya PS	Gov't	0	1,102	1,102	8		138	138
Yumbe	Kululu	Aliapi PS	Gov't	0	621	621	6		104	104
Yumbe	Kululu	Kululu PS	Gov't	0	708	708	7		101	101
Yumbe	Kululu	Ojinga PS	Gov't	0	580	580	6		97	97
Yumbe	Kululu	Aliba PS	Gov't	0	368	368	8		46	46

PCR1: PCR derived based on the number of permanent classrooms

PCR2: PCR derived based on the number of permanent and temporary classrooms

Source: prepared by the Study Team

d) Kochi Sub-County, Yumbe District (Score: 24)

Lokopio PS with the highest PCR, to which none of the exclusion criteria apply, was selected as a target school.

Table 8.5-8 List of Candidate and Selected Target Schools (Kochi, Yumbe)

District	Sub-County	School Name	Registration	Refugee	National	Total	CR	CR_Temp.	PCR1	PCR2
Yumbe	Kochi	Lokopio PS	Gov't	103	814	917	5	2	183	131
Yumbe	Kochi	Amaguru PS	Gov't	0	736	736	8		92	92
Yumbe	Kochi	Akande PS	Gov't	0	482	482	6		80	80
Yumbe	Kochi	Kochi Bridge PS	Gov't	0	483	483	7		69	69

PCR1: PCR derived based on the number of permanent classrooms

PCR2: PCR derived based on the number of permanent and temporary classrooms

Source: prepared by the Study Team

e) Odravu Sub-County, Yumbe District (Score: 23)

Kado PS with the highest PCR was excluded because of being covered by other assistance according to DED. As a result, Kulikulinga PS was selected as a target school.

Table 8.5-9 List of Candidate and Selected Target Schools (Odravu, Yumbe)

District	Sub-County	School Name	Registration	Refugee	National	Total	CR	CR_Temp.	PCR1	PCR2
Yumbe	Odravu	Kado PS	Gov't	1,123	523	1,646	4		412	412
Yumbe	Odravu	Kulikulinga Islamic PS	Gov't	0	1,158	1,158	4		290	290
Yumbe	Odravu	Moli PS	Gov't	0	496	496	2		248	248
Yumbe	Odravu	Oluba PS	Gov't	1,133	778	1,911	10		191	191
Yumbe	Odravu	Rimbe PS	Gov't	0	1,285	1,285	8		161	161
Yumbe	Odravu	Kumuna PS	Gov't	0	912	912	6		152	152
Yumbe	Odravu	Pakayo PS	Gov't	0	1,044	1,044	7		149	149
Yumbe	Odravu	Abirimajo PS	Gov't	55	560	615	6		103	103
Yumbe	Odravu	Lodenga PS	Gov't	0	602	602	6		100	100
Yumbe	Odravu	Nyoko PS	Gov't	2	975	977	10		98	98
Yumbe	Odravu	Nyoko Kobo PS	Gov't	0	569	569	6		95	95
Yumbe	Odravu	Alaba Islamic PS	Gov't	0	658	658	7		94	94
Yumbe	Odravu	Odravu PS	Gov't	0	678	678	8		85	85
Yumbe	Odravu	Kulinga Islamic PS	Gov't	0	496	496	6		83	83
Yumbe	Odravu	Kumia PS	Gov't	0	494	494	6		82	82
Yumbe	Odravu	Wetikoro PS	Gov't	0	494	494	6		82	82
Yumbe	Odravu	Wolo PS	Gov't	0	632	632	8		79	79

PCR1: PCR derived based on the number of permanent classrooms

PCR2: PCR derived based on the number of permanent and temporary classrooms

Source: prepared by the Study Team

(2) Eastern Districts (2nd Construction Package)

The below points were taken into account in selecting target schools.

- Determining the allocation of target schools: Moyo District has only one target Sub-County (Itula) with a high score, whereas Adjumani District has seven target Sub-Counties, whose scores, however, are relatively low. Adjumani District has 954 classrooms (207 in Ukusijoni Sub-County, 415 in Dzaipi Sub-County, and 332 in Pakele Sub-County) which are almost tantamount to 944 classrooms in Itula Sub-County of Moyo District. Accordingly, the Study Team finally decided to select five target schools from each District.

1) Adjumani District

In selecting five target schools, schools within the three higher-scored Sub-Counties - Ukusijoni Sub-County (28), Dzaipi Sub-County (19), and Pakele Sub-County (16) - will be eligible in accordance with the selection criteria.

a) Ukusijoni Sub-County, Adjumani District (Score: 28)

Ayiri PS and Ukusijoni PS with higher scores, to which none of the exclusion criteria apply, were selected as target schools.

Table 8.5-10 List of Candidate and Selected Target Schools (Ukusijoni, Adjumani)

District	Sub-County	School Name	Registration	Refugee	National	Total	CR	CR_Temp.	PCR1	PCR2
Adjumani	Ukusijoni	Ukusijoni PS	Gov't	0	870	870	10	0	87	87
Adjumani	Ukusijoni	Ayiri PS	Gov't	168	504	672	8	0	84	84
Adjumani	Ukusijoni	Maasa PS	Gov't	0	512	512	8	0	64	64
Adjumani	Ukusijoni	Atura PS	Gov't	0	469	469	8	0	59	59
Adjumani	Ukusijoni	Gulinya PS	Gov't	0	430	431	8	0	54	54

PCR1: PCR derived based on the number of permanent classrooms

PCR2: PCR derived based on the number of permanent and temporary classrooms

Source: prepared by the Study Team

b) Dzaipi Sub-County, Adjumani District (Score: 19)

Pagirinya I PS and Pagirinya II PS have higher scores with overcrowded classrooms. As it was confirmed from DED that 15 classrooms have already been provided to these schools under the assistance of UNHCR and Pagirinya II PS located within a refugee settlement, the Study Team selected Dzaipi PS and Jurumini PS as target schools having relatively higher scores following the above two schools to avoid duplication of assistance.

Table 8.5-11 List of Candidate and Selected Target Schools (Dzaipi, Adjumani)

District	Sub-County	School name	Registration	Refugee	National	Total	CR	CR_Tem.	PCR1	PCR2
Adjumani	Dzaipi	PAGIRINYA II	Gov't	2739	14	2753			N/A	N/A
Adjumani	Dzaipi	PAGIRINYA I	Gov't	2113	8	2121	12	2	177	152
Adjumani	Dzaipi	Dzaipi PS	Gov't	0	945	945	8	0	118	118
Adjumani	Dzaipi	Jurumini PS	Gov't	4	351	632	6	1	105	90
Adjumani	Dzaipi	GWERE	Gov't	33	603	636	7	0	91	91
Adjumani	Dzaipi	NYUMANZI	Gov't	725	466	1191	17	0	70	70
Adjumani	Dzaipi	Oriangwa PS	Gov't	2	661	663	10	0	66	66
Adjumani	Dzaipi	Pagirinya PS	Gov't	307	399	881	14	0	63	63
Adjumani	Dzaipi	Miniki PS	Gov't	313	713	1066	18	0	59	59
Adjumani	Dzaipi	Yoro PS	Gov't	67	354	421	8	0	53	53
Adjumani	Dzaipi	ELEMA	Gov't	337	393	730	14	0	52	52
Adjumani	Dzaipi	Magara PS	Gov't	0	339	339	7	0	48	48
Adjumani	Dzaipi	ETIA	Gov't	58	267	325	7	0	46	46

PCR1: PCR derived based on the number of permanent classrooms

PCR2: PCR derived based on the number of permanent and temporary classrooms

Source: prepared by the Study Team

c) Pakele Sub-County, Adjumani District (Score: 16)

Determining the total ten schools in the Eastern Districts, of which up to five schools are to be selected from Adjumani District, including those in the above-mentioned Ukusijoni and Dzaipi Sub-Counties, it was decided to single out only one school from Pakele Sub-County. In this Sub-County, some school statistics were not available, the Study Team, therefore, decided to exclude those schools from this study. As a result, the Study Team selected Boroli PS as a target school, as it was confirmed with DED that school having the highest PCR was subject to none of the exclusion criteria.

Table 8.5-12 List of Candidate and Selected Target Schools (Pakele, Adjumani)

District	Sub-County	School Name	Registration	Refugee	National	Total	CR	CR_Tem.	PCR1	PCR2
Adjumani	Pakele	Boroli PS	Gov't	639	544	1283	12	0	107	107
Adjumani	Pakele	Pakele_Army PS	Gov't	0	1101	1101	13	0	85	85
Adjumani	Pakele	Pakele_Girls' PS	Gov't	29	527	550	7	0	79	79
Adjumani	Pakele	Fuda PS	Gov't	22	604	626	8	0	78	78
Adjumani	Pakele	Paluga PS	Gov't	0	462	462	7	0	66	66
Adjumani	Pakele	Meliyo PS	Gov't	398	154	552	10	0	55	55
Adjumani	Pakele	Okawa PS	Gov't	0	387	387	7	0	55	55
Adjumani	Pakele	Lewa PS	Gov't	637	401	1072	23	0	47	47
Adjumani	Pakele	Meliaderi PS	Gov't	15	737	652	14	0	47	47
Adjumani	Pakele	Amuru PS	Gov't	14	417	431	10	0	43	43
Adjumani	Pakele	Pereci PS	Gov't	7	501	508	12	0	42	42
Adjumani	Pakele	Ibibiaworo PS	Gov't	0	318	326	8	0	41	41
Adjumani	Pakele	Amelo PS	Gov't	9	564	573			N/A	N/A
Adjumani	Pakele	Apa PS	No Data						N/A	N/A
Adjumani	Pakele	Conner_stone	No Data			126			N/A	N/A
Adjumani	Pakele	Pakele	No Data			211			N/A	N/A

PCR1: PCR derived based on the number of permanent classrooms

PCR2: PCR derived based on the number of permanent and temporary classrooms

Source: prepared by the Study Team

2) Moyo District

a) Itula Sub-County, Moyo District (Score: 30)

As up to five sites are to be selected from Moyo District, therefore, five schools having higher PCR were selected with descending scoring order.

Table 8.5-13 List of Candidate and Selected Target Schools (Itula, Moyo)

District	Sub-County	School name	Registration	Refugee	National	Total	CR	CR_Tem.	PCR1	PCR2
Moyo	Itula	Chinyi PS	Gov't	3031	338	3369	8	0	421	421
Moyo	Itula	YENGA PS	Gov't	1668	392	2060	10	11	206	98
Moyo	Itula	ORINYA PS	Gov't	1450	156	1606	10	16	161	62
Moyo	Itula	Iboa PS	Gov't	648	250	898	8	11	112	47
Moyo	Itula	WAKA PS	Gov't	862	102	964	10	11	96	46
Moyo	Itula	LEGU PS – Refugee Settlement	Gov't	0	34	34	4	0	9	9

PCR1: PCR derived based on the number of permanent classrooms

PCR2: PCR derived based on the number of permanent and temporary classrooms

Source: prepared by the Study Team

8.5.6 The Project Scheme: Primary Education

Firstly, if this were a regular investment project for constructing primary schools, the relevant District engineers would generally supervise the project implementation processes. However, due to limited availability of personnel, which is further aggravated by many other construction projects concurrently implemented by other organizations, it would be extremely difficult for the District engineers to oversee all projects. For this reason, it is deemed appropriate to adopt a procurement agent system under the supervision of the Ministry of Foreign Affairs or an international organisation partnership approach. Under this scheme, a procurement agency or an international aid organization takes charge of the detailed design, construction supervision, and contracting processes while having the District engineers monitor the progress of the project in order to ensure the District's ownership of the project.

8.6 Outline of Priority Projects: Primary Education

Based on the above considerations, the Study Team proposes the following a/the list of priority projects:

- West Nile Sub-Region - Western Districts (Arua and Yumbe Districts) Primary Education Facilities Improvement Project (E-1)
- West Nile Sub-Region - Eastern Districts (Adjumani and Moyo Districts) Primary Education Facilities Improvement Project (E-2)

It has already been confirmed at the meeting with MoES on January 23, 2018, that both projects are in alignment with their policies and no duplication occurs with any other assistance. However, considering the dynamic state of South Sudanese refugees' movement in Uganda, which was still unfolding at the time of this study, detailed investigations, as well as reselection of target schools and readjustment of the facility components, etc. based on the results thereof, will be indispensable.

8.6.1 Project Outline: Primary Education

The following is an outline of the two projects. For details, please refer to the project profiles in Chapter 13.

(1) West Nile Sub-Region - Western Districts (Arua and Yumbe Districts) Primary Education Facilities Improvement Project (E-1)

This project intends to construct additional classrooms, staff quarters, and Pit Latrines in three schools in Arua District and seven schools in Yumbe District (10 schools in total) in their respective Sub-Counties that are severely affected by the influxes of refugees. Since the project will be implemented in existing schools already equipped with permanent and/or temporary classrooms, the project will consider increasing seven regular classrooms and auxiliary facilities based on one stream per grade so as not to provide excessive classrooms compared to the number of pupils.

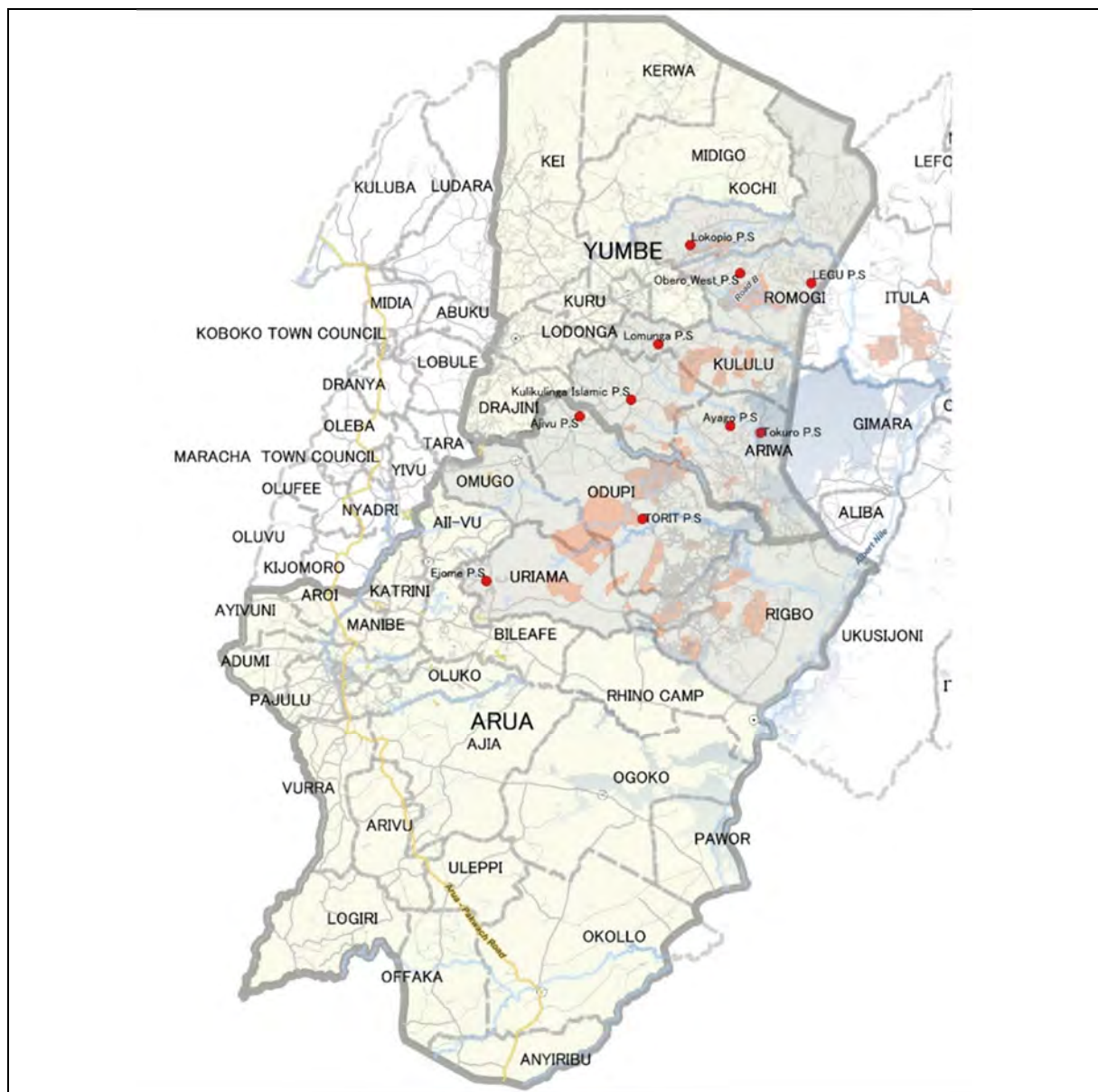
(2) West Nile Sub-Region - Eastern Districts (Adjumani and Moyo Districts) Primary Education Facilities Improvement Project (E-2)

Same as E-1 described above, except that the project will be implemented in five schools each in Adjumani District and Moyo District (10 schools in total).

8.6.2 Target Schools and Location Map of a/the List of Priority Project (E-1)

Table 8.6-1 West Nile Sub-Region - Western Districts (Arua and Yumbe Districts): List of Target Schools of Primary Education Facilities Improvement Project

1 st Section			
District	Sub-County	Score	School name
Arua	Odupi	28	TORIT PS
Arua	Odupi	28	Ajivu PS
Arua	Uriama	26	Ejome PS
Yumbe	Ariwa	31	Ayago PS
Yumbe	Ariwa	31	Tokuro PS
Yumbe	Romogi	30	Legu PS
Yumbe	Romogi	30	Obero West PS
Yumbe	Kululu	27	Lomunga PS
Yumbe	Kochi	24	Lokopio PS
Yumbe	Odravu	23	Kulikulinga Islamic PS



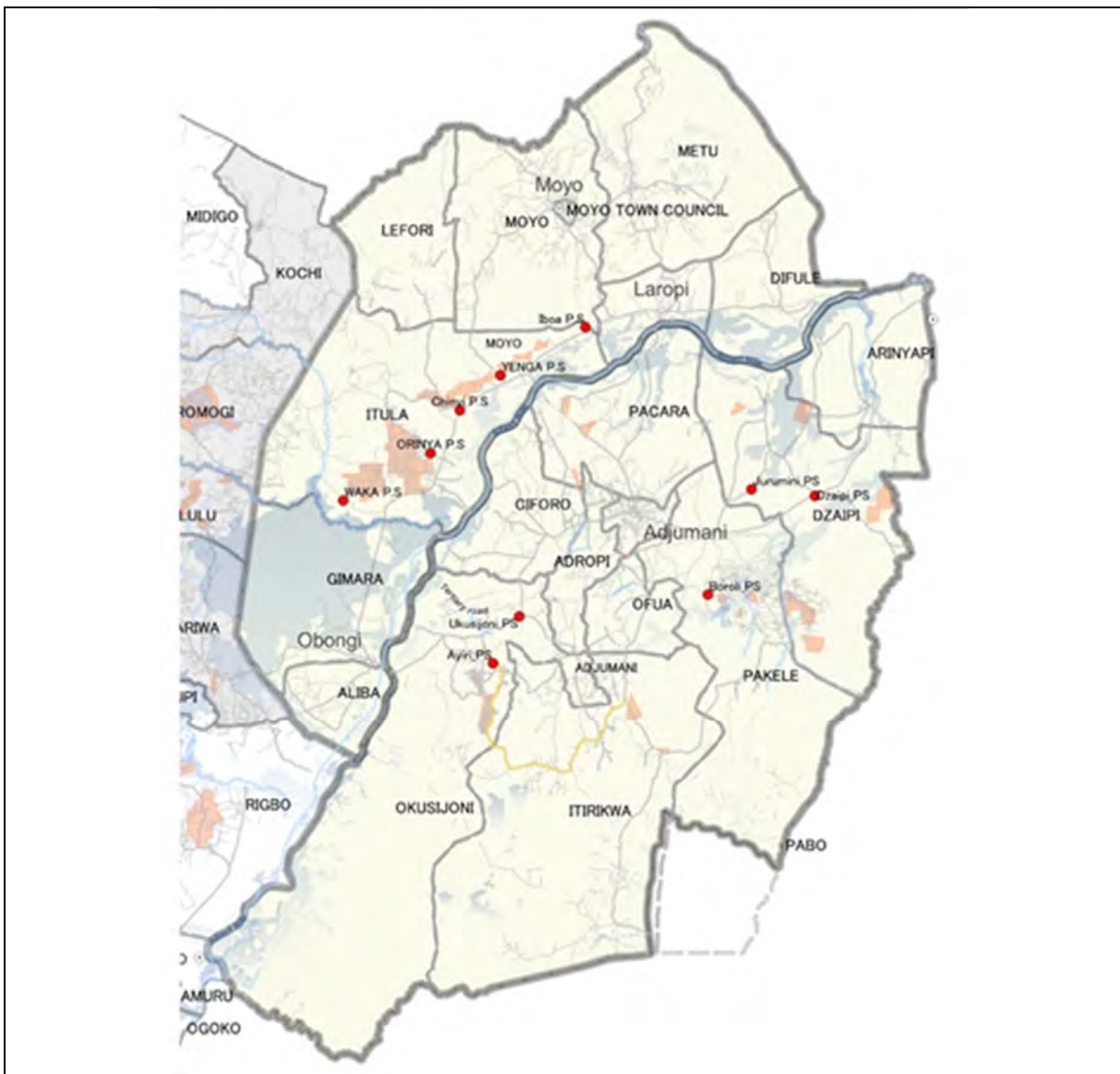
Source: prepared by the Study Team

Figure 8.6-1 West Nile Sub-Region - Western Districts (Arua and Yumbe Districts): Location Map of Primary Education Facilities Improvement Project

8.6.3 Target Schools and Location Map of a/the List of Priority Project (E-2)

**Table 8.6-2 West Nile Sub-Region - Eastern Districts (Adjumani and Moyo Districts):
List of Target Schools of Primary Education Facilities Improvement Project**

2 nd Section			
District	Sub-County	Score	School name
Moyo	Itula	30	Chinyi PS
Moyo	Itula	30	YENGA PS
Moyo	Itula	30	ORINYA PS
Moyo	Itula	30	Iboa PS
Moyo	Itula	30	WAKA PS
Adjumani	Ukusijoni	28	Ayiri PS
Adjumani	Ukusijoni	28	Ukusijoni PS
Adjumani	Dzaipi	19	Dzaipi PS
Adjumani	Dzaipi	19	Jurumini PS
Adjumani	Pakele	16	Boroli PS



Source: prepared by the Study Team

**Figure 8.6-2 West Nile Sub-Region - Eastern Districts (Adjumani and Moyo Districts):
Location Map of Primary Education Facilities Improvement Project**

8.7 Formation of Priority Projects: Secondary Education

8.7.1 Examining the Contents of Proposed Projects: Secondary Education

The target Districts are located in remote areas, with few secondary schools to which it is difficult to access, where students have to travel over 20km to the nearest secondary school in some cases. In addition, many secondary schools in rural areas do not have the facilities required for providing upper secondary education, meaning that there is virtually no access to upper secondary and higher education. To improve the situation, the Study Team propose to establish a model secondary school with dormitories in each of the 5 Districts that encompass remote Sub-Counties including refugee settlements to provide broad access to education.

8.7.2 Contents of Proposed Projects: Secondary Education

(1) Objective

The objective of the project is to improve the accessibility to secondary education and the learning environment in the Sub-Counties included refugee settlements that are severely affected by the influxes of refugees.

(2) Outcome

As a result of the Project, the accommodating capacity of secondary education facilities will be expanded in the Sub-Counties included refugee settlements, the educational environment of which is severely affected by the influxes of refugees.

(3) Project Components

The Study Team will consider constructing 12 regular classrooms and auxiliary facilities based on two streams for each grade in six years of secondary education (4 years of lower secondary and 2 years of upper secondary education) as an appropriate quantity without excess.

There are fewer secondary schools than primary schools, which means that each secondary school will be accommodating students living in much wider areas. Accordingly, student dormitories will be incorporated as a part of auxiliary facilities.

Each school consists of the following facility components:

- Classrooms (3 classrooms per bldg.): 4 bldgs.
- Science laboratory bldg.: 1 bldg.
- Library and ICT bldg.: 1 bldg.
- Administration bldg.: 1 bldg.
- Pit Latrines (5 stances per bldg.) x 3 bldgs. (1 each for boys, girls, and teachers)
- Pit Latrines for staff quarters (2 stances + 2 shower rooms per bldg.) x 4 bldgs.
- Staff Quarters (Semi-detached type - 2 housing units per bldg.) x 3 bldgs.
- Student dormitories (32 students per dorm; total of 192 students): 6 dorms.
(3 each for boys and girls)
- Pit latrines attached to dormitories (5 stance pit latrines/shower-rooms per bldg. [20 students per stance]): 2 bldgs.
- Educational equipment (excluding textbooks) and furniture: 1 set
- Site area: 3,400 m²/site

8.7.3 The Project Package: Secondary Education

The plan is to construct a model secondary school in each of the 5 rural target Districts (five schools in total). To enable proper quality management during project implementation, the Study Team will determine the appropriate number of target schools based on two assumptions. One is that three or so sites²⁴ will be appropriate for one consultant to manage them at the same time. The second one is to divide the target sites, which are scattered over the vast West Nile Sub-Region, into two sections, each supervised by a different consultant in order to reduce their travel time and indirect costs. The 1st section (Western Districts) will encompass Arua and Yumbe Districts while the 2nd section (Eastern Districts) will cover Adjumani and Moyo Districts. Project management offices will be set up in Arua town for the 1st section and Adjumani town for the 2nd section, from which the two consultants will make rounds to supervise their respectively responsible sites. Accordingly, the project scope was defined to consist of three sites in the Western Districts and two sites in the Eastern Districts.

Table 8.7-1 Construction Package for Prioritised Projects

Construction Package	Target Districts	Consultant Office
The First Package (Western Districts)	Arua District, Koboko District, Yumbe District	In Arua urban centre
The Second Package (Eastern Districts)	Adjumani District, Moyo District	In Adjumani urban centre

Source: Prepared by the Study Team

8.7.4 Criteria for Selecting Target Sub-Counties and Schools: Secondary Education

(1) Selecting the Target Sub-Counties

The plan is to establish a model secondary school for rural Uganda in each of the 5 target Districts, which can be further developed in future by the Ugandan government, rather than to construct such model schools in many Sub-Counties at once. Accordingly, one target site will be established in each District by selecting Sub-Counties with high scores on the list of priority needs.

(2) Selecting the Target Schools

1) Defining the Number of Target Schools and the Selection Method

The ESSP aims to construct at least one secondary school in each Sub-County and one primary school in each Parish. This means that the Study Team need to select target secondary schools while keeping in mind that they are expected to serve as educational centres for their respective communities. Accordingly, the Study Team selected the target schools by taking into account the demand for education, as well as the relations between each target school and the adjacent primary/secondary schools, in consultation with each DED to comply with their needs.

2) Priority and Exclusion Criteria for Selecting Target Schools

Before selecting specific schools, the Study Team established the “priority and exclusion criteria for selecting target schools” as shown in the table below. The priority criteria were adopted to preferentially select the school sites that are expected to highly benefit from the Project, whereas the exclusion criteria were selected to exclude sites that have potential problems in the implementation and operation/maintenance of the project.

Subsequently, based on the criteria presented in the following table, the Study Team selected the target sites from the target Sub-Counties with high scores on the list of priority needs after discussing with the personnel of each DED and incorporating their views.

²⁴ It was determined that one consultant can manage up to three schools based on the estimated construction area of 3,000 – 3,500m² per school, which multiplied by three would be over 10,000m² (equivalent to the area of ten primary schools).

Table 8.7-2 Priority and Exclusion Criteria for Selecting Target Schools (Secondary Education)

Priority Criteria	
	One target site shall be selected for the Sub-County with the highest score in each District as a result of initial assessment while taking into account the distance between the target school and surrounding primary schools and adjacent secondary schools, as well as other considerations for wider-area development, in consultation with DED.
	Target schools shall preferably be constructed in new sites. However, existing schools may be used if so requested by DED.
Exclusion Criteria	
	As a general rule, schools in refugee settlements that are receiving assistance from UNCHR shall be excluded.
	Schools that are owned by non-government entities shall be excluded.
	Sites, in which supplying water to staff quarters and sanitation equipment is not possible, or sites that have no water sources nearby, shall be excluded.
	When two candidate target schools are situated within 4km from each other, the less crowded school shall be excluded so as not to create redundancy. (4km is the distance, from the midpoint of which pupils can travel to either school in 30 minutes).
	Sites with a history of disaster or topographic conditions not fit for construction (wetland, etc.) shall be excluded.
	Sites without sufficient space for constructing the planned facilities shall be excluded.
	Schools that cannot be accessed by construction vehicles carrying in building materials shall be excluded (Existing schools are usually accessible by truck, etc. However, those accessible only on foot shall be excluded because of difficulty delivering construction equipment/materials to the sites).
	Schools that are currently, or scheduled to be, constructing facilities independently or with assistance from aid organizations shall be excluded to avoid redundancy.

Source: prepared by the Study Team

8.7.5 Selected Target Schools: Secondary Education

(1) Western Districts (1st Construction Package)

Table 8.7-3 List of Candidate and Selected Target Schools (1st Construction Package: Arua, Koboko, and Yumbe Districts)

District	Sub-County	School name	No. of students			No. of classrooms		SCR
			Refugee	National	Total	Refugee	National	Perm + Temp
Arua	Uriama	Perea SS (new site)				N/A		
Koboko	Lobule	Padrombu SS (existing site)	22	90	112	0	4	28.0
Yumbe	Ariwa	Ariwa SS (existing site)	390	47	437	0	6	72.3

Source: prepared by the Study Team

1) Uriama Sub-County, Arua District (Score: 46)

During the discussion with Arua DED, a land plot adjacent to Perea PS was proposed as the candidate site to make commuting easier for students who completed grade 7, to which the Study Team concurred, as DED confirmed that none of the exclusion criteria apply to the school.

2) Lobule Sub-County, Koboko District (Score: 36)

During the discussion, Koboko DED proposed to select an existing school (Padrombu SS) rather than creating a new site, as they wished to develop the school as the educational centre of the Sub-County. While the local community currently operates the school, it is in the process of registration as a government-subsidized school and will become a public school by the time of project implementation. As DED also confirmed that no other exclusion criteria are applicable to the school, the Study Team selected Padrombu SS as the target school.

3) Ariwa Sub-County, Yumbe District (Score: 38)

DED proposed to select Ariwa SS as the target school to develop it as the educational centre of the Sub-County, to which the Study Team concurred, as DED confirmed that none of the exclusion criteria apply to the school.

(2) Eastern Districts (2nd Construction Package)

**Table 8.7-4 List of Candidate and Selected Target Schools
(2nd Construction Package: Adjumani and Moyo Districts)**

District	Sub-County	School name	No. of students			No. of classrooms		SCR	Priority
			Refugee	National	Total	Perm.	Temp.		
Adjumani	Dzaipi	Dzaipi SS (existing site)	65	240	305	4	1	60.1	2
Moyo	Itula	Itula SS (existing site)	1,611	180	1,791	10	5	119.4	1

Source: prepared by the Study Team

1) Dzaipi Sub-County, Adjumani District (Score: 38)

DED proposed to select Dzaipi SS as the target school to develop it as the educational centre of the Sub-County, to which the Study Team concurred, as DED confirmed that one of the exclusion criteria apply to the school.

2) Itula Sub-County, Moyo District (Score: 36)

DED proposed to select Itula SS as the target school to develop it as the educational centre of the Sub-County, to which the Study Team concurred, as DED confirmed that one of the exclusion criteria applies to the school.

8.7.6 The Project Scheme: Secondary Education

This segment of the Projects is expected not merely to meet the demand for education by constructing facilities, but to establish a model secondary school as part of rural development by incorporating the concepts of gender equality, inclusiveness, environmental considerations, and other added values. Accordingly, comprehensive planning, including the upgrading of existing facilities, beyond merely combining standard designs will be required. Also, certain levels of quality need to be ensured in school design so that it will serve as a standard model in the future. For these reasons, it is deemed appropriate to adopt a facility/equipment procurement agent system, in which detailed design and construction supervision are carried out by skilled consultant and facilities constructed by experienced construction company.

8.8 Outline of Priority Projects: Secondary Education

Based on the above considerations, the Study Team propose the following a/the list of priority projects:

- West Nile Sub-Region - Western Districts (Arua, Koboko, and Yumbe Districts) Secondary Education Facilities Improvement Project (E-3)
- West Nile Sub-Region - Eastern Districts (Adjumani and Moyo Districts) Secondary Education Facilities Improvement Project (E-4)

It has already been confirmed at the meeting with MoES on January 23, 2018, that both projects are in alignment with their policies and do not create redundancy with other aid projects. However, considering the status of South Sudanese refugees in Uganda, which was still unfolding at the time of

this study, detailed investigations, as well as reselection of target facilities and adjustment of the project components, etc. based on the results thereof, will be necessary.

8.8.1 Project Outline: Secondary Education

The following is a brief outline of the two projects. For details, please refer to the project profiles in Chapter 13.

(1) West Nile Sub-Region - Western Districts (Arua, Koboko, and Yumbe Districts) Secondary Education Facilities Improvement Project (E-3)

This project intends to construct a model school for lower and upper secondary education in rural Sub-Counties hosting refugees and most severely affected by their influxes among the Districts (Arua, Koboko, and Yumbe) of the West Nile Sub-Region - Western Districts. There will be three target schools, one each for the above-mentioned Districts. The facilities will include dormitories to accommodate 1/3 of students to improve access to education for those living in remote areas.

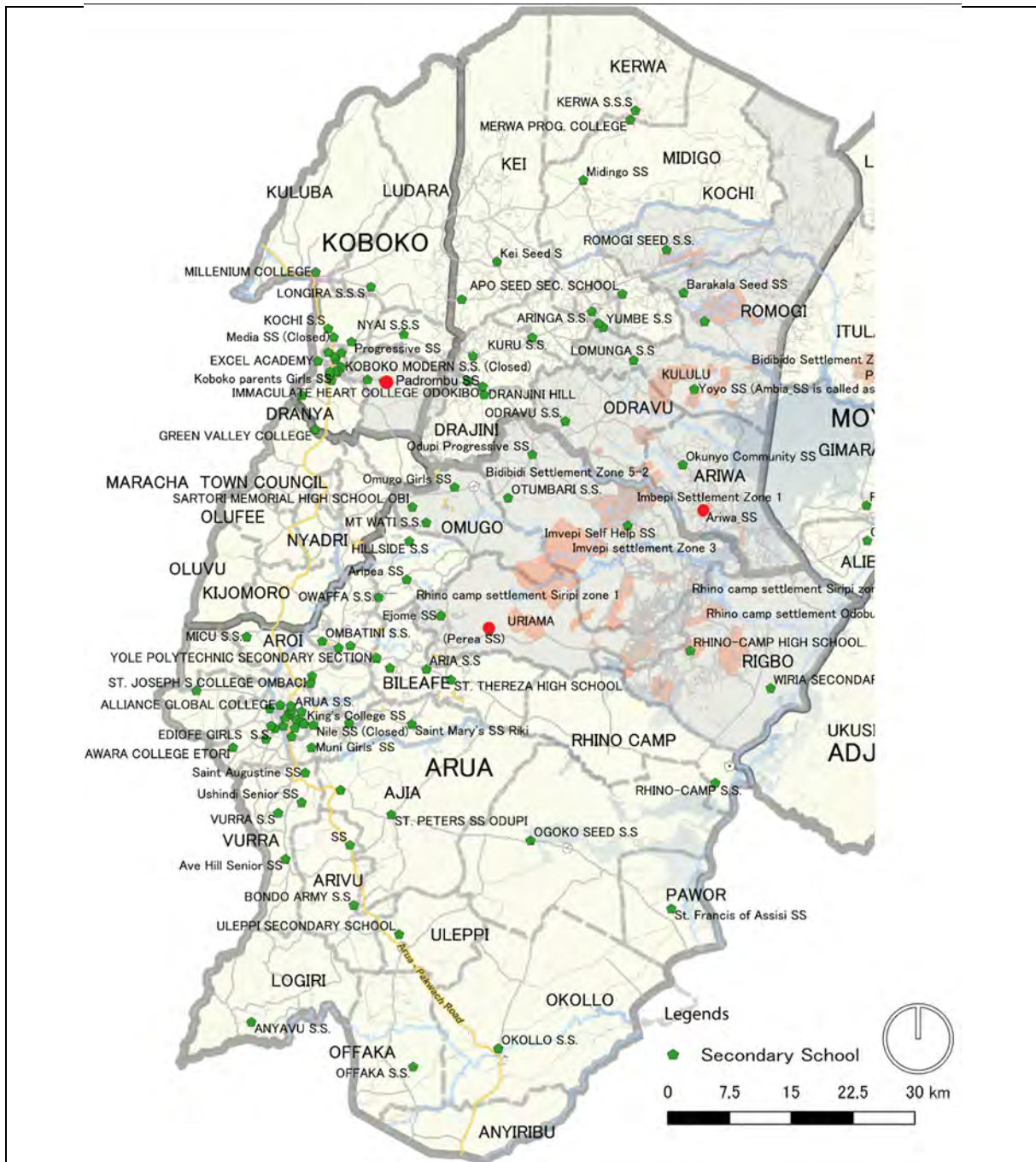
(2) West Nile Sub-Region - Eastern Districts (Adjumani and Moyo Districts) Secondary Education Facilities Improvement Project (E-4)

Same as E-3 described above, except that the project will be implemented in two schools, one each in Adjumani District and Moyo District.

8.8.2 Target Schools of a/the List of Priory Projects (E-3) and Location Map

Table 8.8-1 West Nile Sub-Region - Western Districts (Arua, Koboko, and Yumbe Districts): List of Target Schools of Secondary Education Facilities Improvement Project

1 st Section			
District	Sub-County	Score	School name
Arua	Uriama	46	Perea SS (new site)
Koboko	Lobule	36	Padrombu SS (existing site)
Yumbe	Ariwa	38	Ariwa SS (existing site)



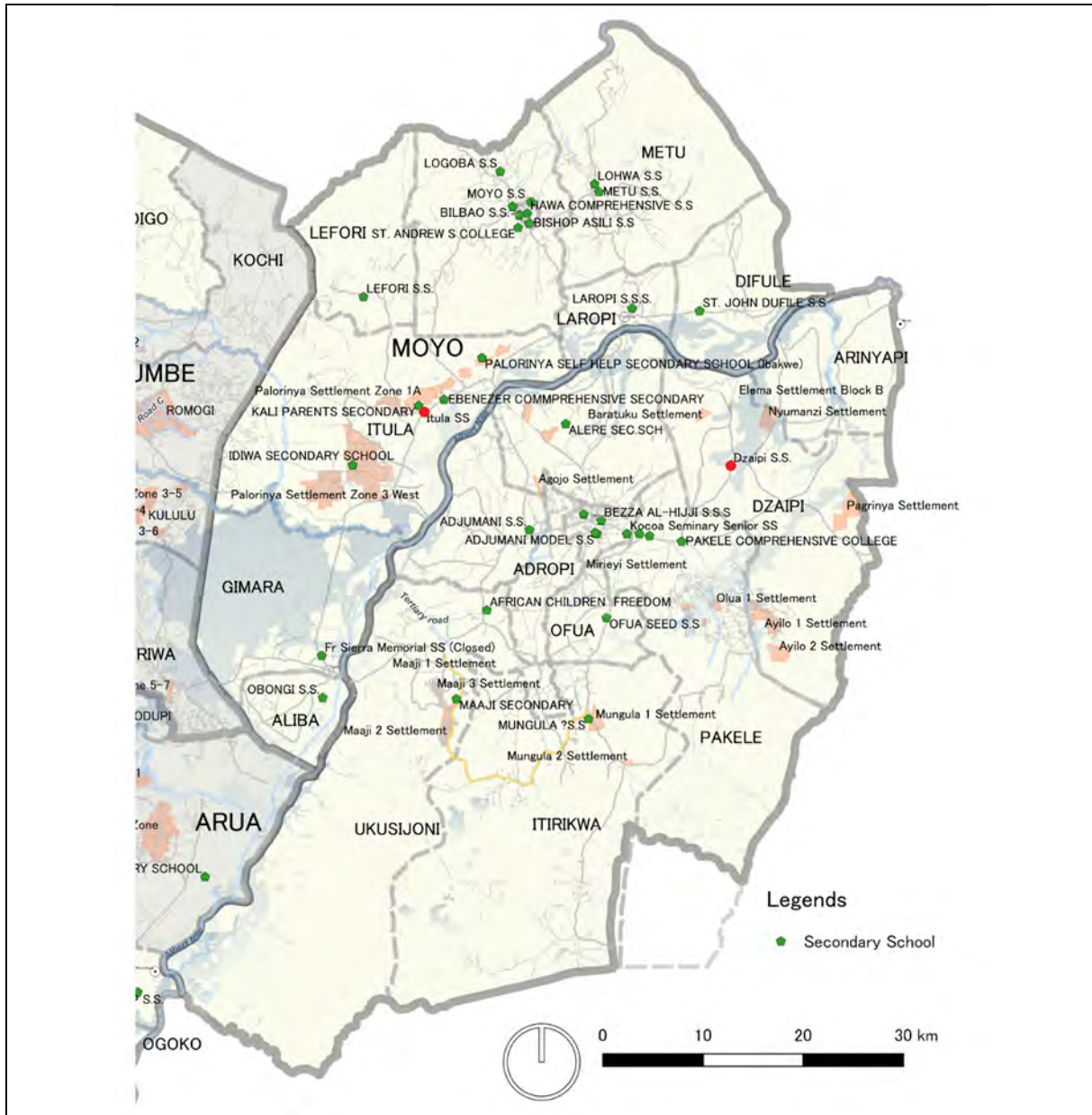
Source: prepared by the Study Team

Figure 8.8-1 West Nile Sub-Region - Western Districts (Arua, Koboko, and Yumbe Districts): Location Map of Secondary Education Facilities Improvement Project

8.8.3 Target Schools and Location Map of a/the List of Priority Project (E-4)

**Table 8.8-2 West Nile Sub-Region - Eastern Districts (Adjumani and Moyo Districts):
List of Target Schools of Secondary Education Facilities Improvement Project**

2 nd Section			
District	Sub-County	Score	School name
Adjumani	Dzaipi	38	Dzaipi SS (existing site)
Moyo	Itula	36	Itula SS (existing site)



Source: prepared by the Study Team

**Figure 8.8-2 West Nile Sub-Region - Eastern Districts (Adjumani and Moyo Districts):
Location Map of Secondary Education Facilities Improvement Project**

CHAPTER 9 SOCIAL INFRASTRUCTURE SURVEY: WATER AND SANITATION

9.1 Overview of WASH (Water, Sanitation and Hygiene) Sector

9.1.1 Sector Development Programs, Policies, and Plans

(1) Second National Development Plan 2015/16-2019/20 (NDP II)

In the National Development Plan 2010/11-2014/15, the Ugandan Government aimed to increase rural water coverage from 63% in 2008/09 to 77% in 2014/15, which, however, turned out to be only a slight increase to 65%, failing to achieve the target. Consequently, the Second National Development Plan (NDP II) promulgated in June 2015 set a goal to increase access to safe water from 65% to 79% in rural areas and from 77% to 100% in urban areas as of 2019/20. For the sanitation segment, NDP II aims to improve household latrine coverage from 68% to 80%, and household hand-washing facility coverage from 24% to 38%, as of 2019/20.

(2) Uganda Vision 2040

Uganda Vision 2040, which provides national development paths for the next 30 years, places great emphasis on providing access to safe water and modern toilet facilities for all citizens by developing piped water supply systems and sanitation facilities, aiming to increase the access rate to piped water supply systems from 15% as of 2010 to 100% by 2040.

(3) Water and Environment Sector Development Plan 2015/16-2019/20

For rural water supply and sanitation, this Plan aims to achieve two strategic objectives by the year 2020: 1) increasing household access to safe water to 79% by constructing water supply facilities and improving their functionality and utilization, and 2) increasing access to improved sanitation facilities to 95% to decrease water-related diseases through improved hygiene at the household, community, and Rural Growth Center (RGC) levels.

Boreholes with handpumps, protected springs, and other point water sources have been the main sources of water for people in rural areas. However, as the population continues to increase, water scarcity and groundwater contamination from household discharge are becoming serious issues. To increase access to clean water, construction of motorized piped water supply systems is recommended to efficiently deliver safe groundwater to many points of use from water sources, which may be situated far away from population centers. Currently, such piped systems are being constructed especially at the RGC level.

As for boreholes with handpumps, the Ministry of Water and Environment (MWE) adopted the Handpump Standardization Policy in 1995 to enhance their sustainability by designating certain handpumps that are widely available in Uganda as standard models and disseminating spare parts and repair techniques. Owing to these efforts, Uganda Mark II (U-2), a locally assembled version of India Mark II, and Uganda Mark III (U-3), a modified version of India Mark III, with easily available spare parts at superior price, are now widely used in rural areas. The Ugandan Government recommends the use of acid-resistant stainless steel in lifting pipes instead of conventionally used galvanized iron (GI) when newly installing or repairing handpumps from 2017/18 onwards. This change, however, is expected to raise construction and repair costs, as stainless steel pipes are more expensive than GI pipes.

9.1.2 Project Implementation Structure at District Level

(1) Operation and Maintenance of Water Supply Facilities

According to the current Water Act, the state government owns the water supply systems while their operation and maintenance are carried out and taken charge at the Sub-County level through their respective Districts.

According to the National Water Policy of 1999, which is currently under revision, and the O&M guidelines for rural water supply systems, adoption of the Community Based Management System (CBMS) is being recommended for the operation and maintenance (O&M) of rural water supply systems. Necessity of enhanced CBMS is also mentioned in NDP II to improve the functionality and utilization of the water systems. O&M of boreholes with handpumps, protected springs, and other point water sources, as well as gravity flow systems, are to be carried out mainly by local residents through daily maintenance and cleaning of the areas around the water sources. In reality, however, the Water User Committees (WUCs) is not organized in many point water sources to carry out daily maintenance, collection of water fees, and other responsibilities of the residents, which remains a problem to be solved.

On the other hand, piped water supply systems are being operated and maintained in many different forms. In highly populated areas, each Municipal or Town Council is appointed as the Water Authority (WA) by the state government under a performance contract to undertake O&M of water supply facilities in accordance with the Water Act. Each WA establishes the Water Supply and Sanitation Board (WSSB), which is comprised of members and chairperson of Town or Sub-County Council and resident representatives, to take charge of O&M by concluding a service contract with a private operator (PO) or employing a scheme operator (SO) to carry out daily inspections, repair, revenue collection and other O&M services on its behalf. In some rural communities, WSSB is established directly under the Sub-County without WA to take charge of O&M by employing a SO to perform actual services.

However, many POs, SOs, Sub-Counties, and WSSBs are not staffed with engineers possessing specialized knowledge and skills required for O&M, nor can they properly manage O&M funds due to lack of administrative and financial capacities. O&M cost is supposed to be covered by water fees from users, which, however are not collected properly in many water facilities, making it difficult to repair broken equipment immediately, resulting in low functional rates. Under these circumstances, there are increasing cases lately where the government appoints NWSC as WA to take charge of O&M of piped water supply systems in urban Districts, RGCs, and other densely populated areas.

According to MWE Atlas Database, the functional rate of water supply facilities in the target areas of this Study is 79%, lower than the national average (85%) of rural water supply systems. These data were collected by spot-check type surveys and, according to the latest information gathered by the Districts, the actual operating rate is likely to be even lower. The low functional rate is an issue for many areas, and this Study also confirmed related problems, including lack of proper recording of pump operations by PO and SO, as well as insufficient fund accumulation for O&M by WSSB to cover the fuel cost of diesel generators for submersible pumps because of their technical inability and inadequate skills for managing and collecting fees from users, thus contributing to the low functional rate, which leads to low water service coverage, further increasing the need for water supply. For these reasons, technical support for enhancing the O&M skills and administrative capacity of relevant organizations and personnel is deemed necessary in addition to intervening from a hardware aspect, such as construction and rehabilitation of water supply facilities.

The structures and the responsibilities of relevant entities engaged in O&M of point water sources and piped water supply systems are summarized in the table below.

Table 9.1-1 O&M of Water Supply Systems

Type of O&M	Outsourcing	Responsibility for O&M
Motorized piped water supply system		
NWSC	N/A	NWSC assumes the entire responsibility for O&M. O&M cost is covered by revenue from water users under an independent accounting system.
WA (WSSB) +PO	Service contract between WA and PO	PO undertakes daily inspection, minor repair, and revenue collection while WA (WSSB) takes charge of major repair works. O&M cost is covered by revenue from water users managed by PO.
WA (WSSB) +SO	Employment contract between WA and SO	SO undertakes daily inspection and revenue collection while WA (WSSB) takes charge of repair work. O&M cost is covered by revenue from water users managed by WA.
WSSB+SO	Employment contract between WSSB and SO	SO undertakes daily inspection and revenue collection while WSSB takes charge of major repair work. O&M cost is covered by revenue from water users managed by WSSB.
Point source water supply system, gravity flow system		
Residents	N/A	Residents form WUC to carry out O&M, including daily inspection and cleaning of area around the water source. Hand Pump Mechanic (HPM) and residents undertake minor repair and spare-parts replacement, the cost of which is covered by water fees from water users. Repair works that are beyond the technical capabilities of HPM or residents will be handled using the budget of Sub-County or District Office.

Source: Prepared by the Study Team based on interviews with relevant personnel

Major duties of the District Water Office (DWO) include monitoring of O&M statuses of water supply facilities, as well as repair of boreholes with handpumps and protected springs, which is taken charge by different entities depending on the scale/cost as shown in the table below.

Table 9.1-2 Repair System of Boreholes with Handpumps and Protected Springs

Scale of Repair Work	Responsible entity
500,000 UGX or less (minor repair)	Residents
500,000 UGX ~ 1,000,000 UGX (small repair)	Sub-County Office
1,000,000 UGX or more (major repair)	District Water Office

Source: Prepared by the Study Team based on interview with District Water Office

As shown above, major repairs costing 1,000,000 UGX or more have been heretofore undertaken by the District Water Office. However, due partially to O&M budget cut in 2017/18 at the District level, Sub-Counties are handing an increasing number of repair works exceeding 500,000 UGX lately.

(2) O&M of Sanitation Facilities

Toilets in Uganda are roughly divided into two types: private latrines and public latrines. The former consist of household latrines and communal latrines shared by multiple families. The latter are further divided into institutional latrines situated in schools and health facilities, and other public latrines provided in the public market areas of RGC, etc. Of the above, private latrines and public latrines provided in public markets fall under the jurisdiction of the WASH Sector.

Communal latrines are promoted on a temporary basis during natural disaster or other emergency event, as well as in settlements for the initial six months, after which they are phased out while the

construction of household latrines for individual families is promoted. Latrines in public markets such as RGC, upon their completion, are handed over to Sub-Counties, which then take over the responsibilities for their O&M. Each Sub-County concludes a service contract with a private operator (PO) to operate and maintain the latrines. PO collects 100 – 200 UGX from each user for each use to cover the O&M cost.

DWO carries out works in hygiene and sanitation fields in cooperation with Health Service Department (HSD) which is in charge of improving hygiene and sanitation at the household level. However, the budget for implementation of activities, such as monitoring, in hygiene and sanitation, which are allocated to each District, is too limited for DWO to implement its activities.

9.1.3 Implementing Structure of Settlement

According to the information of UNHCR, 37 international aid organizations are currently carrying out WASH-related activities in settlements throughout Uganda, most of which are concentrated in the West Nile Region. UNHCR and OPM are working together to coordinate many aid organizations by initiating sector meetings, etc. to be discussed later. UNICEF is also active in the WASH sector, providing support not only in settlements but also in host communities in some cases, focusing more or less on the post-project phase by assisting O&M and administrative capacity building, as well as providing sanitation and hygiene education for refugees.

UNHCR has two Sub-Offices in the West Nile Region, one each in Arua and Adjumani Districts.

The Arua Sub-Office has jurisdiction over Yumbe District (with a UNHCR Field Office) and Koboko District while the Adjumani Sub-Office has jurisdiction over Moyo District (with a UNHCR Field Office). A WASH Officer is assigned to each Sub-Office to manage and supervise the activities of the implementing partner (IP) in each settlement.

(1) O&M of Water Supply Systems in Settlements

UNHCR's WASH Strategic Operational Framework Uganda Refugee Operations, April/May 2017 (a draft version as of the date of this Study in October 2017) aims to achieve 80% participation in CBMC for water supply facilities. However, frameworks for O&M of water supply facilities constructed in settlements have yet to be established, and neither UNHCR nor OPM has a clear picture of how these facilities are being operated and maintained.

During the implementation period of support programs by aid organizations (mostly Operational Partners [OPs]), constructed facilities are owned by the aid organizations, which also undertake daily inspection, repair, etc. at their own expense. After the end of the implementation period, the ownership of the facilities is transferred to the Ugandan Government, which assigns the relevant DWOs the responsibility for facility O&M. Some aid organizations provide O&M-related capacity building assistance and tools for DWOs, which, however, lack technical and administrative skills, as well as manpower and funding, for properly managing and monitoring the facilities within the settlements. In fact, DWOs are relying on UNCHR and other locally-active aid organizations to operate and maintain the facilities.

The water supply capacity of Bidibidi Settlement in Yumbe District is seldom compromised by failed diesel generators of submersible pumps, as UNICEF covers the fuel cost of the generators. Water quality of the water supply systems in the settlements is inspected by aid organizations on a regular basis, and the Danish Refugee Council, an international NGO, is performing a residual chlorine test at all public faucets within the settlements every day. By contrast, in the host communities of Yumbe District, piped water supply systems are operating inefficiently, as they have to rely solely on solar power system due to lack of funding to cover fuel cost of diesel generators as a result of inadequate O&M and administrative capacities.

WUCs are gradually beginning to emerge in settlements towards establishing frameworks for the refugees to operate and maintain their own water supply facilities in alignment with the objectives

of the WASH Strategic Operational Framework Uganda Refugee Operations. According to this Study, WUC in a settlement is usually comprised of seven members¹. In areas near the borders between settlements and host communities, refugees and host-community residents are sharing boreholes with handpumps. In this type of water supply facilities, WUC members are made up of representatives from the settlement and host community as a result of discussions as to how to operate the WUC equitably for both the residents and the refugees. Each of such WUCs is establishing their own rules to share their water supply facilities equally, such as creating separate lines of water containers in front of the water point.

Accumulating funds to cover the O&M cost is an important issue to overcome in order to ensure the sustainable use of water supply facilities. According to the UNHCR report, there are generally no set rules or obligations for the payment of water fees in relatively new settlements while some long-standing settlements, such as Rhino Settlement in Arua District, collect 500 – 2,000 UGX per month from each user household. This has created a sense of inequality, and incidents have been reported on the destruction of boreholes with handpumps by host-community residents near the borders between settlements and host-communities.

(2) O&M of Sanitation Facilities in Settlements

The first six months after setting up a refugee settlement is regarded as the emergency phase, during which construction of communal latrines shared by multiple families is promoted. From the end of the emergency phase to the development phase, communal latrines are phased out while construction of household latrines is promoted. UNHCR provides materials for latrine slabs and superstructures through IPs while the refugees excavate latrine pits by themselves.

As is the case with water supply facilities, public latrines in commercial areas, including RGCs, are managed by aid organizations during the project implementation period, after which their ownership is transferred to the District.

9.2 Current Situations and Issues

Rural water supply facilities investigated by this Study consist of boreholes with handpumps and protected springs that are used mainly in Villages (with population 1,500 or less), as well as piped water supply systems for distributing water to communal taps in densely populated RGCs (with population between 1,500 and 5,000). Rural communities rely mostly on point water sources, such as shallow/deep wells and protected springs that are usually situated far away from dwellings because of their scattered locations, difficulty in developing groundwater, and other reasons. The need to travel long distances to the sources of safe drinking water is a particularly serious problem in the Northern and Eastern Regions of Uganda (Sector Performance Report 2016). There are two types of piped water supply systems: 1) the gravity flow system that uses the elevation difference between the water source point (spring water in the mountains) and the point of use, and 2) the motorized piped water supply system that uses a pump to draw and send underground water to an elevated water tank, from where water flows by gravity and is distributed to users. In this report, the two are differentiated by referring to the former as the gravity flow system and the latter as the motorized piped water supply system.

By type of water supply facilities, deep wells account for 42%, shallow wells for 25%, protected springs for 21%, and the remaining 12% consists of communal taps such as water kiosks and yard taps that receive water from piped water supply systems, and rainwater harvesting tanks², indicating that nearly 90% of residents are still relying on point water sources, such as boreholes with handpumps and protected springs.

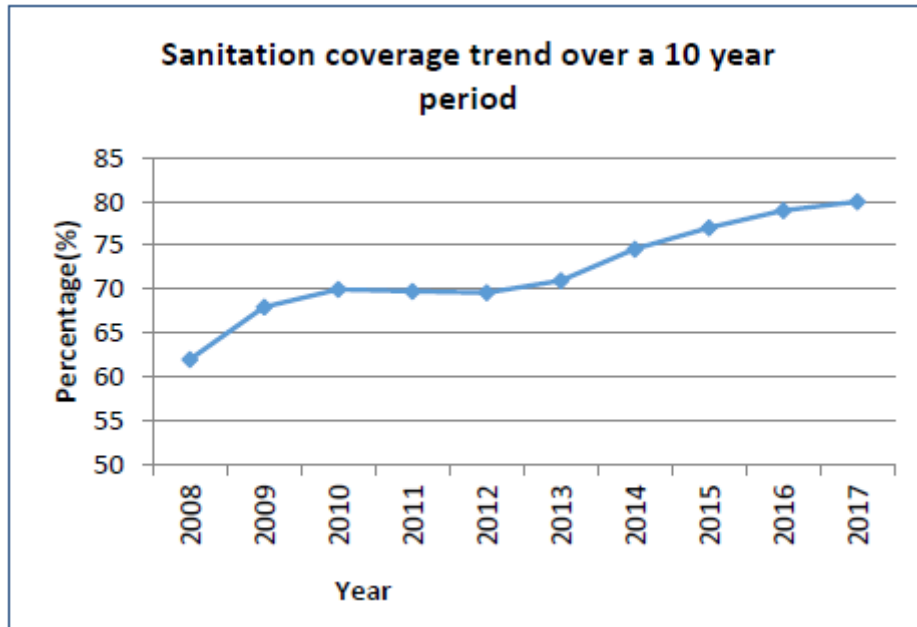
Although no serious problems regarding water quality have been reported in the 5 Districts studied,

¹ MWE's guidelines, etc. concerning WUCs are considered not applicable to WUCs in settlements, as they are not mentioned in such guidelines, etc.

² Source: Water and Environment Sector Performance Report 2017 (WESPR)

water in some sites contained iron and/or had high chlorine/turbidity levels. Also, though rare, certain boreholes with handpumps have been destroyed by the residents because the water quality was unfit for drinking.

Diffusion of household latrines and hand-washing facilities and other sanitary facilities has been facilitated by a number of aid organizations and has produced some results. According to Water and Environment Sector Performance Report (WESPR) 2017, an estimated 307,416 new toilets were built with an additional 965,670 people gaining access to improved sanitation during 2016/17. As of June 2017, the national average access to household latrines and hand-washing facilities was 80% and 37%, respectively (WESPR 2017), roughly 20% improvements from 10 years ago.



Source: Water and Environment Sector Performance Report 2017 (WESPR)

Figure 9.2-1 Rural Sanitation Coverage Improvements Since 2008

With the diffusion of toilets, open defecation practices have been decreasing gradually. However, of a total of 1,433 Villages educated during 2016/17, only 258 (18%) became open defecation free (ODF). The 18% ODF attainment is low compared to 26% in 2015/16 (WESPR 2017).

For constructing toilets, concrete and plastic slabs are locally available in most areas in the West Nile Region. Concrete slabs are sold at around 200,000 UGX (this Study). In Yumbe District, where slabs are not widely marketed, the residents sometimes make slabs by themselves using tree trunks, etc. Thatched roofing has been used traditionally, but is increasingly replaced by other materials due to recent price hikes.

Generally, when a toilet pit become full of urine and feces, it is covered with soil and decommissioned in place. Then, a new toilet is built nearby by excavating a pit and placing a slab transferred from the existing toilet. The soil conditions of the West Nile Region are mostly either hard or sandy, thus discouraging the residents from excavating toilet pits, likely contributing to slow diffusion of toilets.

Described below are the present situations surrounding the water and sanitation services in the 5 target Districts of this Study. A summary of usage of safe drinking water and improved toilet facility is shown in the attachment f-9-3.

9.2.1 Present Conditions and Challenges in the WASH Sector in Settlements

The “WASH Strategic Operational Framework Uganda Refugee Operations, April/May 2017” published by UNHCR and OPM sets out the following objectives in managing settlements:

- 100% coverage of safe water supply within 1km walking distance
- Elimination of dependency on water trucking operations - post-emergency
- 80% participation in community-based management systems for water supply facilities
- 85% coverage of households with improved latrines
- 80% communities practice positive hygiene behaviours including hand-washing with soap

(1) Water Supply and Demand

As will be discussed in Chapter 9.4, the daily water demand of the 5 target Districts is 17,286 m³ while the actual supply is 7,363m³³, falling short about 10,000m³ per day. As such, the dependency on water trucking operations still remains high, and the dependency rate is 81% in Imvepi Settlement in Arua District and 46% in Bidibidi Settlement in Yumbe District, according to the UNHCR report.

Imvepi Settlement in Arua District is facing a scarcity of local building constructors experienced in well construction and civil works, thus being unable to satisfy the mounting needs. Settlements in Adjumani District and Palorinya Settlement in Moyo District are burdened by the repair cost of frequently broken piped water supply facilities, calling for technical capacity enhancement of local building constructors.

It has been pointed out that it is difficult to develop water sources in the settlements of Adjumani District and Rhino and Palorinya Settlements of Arua District, as there are very few promising aquifers. It has also been reported that in Bidibidi Settlement, many pump rods are used in boreholes because of low groundwater levels, making it heavy to operate the handpump handles, resulting in frequent breakage.

(2) O&M of Water Supply Facilities

As discussed in Chapter 9.1.4 - Project Implementation Structure in Settlements, WUCs are gradually being formed in some areas and start collecting water fees from water users. However, many hurdles have yet to be overcome, such as the refugees’ financial ability and willingness to pay water fees and acquisition of repair techniques, in order to reach 80% water supply facilities operated and maintained under CBMS.

Under these circumstances, UNHCR and other aid organizations have been planning and implementing training programs for WUC members and HPMs. In addition, UNHCR is aiming to fortify sustainable O&M of piped water supply systems by establishing a water fee collection mechanism and receiving technical assistance from UO.

According to UNHCR, there have been many cases, where OP left the project site after construction of the water supply facilities were completed without sharing the construction agreement contract and other relevant documents with UNHCR or OPM. As a result, the local governments or IPs that took over the projects were often forced to operate and maintain the facilities without knowing their specifications. This problem has been faced by many projects during the O&M phase after handover.

³ The amount of water supply from safe water sources only, not including that from water-trucking operations.

(3) Household Latrine Coverage

According to the result of this Study, the average sanitation coverage among the 5 target Districts is 62%, still way short of 85% goal.

Reasons for the low diffusion rate include the soil conditions of the toilet construction sites that are either too hard to excavate or too sandy to retain a hole without collapsing, discouraging the residents from excavating a pit. Materials for building slabs and superstructures are usually supplied by aid organizations. However, as certain construction equipment and pit excavation tools are difficult to procure locally, supply has been lagging behind demand. In some settlements of Adjumani District, individual households tend not to have their own toilet because of the tribal tradition, in which family members and relatives share the same toilet. There have been some accidents of children falling into collapsed pits due to lack of skills to excavate and install pits properly, which is also contributing to the low diffusion rate.

Accordingly, aid organizations are expected to provide not only materials and hardware but also assistance for improving construction techniques and conduct an educational campaign on the importance of using a toilet, etc.

(4) Percentage of Households with Hand-washing Facilities

According to the result of this Study, the average ownership rate among the 5 target Districts is 44%⁴, meaning that more than half the households still do not have hand-washing facilities. Those without such facilities are using water containers (Jerrycan) to wash hands by holding the container in one hand, which prevents them from using both hands to wash germs off their hands properly.

To improve the situations, aid organizations are disseminating the tippy tap (a simple hand-washing device using a jerrycan) with hygiene educators teaching people how to wash hands properly, etc.



9.3 Assessment Methodology and Data

9.3.1 Purpose of Assessment

The purpose of this Study is to identify priority needs by measuring how the influx of refugees is affecting the loads on the existing water supply facilities in host communities.

9.3.2 Scope of Assessment

The scope of assessment of this Study in the WASH sector consists only of rural water supply facilities, excluding sanitary facilities for the reasons described below. According to MWE, the “rural water supply sector” refers to the facilities in areas that fall under the jurisdictions of District Local Council and RGC, and does not include those in urban areas under the jurisdictions of Town Board, Town Council, Municipality, and Kampala Capital City. More specifically, it is defined as water supply facilities in Parishes and Villages with populations up to 1,500, as well as RGCs with populations between 1,500 and 5,000⁵.

⁴ Data of Moyo and Yumbe Districts and three sub-counties of Arua District were not available and not included in the computation of the average.

⁵ Source: Water and Environment Sector Development Plan 2015-2019

Reasons for excluding sanitary facilities:

The target areas of this Study are Sub-Counties and Parishes that are directly impacted by the influx of refugees. The social infrastructure services in the sanitation sector of these areas are public latrines. However, no basic data as to the actual number of latrines, needed quantity of latrines, etc. have been compiled by the Districts or aid organizations, which means that information needed for assessment is not available. In addition, diffusion of public latrines is low on the government’s priority list compared to institutional and household latrines, and very little budget has been allocated for their development.

9.3.3 Methods of Assessment and Data Collection

As an indicator of load created by the influx of refugees on the existing water supply facilities of the host communities, the water supply-demand balance of each host community and refugee settlement was studied to determine the priority needs.

To collect data related to water supply-demand balance, field surveys were carried out between mid-July to late-October, 2017. See figure in the following page for the flow of the data collection.

As necessary data for estimating the water demand and supply volumes, information about the populations of the target areas and the number and supply capacities of existing functional water supply facilities were gathered at Sub-County level instead of Parish level as initially planned because the areas to be covered were too wide spread, and it took much longer time than expected to gather information due to various constraints. As for Parish level, only interview surveys were carried out to understand water supply situation and priority needs in parish level for some sub-county with high needs.

Table 9.3-1 Survey Data Concerning Water Supply-Demand Balance

Supply-demand	Survey Data
Water demand	<ul style="list-style-type: none"> ● Population ● Unit of demand (liter/person/day)
Water supply	<ul style="list-style-type: none"> ● Capacity of water supply system (m³/day) ● No. of systems functioning⁶

The method of collecting each type of data is described below. The water supply facilities covered by this Study consisted of the following systems that are defined as safe water sources by the Ugandan Government: 1) piped water supply systems, 2) gravity flow systems, 3) boreholes with handpumps, and 4) protected springs. Rainwater harvesting tanks were not included, although they were also defined as safe, because their supply capacities fluctuate greatly depending on the amount of rainfall, which in any case is insignificant compared to other systems and would have little influence on the overall result of the assessment. With regard to boreholes with handpumps, no distinction was made between deep and shallow wells because of difficulty in obtaining information about individual wells.

(1) Populations of the Target Areas

Through interview surveys, host communities (Sub-Counties) with refugee settlements were identified, and the population of each community in 2017 was estimated based on the 2017 population projection of the Uganda Population and Housing Census of Uganda 2014 published by the Uganda Bureau of Statistics (UBOS) and that of each settlement based on the survey results of OPM and UNHCR.

⁶ The number of facilities as of the end of July 2017.

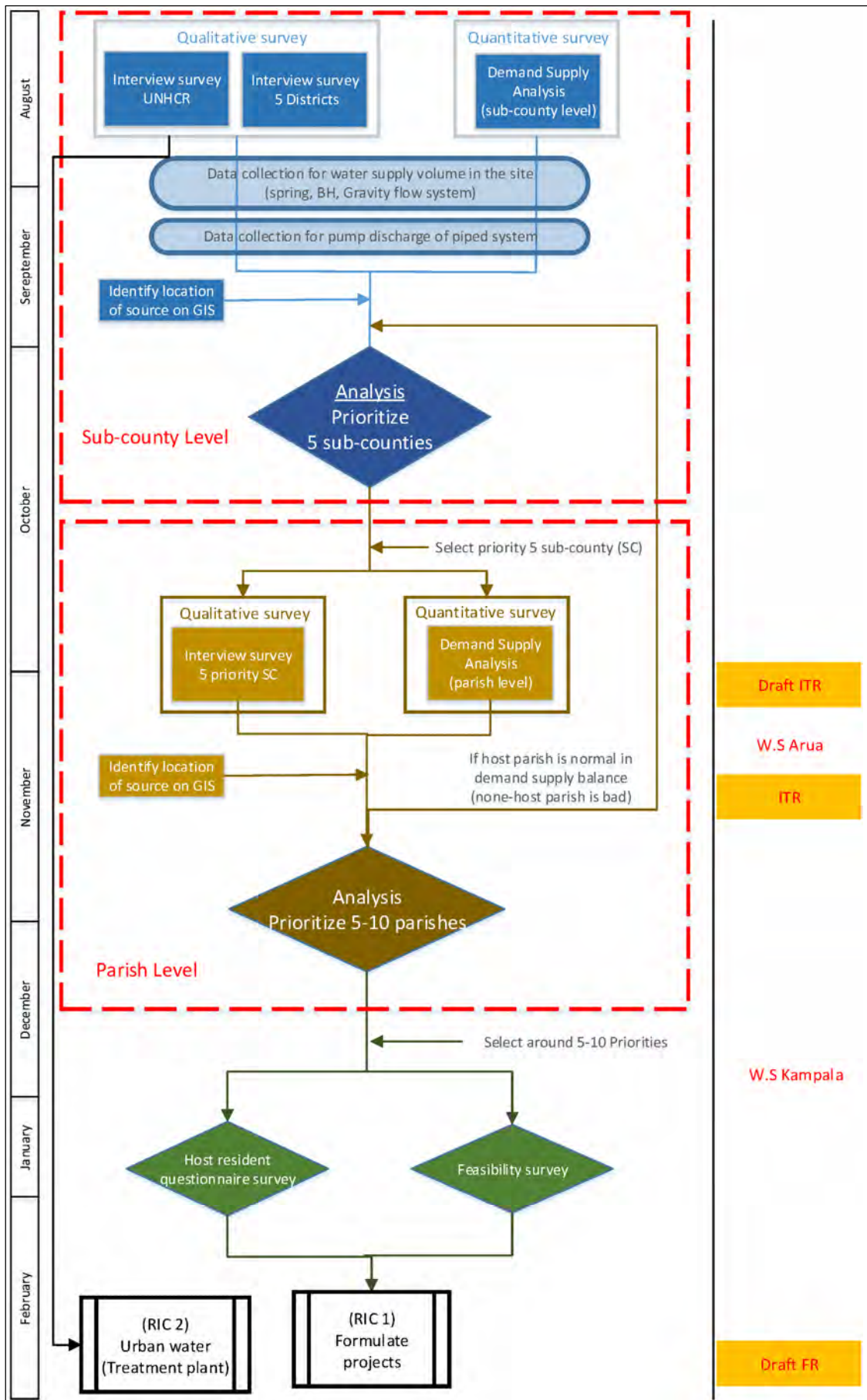


Figure 9.3-1 Flow of the Data Collection

(2) Unit of Water Demand

The Uganda Water Supply Design Manual (2013) defines the amount of water consumed by an equivalent of one person as follows.

Table 9.3-2 Water Demand per Person per Day by Population Size

Design Population (no. of persons)	Water Demand (liter/person/day)
Population \leq 5,000	20
5,000 < population \leq 20,000	35
20,000 < population	50

Source: Uganda Water Supply Design Manual (2013)

According to the interview with UNHCR’s Adjumani Office, the unit of water demand of settlements during the emergency phase (basically the first six months after the establishment of settlement) differs from that of the recovery phase (after the sixth month). As of the end of July 2017, settlements of Adjumani and Koboko Districts were in the recovery phase while those in the other 3 Districts were in the emergency phase, during which the unit of water demand is defined as 15 liters per person per day according to the Sphere Water Supply Standard. However, as the settlements of the 3 Districts will be in the recovery phase by the time cooperation begins, 20 liters/person/day of the unit of water demand was applied to all target areas in the estimation.

(3) Supply Volumes of Water Supply Facilities

Relevant data were collected to estimate the supply volume of each of the four types of water supply facilities covered by this Study. Supply volume of each piped water supply facility was computed by multiplying the hourly yield of the intake pump (pumping rate) of each water-source well by the operating hours of the pump. Supply rate (yield) of each of the boreholes with handpumps, protected springs, and gravity flow systems was determined by measuring the time taken to fill a water container at the site. Then, the supply volume was calculated by multiplying the yield by the average number of hours of use (set at 10 hours based on information gained through interviews).

Data collection survey for each type of water supply system is outlined below.

1) Piped water supply systems

Basic data concerning all existing piped water supply systems were collected through site visits and interviews with personnel in charge of facility O&M, the outline of which is summarized in the table below.

Table 9.3-3 Outline of Survey of Piped Water Supply Systems

Item	Description
Surveyed data	Information collected consists mainly of the following: <ul style="list-style-type: none"> ➤ Yields (pump discharge) of water source ➤ Intake pump capacities of water source ➤ Daily pump operating hours ➤ Tank capacity ➤ Daily water storage ➤ Power source (type of power generation, operating status)
Survey method	Many of the facilities in host communities have information plates posted in the pump rooms showing the records of water pumping tests and other basic information, which were verified

Item	Description
	and used as data for the Study. For facilities without such plates, necessary information was collected by interviewing SOs and Sub-County/District officers. Information about the facilities in settlements was collected from IPs and UNHCR that are taking charge of O&M.
Target facilities	All piped water supply systems of the host communities and settlements were surveyed. Information about the facilities in cities and towns was also collected, although they were not the targets of this Study, in order to assess the impact of refugees migrating into towns on their water supply facilities.

2) Gravity Flow Systems

Data on gravity flow systems were collected by interviewing DWO's personnel in charge. The outline of the survey is summarized in the table below.

Table 9.3-4 Outline of Survey of Gravity Flow Systems

Item	Description
Surveyed data	➤ Time taken to fill a water container in flow paths of spring water (seconds/20L)
Survey method	Data were collected through DWO's personnel in charge. The supply volume of a gravity flow system is determined generally by measuring the quantity of water at the spring point. However, in cases, where identifying or accessing the spring point is difficult, the following alternative methods were used: ① Measure the time taken to fill a water container in the nearest flowing path to the spring. ② Measure the time taken to fill a water container at the nearest tap stand to the spring.
Target facilities	➤ All facilities within host communities and settlements

3) Boreholes with handpumps (shallow and deep wells)

Yield of each borehole was determined by actually operating the handpump and measuring the time taken to fill a container (Jerrycan). However, as there were too many existing boreholes to measure all of them, five boreholes were selected as samples from those of the host communities and five from those of settlements of the target Sub-Countries to derive the average for each group. To reflect the diverse local characteristics of various water sources, samples were extracted from as wide an area as possible within each Sub-Country. The outline of the survey is summarized in the table below.

Table 9.3-5 Outline of Survey of Boreholes with Handpumps

Item	Description
Surveyed data	➤ Time taken to fill a water container at each supply point (seconds/20L)
Survey method	To take into account the amount of work required to pump up water from boreholes, the actual sites were visited to measure the pumping time to determine the yields. Water fetching has been a task mainly for women and children in the surveyed areas. As there was no significant difference in the pumping time between women and children, the time taken to fill a water container was measured at each site without regard to who operated the handpump.
Target facilities	➤ Five facilities each were selected and surveyed from the host communities and settlements of the target Sub-Countries.

As there are no notable differences among the boreholes with handpumps of each Sub-Country, the

average yields were calculated respectively for host communities and settlements based on collected data, and then applied to all target facilities.

To calculate the average hourly yield (m³/hour), the average time for switching water containers (10 seconds) was added to the average pumping time. Then, daily yield was estimated based on the average operating hours (10 hours) of each borehole.

The measured hourly yield (m³/hour) and the derived daily yield (m³/day) were as follows.

Table 9.3-6 Average Yields of Handpump Boreholes of Host Communities and Settlements

Water source	Average hourly yield (m ³ /hour)	Average daily yield (m ³ /day) ⁷
Host communities	0.69	6.87
Settlements	0.80	7.96

4) Protected springs

There are only a limited number of protected springs, and some Sub-Counties have none. The target settlements either have no protected springs or have dried up springs, meaning that protected springs are not used in the settlements. As was the case with boreholes with handpumps, samples were selected from as wide an area as possible to reflect the diverse local characteristics of the water sources. The outline of the survey is summarized in the table below.

Table 9.3-7 Outline of Survey of Protected Springs

Item	Description
Surveyed data	➤ Time taken to fill a water container at supply points (seconds/20L).
Survey method	Necessary data were collected by visiting the actual site of each protected spring facility and measuring the time taken to fill a water container from the intake pipe.
Target facilities	➤ Five facilities each of the host communities and settlements in each Sub-County were surveyed (however, no functioning protected springs exist in the settlements).

For protected spring sources, which were under similar situations as those of boreholes with handpumps, the average value was derived based on the existing data collected by the host communities and applied to all facilities. Yields were not measured in settlements, as none of them had protected springs as mentioned above.

The same method to calculate the average daily yield as that for boreholes with handpumps was used.

Table 9.3-8 Average Yields of Protecting Springs in Host Communities and Settlements

Water source	Average hourly yield (m ³ /hour)	Average daily yield (m ³ /day) ⁸
Host communities	0.48	4.75
Settlements	Non-existent, or dried up and not operating	

(4) Survey on the Number of Functioning Water Supply Facilities

The numbers of existing functional water supply facilities in host communities and settlements were

⁷ Average daily yield (m³/day) = Average hourly yield (m³/hour: before rounding fractions) x 10 (hours)

⁸ The daily yield may not be simply 10 times the hourly average, as it was calculated before rounding fractions, as was the case with handpump boreholes.

determined by interviewing each DWO's personnel in charge, UNCHR, and NGOs, and based on each District Annual Action Plan, DDP II, and other official documents, as well as other information compiled by UNHCR and NGOs.

9.3.4 Basic Ideas and Procedure of Assessment

How much the influx of refugees and associated water shortages are impacting the existing water supply facilities of host communities can be assessed by determining the water supply-demand balance of settlements. Further, how much the host communities can absorb and mitigate water shortages in the settlements can be assessed by determining their supply-demand balance. The more demand exceeds supply, the less the hosting communities' abilities are to supplement water shortages in refugee settlements, and vice versa, in which case there is less need for water supply.

Based on the above ideas, how much load is placed by the refugees on the facilities of host communities is assessed based on: 1) supply-demand balance in host communities, and 2) supply-demand balance in settlements.

Since many refugees are living outside the settlements, as confirmed through interviews with relevant local personnel, the existing water supply facilities of not only the border areas but also the entire Sub-Counties encompassing settlements are likely to be taking on additional loads.

Calculation method of water supply-demand balance

The water supply-demand balance of host communities and settlements of each Sub-County was calculated using the formula below.

Water supply-demand balance (m³/day) = water demand (m³/day) – water supply (m³/day)

✚ Water demand (m³/day) =
Service area population × Unit of water demand (20L/person/day)

✚ Water supply (m³/day) =
{Aggregate of daily yields of all piped systems (m³/day)} + {No. of boreholes with handpumps × average daily yield (m³/day)} } + {No. of protected springs × average daily yield (m³/day)} + {Aggregate of daily yields of all gravity flow systems (m³/day)}

Note: Only functioning facilities were taken into account. Non-functioning and abandoned facilities were not included in the calculations.

In addition, the water supply-demand balance per capita was also determined for comprehensive assessment from the standpoint of urgency.

9.3.5 Scoring

Numerical scale scores were established to assess the daily water supply-demand balance (m³/day) and daily water supply-demand balance per capita (m³/person/day). The individual scores of the following four factors were then aggregated for each Sub-County: 1) daily supply-demand balance (m³/day) of hosting communities, 2) daily water supply-demand balance per capita (m³/person/day) of hosting communities, 3) water supply-demand balance (m³/day) of refugee settlements, and 4) daily water supply-demand balance per capita (m³/person/day) of refugee settlements.

The following score points were assigned to the following ranges.

Table 9.3-9 Scoring Standards for Supply-Demand Gap

Daily water supply-demand gap (X) Score A		Daily water supply-demand gap per person (Y) Score B	
Range	Score	Range	Score
$X \leq 0$	0	$Y \leq 0$	0
$0 < X \leq 200$	1	$0 < Y \leq 4$	1
$200 < X \leq 400$	2	$4 < Y \leq 8$	2
$400 < X \leq 600$	3	$8 < Y \leq 12$	3
$600 < X \leq 800$	4	$12 < Y \leq 16$	4
$800 < X \leq 1,000$	5	$16 < Y \leq 20$	5
$1,000 < X \leq 2,000$	6	—	—
$2,000 < X$	7	—	—

9.3.6 Restrictions and Challenges in Collecting Data

Data related to water supply facilities in host communities and settlements had to be obtained from UNHCR and NGOs, since such basic data needed for initial assessment were not consolidated at the state level. In addition, it took much longer time than expected to collect data and information for a number of reasons, including that construction contracts, operation records of the facilities, and other documents were not properly kept and managed by the DWOs and Sub-Country Offices, and that information related to water supply facilities in settlements were not shared smoothly.

9.4 Assessment Results (Priority Needs)

9.4.1 Assessment Results

According to the initial assessment results, the total daily demand of all the target Districts is 28,956 m³ per day while the water supply from safe sources is only 14,697 m³ per day⁹, short of demand by 14,259 m³, of which a total of 4,336 m³ is lacking in the host communities and 9,923 m³ in the settlements, revealing that the settlements have much higher demand for water, more than twice that of the host communities. This also suggests that water shortages in the settlements are having some negative impact on the existing water supply facilities of the host communities.

According to Uganda's Water Supply Design Manual, 20 liters of water is needed per person per day. However, the initial assessment revealed a shortage of 9.86 liters per day per person across the entire target areas, or 7.45 liters in host communities and 11.48 in settlements.

Based on the score for the water supply-demand balance of each area, Obdupi Sub-County of Arua District has the greatest need for water, falling short of the demand by 15.75 liters per person per day. Within the Sub-County, settlements and host communities are short of water supply by 18.00 and 7.78 liters, respectively.

Itula Sub-County of Moyo District has the second greatest need, being short of 13.20 liters per person per day. Settlements as a whole are short of water supply by 14.16 liters, whereas the host communities are only 1.22 liters short of, and nearly satisfying, the daily requirement of 20 liters, indicating a significant disparity in water supply services between the settlements and host communities.

Yumbe District's Kululu and Kochi Sub-Counties have the third largest need, being short of 13.31 and 12.86 liters per person per day, respectively.

Itirikwa Sub-County of Adjumani District has the least need, exceeding the minimum daily demand by 1.68 liters per person per day. Settlements and host communities of the Sub-County are both

⁹ The amount is only from safe water sources so defined by the Ugandan Government and does not include supply from water trucking operations.

supplying water in excess of the daily demand by 4.08 liters and 0.86 liter per person per day, respectively.

Itirikuwa is the only Sub-County among the 18 target Sub-Counties that is satisfying the demand both in the host communities and settlements.

As for the number of existing water supply facilities in the target areas, host communities have 974 boreholes with handpumps, nearly 1.7 times more than the number (574 boreholes) in the settlements. Settlements, on the other hand, have 38 piped water supply systems while hosting communities have only 7, indicating that the hosting communities remain dependent on boreholes with handpumps and other point water sources instead of piped water supply systems that are recommended by the state government. One of the reasons for this is that the construction of piped systems utilizing water sources with relatively high yields is actively promoted by aid organizations to cope with massive influx of refugees.

Described below are the present conditions of the water supply services as revealed by this Study.

(1) Capacities of piped Water Supply Systems

Although the Ugandan Government is recommending the construction of piped water supply systems using wells with high yields, many problems are encountered concerning O&M of water supply facilities.

Specifically, many of the host communities are using hybrid solar/diesel generators to drive the intake pumps of the piped water supply systems. However, as a result of not collecting water charges properly, such communities are lacking funds to operate and maintain the facilities to take advantage of the energy-saving features of the hybrid systems with their diesel generators left non-functional or abandoned because they cannot afford to buy fuel or pay for the repair cost when the equipment is broken. As such, the generators cannot supply power to the intake pumps to draw groundwater during the hours when they are expected to operate (i.e., 7:00am – 10:00am and 4:00pm – 7:00pm¹⁰; during these hours, solar power generators are considered unable to achieve the design output in the West Nile Region). This means that the intake pumps are drawing groundwater for about six hours per day only when the solar panels can generate the design output, yielding only 50% of their respective capacities.

The piped water supply system in Dzaipi Sub-County of Adjumani District is not presently operating because its diesel generator was stolen and electricity from a subsequently connected commercial power source was cut off due to instability of the services and unpaid charges.

In addition, problems associated with improper storage and management of data, such as technical specifications and daily operation records of the facilities, are found here and there.

By contrast, the piped water supply systems of the settlements are operating as planned because UNICEF, IP, etc. are paying the fuel cost of diesel generators, making it possible to generate power during non-operating hours of the solar panels.

As many of the existing piped water supply systems in the host communities are thus unable to supply water at their design yields due to lack of capacity to properly operate and maintain the facilities, establishment and fortification of the O&M structure are called for.

(2) Local Characteristics

Certain differences in living arrangements among the 5 target Districts have been confirmed in this Study.

In Koboko District, the refugees are mainly from the Democratic Republic of Congo and South Sudan, where the number of refugees from South Sudan is greater than the number of refugees from

¹⁰ According to information gained through interviews with relevant local personnel operating the facilities.

the Democratic Republic of Congo. Refugees from Congo coexist with their relatives, mainly around the Kulubu area. The number of refugees is increasing especially in town areas, placing an increasing load on the existing water supply facilities. In Adjumani District, the majority of refugees are from South Sudan, who have been living in the District since long before July 2016. Many of these refugees are living with their relatives in town areas without refugee registration. Accordingly, the actual water supply-balance is likely to be worse than the quantitative assessment result mentioned above.

The number of refugees is on an increasing trend in Arua, Moyo, and Yumbe Districts, where new settlements were established in 2017, and the need for emergency water supplies is expected to rise as well.

(3) Water-trucking Operations in Settlements

Many settlements remain dependent on water-trucking operations, receiving 5,232 m³ of water per day according to data collected from UNHCR. Water trucks tend to incur high fuel and other operating costs and have certain hygiene issues associated with uncleaned tanks. Because of these shortcomings, UNHCR has announced its decision to phase out water-trucking operations, which could lead to decreased water supply and increased water demand in Imvepi Settlement of Arua District, Bidibidi Settlement of Yumbe District, and Palorinya Settlement of Moyo District, which rely on water-trucking operations for 81%, 46%, and 40%, respectively, of their water needs¹¹.

Taking comprehensively into account the above water supply-demand assessment results and the local capacities to operate and maintain the facilities, as well as the local characteristics and the phasing-out of water trucks, the need for increased water supply is high in all the target Sub-Counties, except those in Adjumani District where the demand for water is being satisfied.

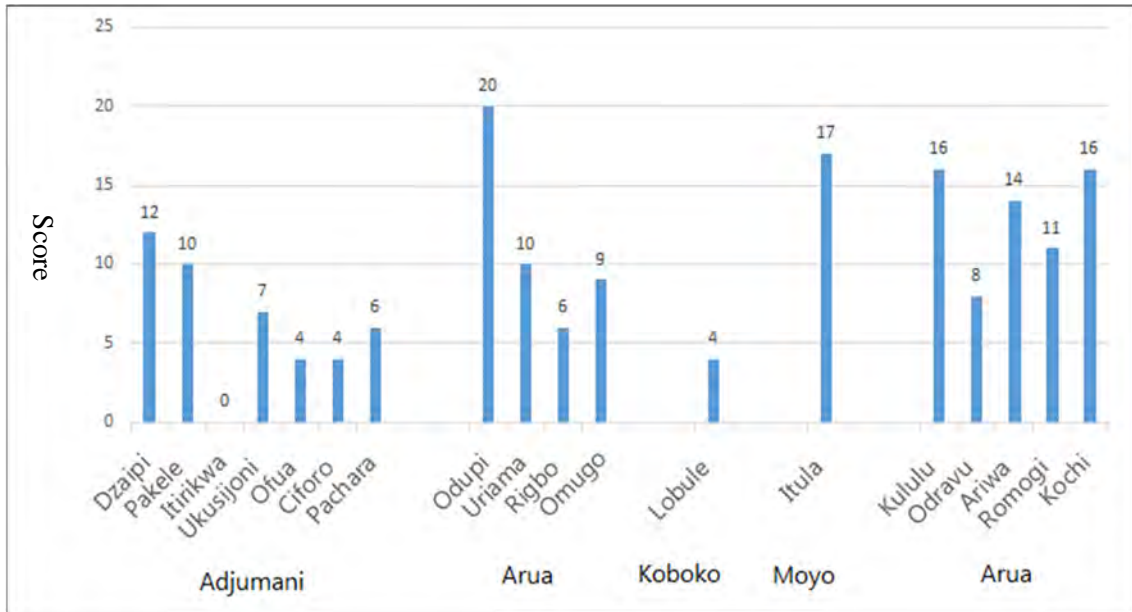
¹¹ Source: Uganda WASH: Next Phase

Table 9.4-1 Outline of Assessment Results

District	No	Category	Area (catchment)	Water Demand		Water Supply								Survey Evaluation											
				Population (2017 Proj.)	Total Daily Demand (m ³ /day)	Piped water system		Gravity flow system		Borehole		Protected spring		Total Daily Supplied (m ³ /day)	Demand-Supply Gap			Difference between H and S (Ltr/D/P)	Access to safe water (%)	Deep-well FN rate (%)	Shallow-well FN rate (%)	Dependence on water trucking (%)	Evaluation (Score A (H)-(S)+ Score B (H)-(S))	Promo-Score	
						Water supply (m ³ /day)	No. of functional facility	Water supply (m ³ /day)	No. of functional facility	Water supply (m ³ /day)	No. of functional facility	Water supply (m ³ /day)	No. of functional facility		Gap Whole (m ³ /day)	Gap/ person (Ltr/D/P)	Supply/ person (Ltr/D/P)								
Adjumani	1	(H) Dzaiji	43,700	874.00	N/A	0	N/A	0	6.87	37	4.75	0	254.19	619.81	4	14.18	4	5.82	9.76	47.0	96	NA	2	12	
		(S) Baranku, Nyumanzzi, Pagniya, Elema	71,153	1,423.10	82.15	4	N/A	0	7.96	98	4.75	0	1,108.68	314.42	2	4.42	2	15.58							
		(T) Total	114,853	2,297.10	4	0	0	135	0	0	1,362.87	934.23	5	8.13	3	11.87									
	2	(H) Pakele	50,400	1,008.00	41.40	1	N/A	0	6.87	72	4.75	2	545.54	462.46	3	9.18	3	10.82	5.04	81.0	100	100	8	10	
		(S) Ayilo 1, 2, Uha Boroli, Oha 1, 2	52,477	1,049.50	46.55	3	N/A	0	7.96	87	4.75	0	832.17	217.33	2	4.14	2	15.86							
		(T) Total	102,877	2,057.50	4	0	0	159	0	0	1,377.71	679.79	4	6.61	2	13.39									
	3	(H) Inukwa	17,400	348.00	21.00	1	N/A	0	6.87	47	4.75	4	362.89	(14.89)	0	(0.86)	0	20.86	3.22	42.0	98	50	2	18	0
		(S) Mungala 1, Mungala 2	5,950	119.00	N/A	0	N/A	0	7.96	18	4.75	0	143.28	(24.28)	0	(4.08)	0	24.08							
		(T) Total	23,350	467.00	1	0	0	65	0	0	506.17	(39.17)	0	(1.68)	0	21.68									
	4	(H) Ukuzajoni	11,600	232.00	N/A	0	N/A	0	6.87	29	4.75	4	218.25	13.77	1	1.19	1	18.81	7.68	40.0	71	86	2	12	7
		(S) Maaji 1, Maaji 2, Maaji 3	34,197	683.90	70	1	N/A	0	7.96	39	4.75	0	380.44	303.46	2	8.87	3	11.13							
		(T) Total	45,797	915.90	1	0	0	68	0	0	598.67	317.23	2	6.93	2	13.07									
	5	(H) Oha	14,300	286.00	38.50	1	N/A	0	6.87	40	4.75	3	327.55	(41.55)	0	(2.91)	0	22.91	14.10	81.0	100	92	15	4	
		(S) Minyei	4,521	90.40	N/A	0	N/A	0	7.96	5	4.75	0	39.80	50.60	1	11.19	3	8.81							
		(T) Total	18,821	376.40	1	0	0	45	0	0	367.35	9.05	1	0.48	1	19.52									
	6	(H) Ciforo	14,800	296.00	27.00	1	N/A	0	6.87	43	4.75	0	322.41	(26.41)	0	(1.78)	0	21.78	13.28	54.0	74	86	15	4	
		(S) Agojo	3,752	75.00	N/A	0	N/A	0	7.96	4	4.75	0	31.84	43.16	1	11.50	3	8.50							
		(T) Total	18,552	371.00	1	0	0	47	0	0	354.25	16.75	1	0.90	1	19.10									
	7	(H) Pachara	17,500	350.00	N/A	0	N/A	0	6.87	33	4.75	0	226.71	123.29	1	7.05	2	12.95	0.90	29.0	72	64	13	6	
		(S) Aleso 1, Ohji	7,470	149.40	N/A	0	N/A	0	7.96	13	4.75	0	103.48	45.92	1	6.15	2	13.85							
(T) Total		24,970	499.40	0	0	0	46	0	0	330.19	169.21	1	6.78	2	13.22										
Adjumani Summary				349,220	6,984.30				4,897.21	2,087.09	5.98	14.02				89	84								
Arua	8	(H) Odipi	41,600	832.00	N/A	0	N/A	0	6.87	61	4.75	18	504.57	327.43	2	7.87	2	12.13	10.13	73.0	88	88	81	1	20
		(S) Inuyipi-zone 1,3,3, Rhino-zone 2,6	145,296	2,905.90	20.79	4	N/A	0	7.96	26	4.75	0	290.12	2,615.78	11	18.00	5	2.00							
		(T) Total	186,896	3,737.90	4	0	0	87	0	0	794.69	2,943.21	11	15.75	4	4.25									
	9	(H) Unama	25,100	502.00	N/A	0	N/A	0	6.87	67	4.75	0	460.29	41.71	1	1.66	1	18.34	11.45	89.0	92	NA	38	8	10
		(S) Rhino-zone 1,2,6	52,138	1,042.80	54.36	5	N/A	0	7.96	11	4.75	0	359.36	683.44	4	13.11	4	6.89							
		(T) Total	77,238	1,544.80	5	0	0	78	0	0	819.65	725.15	4	9.39	3	10.61									
	10	(H) Rigbo	27,900	558.00	N/A	0	N/A	0	6.87	64	4.75	0	439.68	118.32	1	4.24	2	15.76	0.34	66.0	85	NA	10	9	
		(S) Rhino-zone 1,3,4,5	29,770	595.40	33.98	10	N/A	0	7.96	15	4.75	0	459.20	136.20	1	4.58	2	15.42							
		(T) Total	57,670	1,153.40	10	0	0	79	0	0	898.88	254.52	2	4.41	2	15.59									
	11	(H) Omugo	46,900	938.00	74	2	N/A	0	6.87	85	4.75	2	741.45	196.55	1	4.19	2	15.81	15.8	49.0	90	60	10	9	
(S) Rhino extension		6,637	132.70	N/A	0	N/A	0	7.96	0	4.75	0	0.00	132.70	1	19.99	5	0.01								
(T) Total		53,537	1,070.70	2	0	0	85	0	0	741.45	329.25	2	6.15	2	13.85										
Arua Summary				375,341	7,506.80				3,254.67	4,252.13	11.33	8.67				83	75								
Koboko	12	(H) Lobule	37,400	748.00	N/A	0	12.96	2	6.87	48	4.75	32	507.68	240.32	2	6.43	2	13.57	32.43	72.0	98	83	15	4	
		(S) Lobule-zone A,B	4,396	87.90	19.13	1	N/A	0	7.96	23	4.75	0	202.21	(114.31)	0	(2.00)	0	46.00							
		(T) Total	41,796	835.90	1	0	0	71	0	0	709.89	126.01	1	3.01	1	16.99									
Koboko Summary				41,796	835.90				709.89	126.01	3.01	16.99				94	85								
Moyo	13	(H) Inula	14,000	280.00	36.26	1	N/A	0	6.87	33	4.75	0	262.97	17.03	1	1.22	1	18.78	12.94	64.0	46	67	40	2	17
		(S) Palorinya-zone 1,4	174,348	3,487.00	83.2	2	N/A	0	7.96	107	4.75	0	1,018.32	2,468.68	11	14.16	4	5.84							
		(T) Total	188,348	3,767.00	3	0	0	140	0	0	1,281.29	2,485.71	11	13.20	4	6.80									
Moyo Summary				188,348	3,767.00				1,281.29	2,485.71	13.20	6.80				77	75								
Yumbe	14	(H) Kululu	42,900	858.00	N/A	0	N/A	0	6.87	49	4.75	0	336.63	521.37	3	12.15	4	7.85	1.92	34.0	79	33	46	3	16
		(S) Bidibidi, zone 3	65,000	1,300.00	114.95	1	N/A	0	7.96	34	4.75	0	385.59	914.41	5	14.07	4	5.93							
		(T) Total	107,900	2,158.00	1	0	0	83	0	0	722.22	1,435.78	8	13.31	4	6.69									
	15	(H) Odruva	49,100	982.00	N/A	0	N/A	0	6.87	80	4.75	0	549.60	432.40	3	8.81	3	11.19	5.88	47.0	91	60	11	8	
		(S) Bidibidi, zone 4	50,000	1,000.00	375.02	2	N/A	0	7.96	13	4.75	0	853.52	146.48	1	2.93	1	17.07							
		(T) Total	99,100	1,982.00	3	0	0	93	0	0	1,403.12	578.88	3	5.84	2	14.16									
	16	(H) Aruva	27,900	558.00	N/A	0	N/A	0	6.87	26	4.75	0	178.62	379.38	2	13.60	4	6.40	0.78	27.0	68	50	46	5	14
		(S) Bidibidi zone 5	53,206	1,064.10	100.03	1	N/A	0	7.96	25	4.75	0	299.03	765.07	4	14.38	4	5.62							
		(T) Total	81,106	1,622.10	1	0	0	51	0	0	477.65	1,144.45	6	14.11	4	5.89									
	17	(H) Romog	53,000	1,060.00	N/A	0	N/A	0	6.87	77	4.75	0	528.99	531.01	3	10.02	3	9.98	2.76	45.0	87	67	7	11	
(S) Bidibidi zone 1		58,400	1,168.00	102.49	4	N/A	0	7.96	42	4.75	0	744.28	423.72	3	7.26	2	12.74								
(T) Total		111,400	2,228.00	4	0	0	119	0	0	1,273.27	954.73	5	8.57	3	11.43										
18	(H) Kochi	48,000	960.00	N/A	0	N/A	0	6.87	81	4.75	0	556.47	403.53	3	8.41	3	11.59	9.15	52.0	68	50	3	16		
	(S) Bidibidi zone 2	45,600	912.00	N/A	0	N/A	0	7.96	14	4.75	0	111.44	800.56	5	17.56	5	2.44								
	(T) Total	93,600	1,872.00	0	0	0	95	0	0	667.91	1,204.09	7	12.86	4	7.14										
Yumbe Summary				493,106	9,862.10				4,544.17	5,317.93	10.78	9.22				85	60								
Total for Host community				583,500	11,670.00				7,324.47	4,345.53	7.45	12.55													
Total for Settlement				864,311	17,286.20				574	0	0	0	7,362.76	9,923.34	11.48	8.52									

9.4.2 Priority Needs

The bar graph below shows the respective scores of the target Sub-Counties.



Source: Prepared by the Study Team based on initial assessment results

Figure 9.4-1 Score of Each Target Sub-County

As explained earlier, the score is the sum of points given to the supply-demand balance of both the host communities and settlements to reflect the total needs of each Sub-County as a whole. For this reason, the scores alone cannot be relied upon to determine the discrete needs of host communities because in some Sub-Counties with high scores, such as Itula Sub-County of Moyo District, the majority of demand is created by water shortages in settlements.

Most of the refugees accepted in Koboko District, for instance, came from South Sudan and Democratic Republic of Congo. Many of refugees from Congo have been living side by side with the residents of the host communities without refugee registration in many cases since before the mass migration of refugees from South Sudan began in July 2016. Population is growing especially in town areas due to settling of refugees, placing an increasing load on the existing water supply facilities. In Adjumani District, the majority of refugees are from South Sudan, who had been living in the District since long before July 2016. Many of these refugees are living with their relatives in town areas without refugee registration. As such, the actual water supply-balance is likely to be worse than the quantitative assessment result discussed above.

While the scores are used as one of the criteria for selecting priority areas for assistance, different backgrounds and living arrangements in accepting refugees among the target Districts described above should also be taken into account. Accordingly, projects will be formed in such a way as to provide some kind of assistance for all of the Districts in order to minimize disparities among them.

As a specific approach, two high-priority Sub-Counties will be selected from each District (or one Sub-County in case of Koboko and Moyo Districts) to improve their water supply-demand balance and increase access to safe water by constructing new water supply facilities and rehabilitating the existing ones. To do so, however, many tasks and problems need to be tackled, such as identifying the water distribution network of the existing water supply systems of each Sub-County, securing water sources with sufficient yields necessary for constructing piped water supply systems, verifying the priority areas (Parishes) for developing water supply facilities, O&M capacity building after completion of facilities, and securing budget for O&M, all of which need to be discussed with the Ugandan counterpart for specifics. Thus, making a list that only takes into account water supply shortages would be meaningless from the viewpoints of appropriateness and feasibility. Accordingly,

the above assessment results will be used to make a list of priority needs.

9.5 Formulation of Priority Projects

9.5.1 Examination of Specific Contents of Grant Aid Projects

It is considered relevant that existing water supply facilities would be repaired and expanded, and new water supply facilities would be constructed in order to improve the water supply demand gap which is mentioned in chapter 9.2 “Current Situations and Challenges in the WASH Sector in the 5 Districts in the West Nile Region” as a current issue in the water sector.

Specific contents of Grant Aid Projects were examined based on a grant aid budget of the Japanese government. The number of water supply facilities to be assisted will be determined after studying several factors, such as status of groundwater, topographic features of the target areas, and specification of water supply facilities to be newly constructed, renovated and expanded.

Therefore, during the formulation of the Grant Aid Projects in this Study, the number of the water supply facilities to be constructed and improved were set and determined to improve the current water supply shortage through holistically examining approximate water-supplied population, which was calculated using the standard of Ugandan government and the past relevant projects, work capacity of construction companies, and the budget of grant aid. In addition, since the target areas cover a wide range of Ugandan lands, the Grand Aid Projects were formulated proposing the division of the target 5 Districts in West Nile Region into two areas taking into account the ease of construction.

9.5.2 Criteria for Selection of Target Areas

The target areas (Sub-Counties) to implement the Grant Aid Projects were selected as follows.

First, the target Sub-Counties were selected along the lines of the development policy of the government of Uganda and so as not to duplicate ongoing or planned projects of Districts and donors.

Then, the target Sub-Counties were selected so that all of the 5 target Districts would receive some assistance to avoid expanding aid disparities as each District has a different background in accepting refugees and a different pattern in refugees’ residence.

As a result, the selected Sub-Counties are as shown in the table below;

Table 9.5-1 A List of Priority Projects

Target Areas		Score of Assessment	Supply-demand Gap	
District	Sub-County		m ³ /day	liter/person/day
Adjumani	Dzaipi	12	934	8.1
	Pakele	10	680	6.6
Arua	Odupi	20	2,943	15.8
	Uriama	10	725	9.4
Koboko	Lobule	4	130	3.1
Moyo	Itula	17	2,486	13.2
Yumbe	Kululu	16	1,436	13.3
	Kochi	16	1,204	12.9

9.5.3 Required Steps for Selection of Target Water Supply Facilities (Target Areas)

In the Study, a supply-demand gap of the existing water supply facilities was assessed by the Sub-County complying with the scope of the Study. The following process is required to select the specific water supply facilities to be assisted in the future.

First, potential water veins and sources should be found beforehand by assessing hydrogeochemical conditions and aquifers as much as possible in the target area through geophysical explorations and test drillings.

Moreover, regarding the operation and maintenance system of the improved and constructed water supply facilities, a social survey should be implemented to assess management structures, system and capacity of concerned parties, residents' ability and willingness to pay for water services, usage situation of water supply facilities, and hygiene and sanitation status.

In addition, it is also required to confirm if sources of water supply facilities have reasonable water quantity and appropriate water quality through pumping tests and water quality tests for expanding existing water supply facilities.

Finally, targets sites should be selected through discussion with the government of Uganda according to the results of studies mentioned in the required steps above.

9.6 Outline of Priority Projects

Grant Aid Projects for improvement of water supply systems in the respective eastern West Nile Region and the western West Nile region are proposed to address current issues (chapter 9.2 "Current Situations and Challenges in the WASH Sector in the 5 Districts in the West Nile Region").

It was confirmed during the meeting with MWE held on 23rd of January, 2018 that both proposed Grant Aid Projects are consistent with the governmental policy and have no duplication with other aid projects. As stipulated in chapter 9.5.2 "Required steps for selection of target water supply facilities (target areas)", the selection and determination of specific target water supply facilities requires further assessments, such as geophysical exploration measuring.

Summary of each of the proposed Grant Aid Projects is as follows. For details, please refer to the project profiles in Chapter 13.

9.6.1 Project for the Improvement of Water Supply Systems in the Eastern West Nile Region (Adjumani District and Moyo District) (W-1)

(1) Background

According to the Basic Survey on Social Infrastructure in the West Nile Region implemented by JICA in 2017, the total daily water demand of Adjumani and Moyo Districts is 10,751 m³ whereas water supply from safe and sustainable water sources remains as low as 6,178 m³, meaning that the 2 Districts are short of water by 4,573 m³ daily, or 8.51 liters per person per day.

The Government of Uganda promulgated the Second National Development Plan 2015/16-2019/20 (NDP II) in June 2015, which aims to increase access to safe water from 65% in 2014/2015 to 79% in 2019/2020 in rural areas. In addition, the Water and Environment Sector Development Plan 2015/16-2019/20 addresses the problems of water supply shortage and groundwater contamination caused by population growth and household discharge, and recommends that motorized piped water supply systems be constructed to supply safe groundwater efficiently to more points of use.

The District Development Plans set out certain objectives based on their own key performance indicators such as water access rate and the functional rate of water supply systems, but have no specific plans for the target Sub-Counties of the following proposed Project, meaning that there is no duplication between the District Development Plans and this Project (as of end of October 2017).

Therefore, the proposed project calls for urgent attention.

(2) Project Objectives

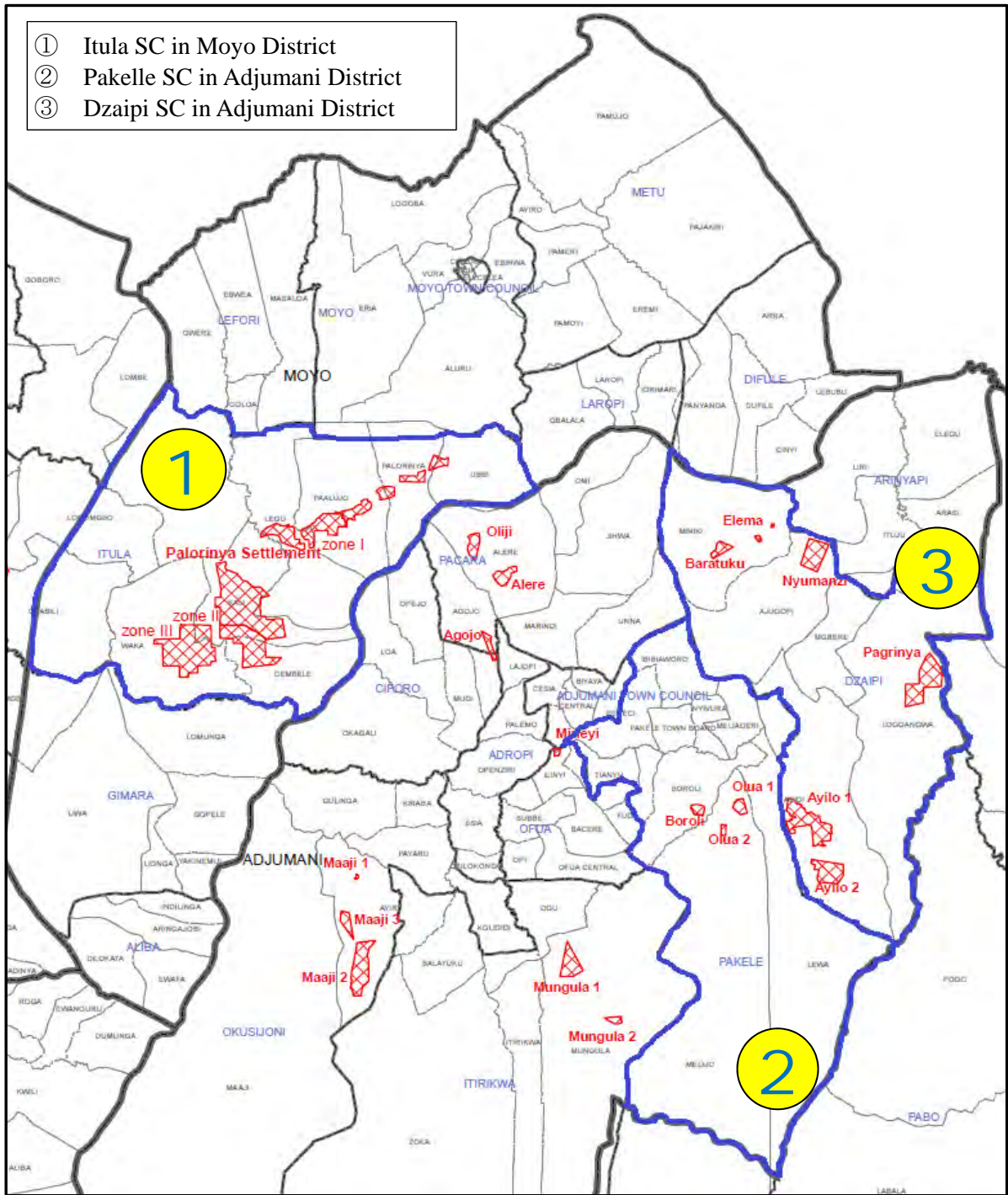
As a result of constructing/rehabilitating water supply facilities in host communities of three Sub-Counties of Adjumani District and Moyo District, where water supply is lacking due to the influx of refugees, a greater population will have access to safe drinking water.

(3) Project Description

Construct 100 new boreholes with handpumps and rehabilitate 43 existing ones, newly construct 5 motorized piped water supply systems, and rehabilitate/expand 3 existing piped water supply systems in the host communities of three Sub-Counties such as Dzaipi Sub-County and Pakelle Sub-County of Adjumani District, Itula Sub-County of Moyo District, where water supply is deficient due to influx of refugees. The figures are the totals of the three Sub-Counties. Specific number of new/rehabilitated facilities in each Sub-County shall be decided depending on the result of the Preparatory Survey. (Refer to chapter 9.5.2 “Required steps for selection of target water supply facilities (target areas)”)

(4) Target Areas

Three Sub-Counties of Dzaipi Sub-County and Pakelle Sub-County of Adjumani District, Itula Sub-County of Moyo District. The locations of the target areas are shown in the map below.



Source: prepared by the Study Team

Figure 9.6-1 Targeted Area Map

9.6.2 Project for the Improvement of Water Supply Systems in the Eastern West Nile Region (Arua, Koboko, and Yumbe Districts) (W-2)

(1) Background

According to the Basic Survey on Social Infrastructure in the West Nile Region implemented by JICA in 2017, the total daily water demand of Arua, Koboko, and Yumbe Districts is 18,205 m³ whereas water supply from safe and sustainable water sources remains as low as 8,509 m³, meaning that the 3 Districts are short of water by 9,696 m³ daily, or 10.65 liters per person per day. The daily supply is less than half the demand.

The Government of Uganda promulgated the Second National Development Plan 2015/16-2019/20 (NDP II) in June 2016, which aims to increase access to safe water from 65% in 2014/2015 to 79% in 2019/2020 in rural areas. In addition, the Water and Environment Sector Development Plan 2015/16-2019/20 addresses the problems of water supply shortage and groundwater contamination caused by population growth and household discharge, and recommends that motorized piped water supply systems be constructed to supply safe groundwater efficiently to more points of use.

The District Development Plans set out certain objectives based on their own key performance indicators such as water access rate and the functional rate of water supply systems, but have no specific plans for the target sub-counties of the following proposed Project, meaning that there is no duplication between the District Development Plans and this Project (as of end of October 2017). Therefore, the proposed project calls for urgent attention.

(2) Project Objectives

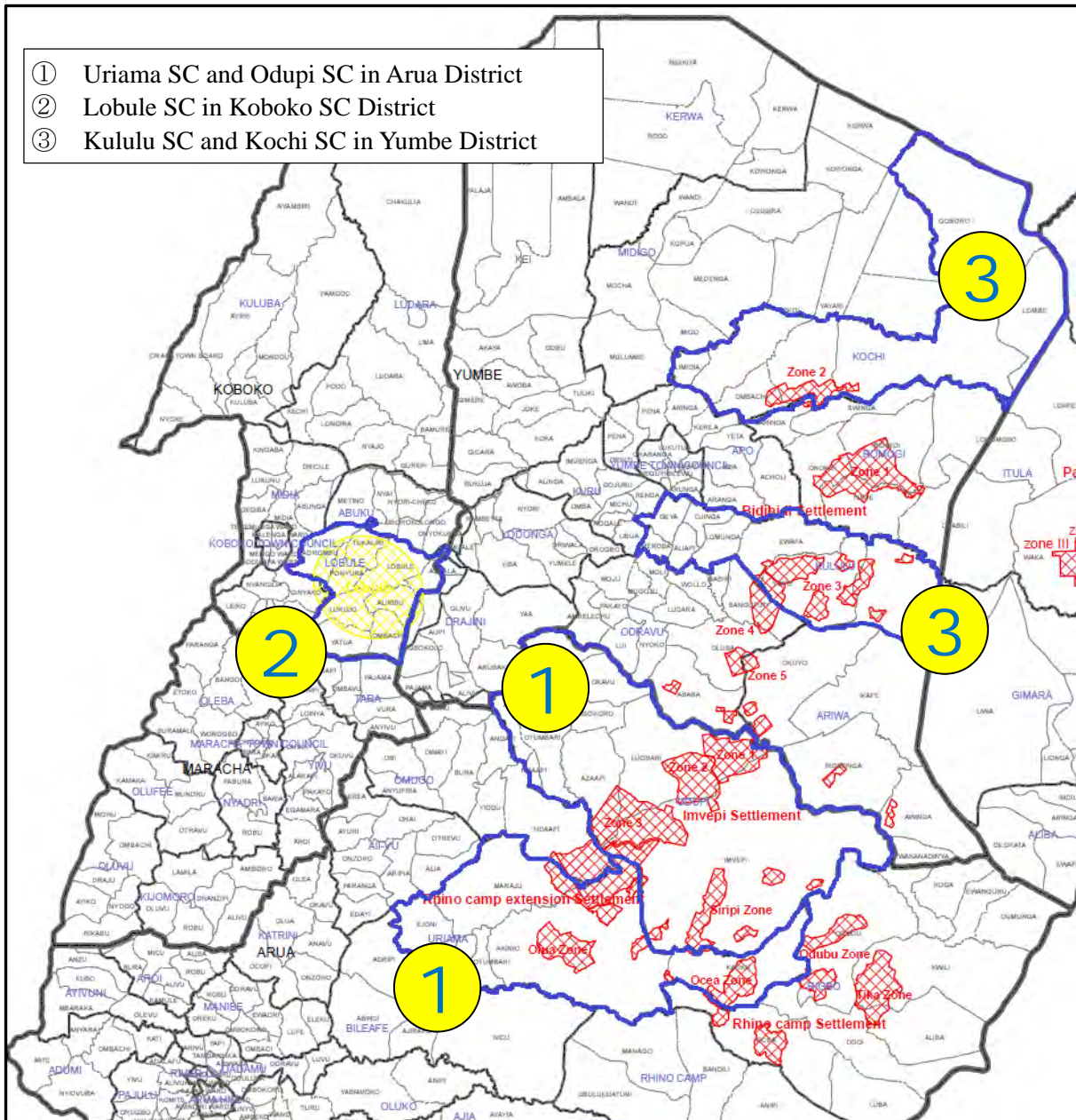
As a result of constructing/rehabilitating water supply facilities in host communities of five sub-counties of Arua District, Koboko District, and Yumbe District, where water supply is lacking due to influx of refugees, a greater population will have access to safe drinking water.

(3) Project Description

Construct 100 new boreholes with handpumps and rehabilitate 61 existing ones, newly construct 5 motorized piped water supply systems, and rehabilitate/expand 3 existing piped water supply systems in the host communities of five sub-counties such as Odupi and Uriamasub-counties of Arua District, Lobule sub-county of Koboko District, and Kululu and Kochi sub-counties of Yumbe District, where water supply is deficient due to influx of refugees. The figures are the totals of the five sub-counties. Specific number of new/rehabilitated facilities in each sub-county shall be decided depending on the result of the Preparatory Survey. (Refer to chapter 9.5.2 “Required steps for selection of target water supply facilities (target areas)”)

(4) Target Areas

Five sub-counties of Odupi and Uriamasub-counties of Arua District, Lobule sub-county of Koboko District, and Kululu and Kochi sub-counties of Yumbe District. The locations of the target areas are shown in the map below.



Source: prepared by the Study Team

Figure 9.6-2 Targeted Area Map

CHAPTER 10 SOCIAL INFRASTRUCTURES MAPS

10.1 The Situation on Map for Social Infrastructures

As mentioned in the previous Chapter 2, 3, 7, 8 and 9, the Study Team faced considerable challenges in collecting data and information.

The following imperatives were identified by the study team to formulate the project profiles that will correspond to the needs of the targeted social sectors

- i) Identification of the location of the Z/S and its adjacent Parish and SC precisely, and location of the facilities
- ii) Estimation of the population pressure attributed to the influx of the refugees on the existing facilities at the time of the study
- iii) Assessment of the stress on the facilities to receive the increased service population
- iv) Determination of the contents of the assistance and location of facilities for the project profile.

However, as described in the previous chapters, it took a considerable amount of time for the Study Team even creating a basic map showing administrative boundaries and location of the Z/S.

Key elements of the challenges were as follows (Refer to Chapter 11 for the details):

- Definition of the Z/S and the host community were varied and perplexed among stakeholders,
- Due to the above, confirmation of the number of registered refugees in each Z/S while identifying hosting Parishes and SCs took substantially longer time than what was initially expected.

The Study Team observed the following challenges during the collection of information and data on social sectors:

- The basic data of the nationals is available at the district level mostly, but visiting the SC or even the facilities were necessary to verify it, and this was often made in Education and WASH Sector particularly;
- The basic data of the refugees, such as a number of population, pupil/student and patients, is not aggregated by zone/settlement under UNHCR or OPM, and is not shared with the local government/administration. Facilities managed by IPs and OPs have been storing the data with their own collection method, forms and the frequency;
- Such difference in the modes of aggregation made collecting and consolidating the data a demanding task. Since the data were obtained from two independent systems, one is from local government/administration and the other from S/Z; the Study Team had to re-arrange the data for the comparison and analysis to enable the Study Team identify the refugee impacts; and
- There were no clear markings on the location of the facilities so access became a challenge. Confirmation of the location of the Parish Chief and the villagers were necessary to reach the facility so data collection could start.

The location of a facility with its basic profile and the category of the facility such as HCII or HCIII is indispensable information to understand the current service delivery capacity of the facility. Furthermore, it is critical to examine the location and the category of the facility with (i) the refugee-related stress to the facility - the number of the patient or pupil/student for example -, (ii) the population pressure the entire SC has received, and (iii) the refugee-related stress to

neighbouring facilities stand.

This way of assessment aimed to encompass gap between the service delivery capacity and demand of the area, not only that gap of the facility. For example, if the patients who had attended the other facilities start coming to the improved HC II, the HC II might receive more patients that were handled before, which would trigger another level of pressure to the improved facilities.

Sooner or later after the commencement of survey activities, the Study Team found that partners were looking for the tool which helps them to plan the refugee assistance with due consideration to the host communities. Those partners were UN agencies, donors and NGOs. The Ministries, Departments and Agencies (MDAs) from the Government are also in need of such tools or data that enable them to grasp the extent of the refugee impacts objectively. One of such example is a seminar held in March 2018 to disseminate the findings of this Study to UN agencies, donors and NGOs. During the seminar, not small number of request was made to the Study Team for sharing the data, results and outputs, the maps specifically. Having considering these requests, JICA will up-loads the data, results and outputs from the Study into the website of the CRRF Secretariat for the Study Team so that all could serve as a public asset to be utilized for the better planning. There shall be dissemination meeting targeting the five refugee hosting districts of West Nile. Taking into consideration of the unstable electricity supply in the area, the data, results and outputs shall be shared in a way that could be referred both online and offline.

10.2 The Social Infrastructure Maps: Development and Utilization

Having considered the above aspects, the Study Team developed maps using Geographical Information System (GIS) in order to visually show the area and the facticity with the higher needs.

The map with administrative boundaries and location of the Z/S served as the base map. Several data were superimposed as layers on the base map, which were a population of the Ugandan and the refugees, the location of the social infrastructures and its basic data for example. The data obtained from multiple sources including the relevant ministries, UNHCR, Google Earth and Open Street Map were incorporated and used in this Social Infrastructure Maps.

The map was referred during the assessment after statistical data was reviewed; firstly, for visually identifying facilities with larger refugee-related stress, and for designing the assistance in consideration to the gap between the service delivery capacity and the demand of the increased population in the area.

For example, Figure 10.2-1 shows existing health facilities in Yumbe District. Multiple geographical data were used as follows:

- base layer: administration boundaries and location of the Ugandan and the refugees
- second layer: population density covering the both Ugandan and the refugees
- third layer: location of the existing facilities (orange dots)
- third layer: number of outpatient of the facilities (green vertical bar)
- final layer: location of health facilities proposed by the Study Team for the future assistance which was the outcome of the analysis of the data and confirmation using the map (red dots)

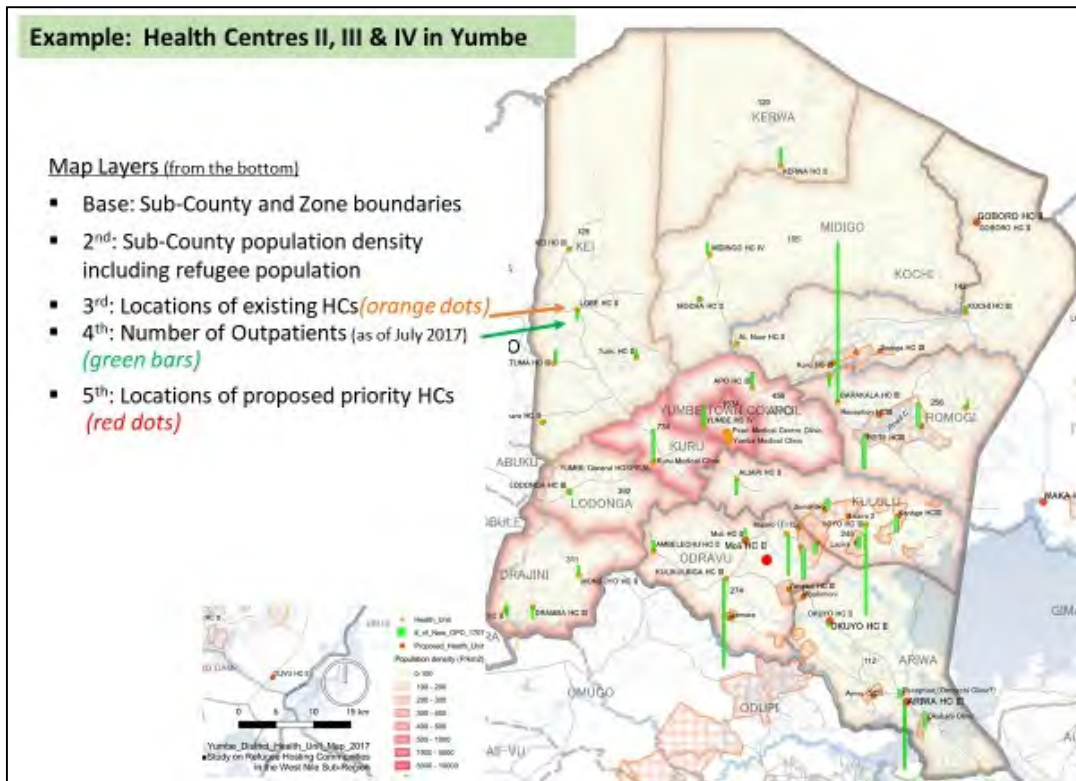


Figure 10.2-1 Location of Health Facilities, Yumbe District

Likewise, Figure 10.2-2 and 10.2-3 show existing primary school in Arua District and gap of water supply-demand in Adjumani District respectively.

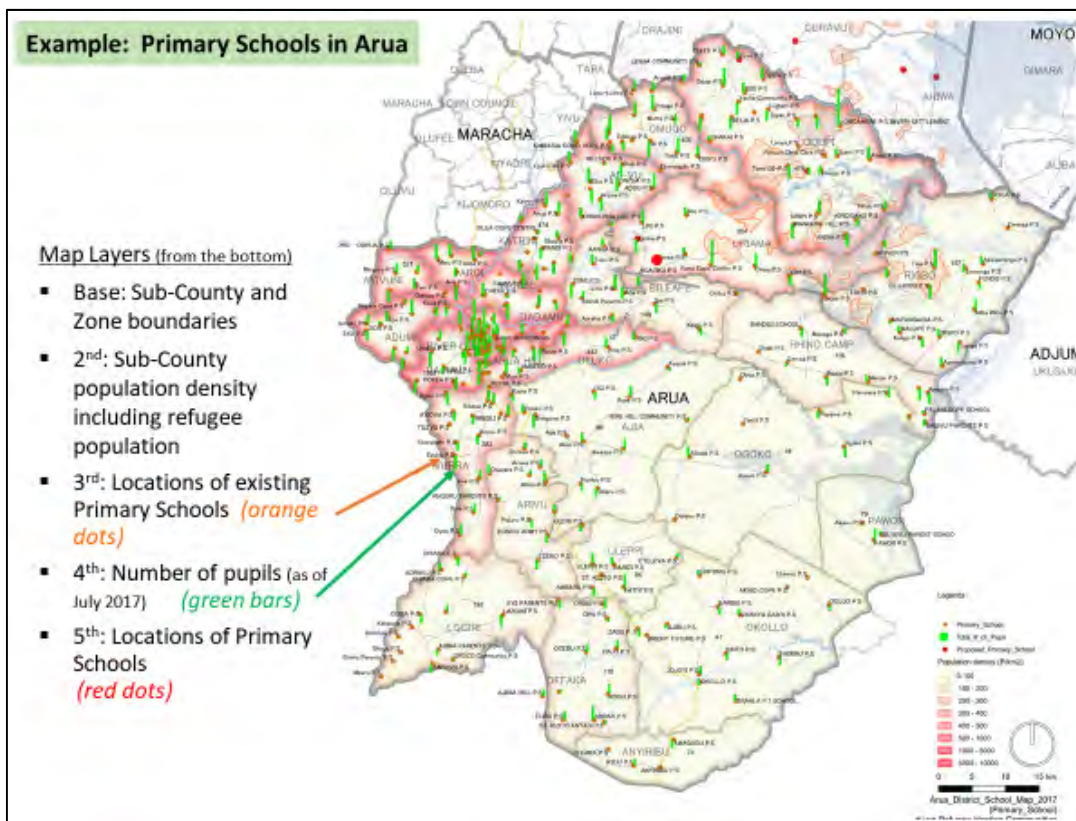


Figure 10.2-2 Location of Primary Schools, Arua District

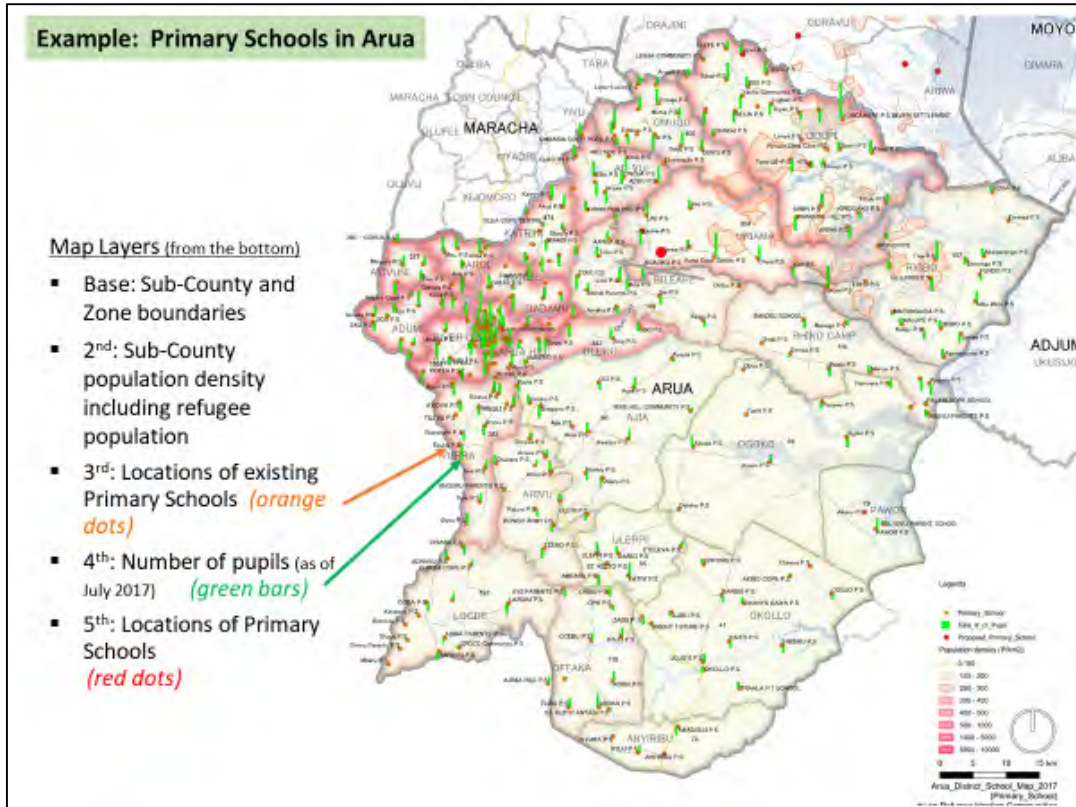


Figure 10.2-3 Gap between Water Supply-Demand, Adjumani District

Table 10.2-1 Available Data for the Integrated Map

Sector	Basic Information	Roads	Bridges	Health	Education	WASH
Scope of the data collection	Host community and Z/C	Roads connected/reach to host communities and Z/C	Bridges on the surveyed roads	Host community and Z/C	Host community and Z/C	Host community and Z/C
Items collected	Administrative boundary	National roads and regional trunk roads traverse host communities, migration route used by the refugees	Bridges on the surveyed national roads	Location of the existing HCII and HC V during July 2017	Location of the existing primary schools during July 2017	Existing well with handpump: location, operational status, water supply
	Boundaries of Z/S. That of Adjumani were collected by the Study Team through the field survey	District roads traverse host communities and migration route used by the refugees	Bridges on the surveyed district roads	Number of the HC to the population	Number of the primary school to the population	Protected spring: location, operational status, water supply
	Host communities: population, area and density by districts, Sub-County	Community access roads traverse host communities	Bridges on the surveyed community access roads	The area within a 5 Km radius (actual accessibility is out of consideration)	The ratio of the Ugandan and refugee pupil/student during July 2017 (at selected districts only)	Piped water supply system: location, operational status, water supply
	S/Z: number of the registered refugees In case the S/Z straddle several Sub-Countries, the number was divided after the border was visually confirmed	Surveyed roads	Bridges on the surveyed roads	Number of the outpatient of the existing HCII to RRH during July 2017	Number of the pupil at the existing primary schools during July 2017	Gravity Flow Systems: operational status, water supply
		Road condition of the surveyed roads	- The current condition of the bridges - Availability of the bridges (in-service or not)	Number of the delivery of the existing HCII to RRH during July 2017	Location of the existing secondary schools during July 2017	
				Number of the inpatient of the existing HCII to RRH during July 2017	Number of the student at the existing secondary schools during July 2017	

Source: The Study Team

As presented above, the location of the proposed site together with a set of the objective data could facilitate discussion on the appropriateness of the proposed site and consensus building among stakeholders.

No map encompassing the host community and the Z/S was available prior to the initiative of the Study Team, this meant that discussion to the support to the refugees and the host community with geographical information. Therefore, the maps developed by the Study Team will serve as the base to identify where the intended target Z/S are located, including its population and access to the social infrastructures concerning related facilities.

The maps captured multiple information visually and cross-cuttingly could be an effective tool for the local administration/government as well. In Uganda, local governments form a five-year development plan using the so-called bottom-up approach: in which the situation into the villages and parishes are shown in words and figures. However, it would be not easy for the various stakeholders to comprehend the real situation except for the planning specialists and the actual users of the facilities. In such case, visual materials such as maps could supplement the existing information and data. Furthermore, the maps could facilitate smoother communication among the several levels of local government/administration and streamline the planning process. See the following Chapter 11 for more suggestion on the map utilization.

CHAPTER 11 WAY FORWARD (RECOMMENDATIONS)

11.1 Priority Projects

Needless to say, the priority projects that have been identified through the Study in the four social infrastructure sectors in the 5 West Nile Districts require utmost attention so that they will be realized in the immediate future. The rationales behind the urgency and importance of these projects in terms of addressing refugee impacts in the host communities are described in the sector-specific Chapters (Chapters 6 – 9) and their profiles are presented collectively in Chapter 13. The UN agencies and regional and bilateral donors are expected to join hands to address the priority needs that have been identified through evidence-based assessment. At the same time, GOU is expected to actively engage with not only JICA and GOJ but also a range of donors for mobilizing resources.

11.2 Data-Based Refugee Impact Assessment and Planning

As mentioned in Chapter 4 (4.1), the settlement-hosting Districts of Uganda including the 5 West Nile Districts are exploring ways to reflect refugee impacts in the District planning and to capture infrastructure and service delivery needs encompassing both host communities and refugee settlements. This is in line with GOU's STA and ReHoPE that assists it, which corresponds to the "Resilience and Self-Reliance" pillar of CRRF.

The approach and findings of the Study are expected to contribute to the endeavor of holistic planning for both Districts and refugee settlements. Conceptualizing host communities as Refugee Impact Catchment (RIC) in two categories (RIC 1 and RIC 2) in accordance with geographical proximity to refugee-residing Zones/Settlements and types of public services will help structure the debate in defining "host communities" and clarify the scope of refugee impact-related planning. The assessment methodologies employed in the target sectors, which involved (i) collection of data from both Districts/Sub-Counties and Zones/Settlements, (ii) identifying appropriate indicators taking account of the nature of the respective services and data availability, (iii) measuring refugee-induced stress on existing facilities applying the indicators & collected data and (iv) identifying priority projects based on the measurement results, may offer a breakthrough in the discourse on humanitarian development nexus. The on-going JICA technical assistance "Project for Capacity Development in Planning and Implementation of Community Development in Acholi and West Nile Sub-Regions (WACAP)" is expected to contribute to strengthening local government planning capacity in this regard.

It must be noted that the data collection by the Study Team was a laborious process entailing significant amount of time and efforts. In order to make the Study's assessment methodology replicable by the Districts and partners and integrate it into their routine planning systems, arrangements for collecting, updating and sharing key data for both the Districts/Sub-Counties and Zones/Settlements need to be in place. Also, it would be important to consolidate multiple categories of data on a GIS platform so that the data can be visualized in layers, which will facilitate evidence-based communications and planning among stakeholders. These two facets will be elaborated below.

(1) Integrated Data Management System

The experience of the Study in gathering facility and service-related data for health, education and water sectors for both the Districts/Sub-Counties and Zones/Settlements has led to the following understanding of the situations and issues with respect to data:

- 1) Dual entry points for data collection: data collection involves going through two entry points, i.e. Districts & Sub-Counties for the host communities and OPM/UNHCR & partners for the Zones/Settlements.
- 2) Data availability with multiple entities and often only at facility level: data for the host communities and Zones/Settlements are scattered at different organizations, while they are mostly available at facility level. In other words, collection of detailed data often requires visiting each facility. Also, degrees of data availability with the Ministries differ across the sectors and in some cases the accuracy of the data is questionable.
- 3) Differences in data collection/management modalities: in the Zones/Settlements, data are usually collected and consolidated using different formats and modalities (e.g. update frequency) than those followed by the Districts and Ministries. This makes it difficult to compare and integrate data for the host communities and Zones/Settlements.

In an attempt to gain a clearer overview of the issues mentioned in 1) and 2) above, the Study Team has revisited and reviewed the types and sources of the data gathered for the assessment in health, education and water sectors. Figure 11.2-1 (health), Figure 11.2-2 (education) and Figure 11.2-3 (water) illustrate the results. It should be noted that the tasks of the Study Team were to collect the data for the purpose of evidence-based assessment and not to assess the data availability. These figures have been created based on the experience of the sector consultants, relying on their memory, and therefore may not be accurately reflecting the reality. Nevertheless, they may be an indication of the situations on the ground and may provide a clue to a future course of actions.

Health data availability at a glance

(HCs II, III & IV)

Y: info/data fully available and obtained

YD: info/data available (partially or supposed to be) but difficult to obtain

NS: the study team is not sure about info/data availability (tried but not possible, or no time to visit)

N: info/data not available

Location of the HC Information/data source	In Host Communities				Within Zone/Settlement					
	MoH (MIS)	District	SC	HC	UNHCR	OPM	Partners	HC	District	MoH (MIS)
Existing HCs										
Name of the HC	Y	NS	YD	Y	Y	NS	YD	Y	NS	NS
Location of the HC (village or parish)	Y	NS	NS	Y	YD	NS	YD	y	NS	NS
Specific location (coordinate) of the HC (Note)	Y	NS	NS	Y	YD	NS	YD	y	NS	NS
Classification/Operator of the HC	Y	YD	NS	Y	Y	NS	Y	Y	NS	NS
Filled-in positions and no. of staff per HC	NS	Y	NS	Y	NS	NS	NS	Y	NS	NS
No. of out-patients	NS	YD	NS	Y	YD	NS	Y	Y	NS	NS
No. of delivery	NS	YD	NS	Y	YD	NS	Y	Y	NS	NS
Ratio of non-Ugandan (refugee) out-patients	N	N	NS	Y	YD	NS	NS	Y	N	N
Ratio of non-Ugandan (refugee) mothers for delivery	N	N	NS	Y	YD	NS	NS	Y	N	N
Facility information (room, beds, operation theaters, etc.)	NS	NS	NS	Y	NS	NS	NS	Y	NS	NS
Water supply of the HC	NS	NS	NS	Y	NS	NS	NS	Y	NS	NS
Electricity supply of the HC	NS	NS	NS	Y	NS	NS	NS	Y	NS	NS
Equipment information of the HC	NS	NS	NS	Y	NS	NS	NS	Y	NS	NS
Information on supply of medicine	Y	NS	NS	Y	NS	NS	NS	Y	NS	NS
HCs being constructed/expanded or planned										
Details of the construction/expansion/plan information	NS	YD	N	N	YD	NS	N	N	NS	NS

Note: Identification and verification of coordinates of HCs involved use of Open Street Maps and Google Earth, too.

Source: JICA Study Team according to their experience in July 2017 - January 2018.

Source: Prepared by the Study Team based on the data collection experience in July 2017 – January 2018.

Figure 11.2-1 Health Data Availability at a Glance

Education data availability at a glance (primary & secondary schools)

Y: info/data fully available and obtained

YD: info/data available (partially or supposed to be) but difficult to obtain

NS: the study team is not sure about info/data availability (tried but not possible, or no time to visit)

N: info/data not available

Location of the school Information/data source	In Host Communities				Within Zone/Settlement					
	MoE (MIS)	District	SC	School	UNHCR	OPM	Partners	School	District	MoE (MIS)
Existing schools										
Name of the school	YD	YD	NS	Y	YD	NS	Y	Y	YD	NS
Location of the school (village or parish)	N	YD	NS	Y	NS	NS	Y	Y	NS	NS
Specific location (coordinate) of the school (Note)	N	YD	NS	Y	NS	NS	Y	Y	NS	NS
No. of classrooms per school	YD	YD	NS	Y	NS	NS	Y	Y	NS	NS
No. of students per school	YD	YD	NS	Y	NS	NS	YD	Y	YD	NS
No. of students per school with gender disaggregation	YD	YD	NS	Y	NS	NS	YD	Y	NS	NS
No. of non-Ugandan (refugee) students per school	N	YD	NS	Y	NS	NS	YD	Y	NS	NS
No. of disabled students per school	N	YD	NS	Y	NS	NS	YD	Y	NS	NS
Filled-in positions and no. of staff per school	YD	YD	NS	Y	NS	NS	YD	Y	NS	NS
No. of teachers per school	NS	YD	NS	Y	NS	NS	YD	Y	NS	NS
Electricity supply of each school	NS	NS	NS	Y	NS	NS	YD	Y	NS	NS
Toilets of each school (availability, number, type, etc.)	NS	NS	NS	Y	NS	NS	YD	Y	NS	NS
Water supply of each school	NS	NS	NS	Y	NS	NS	YD	Y	NS	NS
Electricity supply of each school	NS	NS	NS	Y	NS	NS	YD	Y	NS	NS
Other conditions of the school	NS	NS	NS	Y	NS	NS	YD	Y	NS	NS
Schools being constructed/expanded or planned										
Details of the construction/expansion/plan information	YD	YD	N	N	YD	NS	N	N	YD	NS

Note: Identification and verification of coordinates of schools involved use of Open Street Maps and Google Earth, too.

Source: JICA Study Team according to their experience in July 2017 - January 2018.

Source: Prepared by the Study Team based on the data collection experience in July 2017 – January 2018.

Figure 11.2-2 Education (Primary & Secondary) Data Availability at a Glance

Water data availability at a glance

Y: info/data fully available and obtained

YD: info/data available (partially or supposed to be) but difficult to obtain

NS: the study team is not sure about info/data availability (tried but not possible, or no time to visit)

N: info/data not available

Location of the water facility Information/data source	In Host Communities				Within Zone/Settlement					
	MoWE	District	SC	Facility	UNHCR	OPM	Partners	Facility	District	MoWE
Piped water supply systems										
Location of the systems (village or parish)	Y	Y	Y	Y	YD	N	YD	Y	YD	NS
Specific location (coordinates) of the systems	YD	NS	N	NS	YD	N	YD	NS	YD	NS
Yields (pump discharge) of water source	Y	Y	NS	Y	YD	N	YD	YD	YD	NS
Intake pump capacities of water source	Y	NS	NS	Y	YD	N	YD	YD	YD	NS
Daily pump operation hours	NS	Y	Y	Y	YD	N	YD	Y	YD	NS
Tank capacity	NS	Y	Y	Y	YD	N	YD	Y	YD	NS
Volume of daily water storage	NS	Y	Y	Y	YD	N	YD	Y	YD	NS
Power source	NS	Y	Y	Y	YD	N	YD	Y	YD	NS
Water quality	NS	NS	N	N	NS	N	NS	NS	NS	NS
Boreholes with hand pumps (shallow and deep wells)										
Location of the systems (village or parish)	Y	Y	Y	Y	YD	N	YD	Y	YD	NS
Specific location (coordinates) of the systems	YD	YD	N	N	YD	N	YD	N	YD	NS
Time taken to fill in a water container at each supply point	N	N	N	N	N	N	YD	N	YD	NS
Water quality	NS	NS	N	N	NS	N	NS	N	YD	NS

Note: Data are also available to some extent for gravity flow systems and protected springs in host communities. These water facilities are not available in the settlements.

Source: JICA Study Team according to their experience in July 2017 - January 2018.

Source: Prepared by the Study Team based on the data collection experience in July 2017 – January 2018.

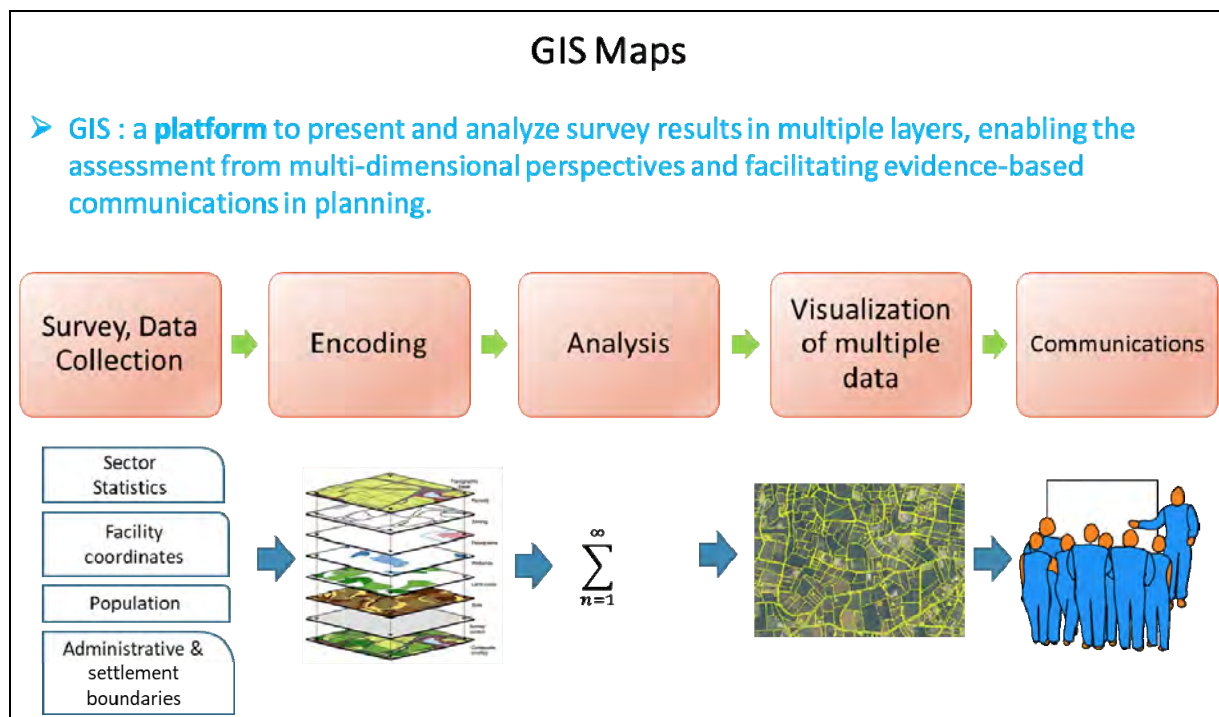
Figure 11.2-3 Water Data Availability at a Glance

Addressing the data-related issues described above and creating integrated systems of data management will involve significant transaction costs and may not be an easy task. However, building a simple system focusing on bare-minimum data such as Zone/Settlement-wise refugee data, facility locations and the number of users should be achievable through collaboration between the Districts/Sub-Counties on one hand and OPM, UNHCR and partners on the other.

In this regard, gauging refugee impacts on basic services such as waster, health clinics and primary education requires Sub-County level analysis (and Parish level analysis for water, if feasible, as safe water should be available in proximate neighborhood) and therefore updated refugee data must be available for each of the Zones/Settlements. The Study Team assumes this would be feasible through small adjustments to OPM's refugee data management systems.

(2) Integrated GIS Maps

Key sector data gathered through the Study were geo-referenced using the coordinates available in the Ministry database supplemented by Google Earth research and field survey and placed on the base map of local government/administrative boundaries and Zone/Settlement locations that had been created at the beginning of the Study. The maps and base GIS data will be provided as public goods and made available to GOU and all partners. (As of writing of this report, a mechanism to upload them on the CRRF website is under consideration.) As mentioned in Chapter 10, GIS facilitates communications among stakeholders through visualization of multiple data layers on one platform, making the planning process evidence-based, credible and efficient. Figure 11.2-4 illustrates the role of GIS and the process of its utilization. UNHCR has initiated systematic mapping of refugee-related data for the Zones/Settlements and surrounding areas. Development partners' joining hands with such initiative to help build and manage a holistic mapping architecture embracing the Districts/Sub-Counties and Zones/Settlements, in combination with the data management system mentioned above, would be much expected and possible with a concerted commitment of GOU and partners.



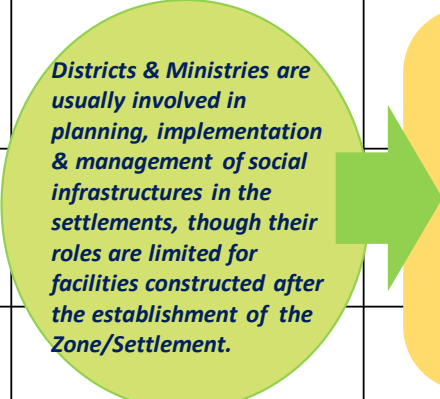
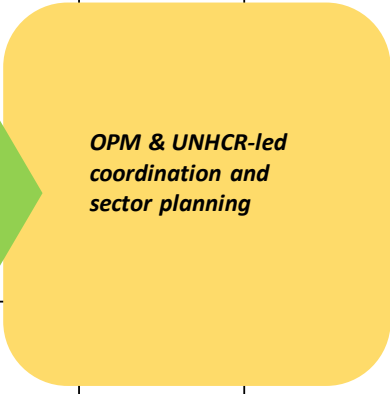
Source: Prepared by the Study Team.

Figure 11.2-4 GIS Mapping for Planning (Conceptual Image)

11.3 Clarifying Roles of Ministries and Local Governments in Zones/Settlements

The basic roles of the Ministries and Districts/Sub-Counties in the respective sectors in both the District/Sub-Counties and Zones/Settlements are described in Chapters 6 – 9. In refugee-residing areas where the Districts/Sub-Counties had been providing services before the arrival of refugees, the Districts/Sub-Counties along with the sector ministries continue maintaining the same or similar roles. Also, according to the Study Team’s interviews with District officials, the Districts/Sub-Counties and ministries perform the same roles within the Zones/Settlements as they do for the conventional areas of the Districts/Sub-Counties. While details may require further fact-finding, what has become apparent through the Study is that basic sector data are scattered with different organizations and there is no integrated mechanism to collect, store and update the data for both the Districts/Sub-Counties and Zones/Settlements. Figure 11.3-1 below illustrates these situations and issues in a nutshell. A general consensus is that the refugees, particularly those from South Sudan, are expected to stay in Uganda for a foreseeable future. With such a prospect, it would be very important to clarify the roles of local governments and sector ministries within the Zones/Settlements and assign explicit roles to them for development and public service delivery to the extent reasonable. OPM may require assistance in this regard so as to enhance their capacity in understanding and coordinating development activities.

Organizations & Responsibilities for Host Communities and Settlements

	Host Communities		Zones/Settlements		
	Ministry	District & Sub-Counties	OPM	UNHCR	Other UN Agencies & Partners
Planning <ul style="list-style-type: none"> ▪ Approval ▪ Land acquisition ▪ Land & facility ownership ▪ Budgeting 					
Implementation <ul style="list-style-type: none"> ▪ Procurement ▪ Contract management ▪ Facility & documents takeover 					
Operation & Maintenance (O&M) <ul style="list-style-type: none"> ▪ Budget allocation ▪ Facility management (staffing, supplies, utilities, facility maintenance, etc.) ▪ Data management 					
<p>But the infrastructure & service delivery data encompassing both host communities & zones/settlements are often not readily available.</p>					

Source: Prepared by the Study Team.

Figure 11.3-1 Planning, Implementation and O&M in Host Communities & Settlements (Conceptual Image)

11.4 Sector-Specific Innovative Measures

An array of information and insight has been generated through the Study as elaborated in the sector specific Chapters. One subject that has not been covered yet is the importance of stable electricity power supply, which will be briefly discussed here.

The target areas of the Study are distant from urban centers and many are not served by electricity grid. Health clinics and school facilities rely on solar power generation, but there are cases where health clinics are unable to ensure electricity supply throughout the day affected by deterioration of storage batteries. Power supply is also important for school facilities for administration as well as the well-being of teaching staff who live on the school compound. Lighting of classrooms in the

evening will provide opportunities for pupils and students for home work or extra studies.

Micro-hydro power generation, harnessing abundant river systems in the region, has potential to address the power shortage in the West Nile Districts. Another renewable energy that has potential is biogas. Koboko District has included biogas generation in their District Plan. Increasing numbers of refugees relying on wood for daily cooking have been exacerbating deforestation already caused by the rapid construction of refugee settlements. Biogas generation linked to sanitation facilities (i.e. toilets) will serve the double purposes of utilizing renewable resources and addressing environmental degeneration, which is an increasing concern in the West Nile Sub-Region.

11.5 Taking Account of Refugee Impact Catchment (RIC) 2

The scope of the Study has been limited to the geographical areas (i.e. 18 Sub-Counties) and the services corresponding to Refugee Impact Catchment (RIC) 1 except for roads & small-scale bridges which have taken account of both RIC 1 and RIC 2. This has been inevitable due to the limited amount of time and inputs available for the Study. But the Study Team is well aware of serious issues outside the Study scope that have been caused by the refugee influx and require attention. Since the very beginning of the Study, the Districts have been raising the following issues, among others, that essentially fall under the RIC 2 category:

- Addressing shortage of water supply, sewerage, solid waste management services in urban centers
- Expanding the capacities of general and regional referral hospitals
- Providing skills development and vocational training opportunities especially for the youth
- Addressing environmental degradation particularly deforestation

The issue of vocational training was underscored during the workshop with the District stakeholders in Arua in October 2017 as well as in the final OPM-JICA workshop in February 2018. During the OPM-JICA workshop, the State Minister of Relief and Disaster Preparedness highlighted the issue particularly among the refugee youth, who often sit idly under trees after completing basic education. This poses a threat to not only the future well-being of the youth themselves but also to a wider society, if their inherent desires for economic security and a sense of dignity associated with it are unaddressed.¹ While the statement was made in relation to the refugee, the host community population are most likely faced with the similar issue, as indicated by generally higher unemployment levels in rural areas of Uganda. Holistic and systematic assistance for skills development for both local residents and refugees in tune with market requirements, facilitating job creation in parallel, would be crucial.

GOU and partners are expected to address these issues as part of deepening the agenda of and furthering actions on the CRRF and its constituent STA.

¹ The Study Team interviewed Refugee Welfare Council members in Adjumani and was told that some youths had committed suicide as there were no opportunities for higher education or jobs within or nearby the settlement (August 2017).

CHAPTER 12 WORKSHOPS AND MEETINGS

12.1 Arua Workshop with District Stakeholders

A one-day workshop was held in Arua on 31 October 2017 for the purpose of sharing the Study methodology and the results of the initial assessment and receiving feedback and inputs from the West Nile stakeholders. The agenda, participants, presentations and record of the workshop are provided as Annex g-12-1 and Annex g-12-2. The Study Team received constructive feedback with respect to the proposed framework of considering and assessing refugee impacts in the four social infrastructure sectors. Key issues raised by the participants and responses by the Study Team are summarized in Table 12.1-1. It must be noted that many issues raised were outside the scope of the Study, underscoring the gravity of refugee impacts in addition to conventional development challenges experienced in the West Nile Districts.

Table 12.1-1 Arua Workshop: Key Issues & Reponses

Key Issues Raised and Reponses	
<ul style="list-style-type: none"> ▪ Services not identified by the Study Team but require refugee-related responses: <ul style="list-style-type: none"> - The national road from Pakwach to Rhino Camp - Other District roads and community roads that serve the settlements - Vocational skills training, pre-primary school education and education for special needs in nearby locations. 	<ul style="list-style-type: none"> ➔ Reflect them for fine-tuning the Refugee Impact Catchment (RIC) concept. ➔ Further study in the road sector.
<ul style="list-style-type: none"> ▪ Extra load on public services created by self-settlers (particularly in the northern border area of Koboko District). 	<ul style="list-style-type: none"> ➔ Place more emphasis on the issue of self-settlers (though addressing it is beyond the current mandate of OPM).
<ul style="list-style-type: none"> ▪ Needs for the Districts to be equipped with latest data on refugees and settlements. 	<ul style="list-style-type: none"> ➔ Hand over all the data collected & analyzed by the Study Team to the Districts and Ministries.
<ul style="list-style-type: none"> ▪ Needs to avoid duplication with on-going or planned projects. 	<ul style="list-style-type: none"> ➔ Seek latest information from the Districts, Ministries and partners.

12.2 OPM-Chaired Meeting in Kampala

OPM organized a meeting in Kampala on 8 November 2017 for the Study Team to share the methodology and findings with officials of OPM as well as those from relevant sector MDAs. The Study Team conducted a presentation using a condensed version of the material used at the Arua Workshop, with some updates reflecting inputs from the West Nile stakeholders. The agenda, participants, presentation and record of the workshop are provided as Annex g-12-3 and Annex g-12-4. All in all, the approach and methodology of the Study were well received by the MDA officials. Key issues raised and responses by the Study Team are summarized in Table 12.2-1. One clear conclusion of the meeting was for the Study Team to engage in sector MDAs for ensuring technical issues particularly in consideration of operation and maintenance of the infrastructures to be constructed/expanded/renovated through priority projects.

Table 12.2-1 OPM-Chaired Meeting: Key Issues & Reponses

Key Issues Raised and Reponses	
<ul style="list-style-type: none"> ▪ Coordination with ReHoPE interventions. ▪ Coordination with sector Ministries for project formulation. 	<p>➔Coordinate with donor-funded projects and donors. Request MDAs to provide ongoing and planned projects in the 5 West Nile Districts in the 4 sectors.¹</p>
<ul style="list-style-type: none"> ▪ Government counterpart arrangements and the role of the counterpart. 	<p>➔Arrangements specified in JICA guidelines will be followed.</p>
<ul style="list-style-type: none"> ▪ Consistency with policies and standards of sector Ministries. ▪ Importance of addressing staffing issues and capacity building along with infrastructure investments. 	<p>➔Detailed consultations on shortlisted projects with Ministries in January 2018.</p> <p>➔GOU is expected to address staffing and capacity development with partners' support as necessary.</p>
<ul style="list-style-type: none"> ▪ Whether future population growth (of both nationals and refugees) and community service standards have been considered. ▪ Needs to consider environment restoration/protection, waste water treatment, agriculture and livelihood and local business development for refugee-related responses. 	<p>➔Data limitations have led to the present methodology of the Study, but it has potential applicability to future-oriented District-level planning.</p> <p>➔Reflect other issues in fine-tuning the RIC concept.</p>

12.3 Humanitarian Donor Group Meeting in Kampala

The Study Team was given about 15 minutes for presenting the Study methodology and findings during a meeting of Humanitarian Donor Group held on 9 November 2017. The presentation was received well, followed by some questions and comments, which are summarized in Table 12.3-1.

Table 12.3-1 Humanitarian Donor Group Meeting: Key Issues & Reponses

Key Issues Raised and Reponses	
<ul style="list-style-type: none"> ▪ Whether the RIC has been shared with the government. 	<p>➔It has been consulted and shared with OPM and District stakeholders.</p>
<ul style="list-style-type: none"> ▪ Relation with the NPA-led integrated planning in the refugee-hosting Districts. 	<p>➔Possibility of utilizing the Study data collection & assessment methodology for the integrated planning will be considered.</p>
<ul style="list-style-type: none"> ▪ Importance of taking into account community-level activities and indicators. 	<p>➔Reflect community-level public activities in fine-tuning the RIC concept. The community-level indicators (national minimum service delivery standards) have not been used due to data limitations.</p>
<ul style="list-style-type: none"> ▪ Whether issues for operation and maintenance (e.g. school teachers and budget) have been considered. 	<p>➔Post-project construction O&M including ensuring inter-governmental transfers for recurrent expenditure will be high on the agenda in consultation meetings with sector Ministries.</p>

¹ The request to the MDAs was made in November 2017, followed by discussions with the relevant sector MDAs that took place in January – February 2018.

12.4 OPM-Chaired Dissemination Workshop

OPM along with the Embassy of Japan and JICA organized a workshop in Kampala on 28 February 2018 to share the Study findings and priority projects, on which draft Project Profiles had been finalized reflecting results of consultation meetings with sector MDAs that were organized in late January 2018. The workshop was chaired by Minister of State for Relief and Disaster Preparedness and attended by representatives of the relevant MDAs. The Japanese side was represented by the Ambassador of Japan to Uganda, Chief Representative and Deputy Representative of JICA Uganda Office, Senior Advisor of JICA HQ and WA-CAP Chief Advisor. The State Minister highly commended JICA’s initiating the Study immediately after the Solidarity Summit and conducting in-depth and extensive field research. JICA underscored the value of the Study, which provides a data-based credible methodology for identifying and planning priority assistance in refugee-affected areas and requested OPM and MDAs to prioritize the identified projects in their resource mobilization. The Ambassador of Japan shared that grassroots grant projects were under preparation, capitalizing on the Study results. The agenda, participants, presentation and record of the workshop are provided as Annex g-12-5 and Annex g-12-6. Key comments provided and responses by JICA and the Study Team are summarized in Table 12.4-1. The workshop was followed by a joint press conference by the State Minister and the Ambassador of Japan.

Table 12.4-1 OPM-Chaired Dissemination Workshop: Key Issues & Responses

Key Comments and Responses	
<ul style="list-style-type: none"> ▪ Roads and bridges in the settlement-hosting areas are under tremendous stress. The priority roads identified through the Study need urgent attention. 	<p>→ JICA is well aware of the urgency and has taken note of the statement.</p>
<ul style="list-style-type: none"> ▪ Skills development & vocational training for refugee youths need attention. 	<p>→ Vocational training has been captured under both RIC 1 and RIC 2. It has been outside the Study scope due to time & input limitations, but its importance is indisputable.</p>
<ul style="list-style-type: none"> ▪ Hospitals, beyond health centers, require attention, too. 	<p>→ JICA has conducted a detailed study on Arua Regional Referral Hospital and the assistance is in the pipeline.</p>
<ul style="list-style-type: none"> ▪ Quality of education needs to be addressed. 	<p>→ Close coordination with the Ministry will be required during detailed designing.</p>

12.5 JICA Output Sharing Workshop

JICA organized a workshop on 1 March 2018 inviting UN agencies, donors and partners to share the Study findings and priority projects. The participants highly commended the Study findings and results and requested JICA to share the data and maps on a common platform. The agenda, participants, presentation and record of the workshop are provided as Annex g-12-7. Key comments and responses by JICA and the Study Team are provided in Table 12.5-1.

Table 12.5-1 JICA Output Sharing Workshop: Key Issues & Responses

Key Comments and Responses	
<ul style="list-style-type: none"> ▪ Appreciated the depth of the Study and information sharing and requested data particularly the maps to be made available on a public platform. 	<p>➔The study results, data and maps will all be public goods and made available to the government and partners and through online if possible. The Districts will be briefed on the final outcomes and be provided with the data, too.</p>
<ul style="list-style-type: none"> ▪ Have the government or donors committed funds to any of the priority projects? What is JICA’s plan to follow up on the Study? 	<p>➔JICA is in consideration of its assistance. All the projects are freshly identified, with none of them having received funding commitment yet. JICA plans to apply the study methodology through the on-going WA-CAP, which aims to strengthen local government capacity.</p>
<ul style="list-style-type: none"> ▪ How will staff and O&M budget be secured? 	<p>➔The identified projects are mostly expansion of existing facilities, but staff and O&M budgeting will require detailed consultations with the respective MDAs.</p>
<ul style="list-style-type: none"> ▪ Do road projects include new constructions? 	<p>➔All road & small-scale bridge projects are rehabilitation or upgrading of existing ones so as to shorten the time of implementation (as new constructions will require EIA in most cases).</p>

Prior to the OPM and JICA workshops, the JICA Study Team took part in a health sector government-partner coordination meeting held on 27 February 2018 and shared the Study findings with focus on the health sector. UNHCR, co-chair of the meeting, and other participants, expressed a great deal of interest in the findings and requested the map data be made available.

CHAPTER 13 PROJECT PROFILE

13.1 Roads and Small-Scale Bridges

Sector : RB	Profile No : RB – 1
Health : H, Education : E, Water and Sanitation : W, Roads and Small Scale Bridges : RB	

Item	Contents
Project Name	Adjumani District Road Rehabilitation Project
Outline	<ul style="list-style-type: none"> - Rehabilitation and improvement of unpaved roads in Adjumani District (Total 18km) - Rehabilitation and improvement of drainage facilities
Background	<ul style="list-style-type: none"> - 7 out of the total 9 Sub-Counties (S/Cs) of Adjumani District are host communities while 18 Zones/Settlements/ (Z/Ss) are located in the District. The population of the refugees is equivalent to more than 70 % of the District population (as of August 2017). - The host communities and the Z/Ss are along the road that connects the roadside Z/Ss and host communities to a national road. The road is, however, not in good condition because of poor maintenance. Furthermore, it has been deteriorated very quickly due to rapidly increased traffic that is primarily coming from heavy vehicles transporting goods to the Z/Ss. Eventually, such road condition is hampering smoother traffic flow among the Z/Ss and host communities. Therefore, urgent response to this situation is required. - It was confirmed that this road is not included in the National Development Plan (NDP II) and the District Development Plan (2015/2016-2019/2020) and not duplicated for any other donor assistance (As of October 2017).
Target Area	Dzaipi S/C, Pakele S/C and neighbouring Z/Ss in Adjumani: i.e. Ayilo I, and Ayilo II
Purpose and Outcome of the Project	<ul style="list-style-type: none"> - Purpose: The enhancement of the road transportation capacity in Dzaipi S/C will contribute to the rejuvenation of the social and economic activities in the host communities and the Z/Ss including Pakele S/C. - Outcome: To support the host communities through the facilitation of logistics by rehabilitation of the District road in Dzaipi S/C.
Beneficiaries ¹	<p>Direct Beneficiaries: Total 217,730:43,700 in Dzaipi S/C, 50,400 in Pakele S/C, 123,630 (71,153+52,477) in the neighboring Z/Ss in both S/Cs</p> <p>Indirect Beneficiaries: 131,175- Residents in Adjumani (District population excluded above 2 S/Cs)</p>
Relevant Government & Partner Organisations	<p>Central: Approval of the project plan by the Ministry of Works and Transportation (MoWT) Ugandan Road Fund (URF) to allocate the maintenance budget</p> <p>District: The District maintains the road and facility after the handover</p> <p>International Organizations: N/A</p>
Summary of Construction Plan & Schedule	<p>Preparatory Study/ Contract with procurement agency: 1.0 year</p> <p>Detailed Design/Bidding Document Preparation/ Bidding/ Contract: 1.0 year</p> <p>Construction Period: 1.5 year</p> <p>Construction Plan: Mechanized construction by local construction company</p>
Site Situation	<ul style="list-style-type: none"> - As the work involves only an existing road, no land acquisition is expected - Since there are no residents within the current ROW, involuntary settlement is not expected
Proposed Evaluation Criteria	Operation/ effectiveness indicator: Annual average daily traffic volume (per day/ per 24 hrs)
Social and Technical Considerations	<ul style="list-style-type: none"> - This project targets the area where 42 % of the District population and 71 % of the refugees within the District reside, which makes up large part of the host community and the Z/S respectively. Therefore, the intended benefit of the project will reach not only those in the targeted area but also the entire District, contributing to harmonization between the host communities and the refugees in the course of time. - The maintenance cost could be low as the project road is a section of the existing road: The District can carry out the maintenance without taking the time to bring the equipment machines only for this road. - RB-1 itself is highly beneficial to the host communities and refugees. However, it will contribute to the wider area if implemented together with RB-6, construction of small scale bridges, as the two projects could create a synergy effect.

¹ Number of both direct and indirect beneficiaries are based on the results from this study.

Item	Contents
	- Specific considerations may be required in response to social situations in any of the target communities. Target S/C and Z/S: S/C: Dzaipi S/C and Pakele S/C in Adjumani District Z/S: Ayilo I, Ayilo II, Nyumanzi, Elema, Baratuku, Pagrinya, Boroli, Olua1, Olua2 (All settlements in Dzaipi S/C and Pakele S/C)

Profile No : RB-1 Appendix

1. Project Location Map (Coloured in Green shows the targeted road)



2. Road Condition



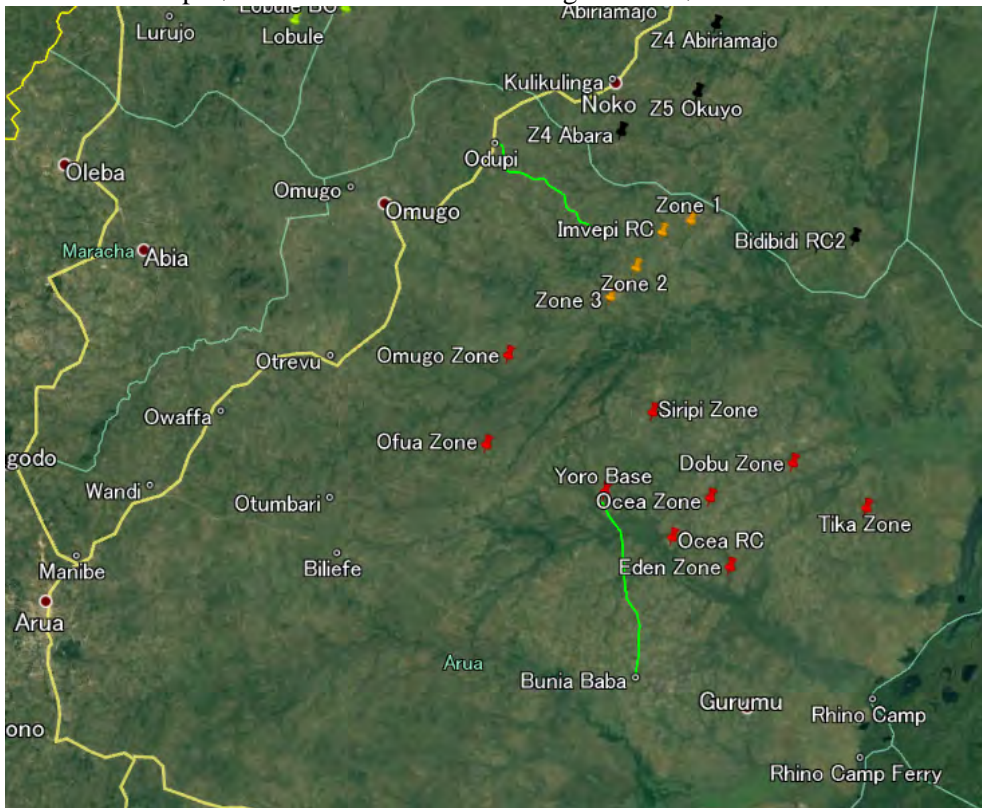
Sector : RB	Profile No : RB – 2
Health : H, Education : E, Water and Sanitation : W, Roads and Small Scale Bridges : RB	

Item	Contents
Project Name	Arua District Roads Rehabilitation Project
Outline	<ul style="list-style-type: none"> - Rehabilitation of Arua District unpaved roads (Total 23km) - Rehabilitation of Drainage facilities
Background	<ul style="list-style-type: none"> - 4 out of the total 24 Sub-Counties (S/Cs) of Arua District are host communities while 13 Zones/Settlements (Z/Ss) are located in the District. The population of the refugees is equivalent to 30 % of the District population (as of August 2017). - The host communities and the Z/Ss are along the road that connects the roadside host communities and Z/Ss to a national road. The road is, however, not in good condition because of poor maintenance. Furthermore, it has been deteriorated very quickly due to rapidly increased traffic that primarily consists of heavy vehicles transporting goods to the Z/Ss. Such road condition is hampering smoother traffic flow among the Z/Ss and host communities. Therefore, urgent response to this situation is required. - It was confirmed that this road is not included in the National Development Plan (NDP II) or the District Development Plan (2015/2016-2019/2020) and not duplicated for any other donor assistance (as of October 2017).
Target Area	Rigbo S/C, Odupi S/C, Uriama S/C and neighboring Z/Ss in Arua: i.e., Rhino Camp Settlement and Imvepi Settlement
Purpose and Outcome of the Project	<ul style="list-style-type: none"> - Purpose: The enhancement of the road transportation capacity in Rigbo, Odupi, and Uriama S/C will contribute to the rejuvenation of social and economic activities in the host communities and the Z/Ss. - Outcome: To support the host communities through the facilitation of logistics by rehabilitation of the District road in Rigbo, Odupi, and Uriama S/C.
Beneficiaries ²	<p>Direct Beneficiaries: Total 321,804 (27,900 in Rigbo S/C, 25,100 in Uriama S/C; 41,600 in Odupi S/C, 227,204 in the neighboring Z/Ss)</p> <p>Indirect Beneficiaries: 687,477- residents in Arua (District population excluding the population of the above 3 S/Cs)</p>
Relevant Government & Partner Organisations	<p>Central: Approval of the project plan by the Ministry of Works and Transportation (MoWT) Ugandan Road Fund (URF) to allocate the maintenance budget</p> <p>District: The District maintains the road and facility after the handover</p> <p>International Organizations: N/A</p>
Summary of Construction Plan & Schedule	<p>Preparatory Study/ Contract with procurement agency: 1.0 year</p> <p>Detailed Design/Bidding Document Preparation/ Bidding/ Contract: 1.0 year</p> <p>Construction Period: 1.5 year</p> <p>Construction Plan: Mechanized construction by local construction company</p>
Site Situation	<ul style="list-style-type: none"> - As the work involves only an existing road, no land acquisition is expected - Since there are no residents within the current ROW, the involuntary settlement is not expected
Proposed Evaluation Criteria	Operation/ effectiveness indicator: Annual average daily traffic volume (per day/ per 24hrs)
Social and Technical Considerations	<ul style="list-style-type: none"> - The target roads consist of 2 roads: Odupi to Imvepi at the north and from Yoro Base to Bunia Baba at the south. UNHCR has been working on a road in the area between the two roads. Thus, by implementing the project, the entire area from Odupi to Bunia Baba can be connected. That will bring benefits to the host communities and refugees. Furthermore, it will complement the effort by Arua District and UNHCR for three major settlements along the road. The project also facilitates smoother transportation among the host communities and the settlement, which will eventually contribute to harmonization between the two. - It should be noted that since RB-2 is two separated roads it will require a procurement agency to supervise the works efficiently and the District to carry out the maintenance. - Specific considerations may be required in response to social situations in any of the target communities.
	<p>Target S/C and Z/S:</p> <p>S/C: Rigbo S/C, Uriama S/C and Odupi S/C in Arua District</p> <p>Z/S: Rhino Camp Settlement, Imvepi Settlement</p>

² The number of both direct and indirect beneficiaries are based on the results from this study.

Profile No : RB-2 Appendix

1. Project Location Map (Coloured in Green shows targeted road)



2. Road Condition



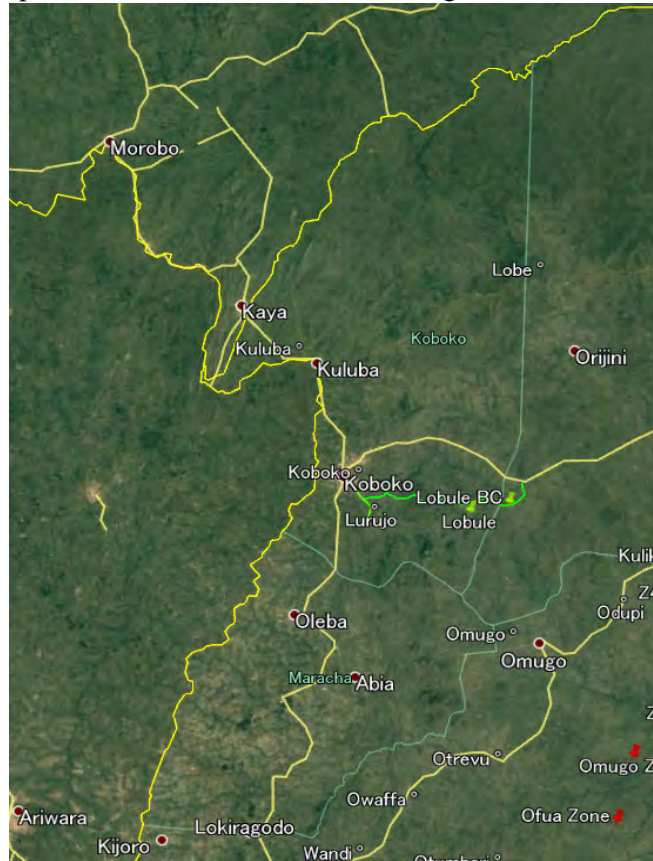
Sector : RB	Profile No : RB – 3
Health : H, Education : E, Water and Sanitation : W, Roads and Small Scale Bridges : RB	

Item	Contents
Project Name	Koboko District Road Rehabilitation Project
Outline	<ul style="list-style-type: none"> - Rehabilitation of Koboko District unpaved roads (Total 22km) - Rehabilitation of Drainage facilities
Background	<ul style="list-style-type: none"> - One out of the total 6 Sub-Counties (S/Cs) of Koboko District is host community and one Zone/Settlement (Z/S) is located in the District. The population of the refugees is equivalent to 20 % of the District population (as of August 2017). - The host community and the Z/S are along the road that connects the roadside host community and Z/S to a national road. The road is, however, not in good condition because of poor maintenance. Furthermore, it has been deteriorated very quickly due to rapidly increased traffic that primarily consists of heavy vehicles transporting goods to the Z/S. Such road condition is hampering smoother traffic flow among the Z/S and host communities. Therefore, urgent response to this situation is required. - It was confirmed that this road is not included in the National Development Plan (NDP II) or the District Development Plan (2015/2016-2019/2020) and not duplicated for any other donor assistance (as of October 2017).
Target Area	Lobule S/C and neighboring Z/S in Koboko: i.e., Lobule Settlement
Purpose and Outcome of the Project	<ul style="list-style-type: none"> - Purpose: The enhancement of the road transportation capacity in Lobule S/C will contribute to the rejuvenation of the social and economic activities in the host communities and the Z/Ss. - Outcome: To support the host communities through the facilitation of logistics by rehabilitation of the District road in Lobule S/C
Beneficiary ³	Direct Beneficiary: Total 41,796 (37,400 in Lobule S/C, 4,396 in the neighbouring Z/Ss) Indirect Beneficiary: 169,095 - Residents in Koboko (District population excluded above Lobule S/C)
Relevant Government & Partner Organisations	Central: Approval of the project plan by the Ministry of Works and Transportation (MoWT) Ugandan Road Fund (URF) to allocate the maintenance budget District: The District maintains the road and facility after the completion of the construction and handover International Organizations: N/A
Summary of Construction Plan & Schedule	Preparatory Study/ Contract with procurement agency: 1.0 year Detailed Design/Bidding Document Preparation/ Bidding/ Contract: 1.0 year Construction Period: 1.5 year Construction Plan: Mechanized construction by local construction company
Site Situation	<ul style="list-style-type: none"> - As the work involves only an existing road, no land acquisition is expected - Since there are no residents within the current ROW, the involuntary settlement is not expected
Proposed Evaluation Criteria	Operation/ effectiveness indicator: Annual average daily traffic volume (per day/ per 24hrs)
Social and Technical Considerations	<ul style="list-style-type: none"> - RB-3 traverse a river where the District is constructing a bridge. By upgrading access roads to the bridges, it will secure smooth transportation for both host community and the settlement. - It should be noted that when considering the implementation of this project, closer coordination with the District is critical to maximizing synergy effect of the bridge and the access roads. - Specific considerations may be required in response to social situations in any of the target communities Target S/C and Z/S: S/C: Lobule S/C in Koboko District Z/S: Lobule Zone A and Zone B

³ The number of both direct and indirect beneficiaries are based on the results from this study.

Profile No : RB—3 Appendix

1. Project Location Map (Coloured in Green shows the targeted road)



2. Road Condition



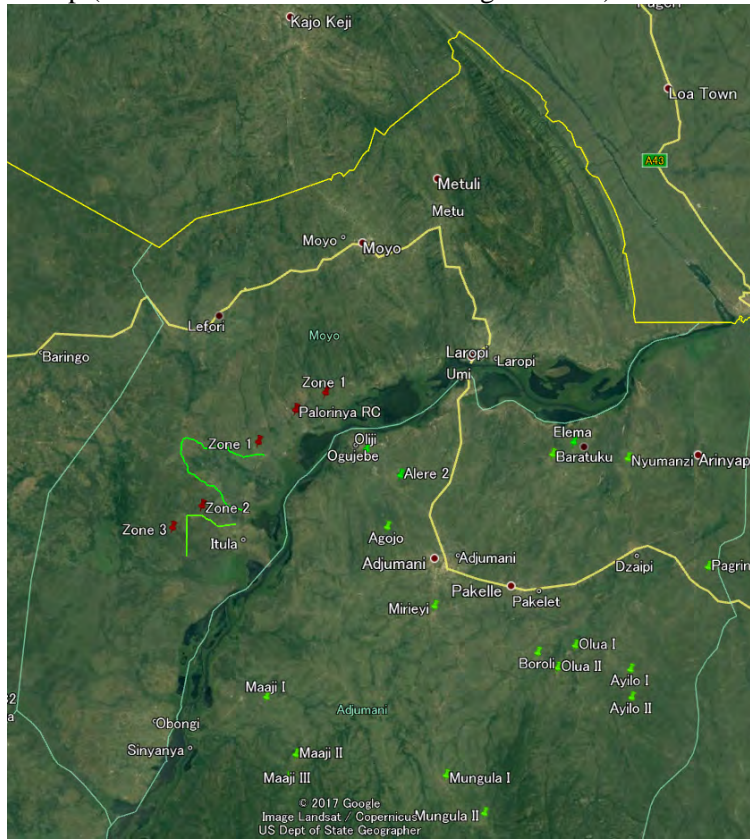
Sector : RB	Profile No : RB – 4
Health : H, Education : E, Water and Sanitation : W, Roads and Small Scale Bridges : RB	

Item	Contents
Project Name	Moyo District Road Rehabilitation Project
Outline	- Rehabilitation of Moyo District unpaved roads (Total 28km) - Rehabilitation of Drainage facilities
Background	- One out of the total 8 Sub-Counties (S/Cs) of Moyo District is host community while 4 Zones/Settlements (Z/Ss) are located in the District. The population of the refugees is equivalent to 130 % of the District population (as of August 2017). - The host communities and the Z/Ss are along the road that connects the roadside host communities and Z/Ss to a national road. The road is, however, not in good condition because of poor maintenance. Furthermore, it has been deteriorated very quickly due to rapidly increased traffic primarily consisting of heavy vehicles transporting goods to the Z/Ss. Such road condition is hampering smoother traffic flow among the Z/Ss and host communities. Therefore, urgent response to this situation is required. - It was confirmed that this road is not included in the National Development Plan (NDP II) or the District Development Plan (2015/2016-2019/2020) and not duplicated for any other donor assistance (As of October 2017).
Target Area	- Itula S/C and neighboring refugee Z/Ss in Moyo: Zone I and II, Palorinya Settlement
Purpose and Outcome of the Project	- Purpose: The strengthening of the road transportation capacity in Itula S/C will contribute to the rejuvenation of social and economic activities in the Z/Ss and the host communities - Outcome: To support the host communities through the facilitation of logistics on the District road in Itula S/C
Beneficiaries ⁴	Direct Beneficiaries: Total 187,964, (13,262: residents in Itula S/C, 174,702: residents in the neighbouring Z/Ss) Indirect Beneficiaries: 125,012- Residents in Moyo (District population excluded above Itula S/C)
Relevant Government & Partner Organisations	Central: Approval of the project plan by the Ministry of Works and Transportation (MoWT) Ugandan Road Fund (URF) to allocate the maintenance budget District: The District maintains the road and facility after the completion of the construction and handover International Organizations: N/A
Summary of Construction Plan & Schedule	Preparation Study/ Contract with procurement agency: 1.0 year Detailed Design/Bidding Document Creation/ Bidding/ Ordering: 1.0 year Construction Period: 2.0 years Construction Plan: Mechanized construction by local construction company
Site Situation	- As the work involves only an existing road, no land acquisition is expected - Since there are no residents within the current ROW, the involuntary settlement is not expected
Proposed Evaluation Criteria	Operation/ effectiveness indicator : Annual average daily traffic volume (per day/ per 24hrs)
Social and Technical Considerations	- RB-4 itself will generate a high contribution to the host communities and refugees; the entire Moyo District will be benefit by implementing it together with RB-8. - Specific considerations may be required in response to social situations in any of the target communities.
	Target S/C and Z/S: S/C: Itula S/C in Moyo District Z/S: Palorinya Settlement Zone 2, Zone 3

⁴ The number of both direct and indirect beneficiaries are based on the results from this study.

Profile No : RB-4 Appendix

1. Project Location Map (Coloured in Green shows the targeted road)



2. Road Condition



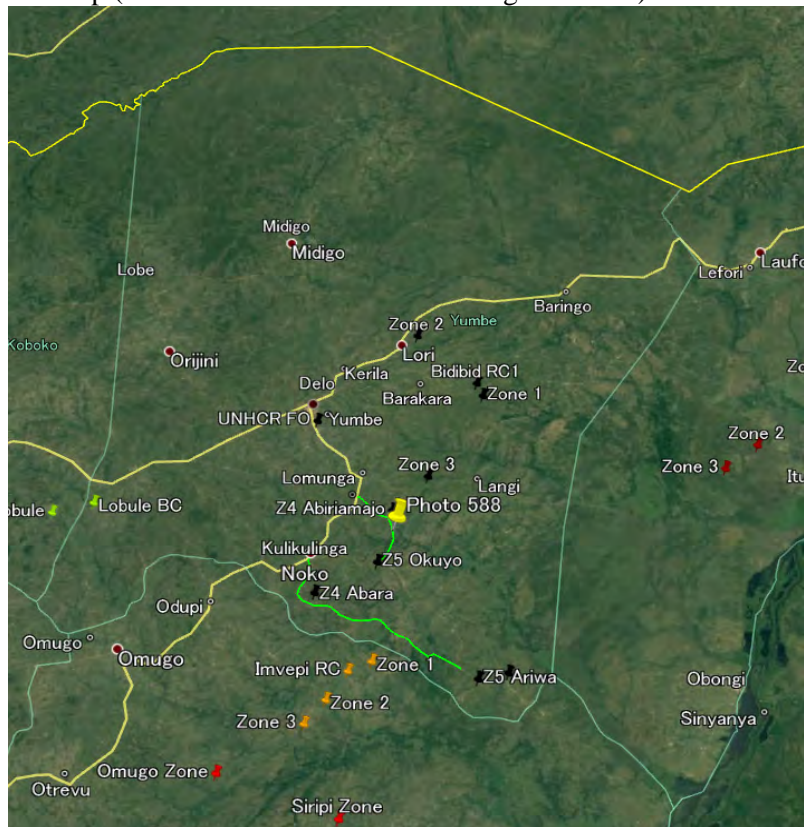
Sector : RB	Profile No : RB – 5
Health : H, Education : E, Water and Sanitation : W, Roads and Small Scale Bridges : RB	

Item	Contents
Project Name	Yumbe District Road Rehabilitation Project
Outline	<ul style="list-style-type: none"> - Rehabilitation of Yumbe District unpaved roads (Total 27km) - Rehabilitation of Drainage facilities
Background	<ul style="list-style-type: none"> - 5 out of the total 12 Sub-Counties (S/Cs) of the Yumb District are host communities while 5 Zones/Settlements (Z/Ss) are located in the District. The population of the refugees is equivalent to 60 % of the District population (as of August 2017). - The host communities and the Z/Ss are along the road that connects the roadside host communities and Z/Ss to a national road. The road is, however, not in good condition because of poor maintenance. Furthermore, it has been deteriorated very quickly due to rapidly increased traffic primarily consisting of heavy vehicles transporting goods to the Z/Ss. Such road condition is hampering smoother traffic flow among the Z/Ss and host communities. Therefore, urgent response to this situation is required. - It was confirmed that this road is not included in the National Development Plan (NDP II) or the District Development Plan (2015/2016-2019/2020) and not duplicated for any other donor assistance (As of October 2017).
Target Area	Odravu and Ariwa S/Cs and neighboring refugee Z/Ss in Yumbe: i.e., Zone 4 and Zone 5, Bidibidi Settlement
Purpose and Outcome of the Project	<ul style="list-style-type: none"> - Purpose: The strengthening of road transportation capacity in Odravu and Ariwa S/Cs will contribute to the rejuvenation of social and economic activities in the Z/Ss and the host communities - Outcome: To support the host communities through the facilitation of logistics on the District road in Odravu and Ariwa S/Cs
Beneficiaries ⁵	<p>Direct Beneficiaries: Total 180,206 (49,100: residents in Odravu S/C; 27,900: Ariwa S/C, 103,206: residents in the neighbouring Z/Ss)</p> <p>Indirect Beneficiaries: 381,616- Residents in Yumbe (District population excluding the population of the above 2 S/Cs)</p>
Relevant Government & Partner Organisations	<p>Central: Approval of the project plan by the Ministry of Works and Transportation (MoWT) Ugandan Road Fund (URF) to allocate the maintenance budget</p> <p>District: The District maintains the road and facility after the completion of the construction and handover</p> <p>International Organizations: N/A</p>
Summary of Construction Plan & Schedule	<p>Preparation Study/ Contract with procurement agency: 1.0 year</p> <p>Detailed Design/Bidding Document Creation/ Bidding/ Ordering: 1.0 year</p> <p>Construction Period: 2.0 years</p> <p>Construction Plan: Mechanized construction by local construction company</p>
Site Situation	<ul style="list-style-type: none"> - As the work involves only an existing road, no land acquisition is expected - Since there are no residents within the current ROW, the involuntary settlement is not expected
Proposed Evaluation Criteria	Operation/ effectiveness indicator : Annual average daily traffic volume (per day/ per 24hrs)
Social and Technical Considerations	<ul style="list-style-type: none"> - Smooth transportation to each refugee settlements is necessary since zones of Bidi Bidi Settlement are spread in Yumbe District. The roads are currently severely constrained in providing smooth transportation due to floods or mud condition during the rainy season. Therefore, by rehabilitating such roads and securing smooth transportation routes, the project will contribute to both refugees and people in host communities. - It should be noted that since RB-5 consists of two separate roads it will require a procurement agency to supervise it efficiently and the District to carry out the maintenance. - Specific considerations may be required in response to social situations in any of the target communities. <p>Target S/C and Z/S: S/C: Odravu S/C and Ariwa S/C in Yumbe District Z/S: Bidibidi Zone 4, Zone 5 Settlements</p>

⁵ Number of both direct and indirect beneficiaries are based on the results from this study.

Profile No : RB—5 Appendix

1. Project Location Map (Coloured in Green shows the targeted roads)



2. Road Condition



Sector : RB	Profile No : RB – 6
Health : H, Education : E, Water and Sanitation : W, Roads and Small Scale Bridges : RB	

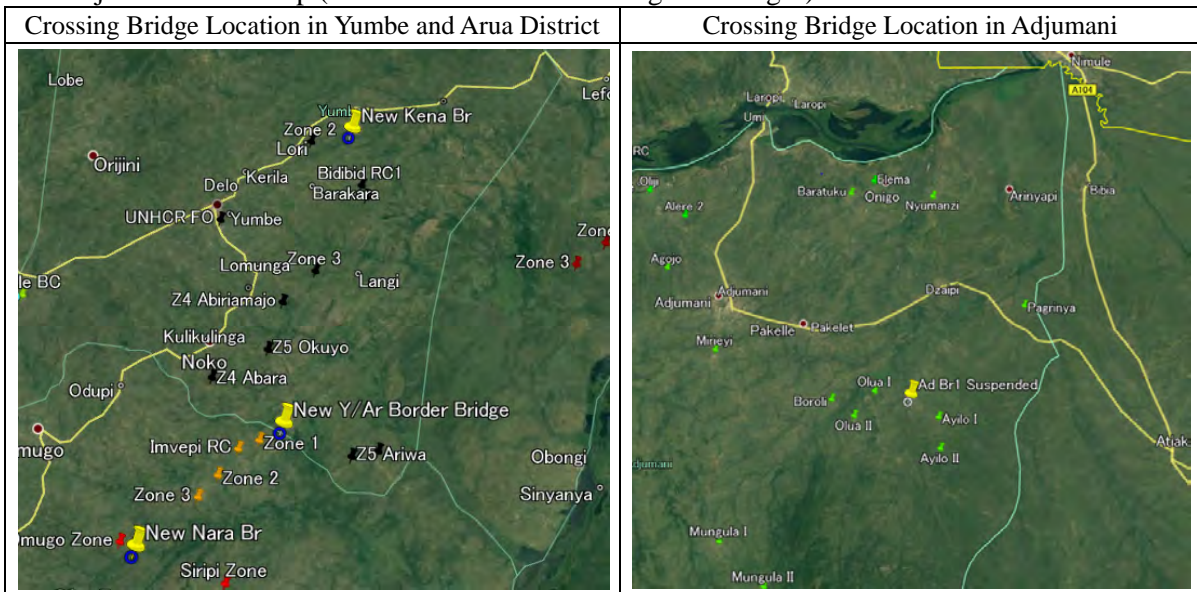
Item	Contents
Project Name	Project of New Construction of Small Scale Bridges on Community Roads in West Nile Sub-Region
Outline	New construction of four Small Scale Bridges on Community Roads among three Districts in the West Nile Sub-Region
Background	<p>- Many of community roads have no bridges connecting host communities and Zones/Settlements (Z/Ss). Because of this situation, it is hard to cross rivers, particularly during the rainy season, constraining travel between the two sides. In case of car accidents or disaster, it brings a severe obstacle to the transportation of people and goods to the Z/Ss and host communities. Construction of the new bridges is critical for UNHCR to provide support regularly and continuously.</p> <ul style="list-style-type: none"> • Yumbe District (Kochi S/C) Kena Bridge (Request from UNHCR) • Yumbe District (Ariwa S/C) – The bridge between the District in Odupi S/C • Arua District (Uriama S/C) Nara Bridge (Request from UNHCR) • Adjumani District (Pakele S/C, Dzaipi S/C) The bridge between Olua I - Ayilo I (Required from Adjumani District, it has been left aside during the process of construction) <p>- It was confirmed in the National Development Plan (NDP II) and the District Development Plan (2015/16-2019/2020) that this road is not included in their plan and not duplicated in any other donor assistance (As of October 2017).</p>
Target Area	<p>Yumbe: Kochi S/C and Ariwa S/C and the neighbouring Z/Ss: i.e., Zone2, 4 and 5, Bidibidi Settlement</p> <p>Arua: Odupi S/C and Uriama S/C and the neighbouring Z/Ss: i.e., Zone 1 and 2 from Imvepi Settlement, and Zone 1, 2 and 6 from Rhino Settlement</p> <p>Adjumani: Pakele S/C and Dzaipi S/C and the neighbouring Imvepi Settlement</p>
Purpose and Outcome of the Project	<p>- To contribute to activation of social and economic activities in the Z/Ss and host communities by enhancing the road transport capacity in West Nile Sub-Region.</p> <p>- Outcome: To facilitate the logistics by constructing a new bridge on a road connecting the host communities and Z/Ss: To support host communities by facilitating the logistics:</p>
Beneficiaries ⁶	<p>Direct Beneficiaries: Total 665,109 (48,000 in Kochi S/C, 27,900 in Ariwa S/C, 41,600 in Odupi S/C, 25,100 in Uriama S/C, 50,400 in Pakele S/C, 43,700 in Dzaipi S/C, 428,409 in the neighbouring Z/Ss)</p> <p>Indirect Beneficiary: 11,255,450- Residents in Yumbe, Arua and Adjumani Districts(3 District population excluding the population of the above 6 S/Cs)</p>
Relevant Government & Partner Organizations	<p>Central: Approval of the project plan by the Ministry of Works and Transportation (MoWT)</p> <p>URF will contribute the maintenance fee after the handover.</p> <p>District: After completing construction, Adjumani, Arua and Yumbe Districts will maintain the facility after the handing over.</p> <p>International Organizations: UNHCR</p>
Summary of Construction Plan & Schedule	<p>Bilateral discussion: 0.5 year</p> <p>Detailed Design/Bidding Document Creation/ Bidding/ Ordering: 1.0 year</p> <p>Construction Period: 2.0 year</p> <p>Construction Plan: Mechanized construction by local construction company</p>
Site Situation	<p>- As the work involves only an existing road, no land acquisition is expected</p> <p>- Since there are no residents within the current ROW, the involuntary settlement is not expected</p>
Proposed Evaluation Criteria	Operation/ effectiveness indicator : Annual average daily traffic volume (per day/ per 24hrs)
Social and Technical Considerations	<p>- RB-6 includes two bridges requested by UNHCR: Kena bridge and Nara bridge. It also covers bridges on the District boundary of Yumbe District and Arua District where Imvepi and Bidi Bidi settlements are located in between. Therefore, the project benefit will not be limited to people in the host communities and Z/Ss only: UNHCR's activities will be benefitted too.</p>

⁶ Number of both direct and indirect beneficiaries are based on the results from this study.

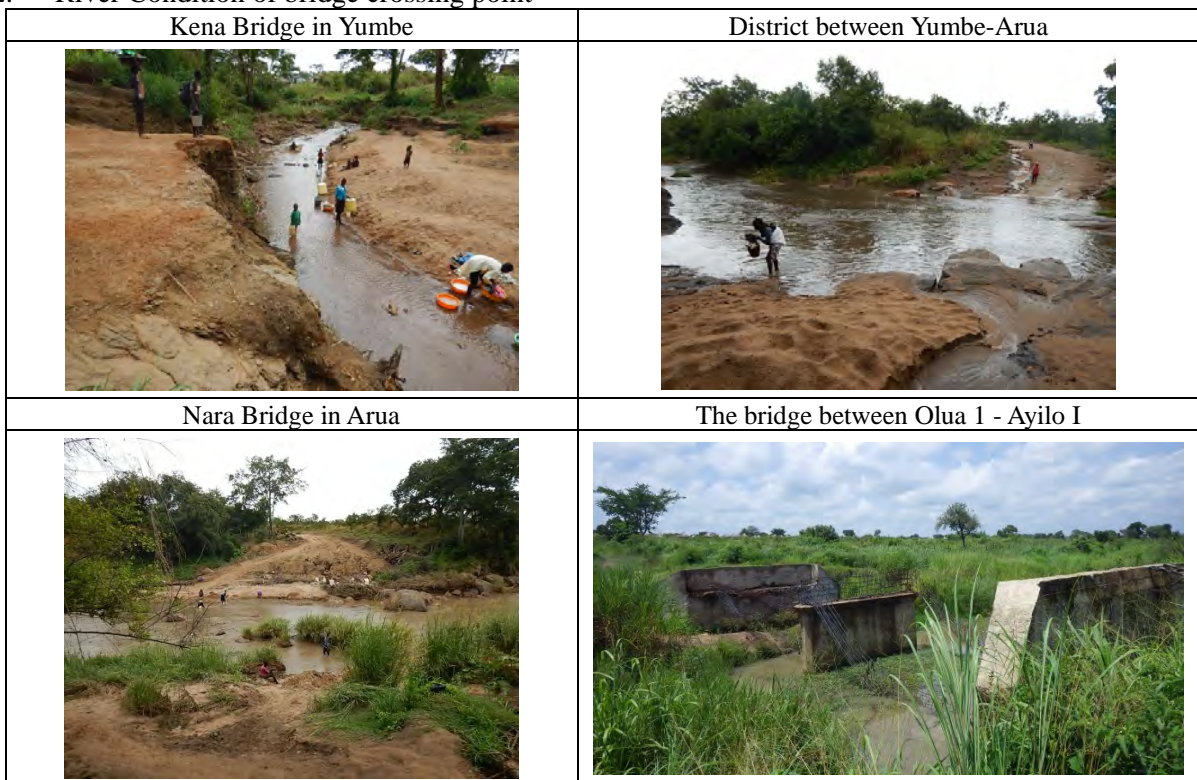
Item	Contents
	<ul style="list-style-type: none"> - RB-6 also contributes to Adjumani District: it includes a bridge the District is requesting resumption of the construction which was abandoned halfway. The more effect is expected for the District if implemented together with RB-1. - It should be noted that there will be three counterparts (C/Ps), namely three Districts since the target bridges are located within the three Districts. Several meetings are required regarding 1) an arrangement to supervise the four sites by a procurement agency; 2) maintenance after completion of the project by each District; 3) whether C/P will be chosen from one District to maintain the District boundary bridge. - Specific considerations may be required in response to social situations in any of the target communities Target S/C and Z/S: S/C: Kochi S/C and Ariwa S/C in Yumbe District Odupi S/C and Uriama S/C in Arua District Pakele S/C and Dzaipi S/C in Adjumani District Z/S: Bidibidi Settlement: Zone 2, Zone 5 Imvepi Settlement: Zone 1, Zone 2 Rhino Camp Settlement: Zone 6-Ofua, Zone 7- Extention

Profile No : RB—6 Appendix

1. Project Location Map (Pinned in Yellow shows targeted bridges)



2. River Condition of bridge crossing point



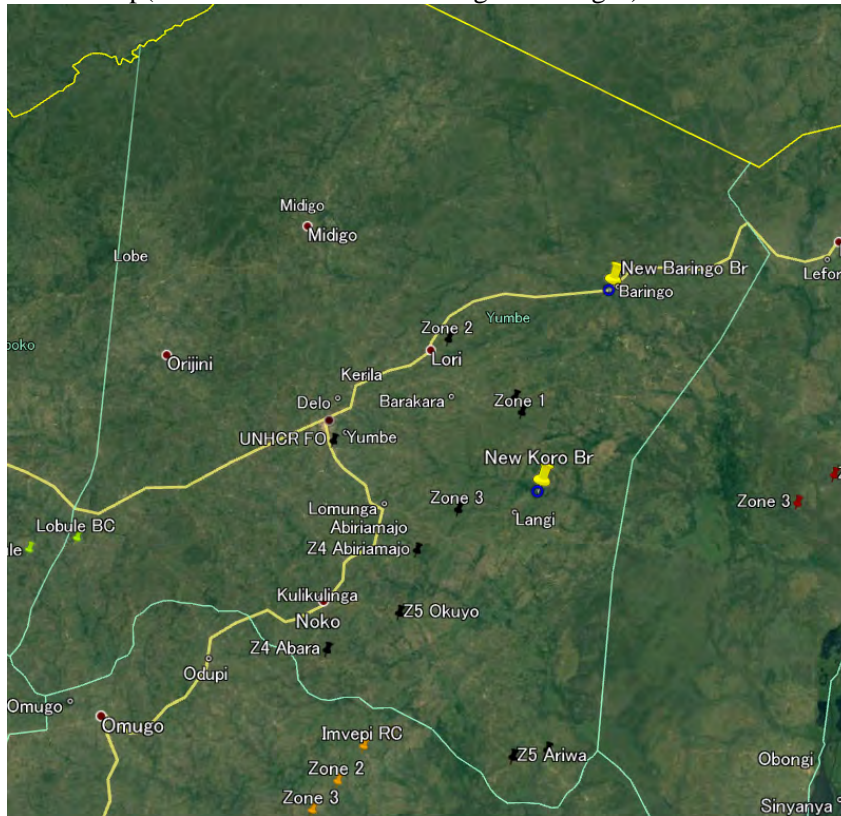
Sector : RB	Profile No : RB – 7
Health : H, Education : E, Water and Sanitation : W, Roads and Small Scale Bridges : RB	

Item	Contents
Project Name	Small Scale Bridges Project on National Roads in Yumbe District
Outline	New Construction of two small-scale bridges on national roads in Yumbe District
Background	<ul style="list-style-type: none"> - 5 out of the 12 Sub-Counites (S/Cs) in the District host the refugees while 5 Zones/Settlements (Z/Ss) are located in the District. The refugee population is equivalent to approximately 60 % of the District population (as of August 2017). - Although there are refugees and host communities along national roads, bridges are not constructed on them. This situation makes difficult to cross rivers and limit the travel between the two sides. In case of car accidents or disaster, it brings a severe obstacle to the transportation of people and goods to the Z/Ss and host communities. New construction of the bridges is critical for UNHCR and its partners to provide support regularly and continuously; they strongly request to construct the bridges urgently. <ul style="list-style-type: none"> • Class C national road: Koro bridge in Lomunga-Baraka (Kululu S/C in Yumbe, Request from UNHCR) • Class C national road: Baringa bridge between Baringa-Barakala (Tentative) Romogi S/C in Yumbe - It was confirmed the roads are not included in the National Development Plan (NDP II) or the District Development Plan (2015/2016- 2019/20120) and are not duplicated in any other donor assistance (as of October 2017).
Target Area	Kululu S/C, Romogi S/C and in the neighbouring Z/Ss in Yumbe: Zone 1, Zone 3 Settlements from Bidi Bidi settlement
Purpose and Outcome of the Project	<ul style="list-style-type: none"> - To spur social and economic activities in the Z/Ss and host communities by enhancing the road transport capacity. Support host communities which receive refugee Z/Ss by facilitating logistics. - Outcome: To facilitate logistics by constructing a new bridge on a road connecting the host communities and Z/Ss.
Beneficiaries ⁷	<p>Direct Beneficiaries: Total 216,900 (42,900 in Kululu S/C, 53,000 in Romogi S/C, 121,000 in the neighbouring Z/Ss)</p> <p>Indirect Beneficiaries: 263,822 Residents in Yumbe (District population excluded above 2 S/Cs)</p>
Relevant Government & Partner Organizations	<p>Central: Approval of the project plan content by the Ministry of Works and Transportation (MoWT). URF will contribute the maintenance budget after the handover the facilities. UNRA will conduct the maintenance of the facility after the completion of the construction and handover</p> <p>International Organizations : UNHCR</p>
Summary of Construction Plan & Schedule	<p>Preparation Study/ Procurement Agency Contract: 1.0 year Detailed Design/Bidding Document Creation/ Bidding/ Ordering: 1.0 year Construction Period: 2.0 year Construction Plan: Mechanized construction by local construction company</p>
Site Situation	<ul style="list-style-type: none"> - As the work involves only an existing road, no land acquisition is expected - Since there are no residents within the current ROW, the involuntary settlement is not expected
Proposed Evaluation Criteria	Operation/ effectiveness indicator : Annual average daily traffic volume (per day/ per 24hrs)
Social and Technical Considerations	<ul style="list-style-type: none"> - RB-7 is to construct the bridges on the national road; it brings benefits not only to people in the communities and Z/Ss but the entire sub-region - Regarding Koro bridge, since the request was made from UNHCR, it will also support UNHCR's activities. - Specific considerations may be required in response to social situations in any of the target communities. Target S/C and Z/S S/C: Kululu S/C and Romogi S/C in Yumbe District Z/S: Bidibidi Settlement: Zone 1, Zone 3



⁷ Number of both direct and indirect beneficiaries are based on the results from this study.

Profile No : RB—7 Appendix

1. Project Location Map(Pinned in Yellow shows targeted bridges)



2. Bridge Crossing Point

Koro Bridge (Between Lomunga-Baraka national road)	Baringo Bridge (Tentative name) (Between Baringo-Barakara national road)
	

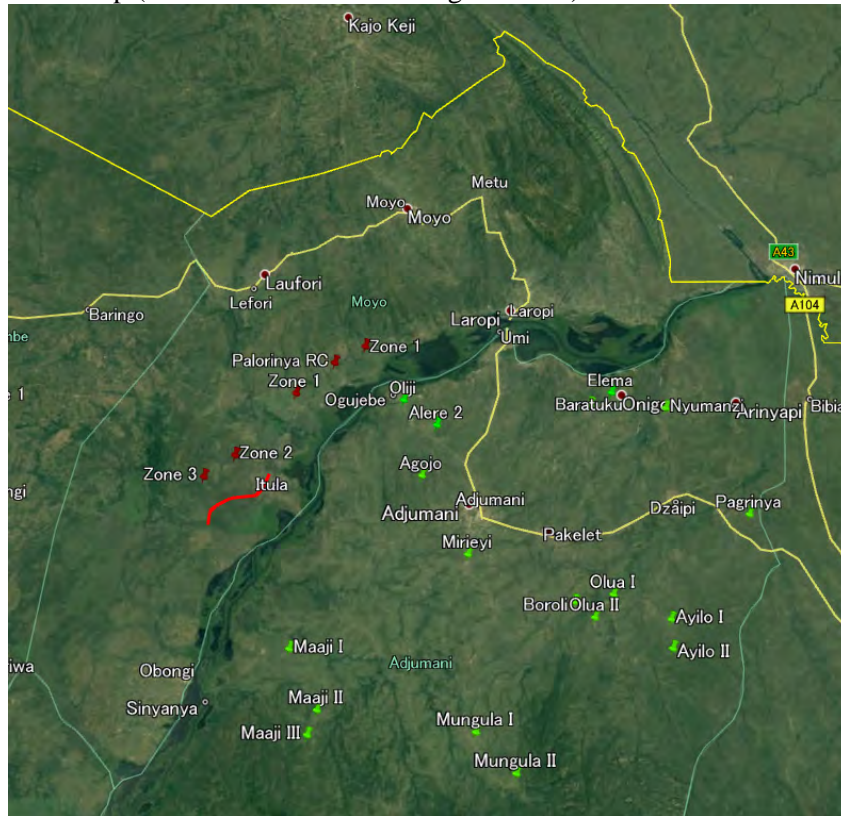
Sector : RB	Profile No : RB – 8
Health : H, Education : E, Water and Sanitation : W, Roads and Small Scale Bridges : RB	

Item	Contents
Project Name	National Road Rehabilitation Project in Moyo District
Outline	Rehabilitation of Moyo - Obongi national road in Moyo District (Total 9km)
Background	<ul style="list-style-type: none"> - 1 out of the 8 Sub-Counties (S/Cs) hosts Z/Ss in Moyo District while 4 Zones/Settlements (Z/Ss) are located in Moyo. The refugee population is equivalent to 130 % of the District population (as of August 2017). - Palorinya Settlement is scattered throughout in Itula S/C and the most of goods transportation to the Z/S and host community rely on Moyo - Obongi national road which also serves as access road to the ferry. The road is closed for a long period because of flood due to lack of drainage facilities although the road is located in low land. This hinders transport of goods to the Z/S(s) and host communities. Therefore, rehabilitation of the road and drainage facilities on this section is urgently required. - 9 km of Itula section: Class C Moyo - Obongi national road (Itula S/C, Moyo) - It was confirmed in the National Development Plan (NDP II) and the District Development Plan (2015/2016- 2019/2020) this road is not included and it is not duplicated in any other donor assistance (as of October 2017).
Target Area	Itula S/C and the neighboring Z/Ss in Moyo: i.e., Zone 2 and Zone 3, Palorinya Settlement
Purpose and Outcome of the Project	<ul style="list-style-type: none"> - Purpose: To contribute to social and economic activities of refugee Z/S(s) and host communities by enhancing the road transport capacity in Itula S/C. - Outcome: To facilitate logistics by raising the national highway connecting the host communities and Z/Ss: To support host communities by facilitating the logistics:
Beneficiaries ⁸	<p>Direct Beneficiaries: Total 105,626 (13,262 in Itula S/C, 92,364 in the neighbouring Z/Ss)</p> <p>Indirect Beneficiaries: 125,012 residents in Moyo District (District population excluded above Itula S/C)</p>
Relevant Government & Partner Organizations	<p>Central: Approval of the project plan by the Ministry of Works and Transportation (MoWT). URF will contribute the maintenance budget after the handover of the facilities. UNRA will conduct the maintenance of the facility after the completion of the construction and handover</p> <p>International Organizations : N/A</p>
Summary of Construction Plan & Schedule	<p>Preparation Study/ Contract with Procurement Agency: 1.0 year</p> <p>Detailed Design/Bidding Document Creation/ Bidding/ Ordering: 1.0 year</p> <p>Construction Period: 1.5 year</p> <p>Construction Plan: Mechanized construction by local construction company</p>
Site Situation	<ul style="list-style-type: none"> - As the work involves only an existing road, no land acquisition is expected - Since there are no residents within the current ROW, the involuntary settlement is not expected
Proposed Evaluation Criteria	Operation/ effectiveness indicator : Annual average daily traffic volume (per day/ per 24hrs)
Social and Technical Considerations	<ul style="list-style-type: none"> - Moyo District accepts refugees, amounting to 130% of the District population and refugees are located only in Itula S/C. The degree of burden on Moyo District and in particular Itula S/C is high. - The national road of RB-8 is closed for a long period because of flooding and the road to Obongi ferry is shut down, too. The road closures impede economic growth in Itula S/C in Moyo District. - By implementing RB-8, the benefit will be brought to both people in host communities and refugees in Itula S/C. It is also expected to promote economic growth in Moyo District. Furthermore, it will contribute to UNHCR's operations by smoothing transportation to refugee settlements. - RB-8 itself will contribute significantly to the host communities and refugees; it will be expected to have more positive impacts by implementing it together with RB-4. - Specific considerations may be required in response to social situations in any of the target communities <p>Target S/C and Z/S: S/C: Itula S/C in Moyo District Z/S: In Palorinya Settlement</p>

⁸ The number of both direct and indirect beneficiaries are based on the results from this study.

Profile No : RB—8 Appendix

1. Project Location Map (Coloured in red shows targeted road)



2. Road Condition



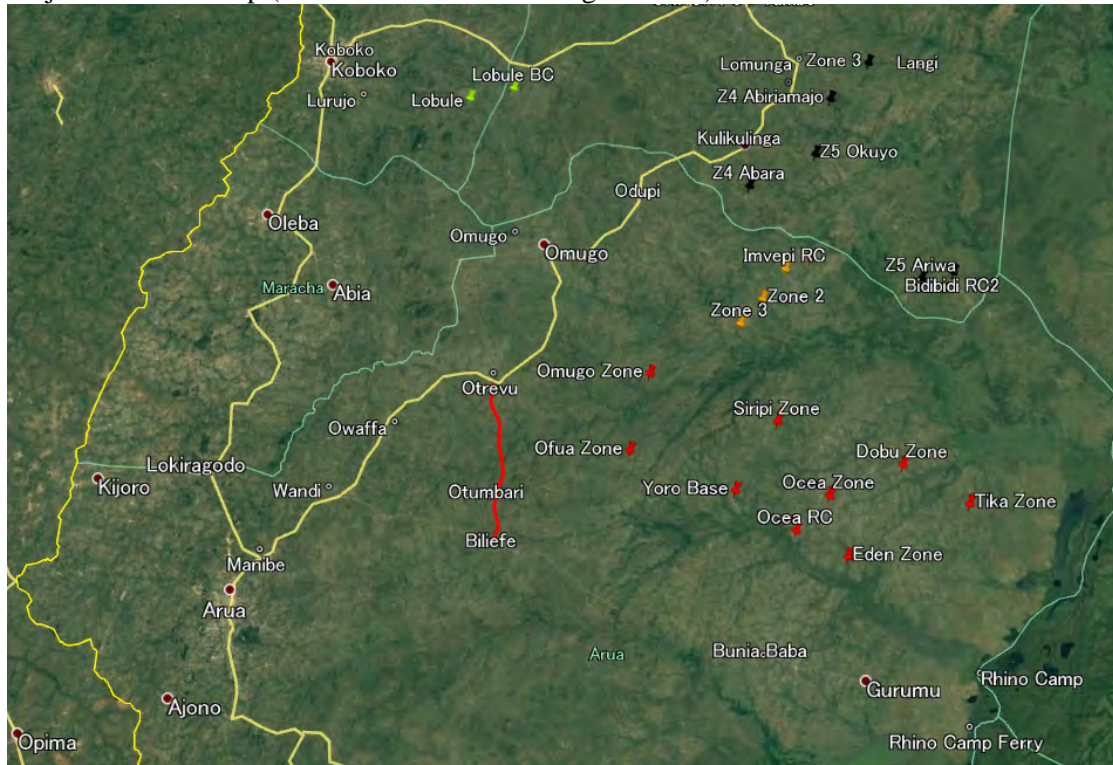
Sector : RB	Profile No : RB – 9
Health : H, Education : E, Water and Sanitation : W, Roads and Small Scale Bridges : RB	

Item	Contents
Project Name	National Road Rehabilitation Project in Arua District
Outline	Rehabilitation of Biliafe-Otrevu national road in Arua District (Total 13km)
Background	<ul style="list-style-type: none"> - 4 out of the 24 Sub-Counties (S/Cs) host refugees while 13 refugee Zones/Settlements (Z/Ss) are located in Arua District. The refugee population is equivalent to 30 % of the District population (as of August 2017) . - The host communities and the Z/Ss are along the road that reaches to Rhino Camp Settlement. The road is not in good condition because of poor maintenance. Furthermore, it has been deteriorated very quickly due to rapidly increased traffic that is primarily consisting of heavy vehicles transporting goods to the settlement. In addition to those, due to insufficient drainage facilities, deep ruts are observed on the road surface. The road condition becomes worse during the rainy season because of the road flooding. It hampers smooth transportation between the settlement and host communities. Therefore, an urgent response is required. - It was confirmed in the National Development Plan (NDP II) and the District Development Plan (2015/2016-2019/2020) that this road is not included and it is not duplicated in any other donor assistance (as of October 2017).
Target Area	Uriama S/C and the neighbouring Z/Ss in Arua: i.e., Zone 1, Zone 2, Zone 3, Zone 6, Rhino Camp Settlement
Purpose and Outcome of the Project	<ul style="list-style-type: none"> - To contribute to social and economic activities of refugee Z/S(s) and host communities by enhancing the road transport capacity. - Outcome: Facilitation of logistics - Contribute to the host communities which receive refugee Z/S by rehabilitating the national road
Beneficiaries ⁹	<p>Direct Beneficiaries: Total 94,982 (25,100: residents in Uriama S/C in Arua, 69,882: residents in the neighbouring Z/Ss)</p> <p>Indirect Beneficiaries: 756,977 residents in Arua District (District population excluded above Uriama S/C)</p>
Relevant Government & Partner	<p>Central: Approval of the project plan content by the Ministry of Works and Transportation (MoWT). URF will contribute the maintenance budget after the handover of the facilities. UNRA will conduct the maintenance of the facility after the handover of the facilities</p> <p>International Organizations : N/A</p>
Summary of Construction Plan & Schedule	<p>Preparation Study/ Contract with Procurement Agency: 1.0 year Detailed Design/Bidding Document Creation/ Bidding/ Ordering: 1.0 year Construction Period: 1.5 year Construction Plan: Mechanized construction by local construction company</p>
Site Situation	<ul style="list-style-type: none"> - As the work involves only of an existing road, no land acquisition is expected - Since there are no residents within the current ROW, the involuntary settlement is not expected
Proposed Evaluation Criteria	Operation/ effectiveness indicator : Annual average daily traffic volume (per day/ per 24hrs)
Social and Technical Considerations	<ul style="list-style-type: none"> - The road is an access road to Rhino Camp Settlement in the District, along which several Ugandan communities are located and suffer from muddy road during the rainy season. UNHCR has been maintaining a road section from Yoro Base of the Settlement to this road. However, the poor condition of this road impedes the logistics to the settlement. Therefore, by rehabilitating RB-9, it will bring benefits to people of both the host communities and the settlement as well as UNHCR. - Specific considerations may be required in response to social situations in any of the target communities. Target S/C and Z/S S/C: Uriama S/C in Arua District Z/S: Rhino Camp Settlement: Zone 1, Zone 2, Zone 3, Zone 6

⁹ Number of both direct and indirect beneficiaries are based on the results from this study.

Profile No : RB—9 Appendix

1. Project Location Map (Coloured in red shows targeted road)



2. Road Condition



Sector : RB	Profile No : RB – 10
Health : H, Education : E, Water and Sanitation : W, Roads and Small Scale Bridges : RB	

Item	Contents
Project Name	Class B Inter-regional Trunk Road Upgrade Project in Western West Nile (Yumbe – Manibe road)
Outline	- Upgrade the Class B Inter-Regional Trunk Road between Yumbe – Manibe (77km) located in Yumbe District and Arua District by asphaltting the unpaved road (Pavement width 9.5m, Asphalt thickness 5cm), raising the road and rehabilitating drainage facilities.
Background	<p>- The main logistic lines of the West Nile Sub-Region are the Class A and B roads.</p> <ul style="list-style-type: none"> • the Class A National Roads: through Vurra – Arua – Koboko - Oraba alongside the Nile river starting from Pakwath through Arua • the Class B Regional Trunk Roads: from Atiak through the north-eastern and north-western parts of West Nile: Adjumani - Moyo - Yumbe – Manibe. <p>- The targeted Yumbe - Manibe road is a segment of this northbound logistic line. The road section traverse between Manibe and Arua is a Class A road (DBST pavement) covering Vura - Arua - Koboko – Oraba for about 5 km.</p> <p>- The large refugee residing areas (Zones/Settlements, Z/Ss) in Uganda such as Bidi Bidi, Impevi, and Rhino Camp Extension are located along this road, which serves as UNHCR’s main transport route. However, the actual road is a gravel road and the drainage facilities are insufficient. During the rainy season (August – October) flooding and bogging of the road occur and surface water bore the pavement and deepens the pothole. This slows the car speed and forces diversion that increases traveling and transportation cost. During the dry season, it is rare that the road surface damages are repaired and the poor road condition is restricting the optional use of the road as a logistic road.</p> <p>- Upgrading the road to asphalt road, raising the road and upgrading the drainage facilities will allow the road to be a logistic road that will not be affected by rain conditions. Priority of upgrading road in Yumbe District is highly recommended since road condition within Yumbe District (from Yumbe town to District boundary of Arua District) is worse, As of now, the traveling time from Yumbe - Manibe road (77km) is about 105~115 minutes, and the Yumbe-Koboko-Manibe section (86km) is about 75~90 minutes. Though it may differ from drivers, weather, and road congestion: the travel time on Yumbe-Manibe road is longer, and damage to vehicle is greater due to the gravel road.</p> <p>- Most of the West Nile population are engaged in agriculture. For example, 72% of Yumbe District population and 81% of Arua District population are engaged in agricultural activities. The main cash crops are tobacco, cotton flower and beekeeping, and the roadside of Yumbe – Manibe road is well known as a tobacco production area. The construction of the road will facilitate the selling of crops at markets and reduce middlemen’s pick-up cost increasing farmers’ cash income. The promotion of logistics will contribute to the economic development of all the residents of the Yumbe and Arua Districts, including the host communities with impacts from by the refugees.</p> <p>- The Ugandan Government has approved the upgrading of this road to an asphalt road as a Matching Project of the Strategic Implementation Plan of MoWT. However, there is no specific development plan by the government and there are no overlapping international donors (as of October 2017).</p>
Target Area	Yumbe District Apo Sub-County (S/C), Kululu S/C, Odravu S/C, and Arua District Odupi S/C, Omugo S/C, Aii-Vu S/C, Katrini S/C, Manibe S/C
Purpose	<p>- Purpose: Contribute to the social and economic development of both Yumbe and Arua District which has a lot of refugees as well as the whole West Nile Sub-Region by enhancing the road transport capacity from Yumbe to Manibe.</p> <p>- Outcome: As the logistic road of Yumbe and Arua District will be upgraded from gravel road to asphalt road, logistics will improve. The improvement of logistics will contribute to the assistance of both Districts that host Z/Ss.</p>
Beneficiaries ¹⁰	<p>Direct Beneficiaries: Residents of Yumbe and Arua District (484,822+782,077=1,266,899persons) Residents of Z/Ss in Yumbe and Arua Districts (283,347+227,204=510,551persons), Total 1,777,450 persons</p> <p>Indirect Beneficiaries : 139,012 residents of Moyo District, 206,495 residents of Koboko</p>

¹⁰ Number of both direct and indirect beneficiaries are based on the results from this study.

Item	Contents
	District
Relevant Government & Partner Organizations	Central: Approval of the project plan content by the Ministry of Works and Transportation (MoWT). URF will contribute the maintenance budget after the handover of the facilities. UNRA will conduct the maintenance of the facility after the handover International Organizations : N/A
Summary of Construction Plan & Schedule	Preparation Study/ Contract with procurement agency : 1.2 year Detailed Design/Bidding Document Creation/ Bidding/ Ordering: 1.0 year Construction Period: 2 construction area plan 5.0 year (construction will be done in order) 3 construction area plan 7.0 year (- ditto -) Construction Plan: Mechanized construction by Japanese construction company
Site Situation	- The new land acquisition might be necessary in the next phase of studies - Since there is no resident in the current ROW, resettlement is not to be considered.
Proposed Evaluation Criteria	Operation/ effectiveness indicator : Annual average daily traffic volume (per day/ per 24hrs)
Social and Technical Considerations	- RB-10 is the trunk road between Yumbe and Arua. Its road is important for UNHCR to transport their equipment since there are major refugee settlements along the road. Therefore, by upgrading RB-10, it will contribute to people in host communities, refugees, people in Arua and Yumbe, UNHCR and the country of Uganda. Host District: Yumbe District and Arua District Z/S: Bidi Bidi Settlement, Imvepi Settlement, Rhino Camp Settlement (Including Rhino Camp Extension Settlement) Specific considerations may be required in response to social situations in any of the S/Cs and Z/Ss located along or near the road.

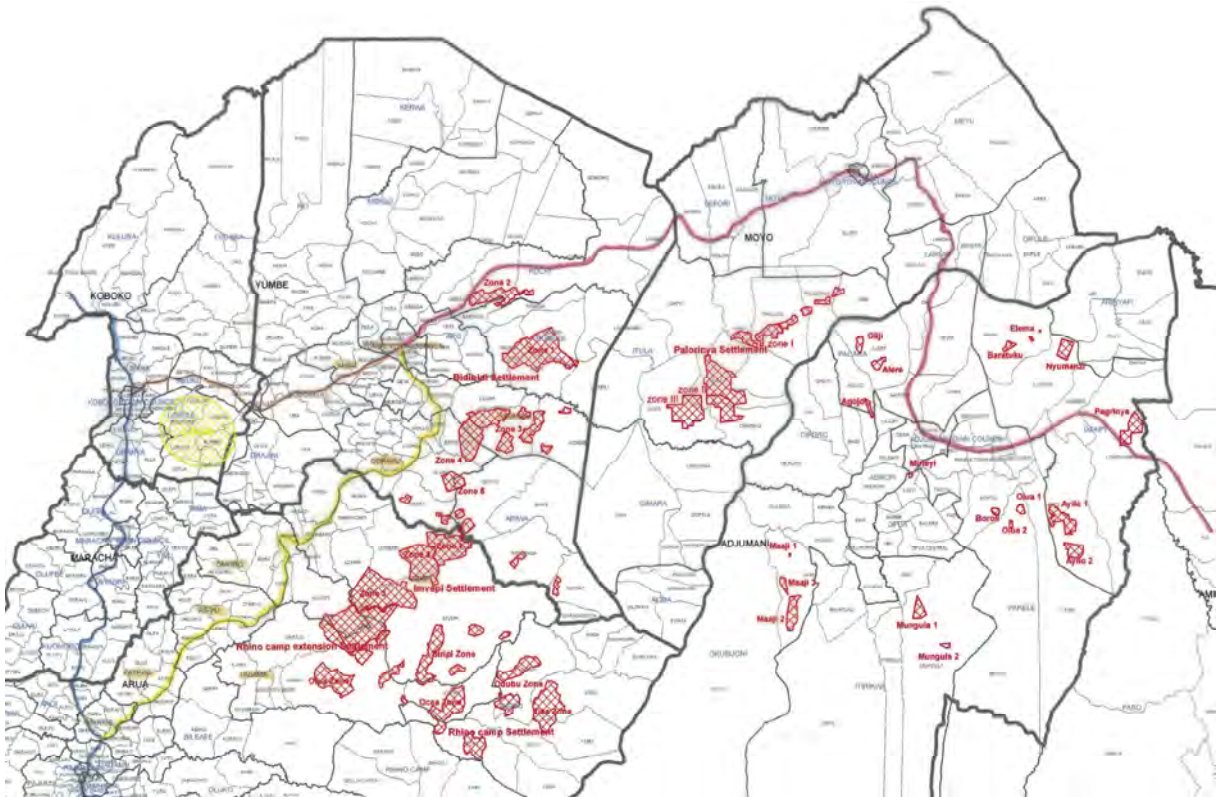
Profile No : RB— 10 Appendix

1. Project site map (The project road is in yellow, the red pins show existing bridges location)











2. Project road and Z/S

The project road is shown in yellow, red and yellow lines show the Class B Inter-Regional Trunk Roads in the West Nile Region. Orange is the Class C Koboko – Yumbe National Road, Blue us Class A Vura – Arua – Koboko – Oraba National Road.













3. Actual road condition

Yumbe – Lomunga section (Yumbe District)	Lomunga – Kulikulinga section (Yumbe District)
	
Kulikulinga – Y/A District border (Yumbe District)	Y/A District Border -Omugo section (Arua District)
	

<p>Omugo – Otrevu section (Arua District)</p>	<p>Otrevu – Wandu section (Arua District)</p>
	
<p>Wandu – Manibe section (Arua District)</p>	<p>Manibe roundabout connection (Arua District)</p>
	

4. Bridges photos

<p>Out of Scope: Jure bridge (Lomunga – Kulikulinga section, Yumbe District)</p>	
	 <p>Wooden floor plate 1 Diameter I-Beam girder Bridge length: about 8m Needs to be replaced Coordinates X: 31°16'39.97"E Y: 3°22'54.23"N</p>
<p>Dacha Bridge (Lomunga – Kulikulinga section, Yumbe District)</p>	
	 <p>RC floor plate 1 Diameter Replaced Need to verify if bridge width is sufficient Coordinates X: 31°15'44.03"E Y: 3°21'44.68"N</p>
<p>Ure bridge (Yumbe/Arua District border)</p>	
	 <p>RC floor plate Total width:8.6m (6.0+2*1.3) 1 diameter RC girder 5 main girder Bridge length:10.5m Replaced. Need to verify if bridge width is sufficient Coordinates X: 31°12'13.64"E Y: 3°20'13.34"N</p>

Ozuro bridge (Yumbe/Arua District border – Omugo section, Arua District)	
	
<p>RC 2-BC Replaced Need to verify if bridge width is sufficient Coordinates X: 31° 9'49.68"E Y: 3° 17'16.58"N</p>	
Nyetre bridge (Yumbe/Arua District border – Omugo section, Arua District)	
	
<p>RC 2-BC Replaced Need to verify if bridge width is sufficient Coordinates X: 31° 9'1.66"E Y: 3° 16'41.81"N</p>	
Oru bridge (Yumbe/Arua District border – Omugo section, Arua District)	
	
<p>RC floor board 5 diameter I-Beam girder(3 main girder) Total width: 3.2m Bridge length: about 35m Needs to be replaced as bridge width is insufficient Coordinates X: 31° 8'6.61"E Y: 3° 15'56.59"N</p>	
Enyau bridge (Omugo – Otrevu section, Arua District)	
	
<p>RC floor board 4 diameter I-beam girder(4main girder) Total width: 3.2m Bridge length: about 35m Needs to be replaced as bridge width is insufficient Coordinates X: 31° 7'26.98"E Y: 3° 15'7.67"N</p>	

13.2 Health

Sector: Health	Project Number.: H-1
Health: H; Education: E; Water Supply: W; Roads/Small Bridges: RB	

Item	Content
Project Name	The Project for Upgrading Health Centre II to III to expand the capacity of health service delivery in the Western Districts of West Nile Sub-Region (Arua / Koboko / Yumbe Districts)
Project Description	This project will construct a maternity ward, staff quarters, and latrines in order to expand the capacity of health service delivery and to widen health services to delivery in the health centers in the sub-counties, which have been heavily impacted by the refugee influx in the Western Districts (Arua, Koboko and Yumbe Districts) of West Nile Sub-Region.
Background	<p>In the five District hosting refugee settlements in West-Nile Sub-Region - Adjumani, Arua, Koboko, Moyo, and Yumbe - the refugee influx from South Sudan has continued to increase since June 2016 and it reached 750,000 refugees by the end of July 2017. The health facilities in Arua district registered an increase of more than 20% of the number of outpatients compared with the number of outpatients as of June of 2016. In Yumbe district, the increase of outpatients from June 2016 is very high reaching up to 350%, whereas, in Koboko it slightly decreased from 2016.</p> <p>It is noted that the health centres serving residents under the support of UNHCR or adjacent to refugee settlements have better health service quality, although health personnel is limited. In addition to the shortage of health workers, more than half of the existing health centres have infrastructures that are aged and in poor condition, causing even more difficulties in providing better health services.</p> <p>Based on these circumstances, it is deemed urgent for the other HCs in the host community surrounding settlements to share and equalise the burden to enable each health centre to be in a sound environment in providing health services.</p> <p>For sharing the burden, it is a prerequisite that each health centre shall have the capacities improved in quality and quantity, to offer a wider range of health services such as general obstetric and inpatient care services. Such improvement suits the policy of Ministry of Health of upgrading HCII to HCIII for strengthening UHC serving capacity.</p> <p>However, most HCII are located in remote areas with poor access. While considering the upgrade of a HCII to HCIII, facilities shall be expanded and staff quarters must also be provided to secure reliable service delivery. This improvement has been a high priority in the Districts' development plan</p>
Target Areas	Arua District: Rigbo and Uriama sub-counties, Koboko District: Lobule Sub-County, and Yumbe District: Ariwa, Kochi and Odravu Sub-Counties
Project Objectives	<p>Project Objective: Provide facilities and materials to target HCII in the Sub-Counties which are experiencing the greatest impact on their medical services due to the refugee influx, to offer better obstetric and inpatient care services closer to home.</p> <p>Outputs: Facilities and materials are provided to target HCII in the target regions, and the status of the HCII is raised to HCIII.</p>
Beneficiaries	<p>Direct Beneficiaries: 134,908 residents of Rigbo and Uriama Sub-Counties and nearby refugee settlements in Arua district, 41,796 residents of Lobule Sub-County in Koboko district, and 273,806 residents of the Ariwa, Kochi, and Odravu Sub-Counties and nearby refugee settlements in Yumbe district. Total: 450,510 persons</p> <p>Indirect Beneficiaries: in addition to residents (450,510) in project sub-counties, residents in Arua M/C (66,500), Koboko M/C (57,300) and Moyo T/C (40,400) where referral and higher hospitals are located. Since the number of referral patients from the project Sub-County and nearby settlements is expected to decrease. Total 614,710 persons</p>
Relevant Government & Partner Organizations	<p>Central: Approval of facility planning content by the MoH Planning Office</p> <p>District: District Health Office of Arua, Koboko, and Yumbe: Review and approval of facility plan / progress supervision during construction / facility maintenance after completion of construction / required personnel dispatch plan and budget allocation plans</p> <p>International Organizations: Expected to contribute a portion of the budget needed for staff, based on the outcome of discussions with District.</p>
Project Component	<p>Each HC consists of the following facility components.</p> <ul style="list-style-type: none"> • Maternity ward x 1 Bldgs. • Outpatient latrines (8 stances per ward) x 2 (separate men's and women's) Bldgs. • Maternity ward latrines/showers (8 toilets/showers per ward) x 1 ward • Latrines for staff quarters (2 stances, 2 shower rooms/building) x 2 Bldgs. • Staff quarters (2 housing units/building) x 2 Bldgs. • Attendants' kitchen x 1 Bldg.

Item	Content
	<ul style="list-style-type: none"> • Generator room x 1 Bldg. • Attendants' laundry room x 1 Bldg. • Placenta pit x 1 • Medical waste receptacle pit x 1 • Security guard room x 1 Bldg. Planned Area: 8,697.33 m ² : 966.37 m ² /existing HC site x 9 sites
Summary of Construction Plan & Schedule	Preparatory Survey ~ Consultant Contract: 12 months Detailed Design, Tender Document Preparation ~ Tender ~ Contract: 10 months Construction Period: 1.5 years Construction Plan: Split into 2.3 lots to be constructed by a local construction company
Site Conditions	Since the plans concern existing HC sites, hearings are being conducted with the HCs to confirm there is no history of natural disasters at the sites.
Proposed Assessment Criteria	<p>Relevance</p> <p>1. Project Beneficiaries In line with Uganda's comprehensive support policy for refugees (Settlement Transformation Agenda: STA), the project will target the residents of the refugee settlements and the sub-counties containing refugee settlements, which bear the brunt of the impact from the influx of refugees.</p> <p>2. Project Purpose and Urgency Provide high-quality medical care to a population which has greatly increased due to the influx of refugees: Expanded facility functions are needed to offer better access to facilities for residents, and allow for the accommodation of more outpatients, inpatients, and normal childbirth.</p> <p>3. Contribution to Achieving Goals of Mid-to-Long Term Development Plans In the National Development Plan (NDP2015/16-2019/20), health sector development is listed along with the education and water sanitation sectors under the goal of "Enhancing Human Capital Development."</p> <p>Effectiveness</p> <p>[Quantitative Effects]</p> <ul style="list-style-type: none"> • No. of outpatients 3 years after project completion • No. of inpatients 3 years after project completion • No. of births 3 years after project completion <p>[Qualitative Effects]</p> <ul style="list-style-type: none"> • The health centers' qualification level will be upgraded from II to III with the addition of a maternity ward, expanding the range of medical services provided to residents. • The health centers' qualification level will be upgraded from II to III with the addition of a maternity ward, decreasing the travel and wait time for obstetric care and inpatient treatments.
Social and Technical Considerations	<p>Target sub-counties and (Z/S)</p> <p>Arua District:</p> <ul style="list-style-type: none"> • Rigbo Sub-County and Zone1:Ocea, Zone3: Eden, Zone4: Tika and Zone5: Odubu in Rhino Camp Settlement) • Uriama Sub-County and (Zone 2: Siripi, and Zone 6: Ofua in Rhino Camp Settlement) <p>Koboko District:</p> <ul style="list-style-type: none"> • Lobule Sub-County and (Zone A and B in Lobule Settlement) <p>Yumbe District</p> <ul style="list-style-type: none"> • Ariwa Sub-County and (Zone 5 in Bidi Bidi settlement) • Kochi Sub-County and (Zone 2 in Bidi Bidi settlement) • Odravu Sub-County (Zone 4 in Bidi Bidi settlement) <p>Specific considerations may be required in response to social situations in any of the target communities.</p> <p>For accepting refugees to HC, it is important to arrange interpreters as necessary not to make language barrier and to provide equal treatment in waiting for a turn.</p> <p>Also, since health depends on the nutritional situation, in particular, it is important that food distribution is stable for refugees. In HC, in addition to nutrition management centered by CHEW in the community, assistance is needed for securing crops by refugees themselves (agriculture, poultry farming, etc.) and collaboration with a vocational training program to increase opportunities for getting jobs so that they can purchase with their own income.</p>

Appendix 1: Proposed Health Centres (HC) list and locations

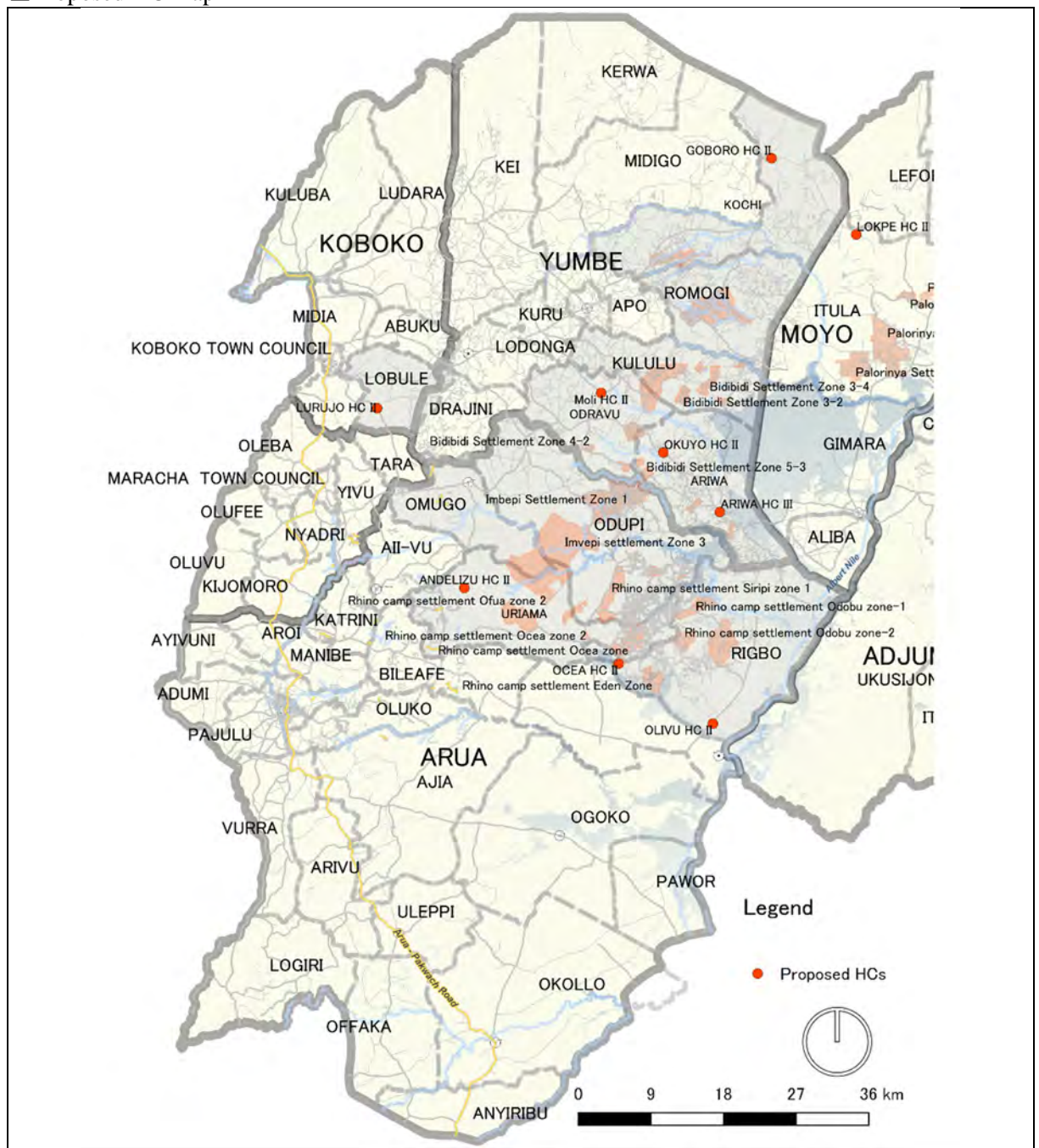
Appendix 2: Proposed HC Data

Appendix 1: Proposed Health Centres (HC) list and locations

□ Proposed HC list

	District	Sub-County	Health Centre	No. of Outpatient (July 2017)
1	Arua	Rigbo	Ocea HC II	3652
2	Arua	Rigbo	Olivu HC II	248
3	Arua	Uriama	Andelizu HC II	542
4	Koboko	Lobule	Lurujo_HCII	944
5	Yumbe	Kochi	Lokpe HC II	850
6	Yumbe	Odravu	Moli HC II	1094
7	Yumbe	Kochi	Goboro HC II	321
8	Yumbe	Ariwa	Okuyo HC II	514
9	Yumbe	Ariwa	Ariwa HC III	6273

□ Proposed HC map



● Proposed Project Site

Appendix 2: Proposed HC Data

01: Arua District, Rigbo SC

1. Information about Health Unit:

Health Unit: name:	Ocea Health Centre II	Yr. of Est.	1994
Classification	Government,		
Operation by	Government, Private, NGOs		
Tel:	0392175951 – land line; 0777443536 – health centre in charge; 0782148464 – HUMC chairman		
E-mail:			
Contact person:	Kakiye Joyce – the in charge and Joel Arumadri – the chairman HUMC		

2. Information about operation

How many Patients come to the Health Unit to be examined (Average No. / Month)?	4,500 per month on average.	P/month
# of Delivery / Month	80 on average per month	P/month
The ratio of Patients of refugees in total?	60% refugees and 40% Ugandan Nationals	
Staff		
/health staff	GOU	2
	UNHCR	26
	UNICEF	3
	IDI	1
	PHC fund	0
Supporting Staff	Cleaner, Warden, etc	14
	Total	46

3. Information about facilities

No. of Block	Block 01 (others- nutrition & ART) built in (Yr. 2015) by (UNHCR)
	Block 02 (others – Pharmacy & Triage) built in (Yr.2016) by (UNICEF)
	Block 03 (OPD, Maternity room) built in (Yr.2016) by (Local government)
	Block 04 (Labo, others) built in (Yr.2016) by (Local government)
	Block 05 (Tent), (IPD) built in (Yr.2017) by (UNHCR)
	Block 06 (Tent) for Isolation
#. Examination rooms	2
#. of Delivery Tables/beds	2
#. of Beds for Maternity Ward	4 beds for observation only (antenatal and post-natal)
# of Staff quarters	Hut: (0)
	Single SQ: (1)
	Semi-Detached SQ (2 house in 1 block) (4)
	4 in 1 SQ: (0)
	# of health workers staying in SQs: (32)In total
# of stance of Toilet	Patients: Male:(6), Female: (6) >> Total (12) stances
	Teacher: Male:(0), Female: (0) >> Total (0) stances the staff goes home for toilets in the staff quarters even while at work.
Other facilities	
Water:	Piped water from motorised borehole within the site
Electricity	Solar panel and Generator
Communication	TEL (Fixed line) and Mobile
Land right	Government land has not been leased and there is no land title
Land availability	Enough for expansion
Disaster records	Nothing recorded

4. Request

1. Inpatient ward for male and Female
2. Maternity ward
3. laboratory

□ 5. Photos

		
<p>Ward</p>		
		
<p>Examination Room (interior)</p>	<p>Labo. The dispensing room (Interior)</p>	<p>Delivery Room (interior)</p>
		
<p>Latrine</p>	<p>Staff Quarters</p>	<p>Borehole, Piped water from a motorised borehole</p>

02: Arua District, Rigbo Sub-County, Olivu HC II

1. Information about Health Unit

Health Unit: name:	Olivu HC 2	Yr. of Est.	2011/2012
Classification	Government,		
Operation by	Government, Private, NGOs: the government only pays staff here. The government does not deliver drugs here. The drugs are got from the other nearby health centres through the health sub-district health centre IV in Rhino camp.		
Tel:	0777471474- in charge; 0775268591-HUMC chairman		
E-mail:	-		
Contact person:	Mundur Florence – in charge; Muhammed Ali – HUMC chairman		

2. Information about operation

How many Patients come to the Health Unit to be examined (Average No. / Month)?	259	P/month
The ratio of Patients of refugees in total?	0	Refugees %
Staff		
Teaching staff	GOU	2
	UNHCR	0
	UNICEF	1
	PHC fund	0
Supporting Staff	Cleaner, Warden, etc	3
Total		6

3. Information about facilities

No. of Block	Block 01 (OPD) built in (Yr.2010) by (Local Government)
#. Examination rooms	1
#. of Delivery Tables	0
#. of Beds for Maternity Ward	0
# of Staff quarters	Hut: (0)
	Single SQ: (0)
	Semi-Detached SQ (2 house in 1 block) (1)
	4 in 1 SQ: (0)
	# of Health Workers staying in SQs: (4) In total
# of stance of Toilet	Patients: Male:(1), Female: (1) >> Total (2) stances
	Health workers: Male:(0), Female: (0) >> Total (0) stances: Staff go home for toilet even while at work.
Other facilities	
Water:	Hand pump borehole within site, but the borehole has a very low yield. It is pumped for about 5 minutes before water starts to come out. And then the water comes out yellowish.
Electricity	Not available
Communication	No, they use the one of them in charge
Land right	Government
Land availability	Enough for expansion
Disaster records	Nothing recorded

4. Request

- Expansion of OPD to include laboratory, drug store, consultation room, records room and waiting bay for patients.
- Maternity ward
- General ward – male and female
- Additional staff houses full of Kitchen and Toilets
- Fencing of the health centre
- Installation of power – solar and/or generator.

□ 5. Photos

<p>No ward</p>	<p>No ward</p>
<p>Ward</p>	<p>Ward</p>
	<p>No laboratory</p>
<p>Examination Room (interior)</p>	<p>Labo. Dispensing room (Interior)</p>
<p>No delivery room</p>	
<p>Delivery Room (interior)</p>	<p>Borehole</p>
	
<p>Latrine</p>	<p>Staff Quarters</p>

03: Arua District, Uriama Sub-County, ANDELIZU HC II

1. Information about Health Unit:

Health Unit: name:	ANDELIZU HC II	Yr. of Est.	2011/2012
Classification	Government,		
Operation by	Government,		
Tel:	0773627546		
E-mail:			
Contact person:	Etudopia Felicity		

2. Information about operation

How many Patients come to the Health Unit to be examined (Average No. / Month)?	70~80 P/month (while drug available) 10~20 P/Month (while no drug available)	
The ratio of Patients of refugees in total?	0	Refugees %
Staff		
Teaching staff	GOU	2
	UNHCR	0
	UNICEF	0
	PHC fund	1 (medical record assistant)
Supporting Staff	Cleaner, Warden, etc	3
Total		6

3. Information about facilities

No. of Block	Block 01 (OPD) built in (Yr.2001) by (established as health post)
#. Examination rooms	1
#. of Delivery Tables	0
#. of Beds for Maternity Ward	0
# of Staff quarters	Hut: (0) however, in a store room 1 guard lives
	Single SQ: (0)
	Semi-Detached SQ (2 house in 1 block) (1)
	4 in 1 SQ: (0)
# of Health Workers staying in SQs: (2) In total	
# of stance of Toilet	Patients: Male:(1), Female: (1) >> Total (2) stances
	Health workers: Male:(0), Female: (0) >> Total (0) stances: Staff go home for toilet even while at work.
Other facilities	
Water:	No water source, nearest is 3km away from the site
Electricity	not available
Communication	they use the one of the in charge
Land right	Government
Land availability	Enough for expansion
Disaster records	Nothing recorded

4. Request

<ul style="list-style-type: none"> - Expansion of OPD to include laboratory, drug store, consultation room, records room and waiting bay for patients. - Maternity ward - Additional staff houses full of Kitchen and Toilets - Fencing of the health centre - Installation of power – solar and/or generator.

□ 5. Photos

	
<p>Ward: Consultation, dispensary, Labo.</p>	<p>Inside the ward</p>
	
<p>Outside waiting area</p>	<p>Dispensary</p>
	
<p>No. Borehole, rainwater collecting tank is non-functional</p>	<p>Latrine</p>
	
<p>Store, guard house</p>	<p>Staff Quarters</p>

04: Koboko District, Lobule Sub-County, Lurujo HC II

1. Information about Health Unit

Health Unit: name:	Lurujo HC II	Yr. of Est.	1982
Classification	Government,		
Operation by	Government, Private, NGOs		
Tel:	0773996672 for in charge; 0780213770 for the HUMC chairman		
E-mail:			
Contact person:	Asiku Pontius – in charge and Yuma Nigo – HUMC chairman		

2. Information about operation

How many Patients come to the Health Unit to be examined (Average No. / Month)?	1,300	P/month
# of Delivery / Month	0	P/month
The ratio of Patients of refugees in total?	70% nationals and 30% refugees	
Staff		
Teaching staff	GOU	4
	UNHCR	1
	PHC fund	1
Supporting Staff	Cleaner, Warden, etc	2
Total		8









3. Information about facilities

No. of Block	Block 01 (OPD, IPD, EPI, Maternity room, Labo, others) built in (Yr.2016) by (government of Uganda)
#. Examination rooms	2
#. of Delivery Tables	1
#. of Beds for Maternity Ward	0
# of Staff quarters	Hut: (0)
	Single SQ: (1)
	Semi-Detached SQ (2 house in 1 block) (1)
	4 in 1 SQ: (0)
	# of health worker staying in SQs: (3)In total
# of stance of Toilet	patients: Male:(1), Female: (2) >> Total (3) stances
	staff: Male:(0), Female: (0) >> Total (0) stances
Other facilities	
Water:	Piped water within the site
Electricity	Solar panel
Communication	Mobile 0773996672 for the in charge
Land right	Government, Private, Community
Land availability	Enough for expansion
Disaster records	Nothing recorded

4. Request

- Upgrade Lurujo health centre 2 to a health centre 3. Since the GH will be in Lobule Sub County, by policy, another HC 4 cannot be established in the Sub-County again. So upgrade Lurujo HC 2 to 3.
- OPD. There is no OPD here. The original OPD block got burnt in September 2017. Now, they are using a block which was built as a general ward
- Staff quarters
- Delivery kits,
- Fencing
- Transport means for the health centre.

□ 5. Photos

	
<p>Ward still new, no beds. Being used as OPD because OPD got burnt as in the lower picture.</p>	<p>Ward-Being used as OPD. This an improvised laboratory in the lower picture and the upper picture shows patients waiting outside the ward being used as OPD.</p>
	
<p>Examination Room (interior)</p>	<p>Labo. Dispensing room (Interior)</p>
	
<p>Delivery Room (interior)-not being used yet because all the equipment needed are not available</p>	<p>Borehole – Gravity flow scheme. A compound standpipe</p>
	
<p>Latrine - Patients</p>	<p>Staff Quarters -two in one apartment</p>

05: Yumbe District, Kochi Sub-County, Lokpe HCII

1. Information about Health Unit

Health Unit: name:	Lokpe Health Centre II	Yr. of Est.	September 2011
Classification	Government,		
Operation by	Government		
Tel:	0779-743186		
E-mail:			
Contact person:	Awuzu Sunday		

2. Information about operation

How many Patients come to the Health Unit to be examined (Average No. / Month)?		600-900 P/month
# of Delivery / Month		15-18 P/month
The ratio of Patients of refugees in total?		
Staff		4
Teaching staff	GOU	
	UNHCR	
	PHC fund	
Supporting Staff	Cleaner, Warden, etc	2 (Volunteers)
Total		6

3. Information about facilities

No. of Block	Block 01 (OPD, EPI, a Maternity room, ANC, Store) built in (Yr. 2006) By NUSAF
#. Examination rooms	1
#. of Delivery Tables	1
#. of Beds for Maternity Ward	0
# of Staff quarters	Hut: ()
	Single SQ: ()
	Semi-Detached SQ (2 house in 1 block) (1)
	4 in 1 SQ: (1)
	# of Staff staying in SQs: (4) In total
# of stance of Toilet	Patients: Male:(2), Female: (2) >> Total (4) stances
	Staff: Male:(0), Female: (0) >> Total (0) stances
Other facilities	
Water:	Well (1 within)
Electricity	Solar panel
Communication	Mobile; Available
Land right	Government
Land availability	Enough for expansion
Disaster records	Nothing recorded

4. Request

<ul style="list-style-type: none"> - General Ward, - Staff quarters, - Maternity Ward - Beds, - Latrines - Transport, - Equipment for delivery

□ 5. Photos

	
<p>NO Ward - Only building</p>	<p>Ward</p>
	
<p>Examination Room (interior)</p>	<p>Labo. Dispensing room (Interior)</p>
	
<p>Delivery Room (interior)</p>	<p>Borehole</p>
	
<p>Latrine</p>	<p>Staff Quarters</p>

06: Yumbe District, Odravu Sub-County, Moli HC II

□ 1. Information about Health Unit

Health Unit: name:	Moli Health Centre 11	Yr. of Est.	September 2016
Classification	Government,		
Operation by	Government.		
Tel:	0774-730904		
E-mail:	geoffreyguma139@gmail.com		
Contact person:	Geoffrey Guma		

□ 2. Information about operation

How many Patients come to the Health Unit to be examined (Average No. / Month)?	1034P/month		
# of Delivery / Month	Yet begin, midwife employed and reported on 13/11/2017		
The ratio of Patients of refugees in total?	0.3 Refugees % The number rose to about 0.5% when the pupils came for PLE at near schools		
Staff	3		
Teaching staff	GOU	3	
	UNHCR		
	PHC fund		
Supporting Staff	Cleaner, Warden, etc	2 Volunteers	
Total		6	

□ 3. Information about facilities

No. of Block	Block 01 (OPD, EPI, a Maternity room, Labo, others) built in (Yr. 2012) By PRDP		
#. Examination rooms	1		
#. of Delivery Tables	1		
#. of Beds for Maternity Ward	0		
# of Staff quarters	Hut: ()		
	Single SQ: ()		
	Semi-Detached SQ (2 house in 1 block) (2)		
	4 in 1 SQ: ()		
# of Teacher staying in SQs: (0) In total			
# of stance of Toilet	Patients: Male:(1), Female: (1) >> Total (2) stances		
	Staff: Male:(), Female: () >> Total () stances		
Other facilities			
Water:	Well 0.5 km away in the community		
Electricity	Not available:		
Communication	Mobile		
Land right	Government		
Land availability	Enough for expansion		
Disaster records	Nothing recorded		

□ 4. Request

<ul style="list-style-type: none"> - Maternity Ward - General Ward - Borehole - Fencing - Staff House
--

□ 5. Photos



Ward – No ward



Ward



Examination Room (interior)



Labo. Dispensing room (Interior)



Delivery Room (interior)



Borehole



Latrine



Staff Quarters

07: Yumbe District, Kochi Sub-County, Goboro HC II

1. Information about Health Unit

Health Unit: name:	Goboro Health Centre 11	Yr. of Est.	September 2014
Classification	Government		
Operation by	Government		
Tel:	0772-454988		
E-mail:			
Contact person:	Eyoku Draduma Emmanuel		

2. Information about operation

How many Patients come to the Health Unit to be examined (Average No. / Month)?		450-500P/month
# of Delivery / Month		10-15 P/month
The ratio of Patients of refugees in total?		20-25 Self settled refugees per month
Staff		2 + 2 (yet report)
Teaching staff	GOU	2
	UNHCR	
	PHC fund	
Supporting Staff	Cleaner, Warden, etc	2 Volunteers + 1 yet to report
Total		7

3. Information about facilities

No. of Block	Block 01 (OPD, EPI, a Maternity room, Labo, others) built in (Yr. 2012) By NUSAF
#. Examination rooms	1
#. of Delivery Tables	1
#. of Beds for Maternity Ward	1
# of Staff quarters	Hut: ()
	Single SQ: ()
	Semi-Detached SQ (2 house in 1 block) (2)
	4 in 1 SQ: ()
	# of Teacher staying in SQs: (2)In total
# of stance of Toilet	Student: Male:(2), Female: (1) >> Total (3) stances
	Teacher: Male:(), Female: () >> Total () stances
Other facilities	
Water:	Well within site1 but broken down
Electricity	No power
Communication	
Land right	Government
Land availability	Enough for expansion- 400mx 500m
Disaster records	Nothing recorded

4. Request

<ul style="list-style-type: none"> - General Ward - Staff quarters - Maternity Ward - Beds - Lighting systems - Transport - Fencing + Gatehouse, - Repair of Borehole

□ 5. Photos

	
Ward – One bed partitioned in ANC room for resting for very sick patients	Ward- No ward
	
Examination Room (interior)	Labo. Dispensing room (Interior)
	
Delivery Room (interior)	Borehole
	
Latrine	Staff Quarters

08: Yumbe District, Ariwa Sub-County, Okuyo HC II

1. Information about Health Unit

Health Unit: name:	Okuyo Health Centre 11	Yr. of Est.	The 1990s
Classification	Government,		
Operation by	Government, Private, NGOs		
Tel:	0775557133		
E-mail:			
Contact person:	Adiga Stephen		

2. Information about operation

How many Patients come to the Health Unit to be examined (Average No. / Month)?		Before refuges 1000 P/month But now 500 P/Month
# of Delivery / Month		Before refugees 20-25 P/month But now 0-5 P/month
The ratio of Patients of refugees in total?		2-3 in a month only when the Ikafe Police Training School HC 11 is closed.
Staff		4
Teaching staff	GOU	3
	UNHCR	
	PHC fund	
Supporting Staff	Cleaner, Warden, etc	1
Total		4

3. Information about facilities

No. of Block	Block 01 (OPD, a Maternity room, /ANC, Store) built in (Yr. Early 2000) by (ARC) Block 02 under construction by Sub-county
#. Examination rooms	0
#. of Delivery Tables	1
#. of Beds for Maternity Ward	0
# of Staff quarters	Hut: (1)
	Single SQ: ()
	Semi-Detached SQ (2 house in 1 block) (1)
	4 in 1 SQ: ()
	# of Staff staying in SQs: (3)In total
# of stance of Toilet	Student: Male:(2), Female: (2) >> Total (4) stances
	Teacher: Male:(), Female: () >> Total () stances
Other facilities	
Water:	Well within, 1 borehole but spoilt)
Electricity	Solar panel available
Communication	
Land right	Government,
Land availability	Enough for expansion
Disaster records	Nothing recorded

4. Request

<ul style="list-style-type: none"> - Maternity Ward - Staff House - General Ward

□ 5. Photos

	
<p>Ward -NO ward but attached is the current HC</p>	<p>No Ward- New HC being Constructed by sub county</p>
	
<p>Examination Room (interior)-Under tree</p>	<p>Labo. The dispensing room (Interior)</p>
	
<p>Delivery Room (interior)</p>	<p>Staff Quarters</p>
	
<p>Latrine</p>	<p>Staff Quarters</p>

09: Yumbe District, Ariwa Sub-County, Ariwa HC III

□ 1. Information about Health Unit

Health Unit: name:	Ariwa Health Centre 111	Yr. of Est.	Not Known
Classification	Government,		
Operation by	Government, Private, NGOs		
Tel:	0782316155		
E-mail:			
Contact person:	Atiku Onzima Samuel		

□ 2. Information about operation

How many Patients come to the Health Unit to be examined (Average No. / Month)?	1200P/month	
# of Delivery / Month	70-80 P/month	
The ratio of Patients of refugees in total?	50% Refugees and Nationals 50%.	
Staff	9	
Teaching staff	GOU	6
	UNHCR	3
	PHC fund	
Supporting Staff	Cleaner, Warden, etc	6
Total		15

□ 3. Information about facilities

No. of Block	Block 01 (Waiting Area used as an OPD) built in (Yr. Early 2000) by (IRC)
	Block 02 for ART and Drug Store for IRC
	Block 3- Lab and Drug store for Government
	Block 4- Maternity and ANC
	Block 5- Ward for female, male and Children
	Block 6- Theatre under construction
#. Examination rooms	3
#. of Delivery Tables	2
#. of Beds for Maternity Ward	6 (General Ward- 24, Paediatric 8, Female ward-8, Male ward-8)
# of Staff quarters	Hut: (9)
	Single SQ: ()
	Semi-Detached SQ (2 house in 1 block) (1)
	4 in 1 SQ: (1)
# of Teacher staying in SQs: (9)In total	
# of stance of Toilet	Student: Male:(2), Female: (2) >> Total (4) stances
	Teacher: Male:(), Female: () >> Total () stances
Other facilities	
Water:	No source of water, its trucked)
Electricity	Solar panel
Communication	
Land right	Government
Land availability	Enough for expansion
Disaster records	Nothing recorded except for a draught experience for 3-4 months

□ 4. Request

<ul style="list-style-type: none"> - Maternity Ward - A reliable source of water - Staff housing - Equipment
--

□ 5. Photos

	
<p>Ward - The General Ward, Total of 28 beds</p>	<p>Ward- General Ward</p>
	
<p>Examination Room (interior)-There is no OPD in Ariwa, Patients are examined in the Waiting Area</p>	<p>Labo. The dispensing room (Interior)</p>
	<p>No Borehole in Ariwa, depending on trucked water only</p>
<p>Delivery Room (interior)</p>	<p>Borehole</p>
	
<p>Latrine</p>	<p>Staff Quarters</p>
	
<p>Theatre under Construction</p>	<p>Lab and Drug Store Building</p>

Sector: Health	Project Number.: H-2
Health: H; Education: E; Water Supply: W; Roads/Small Bridges: RB	

Item	Content
Project Name	The Project for Upgrading Health Centre II to III to expand the capacity of health service delivery in the Eastern Districts of West Nile Sub-Region (Adjumani / Moyo Districts)
Project Description	This project will construct a maternity ward, staff quarters, and latrines in order to expand the capacity of health service delivery and to widen health services to delivery in the health centers in the sub-counties, which have been heavily impacted by the refugee influx in the Eastern District (Adjumani and Moyo Districts) of West Nile Sub-Region.
Background	<p>In the five District hosting refugee settlements in West-Nile Sub-Region - Adjumani, Arua, Koboko, Moyo, and Yumbe - the refugee influx from South Sudan has continued to increase since June 2016 and it reached 750,000 refugees by the end of July 2017. The health facilities in Adjumani and Moyo district registered an increase of more than 20% of the number of outpatients compared with the number of outpatients as of June of 2016.</p> <p>It is noted that the health centres serving residents under the support of UNHCR or adjacent to refugee settlements have better health service quality, although health personnel is limited. In addition to the shortage of health workers, more than half of the existing health centres have infrastructures that are aged and in poor condition, causing even more difficulties in providing better health services.</p> <p>Based on these circumstances, it is deemed urgent for the other HCs in the host community surrounding settlements to share and equalise the burden to enable each health centre to be in a sound environment in providing health services.</p> <p>For sharing the burden, it is a prerequisite that each health centre shall have the capacities improved in quality and quantity, to offer a wider range of health services such as general obstetric and inpatient care services. Such improvement suits the policy of Ministry of Health of upgrading HCII to HCIII for strengthening UHC serving capacity.</p> <p>However, most HCII are located in remote areas with poor access. While considering the upgrade of a HCII to HCIII, facilities shall be expanded and staff quarters must also be provided to secure reliable service delivery. This improvement has been a high priority in the Districts' development plan</p>
Target Areas	Adjumani District: Ukusijoni, Dzaipi, Ofua Sub-Counties, Moyo District: Itula Sub-County
Project Objectives	<p>Project Objective: Provide facilities and materials to target HCII in the sub-counties which are experiencing the greatest impact on their medical services due to the refugee influx, to offer better obstetric and inpatient care services closer to home.</p> <p>Outputs: Facilities and materials are provided to target HCII in the target regions, and the status of the HCII is raised to HCIII.</p>
Beneficiaries	<p>Direct Beneficiaries: 179,471 residents of Ukusijoni, Dzaipi, and Ofua sub-counties and nearby refugee settlements in Adjumani district, and 188,348 residents of the Itula Sub-County and nearby refugee settlements in Moyo district. Total: 367,819 persons</p> <p>Indirect Beneficiaries: in addition to Residents (367,819) in project sub-counties, Residents of Adjumani T/C (36,100) and Moyo T/C (11,300) where referral and higher hospitals are located. since the number of referral patients from the project sub-counties is expected to decrease. Total 415,219 persons</p>
Relevant Government & Partner Organizations	<p>Central: Approval of facility planning content by the MoH Planning Office</p> <p>District: District Health Office of Adjumani and Moyo District: Review and approval of facility plan / progress supervision during construction / facility maintenance after completion of construction / required personnel dispatch plan and budget allocation plans.</p> <p>International Organizations: Expected to contribute a portion of the budget needed for staff, based on the outcome of discussions with District.</p>
Project Component	<p>Each HC consists of the following facility components.</p> <ul style="list-style-type: none"> • Maternity ward x 1 Bldgs. • Outpatient latrines (8 stances per ward) x 2 (separate men's and women's) Bldgs. • Maternity ward latrines/showers (8 stances/showers per ward) x 1 ward • Latrines for staff quarters (2 stances, 2 shower rooms/building) x 2 Bldgs. • Staff quarters (2 housing units/building) x 2 Bldgs. • Attendants' kitchen x 1 Bldg. • Generator room x 1 Bldg. • Attendants' laundry room x 1 Bldg.

Item	Content
	<ul style="list-style-type: none"> · Placenta pit x 1 · Medical waste receptacle pit x 1 · Security guard room x 1 Bldg. Planned Area: 7,730.96 m ² : 966.37 m ² /existing HC site x 8 sites
Summary of Construction Plan & Schedule	Preparatory Survey ~ Consultant Contract: 12 months Detailed Design, Tender Document Preparation ~ Tender ~ Contract: 10 months Construction Period: 1.5 years Construction Plan: Split into 2.3 lots to be constructed by a local construction company
Site Conditions	Since the plans concern existing HC sites, hearings are being conducted with the HCs to confirm that there is no history of natural disasters at the sites.
Proposed Assessment Criteria	<p>Relevance</p> <p>1. Project Beneficiaries In line with Uganda's comprehensive support policy for refugees (Settlement Transformative Agenda: STA), the project will target the residents of the refugee settlements and the sub-counties containing refugee settlements, which bear the brunt of the impact from the influx of refugees.</p> <p>2. Project Purpose and Urgency Provide high-quality medical care to a population which has greatly increased due to the influx of refugees: Expanded facility functions are needed to offer better access to facilities for residents, and allow for the accommodation of more outpatients, inpatients, and normal childbirth.</p> <p>3. Contribution to Achieving Goals of Mid-to-Long Term Development Plans In the National Development Plan (NDP2015/16-2019/20), health sector development is listed along with the education and water sanitation sectors under the goal of "Enhancing Human Capital Development."</p> <p>Effectiveness</p> <p>[Quantitative Effects]</p> <ul style="list-style-type: none"> · No. of outpatients 3 years after project completion · No. of inpatients 3 years after project completion · No. of births 3 years after project completion <p>[Qualitative Effects]</p> <ul style="list-style-type: none"> · The health centers' qualification level will be upgraded from II to III with the addition of a maternity ward, expanding the range of medical services provided to local residents. · The health centers' qualification level will be upgraded from II to III with the addition of a maternity ward, decreasing the travel and wait time for obstetric care and inpatient treatments.
Social and Technical Considerations	<p>Target sub-counties and (Z/S)</p> <p>Adjumani District:</p> <ul style="list-style-type: none"> · Dzaipi Sub-County and (Pagirinya, Nyumanzi settlement, etc.) · Ofua Sub-County and (Mirieyi Settlement) · Ukusijoni Sub-County and (Maaji 1, 2 and 3 Settlements) <p>Moyo District: Itula Sub-County (Zone 1, 2, 3 and 4)</p> <p>Specific considerations may be required in response to social situations in any of the target communities.</p> <p>For accepting refugees to HC, it is important to arrange interpreters as necessary not to make language barrier and to provide equal treatment in waiting for a turn.</p> <p>Also, since health depends on the nutritional situation, in particular, it is important that food distribution is stable for refugees. In HC, in addition to nutrition management centered by CHEW in the community, assistance is needed for securing crops by refugees themselves (agriculture, poultry farming, etc.) and collaboration with a vocational training program to increase opportunities for getting jobs so that they can purchase with their own income.</p>

Appendix 1: List of target HCs and location map

Appendix 2: Outline of target HCs

Appendix 1: Proposed HCs list and locations

Proposed HC list

	District	Sub-County	Health Centre	No. of Outpatient (July 2017)
1	Adjumani	Dzaipi	AJUGOPI HC II	708
2	Adjumani	Dzaipi	NYUMANZI HC II	4,727
3	Adjumani	Ofua	KUREKU HC II	1,415
4	Adjumani	Ukusijoni	MAAJI A HC II	512
5	Moyo	Itula	IBAKWE HC II	1,103
6	Moyo	Itula	Iboa HC II	547
7	Moyo	Itula	KALI HC II	1,011
8	Moyo	Itula	WAKA HC II	648

HC: Health Centre

Proposed HC map



● Proposed Project Site

Appendix 2: Proposed HC Data

01: Adjumani District, Dzaipi Sub-County, Ajugopi HC II

1. Information about Health Unit:

Health Unit: name:	Ajugopi HC II	Yr. of Est.	2000
Classification	Government,		
Operation by	Government, Private, NGOs		
Tel:	0782069883 – fixed line		
E-mail:	-		
Contact person:	Onzima Lawrence – 0782416255, in charge and Issa Sunday – 0780235894, HUMC chair		

2. Information about operation

How many Patients come to the Health Unit to be examined (Average No. / Month)?	693	P/month
# of Delivery / Month	6	P/month
The ratio of Patients of refugees in total?	80% nationals and 20% refugees	
Staff		
Teaching staff	GOU	2
	UNHCR	0
	PHC fund	0
Supporting Staff	Cleaner, Warden, etc	4
Total		6

3. Information about facilities

No. of Block	Block 01 (OPD, IPD, EPI, a Maternity room, Labo, others) built in (Yr. 2000) by (Government)
#. Examination rooms	1
#. of Delivery Tables	1
#. of Beds for Maternity Ward	0
# of Staff quarters	Hut: (0)
	Single SQ: (2)
	Semi-Detached SQ (2 house in 1 block) (0)
	4 in 1 SQ: (0)
	# of Teacher staying in SQs: (4) In total
# of stance of Toilet	patient: Male:(1), Female: (2) >> Total (3) stances
	Health staff: Male:(), Female: () >> Total (1) stances - shared
Other facilities	
Water:	Piped water, Well (within site, or km away) nothing
Electricity	Grid, Solar panel, not available
Communication	TEL(Fixed line), Mobile
Land right	Government, Private, Community
Land availability	Enough for expansion / Insufficient
Disaster records	Flood and storms once in a while

4. Request

<ul style="list-style-type: none"> - OPD block – a bigger one - Maternity – comprehensive with all services - Water source - General ward - Staff quarters - Fencing
--

□ 5. Photos

<p>No ward</p>	<p>No ward</p>
<p>Ward</p>	<p>Ward</p>
	
<p>Examination Room (interior)</p>	<p>Labo. Dispensing room (Interior)</p>
	
<p>Delivery Room (interior)</p>	<p>Borehole – no borehole. There is a tank for catching rainwater</p>
	
<p>Latrine</p>	<p>Staff Quarters</p>

02: Adjumani District, Dzaipi Sub-County, Nyumanzi HC II

□ 1. Information about Health Unit:

Health Unit: name:	Nyumanzi HC II	Yr. of Est.	????
Classification	Government,		
Operation by	Government, NGOs		
Tel:	0774106935 for in charge and 0781049506 for HUMC		
E-mail:	-		
Contact person:	Amandu Joshua – in charge and Alumai Charles Martin – the HUMC chairman		

□ 2. Information about operation

How many Patients come to the Health Unit to be examined (Average No. / Month)?	4,000	P/month
# of Delivery / Month	70	P/month
The ratio of Patients of refugees in total?	80% refugees and 20% nationals	
Staff		
Teaching staff	GOU	2
	UNHCR/MTI	There are 30 technical and 31 support including translators = 61
	PHC fund	0
Supporting Staff	Cleaner, Warden, etc	2
Total		65

□ 3. Information about facilities

No. of Block	Block 01 (OPD, Labo, others) built in (Yr. 2014) by (LWF)
	Block 02 (Maternity room, others) built in (Yr. 2012) by (Government)
	Block 03 (IPD) built in (Yr. 2014) by (LWF)
	Block 04 (others) built in (Yr. 2015) by (LWF) isolation
	Block 05 (IPD, others) built in (Yr. 2014) by (LWF) nutrition
#. Examination rooms	3
#. of Delivery Tables	2
#. of Beds for Maternity Ward	10 but there is no independent maternity ward. It is an improvised room
# of Staff quarters	Hut: (0)
	Single SQ: (0)
	Semi-Detached SQ (2 house in 1 block) (5)
	4 in 1 SQ: (0)
	# of Teacher staying in SQs: (35) In total
# of stance of Toilet	patient: Male:(5), Female: (5) >> Total (10) stances
	Health worker: Male:(0), Female: (0) >> Total (0) stances – staff go the staff quarters
Other facilities	
Water:	Piped water within the site
Electricity	Solar panel
Communication	Mobile – for in charge
Land right	Government
Land availability	Enough for expansion
Disaster records	Storm

□ 4. Request

- A full maternity unit including the ward, delivery room, examination room, antenatal and post-natal services.
- Staff houses
- laboratory

□ 5. Photos

	
<p>Ward female</p>	<p>Ward male</p>
	
<p>Examination Room (interior)</p>	<p>Labo. Dispensing room (Interior)</p>
	
<p>Delivery Room (interior) – was not allowed to enter the delivery room because a mother was delivering.</p>	<p>Borehole – motorized borehole within the facility</p>



Latrine



Staff Quarters

03: Adjumani District, Ofua Sub-County, Kureka HC II

□ 1. Information about Health Unit:

Health Unit: name:	Kureka HC II	Yr. of Est.	2001
Classification	Government,		
Operation by	Government, NGOs like Marie Stopes and straight talk give some support, especially in reproductive health.		
Tel:	0774467998 for in charge; 0777626085 for HUMC chairman		
E-mail:	-		
Contact person:	Ms.Chandiru Fiona Jurua – the in charge and Mr. Anyajo William – the HUMC chairman		

□ 2. Information about operation

How many Patients come to the Health Unit to be examined (Average No. / Month)?	1,400	P/month
# of Delivery / Month	15	P/month
The ratio of Patients of refugees in total?	90% Ugandan nationals and 10% refugees	
Staff		
Teaching staff	GOU	7
	UNHCR	0
	PHC fund	0
Supporting Staff	Cleaner, Warden, etc	4
Total		11

□ 3. Information about facilities

No. of Block	Block 01 (OPD, a Maternity room, others) built in (Yr. 2013) by (LG under NUSAF)
	Block 02 (OPD, EPI, Labo, others) built in (Yr. 2001) by (EU under EDF)
	Block 03 (IPD, others) built in (Yr. 2014/15) by (PRDP)
#. Examination rooms	1
#. of Delivery Tables	1
#. of Beds for Maternity Ward	2-These are small rooms improvised for just post-natal care and observation.
# of Staff quarters	Hut: (0)
	Single SQ: (2)
	Semi-Detached SQ (2 house in 1 block) (0)
	4 in 1 SQ: (0)
# of health worker staying in SQs: (4) In total	
# of the stance of Toilet	Patients: >> Total (7) stances – not specified for male or female
	Health workers: >> Total (4) stances
Other facilities	
Water:	borehole, about 120 metres from the facility in the community. Nothing at the health centre
Electricity	Solar panel, one of the solar systems is dead; only the one of the fridge works
Communication	No, they use the in charge and other staff
Land right	Government
Land availability	Enough for expansion
Disaster records	Nothing recorded

□ 4. Request

- Complete staff quarter with kitchen and latrines
- Maternity ward
- Expansion of the general ward
- Installation of power
- Fencing
- Installation of Piped Water

□ 5. Photos

	
<p>Ward Post-natal room used as maternity ward with 2 beds only</p>	<p>Ward</p>
	
<p>Examination Room (interior)</p>	<p>Labo. Dispensing room (Interior)</p>
	<p>No water source</p>
<p>Delivery Room (interior)</p>	<p>Borehole</p>
	
<p>Latrine</p>	<p>Staff Quarters</p>

04: Adjumani District, Ukusijoni Sub-County, Maaji A HCII

1. Information about Health Unit:

Health Unit: name:	Maaji A HCII	Yr. of Est.	???
Classification	Government		
Operation by	Government		
Tel:	0778814448		
E-mail:	ocayaamos@gmail.com		
Contact person:	Ocaya Amos, Enrolled Nurse		

2. Information about operation

How many Patients come to the Health Unit to be examined (Average No. / Month)?	(15/day in June 2016, 30/day in 2017) 900/month		
# of Delivery / Month	Emergency deliveries – 5 per month		
The ratio of Patients of refugees in total?	70% are refugees		
Staff			
Teaching staff	GOU		3
	UNHCR		0
	PHC fund		0
Supporting Staff	Cleaner, Warden, etc		0
Total			3

3. Information about facilities

No. of Block	Block 01 (Examination rm)
#. Examination rooms	1
#. of Delivery Tables	0 examination table is used for emergency delivery
#. of Beds for Maternity Ward	N/A
# of Staff quarters	Hut: (1)
	Single SQ: (1)
	Semi-Detached SQ (2 house in 1 block) (1)
	4 in 1 SQ: ()
# of staff staying in SQs: (2)In total	
# of stance of Toilet	Male:(1), Female: (1) >> Total (2) stances
Other facilities	Huts for storage
Water:	Borehole 1km away from the site)
Electricity	Photosynthesis Power panel, but the battery has been worn out
Communication	N/A except personal mobil
Land right	Government
Land availability	Enough for expansion
Disaster records	Nothing recorded

4. Request

<ul style="list-style-type: none"> - Water supply, - Accommodation, - Refrigerator >> Currently vaccines are kept in Ukusijoni HCIII - Battery for solar panel,

□ 5. Photos



Ward



Ward



Labo. The dispensing room (Interior)



Delivery Room (interior)



Borehole



Latrine



Staff Quarters

05: Moyo District, Itula Sub-County, Ibakwe HC II

1. Information about Health Unit:

Health Unit: name:	Ibakwe Health Centre 11	Yr. of Est.	2014
Classification	Government		
Operation by	Government and NGOs-MTI		
Tel:	0787600673		
E-mail:	ogwalambrozini@gmail.com		
Contact person:	Ogwal Ambrose/ Atama Williams		

2. Information about operation

How many Patients come to the Health Unit to be examined (Average No. / Month)?		1400/month
# of Delivery / Month		Emergency deliveries – 8 per month
The ratio of Patients of refugees in total?		70% are refugees
Staff		
Teaching staff	GOU	2
	UNHCR	10
	PHC fund	
Supporting Staff	Cleaner, Warden, etc	7
Total		19

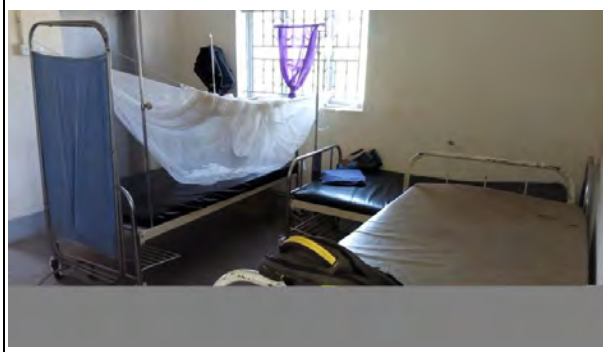
3. Information about facilities

No. of Block	Block 01 (OPD, EPI, a Maternity room, Labo, others) built in (Yr. 2014) By PRDP
#. Examination rooms	1
#. of Delivery Tables	1
#. of Beds for Maternity Ward	3
# of Staff quarters	Hut: (11)
	Single SQ: ()
	Semi-Detached SQ (2 house in 1 block) (1)
	4 in 1 SQ: ()
	# of Teacher staying in SQs: (13) In total
# of stance of Toilet	Student: Male:(1), Female: (1) >> Total (2) stances
	Teacher: Male:(), Female: () >> Total () stances
Other facilities	
Water:	Borehole within site
Electricity	Some unreliable solar
Communication	Mobile: Available
Land right	Government
Land availability	Enough for expansion
Disaster records	Nothing recorded

4. Request

<ul style="list-style-type: none"> - OPD needs to be bigger - Maternity Ward - Latrines for OPD and Staff - General Wards - Staff houses - Fencing - Lighting
--

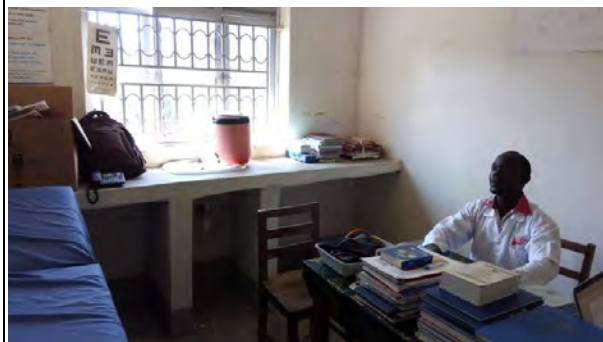
□ 5. Photos



Ward



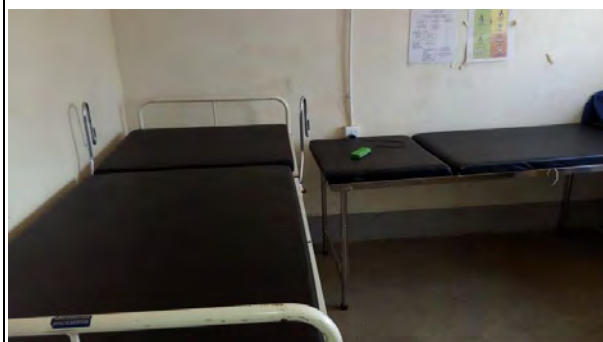
Ward



Examination Room (interior)



Labo. Dispensing room (Interior)



Delivery Room (interior)



Borehole



Latrine



Staff Quarters

06: Moyo District, Itula Sub-County, Iboa HC II

1. Information about Health Unit:

Health Unit: name:	Iboa Health Centre 11	Yr. of Est.	
Classification	Government		
Operation by	Government and NGOs-MTI		
Tel:	0789489158/0779752691		
E-mail:	rayacire@gmail.com		
Contact person:	Acire Ronald/ Bania Irene		

2. Information about operation

How many Patients come to the Health Unit to be examined (Average No. / Month)?	900-1000/month		
# of Delivery / Month	Emergency deliveries – 3-6 per month		
The ratio of Patients of refugees in total?	1:2, Nationals: Refugees		
Staff			
Teaching staff	GOU		2
	UNHCR		8
	PHC fund		
Supporting Staff	Cleaner, Warden, etc		8
Total			18

3. Information about facilities

No. of Block	Block 01 (OPD, a Maternity room, Labo, others) built in (Yr 1997) by (Not known by the staff)		
#. Examination rooms	1		
#. of Delivery Tables	1		
#. of Beds for Maternity Ward	0		
# of Staff quarters	Hut: (5)		
	Single SQ: (1)		
	Semi-Detached SQ (2 house in 1 block) (1)		
	4 in 1 SQ: ()		
# of Teacher staying in SQs: (9) In total			
# of stance of Toilet	Student: Male:(2), Female: (1) >> Total (3) stances		
	Teacher: Male:(), Female: () >> Total () stances		
Other facilities			
Water:	Piped water, Well (300m in the community,)		
Electricity	No power		
Communication	TEL(Fixed line), Mobile: Available		
Land right	Government		
Land availability	Enough for expansion		
Disaster records	Nothing recorded		

4. Request

<ul style="list-style-type: none"> - OPD needs to bigger - Maternity Ward - General Wards - Staff houses - Fencing - Borehole - Lighting

□ 5. Photos

Ward - NO Ward but the only structure has 3 rooms	Ward
	Lab and dispensing in the same room as for consultation room.
Examination Room (interior)	Labo. Dispensing room (Interior)
	
Delivery Room (interior)	Borehole
	
Latrine	Staff Quarters

07: Moyo District, itula Sub-County, Kali HC II

1. Information about Health Unit:

Health Unit: name:	Kali HC 11	Yr. of Est.	1994
Classification	Government		
Operation by	Government and NGOs-MTI		
Tel:	0779196112/0775992880		
E-mail:	Unziemmanuel300@gmail.com		
Contact person:	Unzi Emmanuel/ Ogama George		

2. Information about operation

How many Patients come to the Health Unit to be examined (Average No. / Month)?	1100/month	
# of Delivery / Month	Emergency deliveries – 3-6 per month	
The ratio of Patients of refugees in total?	1:3, Nationals: Refugees	
Staff		
Teaching staff	GOU	3
	UNHCR	7
	PHC fund	
Supporting Staff	Cleaner, Warden, etc	9
Total		19

3. Information about facilities

No. of Block	Block 01 (OPD, Lab, a Maternity room, store, EPI others) built in (Yr 1994) By UNHCR
#. Examination rooms	1
#. of Delivery Tables	1
#. of Beds for Maternity Ward	4 (general)
# of Staff quarters	Hut: (3)
	Single SQ: (0)
	Semi-Detached SQ (2 house in 1 block) (0)
	4 in 1 SQ: (1)
# of Teacher staying in SQs: (12)In total	
# of stance of Toilet	Student: Male:(3), Female: (2) >> Total (5) stances
	Teacher: Male:(1), Female: (1) >> Total (2) stances
Other facilities	
Water:	borehole within the site
Electricity	Unreliable solar
Communication	Mobile: Available
Land right	Government
Land availability	Enough for expansion
Disaster records	Nothing recorded

4. Request

<ul style="list-style-type: none"> - New OPD since the current one old - Maternity Ward - General Wards - Staff houses - Lighting
--

□ 5. Photos



Ward - 4 Bed multi-purpose Ward



Ward



Examination Room (interior)



Labo. Dispensing room (Interior)



Delivery Room (interior)



Borehole



Latrine



Staff Quarters

08: Moyo District, Itula Sub-County, Waka HC II

1. Information about Health Unit:

Health Unit: name:	Waka HC 11	Yr. of Est.	2011
Classification	Government		
Operation by	Government		
Tel:	0787-129641		
E-mail:			
Contact person:	Asiki Rasul		

2. Information about operation

How many Patients come to the Health Unit to be examined (Average No. / Month)?		750-900/month
# of Delivery / Month		Emergency deliveries – 3-6 per month
The ratio of Patients of refugees in total?		1:3, Nationals: Refugees
Staff		2
Teaching staff	GOU	2
	UNHCR	0
	PHC fund	
Supporting Staff	Cleaner, Warden, etc	2
Total		4

3. Information about facilities

No. of Block	Block 01 (OPD, Lab, a Maternity room, store, EPI others) built in (Yr 1994) By UNHCR
#. Examination rooms	1
#. of Delivery Tables	0
#. of Beds for Maternity Ward	0
# of Staff quarters	Single SQ: (0)
	Semi-Detached SQ (2 house in 1 block) (0)
	4 in 1 SQ: (1)
# of Teacher staying in SQs: (4)In total	
# of stance of Toilet	Student: Male:(2), Female: (2) >> Total (4) stances
	Teacher: Male:(0), Female: (0) >> Total (0) stances
Other facilities	
Water:	Fetch the River like 0.5km
Electricity	No power
Communication	Mobile: Available
Land right	Government
Land availability	Enough for expansion
Disaster records	Flooding since 2011

4. Request

<ul style="list-style-type: none"> - New OPD since the current one old - Maternity Ward - General Wards - Staff houses - Lighting
--

□ 5. Photos

<p>No Ward</p>	
<p>Ward</p>	<p>Ward</p>
	
<p>Examination Room (interior)</p>	<p>Labo. Dispensing room (Interior)</p>
<p>No delivery room</p>	<p>No borehole</p>
<p>Delivery Room (interior)</p>	<p>Borehole</p>
	
<p>Latrine</p>	<p>Staff Quarters</p>

13.3 Education

Sector: Education (Primary Education) Project Number: E-1
Health: H; Education: E; Water Supply: W; Roads/Small Bridges: RB

Item	Content
Project Name	The Project for improvement of Primary Schools in the Western Districts in West Nile Sub-Region (Arua / Yumbe Districts)
Project Description	This project will construct additional classrooms, teacher accommodations, and toilets in ten schools in the Sub-Counties which have been heavily impacted by the Refugee Influx in the Western Districts (Arua / Yumbe Districts) of West Nile Sub-Region.
Background	<p>In the five Districts hosting refugee settlements in West Nile Sub-Region - Adjumani, Arua, Koboko, Moyo, and Yumbe - the refugee influx from South Sudan has continued since June 2016 and it reached 750,000 refugees by the end of July 2017. 190,000 of the increased population are counted as school-age youths (age 6–12), accounting for about 25% of the total refugee population.</p> <p>As a result, the educational environment has greatly deteriorated due to a surge of students in educational facilities receiving refugees.</p> <p>In the Arua and Yumbe Districts, the school-aged population (ages 6-12) increased by 145,000 for a year from June 2016, meaning that about 2,900 new primary school classrooms are now required.</p> <p>Currently, some schools are forced to conduct classes outdoors under the shade of trees, but classes cannot be offered on a consistent basis due to shifting weather conditions.</p> <p>Furthermore, the increase in the number of students poses an administrative issue, due to the fact that schools located near refugee settlements have received more than 5,000 students per school, meaning that each class now contains more than 400 students (in the case of Primary Grade 1: P1), and making it difficult to maintain a qualified education.</p> <p>As is the case with remote areas, Sub-Counties in the project area hosting refugee settlements are far from urban areas. While school facilities are planned, it is essential to allocate staff quarters from the viewpoint of securing stable school operation. Staff quarter development does not receive sufficient attention and the quarters are usually in worse conditions than classrooms. Teacher-related issues include significant commuting time from urban areas and late arrivals and absenteeism affected by the commuting time as well as unreliable traffic conditions on unpaved roads. . In response to the strong need to build staff quarters along with classrooms and latrines to improve the learning environment, these collective improvements have been given a high priority in the Districts' development plan.</p>
Target Areas	Odupi, Uriama Sub-Counties in Arua District, Ariwa, Kochi, Kululu, Odravu, and Romogi Sub-Counties in Yumbe District
Project Objectives	<p>Project Objective: To improve accessibility to primary education as well as improve the learning environments in Sub-Counties which have been significantly impacted by the refugee influx in Arua and Yumbe Districts</p> <p>Outputs: Primary education facilities are expanded in the target Sub-Counties.</p>
Beneficiaries	<p>Direct Beneficiaries: 1,050 students and 12 teachers in Odupi, Uriama Sub-Counties and nearby refugee settlements in Arua District; 2,450 students and 28 teachers in Ariwa, Kochi, Kululu, Odravu, and Romogi Sub-Counties and nearby refugee settlements in Yumbe District. Total: 3,580 persons</p> <p>Indirect Beneficiaries: residents of Odupi, Uriama Sub-Counties and nearby refugee settlements in Arua District; and residents of Ariwa, Kochi, Kululu, Odravu, and Romogi Sub-Counties and nearby refugee settlements in Yumbe District. Total: 757,240 persons</p>
Relevant Government and Partner Organisations	<p>Central: Approval of facility planning content by the MoES Planning Office</p> <p>District: District Education Office of Arua, and of Yumbe District: Review and approval of facility plan/progress supervision during construction / maintain facility maintenance after completion of construction / required personnel dispatch plan and budget allocation plans</p> <p>International Organizations: partial budget support needed for allocating teaching staff, based on discussions with Districts.</p>
Project Component	<p>Each school consists of the following facility components.</p> <ul style="list-style-type: none"> • Classrooms (2 classrooms/building) x 2 Bldg. • Classrooms (3 classrooms/building) x 1 Bldg. • Administrative office x 1 Bldg. • Latrines (5 stance pit latrines /building) x 3 Bldg. (1 each for boys, girls and faculty staff) • Latrines for staff quarters (2 stances, 2 shower rooms/building) x 2 Bldgs. • Staff Quarters (2 housing units/building) x 2 Bldgs. • Educational equipment (not including textbooks), furniture <p>Planned Area: 10882.55 m²: 1,088.25 m² per existing school site x 10 existing school sites</p>

Item	Content
Summary of Construction Plan and Schedule	Preparatory Survey ~ Consultant Contract: 12 months Detailed Design ~ Tender Document Preparation ~ Tender ~ Contract: 10 months Construction Period: 1.5 years Construction Plan: Split into 2.3 lots to be constructed by local construction companies.
Site Conditions	Since the plans concern existing school sites, hearings have been conducted with the schools to confirm there is no history of natural disasters at the sites.
Proposed Assessment Criteria	<p>Relevance</p> <p>1. Project Beneficiaries In line with Uganda’s regional development plan promoting comprehensive support for refugees, the project will target the residents of the Sub-Counties hosting refugee settlements which have been significantly impacted by the refugee influx in the Arua and Yumbe Districts</p> <p>2. Project Purpose and Urgency Educational indicators worsened by the influx of refugees: Improvement of the pupil-classroom ratio (PCR) and the pupil-teacher ratio (PTR) is required as soon as possible.</p> <p>3. Contribution to Achieving Goals of Mid-to-long Term Development Plans In the National Development Plan (NDP2015/16-2019/20), education sector development is listed along with the health and water sanitation sectors under the goal of “Enhancing Human Capital Development.”</p> <p>Effectiveness</p> <p>[Quantitative Effects]</p> <ul style="list-style-type: none"> • Net and Gross Enrollment Rates in the target Districts at 3 years after project completion • Number of Classes implemented per year in new classrooms at 3 years after project completion <p>[Qualitative Effects]</p> <ul style="list-style-type: none"> • The shortage of classrooms and educational equipment is solved; student's learning environment and administrative work environment are improved. • Training rooms and equipment are improved in both quality and quantity, and the curriculum is appropriately implemented.
Social and Technical Considerations	<p>Target Sub-Counties and (Z/S)</p> <p>Arua District:</p> <ul style="list-style-type: none"> • Odupi Sub-County and (Zone 2: Siripi and Zone 6: Ofua in Rhino Camp settlement and Zone 1, 2 and 3 in Imvepi Settlements) • Uriama Sub-County and (Zone 1,2 and 6 in Rhino-Camp Settlement) <p>Yumbe District:</p> <ul style="list-style-type: none"> • Ariwa Sub-County and (zone 5 in Bidi Bidi settlement) • Kochi Sub-County and (zone 2 in Bidi Bidi settlement) • Kululu Sub-County and (zone 3 in Bidi Bidi settlement) • Odravu Sub-County and (zone 4 in Bidi Bidi settlement) • Romogi Sub-County and (zone 1 and 2 in Bidi Bidi settlement) <p>Specific considerations may be required in response to social situations in any of the target communities.</p> <p>For refugee acceptance, it is necessary to arrange an interpreter as necessary not to make a language barrier and to devise measures such as ALP (Accelerated Learning Program) for students whose learning level has been affected by confusions created by the disturbance. And also, since learning is influenced by the nutritional situation particularly for refugees, it is important to secure food through such arrangements as school lunch programme supported by not only partners but also communities.</p> <p>In addition, since schools are expected to be “open facilities” so that they will be used as a place of mutual understanding and dialogue in the community, they are to be open to the community at night and on holidays. In doing so, attention must be paid so that the facilities will not be dominated by specific tribes or groups in multi-ethnic communities.</p>

Appendix 1: List of target schools and location map

Appendix 2: Outline of target schools

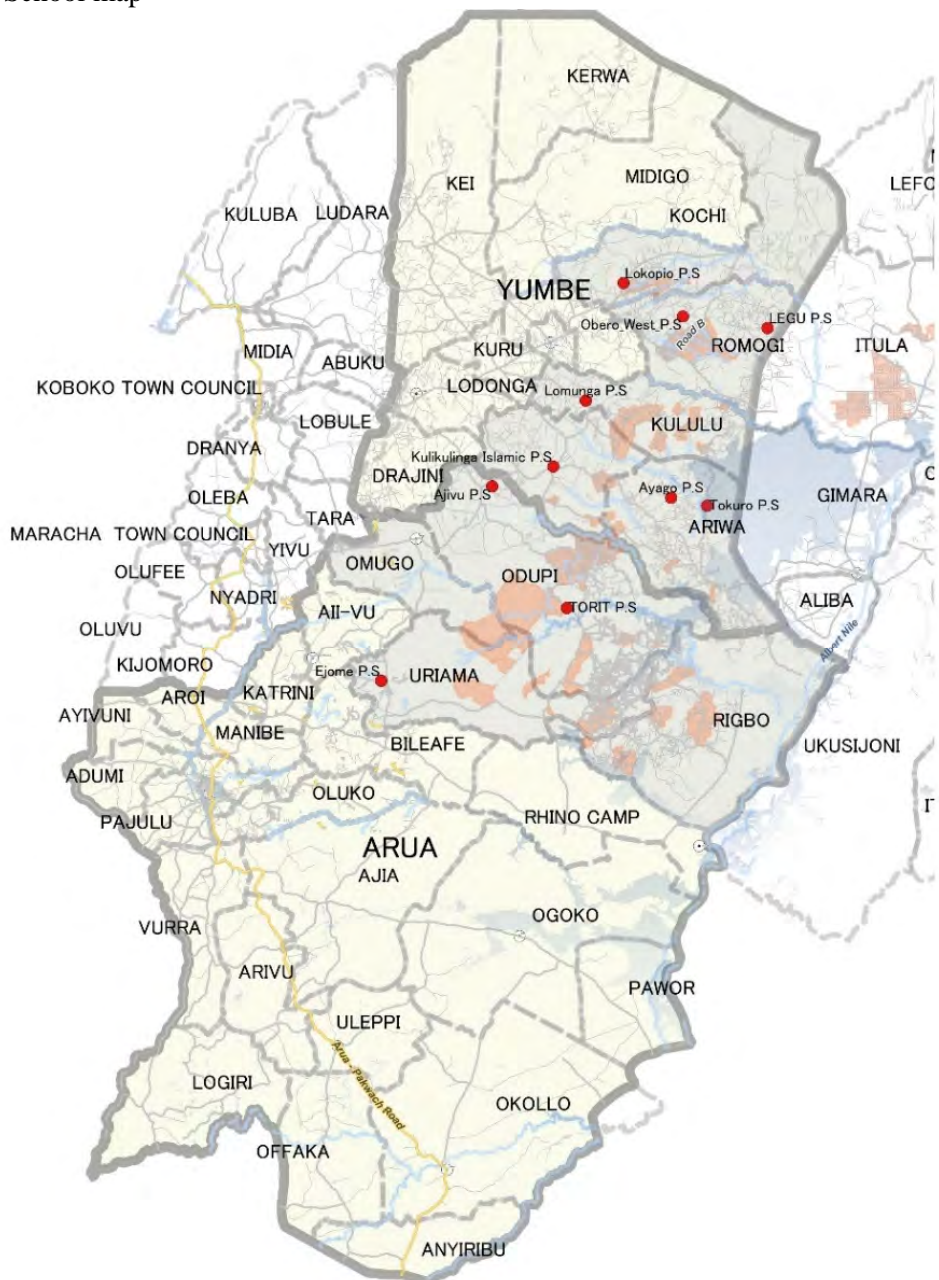
Appendix 1: Proposed School list and locations

☐ Proposed School list

No.	District	Sub-County	Score	School	# of Pupil			Classroom		Pupil / CLRM
					Refugee	Ugandan	Total	Perm	Temp.	Pupil Classroom Ratio
01	Arua	Odupi	28	TORIT P.S	929	188	1117	0	4	279
02	Arua	Odupi	28	Ajivu P.S	0	905	905	4	2	151
03	Arua	Uriama	26	Ejome P.S	0	1652	1652	2	10	138
04	Yumbe	Ariwa	31	Ayago P.S	0	744	744	4	3	107
05	Yumbe	Ariwa	31	Tokuro P.S	0	453	453	5	0	91
06	Yumbe	Romogi	30	LEGU P.S	0	505	505	4	0	126
07	Yumbe	Romogi	30	Obero_West_P.S	0	487	487	4	0	122
08	Yumbe	kululu	27	Lomunga P.S	0	709	709	4	0	177
09	Yumbe	Kochi	24	Lokopio_P.S	104	814	918	5	4	102
10	Yumbe	Odravu	23	Kulikulinga Islamic P.S	0	1158	1158	6	1	165

PS: Primary school

☐ Proposed School map



● Proposed Project Site

Appendix 2: Proposed School Data

01: Arua District, Odupi Sub-County, Torit Primary School

1 Information about School:

School name:	Torit PS	Yr. of Est.	1993
Address:		Parish	
Tel:			
E-mail:	N/A		
Contact person:			

2. Students and Staff

Shift	1 Shift								
Students	Grade	No. Stream	No. of student 907						G.Total
			Refugee			National			
			Male	Female	Total	Male	Female	Total	
Primary	Gr. 1	1	186	167	353	38	43	81	434
	Gr. 2	1	77	85	162	17	22	39	201
	Gr. 3	1	75	56	131	14	17	31	162
	Gr. 4	1	49	48	97	7	9	16	113
	Gr. 5	1	40	44	84	9	4	13	97
	Gr. 6	1	66	36	102	4	4	8	110
	Gr. 7								
									1,117
No. of Disables	Visual	0	Hearing		0	Others		0	
	Physical	0	Mental		0	Total		0	
Staff	Teaching staff		GOU			7			
			UNHCR			3(WTU)+3(NRC for ALP)			
			PTA			2			
	Supporting Staff		Cleaner, Warden, etc			1 cook			
									Total 13







3 Information about school facilities

No. of Block	Block 01 (Admi.) (Semi-P.)
	Block 02 (Small 4 CRs) (Semi-P.)
No. Staff quarters	Hut: ()
	Single SQ: ()
	Semi-Detached SQ (2 house in 1 block) (Semi-Perm. x 1)
	4 in 1 SQ: (0)
	# of Teacher staying in SQs: (2)In total
# of the stance of Toilet	All broken
Other facilities	Kitchen, Dining, Auditorium, Gym, Laboratory, Workshop etc., if available None of the above
Water:	borehole 50m away (broken)
Electricity	not available
Communication	Use a mobile phone of the head teacher
Land right	Government
Land availability	Enough for expansion
Disaster records	Nothing recorded

4 Request

- Staff quarters with kitchen and VIP latrines
- VIP latrines for the school for both pupils and teachers
- NRC will build 5CRs + 1 Staffroom for ALP

5. Photos

	
Classroom / Administrative Block	Classroom Block
	
Outside classroom	Classroom interior
	
Latrines	Borehole/ water point not functional

02: Arua District, Odupi Sub-County, Ajivu Primary School

□ 1 Information about School:

School name:	Ajivu PS	Yr. of Est.	1996
Address:	P.O.Box 135, Arua	Parish	Okavu Parish
Tel:	0774628495 – Deputy head teacher; 0783428069 – head teacher; 0782587347 – SMC chairman		
E-mail:	N/A		
Contact person:	Avudria Wilson – Head teacher; Titre Emmanuel – SMC chairman		

□ 2. Students and Staff

Shift	1 Shift									
Students	Grade	No. Stream	No. of student 907							
			Refugee			National				
			Male	Female	Total	Male	Female	Total	G.Total	
Primary	Gr. 1	1	0	0	0	156	151	307	304	
	Gr. 2	1	0	0	0	94	92	186	186	
	Gr. 3	1	0	0	0	71	76	147	147	
	Gr. 4	1	0	0	0	56	62	118	118	
	Gr. 5	1	0	0	0	53	40	91	91	
	Gr. 6	1	0	0	0	34	08	42	42	
	Gr. 7	1	0	0	0	12	05	17	17	
No. of Disables	Visual		0		Hearing		0		Others	0
	Physical		0		Mental		0		Total	0
Staff	Teaching staff		GOU				10			
			UNHCR				0			
			PTA				2			
	Supporting Staff		Cleaner, Warden, etc				1 cook			
Total									13	

□ 3 Information about school facilities

No. of Block	Block 01 (4 CRs) (Perm.) built in (Yr. 2004) by (local Government) Block 02 (2 CRs) (Temp.) built in (Yr.) by ()
No. Staff quarters	Hut: (3)
	Single SQ: (0)
	Semi-Detached SQ (2 house in 1 block) (0)
	4 in 1 SQ: (0)
	# of Teacher staying in SQs: (3)In total
# of stance of Toilet	Student: Male:(2), Female: (2) >> Total (4) stances
	Teacher: Male:(), Female: () >> Total () stances; teachers share with pupils
Other facilities	Kitchen, Dining, Auditorium, Gym, Laboratory, Workshop etc., if available None of the above
Water:	Borehole within site
Electricity	No
Communication	No phone. Use the ones of the headteacher and deputy
Land right	Government, not leased, no land title
Land availability	Enough for expansion
Disaster records	Nothing recorded

□ 4 Request

<ul style="list-style-type: none"> - Fully furnished classroom block with 7 classes and office - Staff quarters with kitchen and VIP latrines - VIP latrines for the school for both pupils and teachers

□ 5. Photos

	
<p>Classroom / Administrative Block</p>	<p>Classroom / Administrative Block</p>
	 
<p>Classroom / Administrative Block (Interior)</p>	<p>Classroom / Administrative Block (Interior)</p>
	
<p>Latrines</p>	<p>Borehole</p>
	
<p>Staff Quarters</p>	<p>Staff Quarters</p>

03: Arua District, Uriama Sub-County, Ejome Primary School

1 Information about School:

School name:	EJOME P/S	Yr. of Est.	1959
Address:	P.O. BOX 1582 ARUA	Parish	EJONI
Tel:	-		
E-mail:	-		
Contact person:	ERIMA PETER (Head Teacher—0782984664)		
	ANDIMA MJCHEAL (SMC Chairman—0779742895)		

2. Students and Staff

Shift	1 Shift / 2 Shift									
Students	Grade	No. Stream	No. of student; 1,652						G.Total	
			Refugee			National				
			Male	Female	Total	Male	Female	Total		
Primary	Gr. 1	2	0	0	0	249	255	504	504	
	Gr. 2	1	0	0	0	131	142	273	273	
	Gr. 3	1	0	0	0	149	154	303	303	
	Gr. 4	1	0	0	0	137	136	273	273	
	Gr. 5	1	0	0	0	87	81	168	168	
	Gr. 6	1	0	0	0	61	44	105	105	
	Gr. 7	1	0	0	0	21	5	26	26	
No. of Disables	Visual	0		Hearing		0		Others	0	
	Physical	0		Mental		0		Total	0	
Staff										
Teaching staff	GOU		18							
	UNHCR		0							
	PTA		0							
Supporting Staff	Cleaner, Warden, etc		0							
		Total		18						

3 Information about school facilities

No. of Block	Block 01 (2 CRs) (Perm.) built in (Yr. 2007/2008) by (SFG) already has serious cracks
	Block 02 (5 CRs) (Temp.) built in (Yr. 2000) by (Parents)
	Block 03 (5 CRs) (Temp.) built in (Yr. 2000) by (Parents)
No. Staff quarters	Hut: (7)
	Single SQ: (7) Temporary
	Semi-Detached SQ (2 house in 1 block) (0)
	4 in 1 SQ: (0)
# of Teacher staying in SQs: (15)	
# of stance of Toilet	Student: Male:(8), Female: (4) >> Total (12) stances
	Teacher: Male:(1), Female: (1) >> Total (2) stances temporary
Other facilities	Kitchen, Dining, Auditorium, Gym, Laboratory, Workshop etc., if available None of the above
Water:	Borehole within site
Electricity	No
Communication	No except for Headteacher and SMC Chairman
Land right	Government, No land title
Land availability	Enough for expansion
Disaster records	Nothing recorded

4 Request

<ul style="list-style-type: none"> - Fully furnished classrooms - Staff quarters
--

□ 5. Photos

	
Classroom / Administrative Block	Classroom / Administrative Block
	
Classroom / Administrative Block (Interior)	Classroom / Administrative Block (Interior)
	
Latrines	Borehole
	
Staff Quarters	Staff Quarters

04: Yumbe District, Ariwa Sub-County, Ayago Primary School

□ 1 Information about School:

School name:	Ayago PS	Yr. of Est.	Started a community school in 2005 and taken by Government in 2007
Address:		Parish	Okuyo
Tel:	0753290065		
E-mail:	-		
Contact person:	Baga George		

□ 2. Students and Staff

Shift	1 Shift								
Students	Grade	No. Stream	No. of student						G.Total
			Refugee			National			
			Male	Female	Total	Male	Female	Total	
Primary	Gr. 1	1	0	0	0	102	133	235	235
	Gr. 2	1	0	0	0	69	90	159	159
	Gr. 3	1	0	0	0	57	59	116	116
	Gr. 4	1	0	0	0	53	56	109	109
	Gr. 5	1	0	0	0	36	45	81	81
	Gr. 6	1	0	0	0	21	23	44	44
	Gr. 7	No classrooms. P7 will start coming year because there is temporary put up by FCA							
No. of Disables	Visual	1 Male		Hearing		5 males		Others	
	Physical	3 male, 1 female		Mental				Total	
Staff									
Teaching staff	GOU			10					
	UNHCR			0					
	PTA			0					
Supporting Staff	Cleaner, Warden, etc			0					
				Total		10			

□ 3 Information about school facilities

No. of Block	Block 01 (4 CRs) (Perm..) built in (Yr.2009) by (GOU- SFG/PRDP)
	Block 02 (3 CRs) (Temporary) being constructed by FCA
No. Staff quarters	Hut: (6)
	Single SQ: ()
	Semi-Detached SQ (2 house in 1 block) (1)
	4 in 1 SQ: ()
# of Teacher staying in SQs: (9) In total	
# of stance of Toilet	Student: Male:(5), Female: (5) >> Total (10) stances
	Teacher: Male:(0), Female: (0) >> Total (0) stances
Other facilities	
Water:	Piped water, Well (200 m away in the community)
Electricity	No Power
Communication	Mobile: Available
Land right	Government
Land availability	Enough for expansion
Disaster records	Nothing recorded

□ 4 Request

<ul style="list-style-type: none"> - At least 3 Classrooms plus office, - Staff room, - Latrines - Staff house and water, - Bathrooms - Fencing

□ 5. Photos

	
<p>Classroom / Administrative Block</p>	<p>Classroom / Administrative Block</p>
	
<p>Classroom / Administrative Block (Interior)- One classroom partitioned as an office, staffroom and store temporarily</p>	<p>Classroom / Administrative Block (Interior)</p>
	
<p>Latrines</p>	<p>Borehole</p>
	
<p>Staff Quarters</p>	<p>Staff Quarters</p>

05: Yumbe District, Ariwa Sub-County, Tokuro Primary School

□ 1 Information about School:

School name:	Tokuro PS	Yr. of Est.	Started in 2001 as a community and taken by the government in 2004
Address:		Parish	Ikafe
Tel:	0782-495078		
E-mail:	-		
Contact person:	Olima Hamid		

□ 2. Students and Staff

Shift	1 Shift								
Students	Grade	No. Stream	No. of student			National			G.Total
			Refugee			Male	Female	Total	
			Male	Female	Total				
Primary	Gr. 1	1	0	0	0	105	90	195	195
	Gr. 2	1	0	0	0	38	31	69	69
	Gr. 3	1	0	0	0	43	31	74	74
	Gr. 4	1	0	0	0	31	26	57	57
	Gr. 5	1	0	0	0	18	19	37	37
	Gr. 6	1	0	0	0	10	5	15	15
	Gr. 7	1	0	0	0	6	0	6	6
No. of Disables	Visual		0		Hearing		0		Others
	Physical		2		Mental		2		Total
Staff			9						
Teaching staff	GOU		9						
	UNHCR		0						
	PTA		1						
Supporting Staff	Cleaner, Warden, etc								
Total			10						


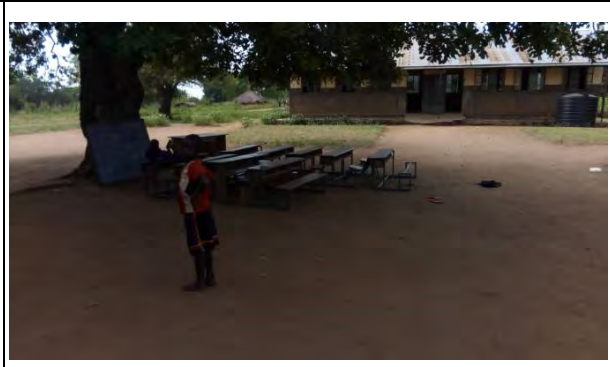
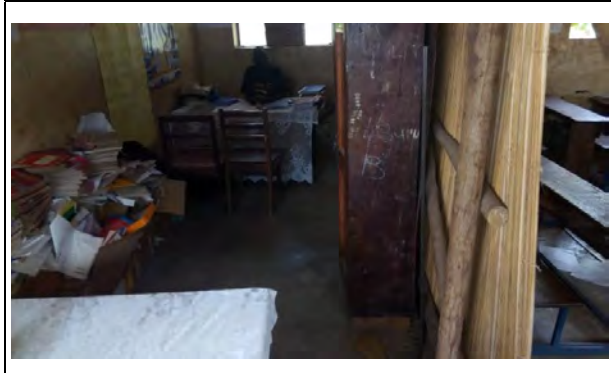




□ 3 Information about school facilities

No. of Block	Block 01 (2CRs) (Perm.)	built in (Yr-20046) by (GOU -SFG)
	Block 01 (3CRs) (Perm.)	built in (Yr-2009/10) by (_GOU- PRDD)
No. Staff quarters	Hut: (6)	
	Single SQ: (0)	
	Semi-Detached SQ (2 house in 1 block) (0)	
	4 in 1 SQ: ()	
# of Teacher staying in SQs: (6)In total		
# of stance of Toilet	Student: Male:(2), Female: (2) >> Total (4) stances	
	Teacher: Male:(2), Female: (1) >> Total (3) stances	
Other facilities		
Water:	No Water- There is a broken borehole 700m away within the community	
Electricity	No Power	
Communication	Mobile: Available	
Land right	Government	
Land availability	Enough for expansion: Yes	
Disaster records	Nothing recorded	

□ 4 Request

<ul style="list-style-type: none"> - Classrooms - Latrines need - Water source needed-Borehole - Teachers houses - Store, office and Staffroom - Library - Fencing - Light
--

□ 5. Photos

	
<p>Classroom / Administrative Block</p>	<p>Classroom / Administrative Block</p>
	
<p>Classroom / Administrative Block (Interior)- Part of classroom partitioned as office</p>	<p>Classroom / Administrative Block (Interior)</p>
	<p>No borehole</p>
<p>Latrines</p>	<p>Borehole</p>
	
<p>Staff Quarters</p>	<p>Staff Quarters</p>

06: Yumbe District, Romogi Sub-County, Legu Primary School

□ 1 Information about School:

School name:	Legu PS	Yr. of Est.	2004 (taken by GOU)
Address:		Parish	Chabili
Tel:	0777-374600		
E-mail:	-		
Contact person:	Avujaga Abdu Ibrahim/Bulia Vito		

□ 2. Students and Staff

Shift	1 Shift									
Students	Grade	No. Stream	No. of student						G.Total	
			Refugee			National				
			Male	Female	Total	Male	Female	Total		
Primary	Gr. 1	1	0	0	0	74	61	135	135	
	Gr. 2	1	0	0	0	54	73	127	127	
	Gr. 3	1	0	0	0	48	36	84	84	
	Gr. 4	1	0	0	0	47	38	85	85	
	Gr. 5	1	0	0	0	29	18	47	47	
	Gr. 6	1	0	0	0	11	16	27	27	
	Gr. 7	0	0	0	0	0	0	0	0	
No. of Disables	Visual		0	Hearing			0	Others		0
	Physical		0	Mental			0	Total		0
Staff										
Teaching staff	GOU					8				
	UNHCR					0				
	PTA					1				
Supporting Staff	Cleaner, Warden, etc									
Total										9

□ 3 Information about school facilities

No. of Block	Block 01 (2 CRs) (Perm..) built in (Yr. 2005/6) by (GOU-SFG)
	Block 02 (2 CRs) (Perm.) built in (Yr. 2007/8) by (GOU_ SFG)
No. Staff quarters	Hut: (3)
	Single SQ: ()
	Semi-Detached SQ (2 house in 1 block) (1)
	4 in 1 SQ: ()
	# of Teacher staying in SQs: (8)In total
# of stance of Toilet	Student: Male:(3), Female: (2) >> Total (5) stances
	Teacher: Male:(1), Female: (1) >> Total (2) stances
Other facilities	Kitchen, Dining, Auditorium, Gym, Laboratory, Workshop etc., if available
Water:	Borehole within site
Electricity	No Power
Communication	Mobile: Available
Land right	Government
Land availability	Enough for expansion
Disaster records	Nothing recorded

□ 4 Request

- Classrooms blocks
- Latrines
- Fencing
- Staff house

□ 5. Photos



Classroom / Administrative Block



Classroom / Administrative Block



Classroom / Administrative Block (Interior)



Classroom / Administrative Block (Interior)



Latrines



Borehole



Staff Quarters



Staff Quarters

07: Yumbe District, Romogi Sub-County, Obero West Primary School

□ 1 Information about School:

School name:	Obero West PS	Yr. of Est.	1989
Address:		Parish	BidiBidi
Tel:	0782-702863/0782-665572		
E-mail:	-		
Contact person:	Eyole Aziz Alison		

□ 2. Students and Staff

Shift	1 Shift								
Students	Grade	No. Stream	No. of student			National			G.Total
			Refugee			Male	Female	Total	
			Male	Female	Total				
Primary	Gr. 1	1	0	0		76	106	182	182
	Gr. 2	1	0	0		61	32	93	93
	Gr. 3	1	0	0		30	33	63	63
	Gr. 4	1	0	0		46	21	67	67
	Gr. 5	1	0	0		44	9	53	53
	Gr. 6	1	0	0		15	14	29	29
	Gr. 7	0	0	0		0	0	0	0
No. of Disables	Visual		0	Hearing		0		Others	
	Physical		0	Mental		0		Total	
Staff									
Teaching staff	GOU		10						
	UNHCR		0						
	PTA		2						
Supporting Staff	Cleaner, Warden, etc								
		Total		12					



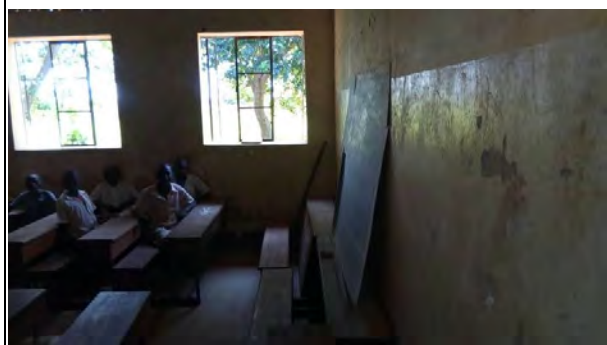




□ 3 Information about school facilities

No. of Block	Block 01 (2 CRs) (Perm.) built in (Yr. 2004/5) by (GOU- SFG)
	Block 02 (2 CRs) (Perm.) built in (Yr. 2007/8) by (GOU- SFG)
No. Staff quarters	Hut: (8)
	Single SQ: ()
	Semi-Detached SQ (2 house in 1 block) ()
	4 in 1 SQ: ()
# of Teacher staying in SQs: (8)In total	
# of stance of Toilet	Student: Male:(5), Female:(5) >> Total (10) stances
	Teacher: Male:(2), Female:(2) >> Total (4) stances
Other facilities	Kitchen, Dining, Auditorium, Gym, Laboratory, Workshop etc., if available
Water:	Borehole 500m away in the community)
Electricity	No Power
Communication	Mobile: Available
Land right	Government
Land availability	Enough for expansion
Disaster records	Nothing recorded

□ 4 Request

<ul style="list-style-type: none"> - Classrooms blocks - More office space, - Store - Library - Latrines - Teachers houses - Borehole
--

□ 5. Photos

	
<p>Classroom / Administrative Block</p>	<p>Classroom / Administrative Block</p>
	
<p>Classroom / Administrative Block (Interior)</p>	<p>Classroom / Administrative Block (Interior)_ Partitioned to cater for 2 classes</p>
	<p>No Borehole</p>
<p>Latrines</p>	<p>Borehole</p>
	
<p>Staff Quarters</p>	<p>Staff room under the tree</p>

08: Yumbe District, Kululu Sub-County, Lomunga Primary School

1 Information about School:

School name:	Lomunga P.S	Yr. of Est.	1970
Address:		Parish	
Tel:	0772994872		
E-mail:	-		
Contact person:	Abale Zuberi (Head Teacher)		

2. Students and Staff

Shift	1 Shift								
Students	Grade	No. Stream	No. of student			National			G.Total
			Refugee			Male	Female	Total	
			Male	Female	Total				
Primary	Gr. 1	1				89	91	180	180
	Gr. 2	1				87	60	147	147
	Gr. 3	1				76	66	142	142
	Gr. 4	1				44	42	86	86
	Gr. 5	1				39	45	84	84
	Gr. 6	1				32	21	53	53
	Gr. 7	1				14	3	17	17
	Total					381	328	709	709
No. of Disables	Visual	9 Males, 07 females		Hearing		04 males, 06 Females		Others	
	Physical	1 female, 1 Male		Mental		01 Male		Total	
Staff									
Teaching staff	GOU			17					
	UNHCR			0					
	PTA			0					
Supporting Staff	Cleaner, Warden, etc								
Total				13					


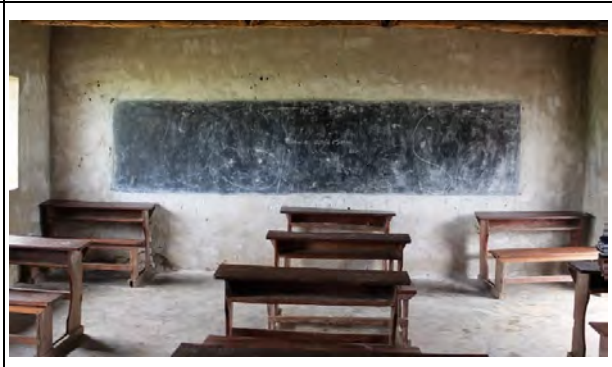
3 Information about school facilities

No. of Block	Block 01 (4 CRs) (Perm..) built in (Yr. ?) by ()
	Block 02 (Admi CRs) (Perm.) built in (Yr. ?) by ()
	Block 03 (CRs) () built in (Yr.) by ()
No. Staff quarters	Temporary houses: (6) but not on site
	# of Teacher staying in SQs: (6) In total
# of stance of Toilet	Student: Male:(4), Female: (5) >> Total (9) stances
	Teacher: Male:(1), Female: (1) >> Total (2) stances
Other facilities	Kitchen, Dining, Auditorium, Gym, Laboratory, Workshop etc., if available Shower room for emergency taking account of girls education especially with menstruation care
Water:	Borehole 500m away from the site
Electricity	No Power
Communication	Mobile: Personal mobile
Land right	Government
Land availability	Enough for expansion: Yes
Disaster records	Nothing recorded, but storm is recorded according to the explanation of Head teacher

4 Request

<ul style="list-style-type: none"> - Classrooms blocks (currently lack of classrooms for lower grade classes) - Latrines, - Staff house and - Water

□ 5. Photos

	
<p>Classroom / Administrative Block</p>	<p>Well maintained school compound: it is large to hold an several events in the area.</p>
	
<p>Classroom / Administrative Block (Interior)</p>	<p>Classroom / Administrative Block (Interior)</p>
	
<p>Hand-made learning material</p>	<p>Latrines and shower room</p>
<p>6 temporary houses available but forgot to take</p>	
<p>Staff Quarters</p>	<p>The shower room is prepared for enrolling girls taking account of a menstrual emergency; uniforms are also stocked for changing cloth.</p>

09: Yumbe District, Kochi Sub-County, Lokopio Primary School

□ 1 Information about School:

School name:	Lokopio PS	Yr. of Est.	1972 (taken by GOU)
Address:		Parish	Ombaci
Tel:	0783-435611/0783836761		
E-mail:	-		
Contact person:	Goroa Toha Abdulahi		

□ 2. Students and Staff

Shift	1 Shift								
Students	Grade	No. Stream	No. of student			National			G.Total
			Refugee			Male	Female	Total	
			Male	Female	Total				
Primary	Gr. 1	1	7	19	26	92	116	208	300
	Gr. 2	1	6	10	16	82	89	171	187
	Gr. 3	1	6	5	11	73	69	142	153
	Gr. 4	1	9	7	16	52	48	100	116
	Gr. 5	1	10	16	26	50	34	84	110
	Gr. 6	1	3	4	7	55	34	89	96
	Gr. 7	1	1	1	2	15	5	20	22
No. of Disables	Visual	9 Males, 07 females		Hearing		04 males, 06 Females		Others	
	Physical	1 female, 1 Male		Mental		01 Male		Total	
Staff				13					
Teaching staff	GOU			13					
	UNHCR			0					
	PTA			0					
Supporting Staff	Cleaner, Warden, etc								
Total				13					

□ 3 Information about school facilities

No. of Block	Block 01 (3 CRs) (Perm..) built in (Yr.) by (GOU- Sub-County)
	Block 02 (2 CRs) (Perm.) built in (Yr. 2002/3) by (GOU_ SFG)
	Block 03 (4 CRs) (S.Perm.) built in (Yr.) by (Community)
No. Staff quarters	Hut: (5)
	Single SQ: ()
	Semi-Detached SQ (2 house in 1 block) ()
	4 in 1 SQ: ()
	# of Teacher staying in SQs: (6) In total
# of stance of Toilet	Student: Male:(4), Female: (4) >> Total (8) stances
	Teacher: Male:(2), Female: (1) >> Total (3) stances
Other facilities	Kitchen, Dining, Auditorium, Gym, Laboratory, Workshop etc., if available None
Water:	Borehole within site
Electricity	No Power
Communication	Mobile: Available
Land right	Government
Land availability	Enough for expansion: Yes
Disaster records	Nothing recorded

□ 4 Request

<ul style="list-style-type: none"> - Classrooms blocks - Latrines, - Staff house and - Water (current borehole not productive)
--

□ 5. Photos



Classroom / Administrative Block



Classroom / Administrative Block



Classroom / Administrative Block (Interior)



Classroom / Administrative Block (Interior)



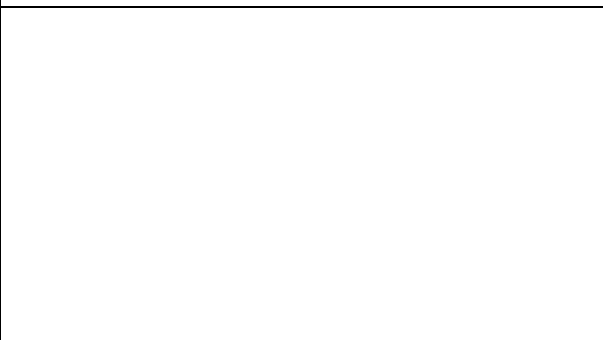
Latrines



Borehole



Staff Quarters



Staff Quarters

10: Yumbe District, Odravu Sub-County, Kulikulinga Islamic Primary School

1 Information about School:

School name:	Kulikulinga Islamic PS	Yr. of Est.	As a community inn 1956, Taken by Government in 1997
Address:		Parish	Oluba
Tel:	0782-021924		
E-mail:	-		
Contact person:	Dramadri Toha		

2. Students and Staff

Shift		1 Shift							
Students	Grade	No. Stream	No. of student						
			Refugee			National			
			Male	Female	Total	Male	Female	Total	G.Total
Primary	Gr. 1	1	1	0	1	170	152	322	323
	Gr. 2	1	0	0	0	114	90	204	204
	Gr. 3	1	1	0	1	103	99	202	203
	Gr. 4	1	0	0	0	98	78	176	176
	Gr. 5	1	0	0	0	77	58	135	135
	Gr. 6	1	0	0	0	48	43	91	91
	Gr. 7	1	0	0	0	20	06	26	26
No. of Disables	Visual	1 Males		Hearing		0		Others	0
	Physical	0		Mental		0		Total	0
Staff			19						
Teaching staff	GOU		19						
	UNHCR		0						
	PTA		1						
Supporting Staff	Cleaner, Warden, etc		3						
Total			23						

3 Information about school facilities

No. of Block	Block 01 (2 CRs) (Perm..) built in (Yr.2002/3) by (GOU- Sub-County)
	Block 02 (2 CRs) (Perm.) built in (Yr. 2002/3) by (GOU_SFG)
	Block 03 (2 CRs) (.Perm.) built in (Yr. 2017) by (GOU-SFG)
	Block 04 (1 CRs) (. Semi Perm.) built in (Yr. 2000) by (Community but dilapidated)
No. Staff quarters	Hut: (4)
	Single SQ: (2)- semi-permanent
	Semi-Detached SQ (2 house in 1 block) ()
	4 in 1 SQ: ()
# of Teacher staying in SQs: (6)In total	
# of stance of Toilet	Student: Male:(5), Female: (5) >> Total (10) stances
	Teacher: Male:(0), Female: (0) >> Total (0) stances
Other facilities	Store in a dilapidated house
Water:	Piped water, Well (Borehole within site but broken down not repairable)
Electricity	No Power, only one classroom connected using solar.
Communication	TEL(Fixed line), Mobile: Available
Land right	Government
Land availability	Enough for expansion
Disaster records	Nothing recorded except the water table is so high as such toilets being sunk are filled with water

4 Request

- At least 5 Classrooms blocks
- Latrines,
- Staff house
- Water (current borehole broken- not repairable),

□ 5. Photos

	
<p>Classroom / Administrative Block -Staffroom under tree</p>	<p>Classroom / Administrative Block + store</p>
	
<p>Classroom (Interior)</p>	
	
<p>Latrines</p>	<p>Borehole –Broken, 2 Toilet being excavated filled</p>
	
<p>Staff Quarters</p>	<p>Staff Quarters</p>

Sector: Education (Primary Education) Project Number: E-2

Health: H; Education: E; Water Supply: W; Roads/Small Bridges: RB

Item	Content
Project Name	The Project for improvement of Primary Schools in the Eastern Districts in West Nile Sub-Region (Adjumani / Moyo Districts)
Project Description	This project will construct additional classrooms, teacher accommodations, and toilets in ten schools in the Sub-Counties which have been heavily impacted by the Refugee Influx in the Eastern Districts (Adjumani / Moyo Districts) of West Nile Sub-Region.
Background	<p>In the five Districts hosting refugee settlements in West Nile Sub-Region - Adjumani, Arua, Koboko, Moyo, and Yumbe - the refugee influx from South Sudan has continued since June 2016 and it reached 750,000 refugees by the end of July 2017. 190,000 of the increased population are counted as school-age youths (age 6–12), accounting for about 25% of the total refugee population.</p> <p>As a result, the educational environment has greatly deteriorated due to a surge of students in educational facilities receiving refugees.</p> <p>In the Adjumani and Moyo Districts, the school-aged population (ages 6-12) increased by 75,000 for a year from June 2016, meaning that about 1,480 new primary school classrooms are now required.</p> <p>Currently, some schools are forced to conduct classes outdoors under the shade of trees, but classes cannot be offered on a consistent basis due to shifting weather conditions.</p> <p>Furthermore, the increase in the number of students poses an administrative issue, due to the fact that schools located near refugee settlements have received more than 5,000 students per school, meaning that each class now contains more than 400 students (in the case of Primary Grade 1: P1), and making it difficult to maintain a qualified education.</p> <p>As is the case with remote areas, Sub-Counties in the project area hosting refugee settlements are far from urban areas. While school facilities are planned, it is essential to allocate staff quarters from the viewpoint of securing stable school operation. Staff quarter development does not receive sufficient attention and the quarters are usually in worse conditions than classrooms. Teacher-related issues include significant commuting time from urban areas and late arrival and absenteeism affected by the commuting time as well as unreliable traffic conditions on unpaved roads. In response to the strong need to build staff quarters along with classrooms and latrines to improve the learning environment, these collective improvements have been given a high priority in the Districts' development plan.</p>
Target Areas	Ukusijoni, Dzaipi, Pakele Sub-Counties in Adjumani District, Itula Sub-County in Moyo District
Project Objectives	<p>Project Objective: To improve accessibility to primary education as well as improve the learning environments in Sub-Counties which have been significantly impacted by the refugee influx in Adjumani and Moyo Districts</p> <p>Outputs: Primary education facilities are expanded in the target Sub-Counties.</p>
Beneficiaries	<p>Direct Beneficiaries: 1,750 students and 20 teachers in Ukusijoni, Dzaipi, and Pakele Sub-Counties and nearby refugee settlements in Adjumani District; 1,750 students and 20 teachers in Itula Sub-County and nearby refugee settlements in Moyo District. Total: 3,580 persons</p> <p>Indirect Beneficiaries: residents of Ukusijoni, Dzaipi, and Pakele Sub-Counties and nearby refugee settlements in Adjumani District; and the residents of Itula Sub-County and nearby refugee settlements in Moyo District. Total: 451,875 persons</p>
Relevant Government and Partner Organisations	<p>Central: Approval of facility planning content by the MoES Planning Office</p> <p>District: District Education Office of Adjumani, and of Moyo district: Review and approval of facility plan/progress supervision during construction / maintain facility maintenance after completion of construction / required personnel dispatch plan and budget allocation plans</p> <p>International Organizations: partial budget support needed for allocating teaching staff, based on discussions with districts.</p>
Project Component	<p>Each school consists of the following facility components.</p> <ul style="list-style-type: none"> • Classrooms (2 classrooms/building) x 2 Bldg. • Classrooms (3 classrooms/building) x 1 Bldg. • Administrative office x 1 Bldg. • Latrines (5 stance pit latrines /building) x 3 Bldg. (1 each for boys, girls and faculty staff) • Latrines for Staff Quarters (2 stances, 2 shower rooms/building) x 2 Bldgs. • Staff Quarters (2 housing units/building) x 2 Bldgs. • Educational equipment (not including textbooks), furniture

Item	Content
	Planned Area: 10882.55 m ² : 1,088.25 m ² per existing school site x 10 existing school sites
Summary of Construction Plan and Schedule	Preparatory Survey ~ Consultant Contract: 12 months Detailed Design ~ Tender Document Preparation ~ Tender ~ Contract: 10 months Construction Period: 1.5 years Construction Plan: Split into 2.3 lots to be constructed by local construction companies.
Site Conditions	Since the plans concern existing school sites, hearings have been conducted with the schools to confirm there is no history of natural disasters at the sites.
Proposed Assessment Criteria	<p>Relevance</p> <p>1. Project Beneficiaries In line with Uganda's regional development plan promoting comprehensive support for refugees, the project will target the residents of the Sub-Counties hosting refugee settlements which have been significantly impacted by the refugee influx in the Adjumani and Moyo Districts</p> <p>2. Project Purpose and Urgency Educational indicators worsened by the influx of refugees: Improvement of the pupil-classroom ratio (PCR) and the pupil-teacher ratio (PTR) is required as soon as possible.</p> <p>3. Contribution to Achieving Goals of Mid-to-long Term Development Plans In the National Development Plan (NDP2015/16-2019/20), education sector development is listed along with the health and water sanitation sectors under the goal of "Enhancing Human Capital Development."</p> <p>Effectiveness</p> <p>[Quantitative Effects]</p> <ul style="list-style-type: none"> • Net and Gross Enrollment Rates in the target Districts at 3 years after project completion • Number of Classes implemented per year in new classrooms at 3 years after project completion <p>[Qualitative Effects]</p> <ul style="list-style-type: none"> • The shortage of classrooms and educational equipment is solved; student's learning environment and administrative work environment are improved. • Training rooms and equipment are improved in both quality and quantity, and curriculum is appropriately implemented.
Social and Technical Considerations	<p>Target Sub-Counties and (Z/S)</p> <p>Adjumani District:</p> <ul style="list-style-type: none"> • Ukusijoni Sub-County and (Maaji 1, 2 and 3 Settlements) • Dzaipi Sub-County and (Pagirinya, Nyumanzi Settlements, etc.) • Pakele Sub-County and (Boroli, Olua 1, 2, and Ayilo 1, 2 Settlements) <p>Moyo District: Itula Sub-County (Zone 1, 2, 3 and 4 in Palorinya settlement)</p> <p>Specific considerations may be required in response to social situations in any of the target communities.</p> <p>For refugee acceptance, it is necessary to arrange an interpreter as necessary not to make language barrier and to devise measures such as ALP (Accelerated Learning Program) for students whose learning level has been affected by confusions created by the disturbance. And also, since learning is influenced by the nutritional situation particularly for refugees,, it is important to secure food through such arrangements as school e lunch programme supported by not only partners but also communities.</p> <p>In addition, since schools are expected to be used as a place of mutual understanding and dialogue in the community as "open facilities", they are to be open to the community at night and on holidays. In doing so, attention must be paid so that specific tribes or groups will not dominate the facilities in multi-ethnic communities.</p>

Appendix 1: List of target schools and location map

Appendix 2: Outline of target schools *Attach the following information about each school

Appendix 1: List of target schools and location map

Proposed School list

No	District	Sub-County	Score	School	# of Pupil	# of CLRM	Pupil/Classroom
----	----------	------------	-------	--------	------------	-----------	-----------------

					Refugee	Jgandar	Total	Perm.	Temp.	Pupil Classroom Ratio
01	Adjumani	Ukusijoni	28	Ayiri_PS	171	526	697	8	4	58
02	Adjumani	Ukusijoni	28	Ukusijoni_PS	0	821	821	13(5 out of use)	0	103
03	Adjumani	Dzaipi	19	Dzaipi_PS	22	945	967	7	8	64
04	Adjumani	Dzaipi	19	Jurumini_PS	0	297	297	6	1	42
05	Adjumani	Pakele	16	Boroli_PS	857	498	1355	12	0	113
06	Moyo	Itula	30	YENGA P.S	1698	396	2094	10	11	100
07	Moyo	Itula	30	ORINYA P.S	1449	156	1605	10	16	62
08	Moyo	Itula	30	Chinyi P.S	2052	287	2339	8	0	292
09	Moyo	Itula	30	Iboa P.S	747	252	999	8	11	53
10	Moyo	Itula	30	WAKA P.S	894	102	996	10	11	47

PS: Primary School

Proposed School map



● Proposed Project Site

Appendix 2: Proposed School Data

01: Adjumani District, Ukusijoni Sub-County, Ayiri Primary School

1. Information about School:

School name:	AYIRI PS	Yr. of Est.	1997
Address:	P.O.Box 77 Adjumani	Parish	Ayiri
Tel:	0782480114 for the head teacher, 0785513953 for deputy head teacher and 0787629948 for SMC chairman		
E-mail:	-		
Contact person:	Vukereda Fred – head teacher; Agasi Stephen – deputy headteacher and Le`yoga Emmanuel – SMC chairman		

2. Students and Staff

Shift	1 Shift / 2 Shift								
Students	Grade	No. Stream	No. of student						G.Total
			Refugee			National			
			Male	Female	Total	Male	Female	Total	
Primary	Gr. 1	1	12	9	21	53	54	107	128
	Gr. 2	1	9	12	21	26	36	62	83
	Gr. 3	1	12	12	24	41	42	83	107
	Gr. 4	2	15	16	31	47	69	116	147
	Gr. 5	1	12	13	25	28	33	61	86
	Gr. 6	1	18	10	28	29	38	67	95
	Gr. 7	1	13	8	21	22	8	30	51
No. of Disables	Visual	20	Hearing		?		Others	20	
	Physical	?	Mental		?		Total	40	
Staff									
Teaching staff	GOU		3						
	UNHCR		8						
	PTA		0						
Supporting Staff	Cleaner, Warden, etc		2						
		Total		13					

3. Information about school facilities

No. of Block	Block 01 (4 CRs) (Perm. Semi-P. Temp.) built in (Yr. 1997) by (government)
	Block 02 (4 CRs) (Perm. Semi-P. Temp.) built in (Yr. 2003) by (government)
	Block 03 (4 CRs) (Perm. Semi-P. Temp.) built in (Yr. ?) by (government)
	Block 02 (CRs) (Perm. Semi-P. Temp.) built in (Yr.) by ()
	Block 03 (CRs) (Perm. Semi-P. Temp.) built in (Yr.) by ()
No. Staff quarters	Hut: (7) temporary
	Single SQ: (0)
	Semi-Detached SQ (2 house in 1 block) (2)
	4 in 1 SQ: (0)
# of Teacher staying in SQs: (13)In total	
# of stance of Toilet	Student: Male:(10), Female: (10) >> Total (20) stances
	Teacher: Male:(1), Female: (1) >> Total (2) stances
Other facilities	Kitchen, Dinning, Auditorium, Gym, Laboratory, Workshop etc., if available Makeshift kitchen
Water:	borehole
Electricity	Solar panel, the solar is not in use because it is spoilt
Communication	Mobile for the head teacher
Land right	Government, Private, Community
Land availability	Enough for expansion
Disaster records	Nothing recorded

4. Request

<ul style="list-style-type: none"> - Teachers Quarters complete with Kitchen and latrines - Latrines for teachers while at school - Changing room for girls
--

□ 5. Photos

	
<p>Classroom / Administrative Block</p>	<p>Classroom / Administrative Block</p>
	
<p>Classroom / Administrative Block (Interior)</p>	<p>Classroom / Administrative Block (Interior)</p>
	<p>School has no borehole</p>
<p>Latrines</p>	<p>Borehole</p>
	
<p>Staff Quarters</p>	<p>Staff Quarters</p>

02: Adjumani District, Ukusijoni Sub-County, Ukusijoni Primary School

1. Information about School:

School name:	Ukusijoni PS	Yr. of Est.	????
Address:	P.O.Box 183, Adjumani	Parish	Payaru
Tel:	0771669477 for the head teacher; 0779143573 for deputy head teacher		
E-mail:	-		
Contact person:	Abuni Johnson – head teacher and Gama Robert – deputy head teacher		

2. Students and Staff

Shift	1 Shift / 2 Shift								
Students	Grade	No. Stream	No. of student						G.Total
			Refugee			National			
			Male	Female	Total	Male	Female	Total	
Primary	Gr. 1	1	0	0	0	68	79	147	147
	Gr. 2	1	0	0	0	36	56	92	92
	Gr. 3	2	0	0	0	76	76	152	152
	Gr. 4	2	0	0	0	75	80	155	155
	Gr. 5	2	0	0	0	62	79	141	141
	Gr. 6	1	0	0	0	43	29	72	72
	Gr. 7	1	0	0	0	38	24	62	62
No. of Disables	Visual		Hearing			Others			
	Physical		Mental			Total			25
Staff									
Teaching staff	GOU		12						
	UNHCR		0						
	PTA		3						
Supporting Staff	Cleaner, Warden, etc		3						
		Total		18					








3. Information about school facilities

No. of Block	Block 01 (2 CRs) (Perm.) built in (Yr.) by (EDF/MPP)
	Block 02 (2 CRs) (Perm.) built in (Yr. 2003) by (UNHCR)
	Block 03 (2 CRs) (Perm.) built in (Yr. 2003) by (UNHCR)
	Block 02 (1 CRs) (Perm.) built in (Yr. 1997) by (JRC)
	Block 03 (1 CRs) (Perm.) built in (Yr. 1997) by (JRC)
	Block 03 (5 CRs) (Perm.) built in (Yr. 1997) by (JRC)not in use
No. Staff quarters	Hut: (1)
	Single SQ: (0)
	Semi-Detached SQ (2 house in 1 block) (2)
	4 in 1 SQ: (0)
# of Teacher staying in SQs: (6)In total	
# of stance of Toilet	Student: Male:(2), Female: (2)>> Total (4) stances
	Teacher: Male:(0), Female: (0)>> Total (0) stances
Other facilities	Kitchen, Dining, Auditorium, Gym, Laboratory, Workshop etc., if available None of the above
Water:	Borehole 800metres away
Electricity	Grid, Solar panel, not available none
Communication	Mobile for the head teacher
Land right	Government
Land availability	Enough for expansion
Disaster records	Nothing recorded

4. Request

- Teachers Quarters
- Classrooms
- Pupils toilet, Changing room for girls

□ 5. Photos

	
<p>Classroom / Administrative Block</p>	<p>Classroom / Administrative Block</p>
	
<p>Classroom / Administrative Block (Interior)</p>	<p>Classroom / Administrative Block (Interior)</p>
	<p>The school has no borehole and community borehole is far from the school</p>
<p>Latrines</p>	<p>Borehole</p>
	
<p>Staff Quarters</p>	<p>Staff Quarters</p>

03: Adjumani District, Dzaipi Sub-County, Dzaipi Primary School

□ 1. Information about School:

School name:	Dzaipi PS	Yr. of Est.	1942
Address:	P.O.Box 158 Adjumani	Parish	Mgbere
Tel:	0772312839 for the head teacher; 0772932315 for SMC chairman		
E-mail:			
Contact person:	Drali Drani Charles – Headteacher and Loka Festo – SMC chairman		

□ 2. Students and Staff

Shift	1 Shift / 2 Shift								
Students	Grade	No. Stream	No. of student						G.Total
			Refugee			National			
			Male	Female	Total	Male	Female	Total	
Primary	Gr. 1	2	5	7	12	75	83	158	170
	Gr. 2	2	0	0	0	65	86	151	151
	Gr. 3	3	0	0	0	71	76	147	147
	Gr. 4	3	3	0	3	68	96	164	167
	Gr. 5	2	1	1	2	69	76	145	147
	Gr. 6	2	0	0	0	53	73	126	126
	Gr. 7	2	4	1	5	32	22	54	59
No. of Disables	Visual		Hearing					Others	
	Physical		Mental					Total	86
Staff									
Teaching staff	GOU		9						
	UNHCR		0						
	PTA		2						
Supporting Staff	Cleaner, Warden, etc		2						
		Total		13					

□ 3. Information about school facilities

No. of Block	Block 01 (4CRs) (Perm.) built in (Yr. ?) by (???)
	Block 02 (3CRs) (Perm.) built in (Yr. ?) by (SFG)
	Block 03 (4CRs) (Semi-P.) built in (Yr. ?) by (NURP)
	Block 04 (4CRs) (Semi-P.) built in (Yr. ?) by (NURP)
No. Staff quarters	Hut: (1)
	Single SQ: (0)
	Semi-Detached SQ (2 house in 1 block) (2)
	4 in 1 SQ: (0)
	# of Teacher staying in SQs: (8)In total
# of stance of Toilet	Student: Male:(15), Female:(15)>> Total (30) stances
	Teacher: Male:(1), Female:(1)>> Total (2) stances
Other facilities	Kitchen, Dining, Auditorium, Gym, Laboratory, Workshop etc., if available None of the above
Water:	borehole with poor yield
Electricity	Grid for office and P7 class
Communication	Mobile, for the head teacher
Land right	Government
Land availability	Enough for expansion
Disaster records	Nothing recorded

□ 4. Request

- Teachers quarters
- Classrooms
- Fencing

□ 5. Photos

	
Classroom / Administrative Block	Classroom / Administrative Block
	
Classroom / Administrative Block (Interior)	Classroom / Administrative Block (Interior)
	
Latrines	Borehole
	
Staff Quarters	Staff Quarters

04: Adjumani District, Dzaipi Sub-County, Jurumini Primary School

□ 1. Information about School:

School name:	Jurumini PS	Yr. of Est.	1988
Address:	P.O.Box 196, Adjumani	Parish	Ajugopi
Tel:	0776371591 – head teacher		
E-mail:			
Contact person:	Selle Leone		

□ 2. Students and Staff

Shift	1 Shift / 2 Shift								
Students	Grade	No. Stream	No. of student						G.Total
			Refugee			National			
			Male	Female	Total	Male	Female	Total	
Primary	Gr. 1	1	0	0	0	36	16	52	52
	Gr. 2	1	0	0	0	16	22	38	38
	Gr. 3	1	0	0	0	26	18	44	44
	Gr. 4	1	0	0	0	36	38	74	74
	Gr. 5	1	0	0	0	15	23	38	38
	Gr. 6	1	0	0	0	14	15	29	29
	Gr. 7	1	0	0	0	10	12	22	22
No. of Disables	Visual		Hearing			Others			
	Physical		Mental			Total			
Staff									
Teaching staff	GOU		8						
	UNHCR		0						
	PTA		1						
Supporting Staff	Cleaner, Warden, etc		1						
			Total			10			





□ 3. Information about school facilities

No. of Block	Block 01 (1 CRs) (Semi-P) built in (Yr. 1996) by (government under NURP) Block 02 (4 CRs) (Perm.) built in (Yr.2005) by (government under NUSAF) Block 03 (2 CRs) (Perm.) built in (Yr.2014) by (LWF)
No. Staff quarters	Hut: (0)
	Single SQ: (1)
	Semi-Detached SQ (2 house in 1 block) (1)
	4 in 1 SQ: (0)
# of Teacher staying in SQs: (4)In total	
# of stance of Toilet	Student: Male:(5), Female: (3) >> Total (8) stances
	Teacher: Male:(1), Female: (1) >> Total (2) stances
Other facilities	Kitchen, Dining, Auditorium, Gym, Laboratory, Workshop etc., if available None of the above
Water:	NO - use the one of the community's which is about 900meters away.
Electricity	NO
Communication	NO
Land right	Government
Land availability	Enough for expansion
Disaster records	Nothing recorded, but Storm and Lightning

□ 4. Request

<ul style="list-style-type: none"> - Classrooms - Teachers Quarters - VIP latrines - Library - Fencing - Power
--

□ 5. Photos

	
<p>Classroom / Administrative Block</p>	<p>Classroom / Administrative Block</p>
	
<p>Classroom / Administrative Block (Interior)</p>	<p>Classroom / Administrative Block (Interior)</p>
	
<p>Latrines</p>	<p>Borehole School has no borehole. There is an underground tank where rainwater from the roof is collected and then hand pumped for use.</p>
	
<p>Staff Quarters</p>	<p>Staff Quarters</p>

05: Adjumani District, Pakele Sub-County, Boroli Primary School

□ 1. Information about School:

School name:	Boroli PS	Yr. of Est.	1973
Address:	-	Parish	Boroli
Tel:	0773797895 for the head teacher; 0774277853 for deputy H/T and 0785565233 for SMC chairman		
E-mail:	-		
Contact person:	Edea Esther – head teacher; Minzira Florence – Deputy H/T; Odendi Michael -SMC chairman		

□ 2. Students and Staff

Shift	1 Shift / 2 Shift (morning – normal PS; afternoon – accelerated learning Program)								
Students	Grade	No. Stream	No. of student						G.Total
			Refugee			National			
			Male	Female	Total	Male	Female	Total	
Primary	Gr. 1	2	67	42	109	45	44	89	198
	Gr. 2	2	75	65	140	54	46	100	240
	Gr. 3	2	84	86	170	45	42	87	257
	Gr. 4	2	87	82	169	44	40	84	253
	Gr. 5	2	87	65	152	40	34	74	226
	Gr. 6	1	39	30	69	27	18	45	114
	Gr. 7	1	29	19	48	13	6	19	67
No. of Disables	Visual	7		Hearing		6		Others	1 - epileptic
	Physical	6		Mental		0		Total	20
Staff									
Teaching staff	GOU		2						
	UNHCR		0						
	PTA		0						
	Windle Trust		19						
Supporting Staff	Cleaner, Warden, etc		3						
			Total		24				

□ 3. Information about school facilities

No. of Block	Block 01 (4 CRs) (Perm.) built in (Yr.1998) by (government) Old structure
	Block 02 (4 CRs) (Perm.) built in (Yr. 1998) by (government) old structure
	Block 03 (2 CRs) (Perm.) built in (Yr. 2015) by (LWF)
	Block 04 (2 CRs) (Perm.) built in (Yr. 2015) by (LWF)
	Block 05 (2 CRs) (Perm.) built in (Yr. 2015) by (LWF)
	Block 06 (2 CRs) (Perm.) built in (Yr. 2015) by (LWF)
No. Staff quarters	Hut: (2)
	Single SQ: (2) – semi-permanent
	Semi-Detached SQ (2 house in 1 block) (3)
	4 in 1 SQ: (0)
	# of Teacher staying in SQs: (20)In total
# of stance of Toilet	Student: Male:(9), Female: (8) >> Total (17) stances
	Teacher: Male:(0), Female: (0) >> Total (0) stances. Teachers go to the staff Quarters for toilet
Other facilities	Small kitchen
Water:	Piped water, within site motorized borehole
Electricity	Solar panel for the motorized borehole and for 2 classes
Communication	Mobile for the head teacher
Land right	Government
Land availability	Enough for expansion
Disaster records	Nothing recorded

□ 4. Request

- Classroom block of 4 classes
- Teachers quarters
- Teachers latrine at school

□ 5. Photos

		
<p>Classroom / Administrative Block</p>	<p>Classroom / Administrative Block</p>	
		
<p>Classroom / Administrative Block (Interior)</p>	<p>Classroom / Administrative Block (Interior)</p>	<p>Staff Quarters</p>
		
		
<p>Latrines</p>	<p>Borehole motorized borehole – upper picture shows reservoir tanks and lower picture shows standpipes in the compound.</p>	

06: Moyo District, Itula Sub-County, Yenga Primary School

1. Information about School:

School name:	Yenga PS	Yr. of Est.	1995
Address:		Parish	Yenga
Tel:	0787-146794		
E-mail:	-		
Contact person:	Jobile Nazereno		

2. Students and Staff

Shift	1 Shift									
Students	Grade	No. Stream	No. of student						G.Total	
			Refugee			National				
			Male	Female	Total	Male	Female	Total		
Primary	Gr. 1	2	149	138	287	30	34	64	351	
	Gr. 2	2	108	94	202	41	41	82	290	
	Gr. 3	2	121	127	248	36	43	79	227	
	Gr. 4	2	149	106	255	33	28	51	316	
	Gr. 5	2	142	125	267	29	31	60	327	
	Gr. 6	2	108	107	215	23	11	34	249	
	Gr. 7	2	132	92	224	19	7	26	250	
No. of Disables	Visual		0			Hearing		2		Others
	Physical		1			Mental		0		Total
Staff										
Teaching staff	GOU		10							
	UNHCR		12							
	PTA		0							
Supporting Staff	Cleaner, Warden, etc									
		Total		22						

3. Information about school facilities

No. of Block	Block 01 (2 CRs) (Perm.) built in (Yr. 2000) by (GOU- SFG)
	Block 02 (2 CRs) (Perm..) built in (Yr. 2004) by (GOU- SFG)
	Block 03 (4 CRs) (Perm..) built in (Yr. 2004) by (GOU- SFG)
No. Staff quarters	Hut: (0)
	Single SQ: ()
	Semi-Detached SQ (2 house in 1 block) (2)
	4 in 1 SQ: ()
	# of Teacher staying in SQs: (6) In total
# of stance of Toilet	Student: Male:(10), Female: (10) >> Total (20) stances
	Teacher: Male:(1), Female: (1) >> Total (2) stances
Other facilities	Kitchen, Dining, Auditorium, Gym, Laboratory, Workshop etc., if available
Water:	Piped water, Well (borehole within site,)
Electricity	No Power
Communication	TEL(Fixed line), Mobile: Available
Land right	Government
Land availability	Enough for expansion: Yes
Disaster records	Nothing recorded

4. Request

<ul style="list-style-type: none"> - 8 Classrooms blocks - Library - 2 Blocks Latrines - Teachers houses - Fencing - Light
--

□ 5. Photos



Classroom / Administrative Block



Classroom / Administrative Block



Classroom / Administrative Block (Interior)



Classroom / Administrative Block (Interior)



Latrines



Borehole



Staff Quarters



Staff Quarters

07: Moyo District, Itula Sub-County, Orinya Primary School

1. Information about School:

School name:	OrinyaPS	Yr. of Est.	1965
Address:		Parish	Legu
Tel:	0782883945/0783-858514		
E-mail:	-		
Contact person:	Dayo Concy Madra/ Pili Venson Paskas		

2. Students and Staff

Shift	1 Shift									
Students	Grade	No. Stream	No. of student						G.Total	
			Refugee			National				
			Male	Female	Total	Male	Female	Total		
Primary	Gr. 1	1	87	75	162	13	13	26	188	
	Gr. 2	1	94	100	194	9	16	25	219	
	Gr. 3	1	103	111	214	12	12	24	238	
	Gr. 4	1	113	108	221	9	15	24	245	
	Gr. 5	1	114	112	226	15	11	26	252	
	Gr. 6	1	186	184	370	18	9	27	397	
	Gr. 7	1	32	31	62	0	4	4	67	
No. of Disables	Visual		0			Hearing			1	Others
	Physical		1			Mental			2	Total
Staff										
Teaching staff	GOU		10							
	UNHCR		14							
	PTA		0							
Supporting Staff	Cleaner, Warden, etc									
		Total		24						

3. Information about school facilities

No. ofBlock	Block 01 (2 CRs)(Perm.) built in (Yr 2000s -Not sure) by (GOU-SFG) Block 02 (2 CRs) (Perm..) built in Yr 2000s -Not sure) by(GOU -SFG) Block 02 (4 CRs) (Perm..) built in (Yr 2000s.) by (UNHCR)
No. Staff quarters	Hut: (0)
	Single SQ: (0)
	Semi-Detached SQ (2 house in 1 block) (2)
	4 in 1 SQ: ()
	# of Teacher staying in SQs: (8)In total
# of stance of Toilet	Student: Male:(10), Female: (5)>> Total (5) stances
	Teacher: Male:(0), Female: (0)>> Total (0) stances
Other facilities	Staff room available though not enough
Water:	Piped water available
Electricity	No Power
Communication	TEL(Fixed line), Mobile: Available
Land right	Government
Land availability	Enough for expansion: Yes
Disaster records	Nothing recorded

4. Request

<ul style="list-style-type: none"> - Classrooms - Latrines - Teachers houses - Fencing - Light - Furniture - No football ground
--

□ 5. Photos

	
<p>Classroom / Administrative Block</p>	<p>Classroom / Administrative Block</p>
	
<p>Classroom / Administrative Block (Interior)</p>	<p>Classroom / Administrative Block (Interior)</p>
	
<p>Latrines</p>	<p>Borehole- Water Kiosk</p>
	
<p>Staff Quarters</p>	<p>Staff Quarters</p>

08: Moyo District, Itula Sub-County, Chinyi Primary School

1. Information about School:

School name:	Chinyi PS	Yr. of Est.	1972
Address:		Parish	Paluju
Tel:	0774401515		
E-mail:	-		
Contact person:	Obuni Severino		

2. Students and Staff

Shift	2 Shifts from P3, P4 come in the afternoon and P1 and P2 in the morning								
Students	Grade	No. Stream	No. of student						G.Total
			Refugee			National			
			Male	Female	Total	Male	Female	Total	
Primary	Gr. 1	2	112	115	227	11	8	19	246
	Gr. 2	2	97	109	206	25	11	36	242
	Gr. 3	2	156	127	283	17	24	41	324
	Gr. 4	3	162	177	337	29	33	62	399
	Gr. 5	3	135	171	306	33	43	76	382
	Gr. 6	4	232	246	489	15	19	34	523
	Gr. 7	2	118	86	204	9	10	19	223
No. of Disables	Visual		4		Hearing		33		Others
	Physical		3		Mental				Total 40
Staff									
Teaching staff	GOU		10						
	UNHCR		35						
	PTA		0						
Supporting Staff	Cleaner, Warden, etc								
		Total		45					

3. Information about school facilities

No. of Block	Block 01 (2 CRs) (Perm.) built in (Yr 2001) by (GOU- SFG)
	Block 02 (2 CRs) (Perm..) built in (Yr. 2001) by (GOU- SFG)
	Block 02 (4 CRs) (Perm..) built in (Yr. 2001) by (GOU-SFG)
No. Staff quarters	Hut: (3)
	Single SQ: (1)
	Semi-Detached SQ (2 house in 1 block) (1)
	4 in 1 SQ: ()
# of Teacher staying in SQs: (14)In total	
# of stance of Toilet	Student: Male:(10), Female: (10) >> Total (20) stances
	Teacher: Male:(1), Female: (1) >> Total (2) stances
Other facilities	
Water:	Piped water, Well (Borehole within site.)
Electricity	No Power
Communication	Mobile: Available
Land right	Government
Land availability	Enough for expansion: Yes
Disaster records	Nothing recorded

4. Request

<ul style="list-style-type: none"> - Classrooms - Latrines - Teachers houses - Fencing - Light - Furniture
--

□ 5. Photos



Classroom / Administrative Block



Classroom / Administrative Block



Classroom / Administrative Block (Interior)



Classroom / Administrative Block (Interior)



Latrines



Borehole



Staff Quarters



Staff Quarters

09: Moyo District, Itula Sub-County, Iboa Primary School

□ 1. Information about School:

School name:	Iboa PS	Yr. of Est.	1979
Address:		Parish	Ubbi
Tel:	0772-910535		
E-mail:	-		
Contact person:	Oyaru Liliyas		

□ 2. Students and Staff

Shift	1 Shift								
Students	Grade	No. Stream	No. of student			National			G.Total
			Refugee			Male	Female	Total	
			Male	Female	Total				
Primary	Gr. 1	2	124	120	244	26	18	44	288
	Gr. 2	1	60	59	119	18	16	34	153
	Gr. 3	1	52	53	105	14	20	34	139
	Gr. 4	1	63	39	102	27	23	50	152
	Gr. 5	1	47	36	83	17	21	38	121
	Gr. 6	1	56	38	94	21	10	31	125
	Gr. 7	1	0	0	0	9	10	21	21
No. of Disables	Visual	M-5, F-3	Hearing		M-6, F-7		Others		
	Physical	M-2, F-4	Mental				Total	27	
Staff									
Teaching staff	GOU		8						
	UNHCR		15						
	PTA		0						
Supporting Staff	Cleaner, Warden, etc								
			Total		23				

□ 3. Information about school facilities

No. of Block	Block 01 (2 CRs) (Perm.) built in (Yr 2008) by (EC)
	Block 02 (2 CRs) (Perm..) built in (Yr. 2008) by (EC)
	Block 02 (2 CRs) (Perm..) built in (Yr. 2011) by (GOU- SFG)
	Block 02 (2 CRs) (Perm..) built in (Yr. 2011) by (GOU- SFG)
No. Staff quarters	Hut: (2 dilapidated huts)
	Single SQ: ()
	Semi-Detached SQ (2 house in 1 block) (2)
	4 in 1 SQ: ()
# of Teacher staying in SQs: (6)In total	
# of stance of Toilet	Student: Male:(5 (dilapidated)), Female: (5 (dilapidated)) >> Total (10) stances
	Teacher: Male:(0), Female: (0) >> Total (0) stances
Other facilities	
Water:	Piped water, Well (Borehole 200m away in the refugee community,)
Electricity	No Power
Communication	TEL(Fixed line), Mobile: Available
Land right	Government
Land availability	Enough for expansion: Yes
Disaster records	Nothing recorded

□ 4. Request

- Classrooms blocks, Library
- Latrines
- Teachers houses
- Fencing
- Light

□ 5. Photos



Classroom / Administrative Block



Classroom / Administrative Block



Classroom / Administrative Block (Interior)



Classroom / Administrative Block (Interior)



Latrines



Borehole



Staff Quarters



Staff Quarters

10: Moyo District, Itula Sub-County, Waka Primary School

1. Information about School:

School name:	Waka PS	Yr. of Est.	1993
Address:		Parish	Waka
Tel:	0782-835141/0780964956		
E-mail:	-		
Contact person:	Rokani Anjeliko/Moga Kwori Patrick		

2. Students and Staff

Shift	1 Shift								
Students	Grade	No. Stream	No. of student			National			G.Total
			Refugee			Male	Female	Total	
			Male	Female	Total				
Primary	Gr. 1	2	58	62	120	6	6	12	132
	Gr. 2	1	51	66	117	3	5	8	125
	Gr. 3	1	65	75	140	8	12	20	160
	Gr. 4	1	73	77	150	12	15	27	177
	Gr. 5	1	78	82	160	3	8	11	171
	Gr. 6	1	59	64	123	5	6	11	134
	Gr. 7	1	46	38	84	11	2	13	97
No. of Disables	Visual		1	Hearing			0	Others	
	Physical		1	Mental			1	Total	3
Staff									
Teaching staff	GOU		10						
	UNHCR		11						
	PTA		0						
Supporting Staff	Cleaner, Warden, etc								
		Total		21					

3. Information about school facilities

No. of Block	Block 01 (2CRs) (Perm.) built in (Yr-2004) by (NUSAF 1)
	Block 01 (2CRs) (Perm.) built in (Yr-2004) by (NUSAF 1))
	Block 03 (2CRs) (Perm..) built in (Yr. 2014) by (NUSAF 2)
	Block 04 (2CRs) (Perm..) built in (Yr. 2014) by (NUSAF 2)
No. Staff quarters	Hut: (0)
	Single SQ: (0)
	Semi-Detached SQ (2 house in 1 block) (2)
	4 in 1 SQ: ()
# of Teacher staying in SQs: (16)In total	
# of stance of Toilet	Student: Male:(5), Female: (5) >> Total (10) stances
	Teacher: Male:(0), Female: (0) >> Total (0) stances
Other facilities	
Water:	No Water- Nearest borehole is 2km-3Km always
Electricity	No Power
Communication	TEL(Fixed line), Mobile: Available
Land right	Government
Land availability	Enough for expansion: Yes
Disaster records	Flooding for the first time since 1993, forced the school to close for a month from October 25 up to date. The school will open 28/11/2017.

4. Request

- 3 Classrooms
- Latrines need- almost full, Water source needed-Borehole
- Teachers houses
- Fencing, Light, Furniture

□ 5. Photos

	
<p>Classroom / Administrative Block</p>	<p>Classroom / Administrative Block</p>
	
<p>Classroom / Administrative Block (Interior)</p>	<p>Classroom / Administrative Block (Interior)</p>
	<p>No Borehole</p>
<p>Latrines</p>	<p>Borehole</p>
	
<p>Staff Quarters</p>	<p>Staff Quarters</p>

Sector: Education (Secondary Education) Project Number: E-3
Health: H; Education: E; Water Supply: W; Roads/Small Bridges: RB

Item	Content
Project Name	The Project for Construction of Model Secondary Schools in the Western Districts in West Nile Sub-Region (Arua / Koboko / Yumbe Districts)
Project Description	This project will construct model Day and boarding secondary schools in rural areas for serving the full-fledged secondary education of both Ordinary “O” level (Lower) and Advanced “A” level (Upper) in the Sub-Counties which have been heavily impacted by the Refugee Influx in the Western Districts (Arua / Koboko / Yumbe Districts) of West Nile Sub-Region. In order to achieve the goal of improving access to education for students in remote areas, this plan will prepare dormitories with an accommodating capacity of approximately 1/3 of the number of students.
Background	<p>In the five Districts hosting refugee settlements in West Nile Sub-Region - Adjumani, Arua, Koboko, Moyo, and Yumbe - the refugee influx from South Sudan has continued since June 2016 and it reached 750,000 refugees by the end of July 2017. 175,000 of the increased population are counted as school-age youths (age 13–18), accounting for about 23% of the total refugee population.</p> <p>As a result, the educational environment has greatly deteriorated due to a surge of students in educational facilities receiving refugees. Approximately 650 new classrooms need to be established to provide secondary education to approximately 120,000 people (including both Ugandan citizens and refugees) who are of school-age (age 13–18) due to the increase of population for a year since June 2016 in the Western Districts of West Nile Sub-Region.</p> <p>As for accessibility to secondary education, most secondary schools are located in urban areas with very few in rural areas. As is the case with this, in some rural areas, the nearest secondary school is 20 km away, making it impossible to access secondary education. Furthermore, many rural secondary schools lack the properly qualified facilities to provide upper secondary class, making it substantially impossible for the school-age population to pursue upper secondary education.</p> <p>As is the case with remote areas, Sub-Counties in the project area hosting refugee settlements are far from urban areas. While school facilities are planned, it is essential to allocate boarding facilities for students and teachers from the viewpoint of securing stable school operation. However, teacher housing and student dormitory development lag behind classrooms and they are usually in much worse conditions. Particularly with regard to teachers, significant commuting time from urban areas and late arrival and absenteeism due to unreliable traffic conditions on unpaved roads are major issues. In response to the strong need to build teacher housing and student dormitories along with classrooms and latrines to improve the learning environment, these collective improvements have been given a high priority in the Districts' development plan.</p>
Target Areas	Uriama Sub-County in Arua District, Lobule Sub-County in Koboko District, and Ariwa Sub-County in Yumbe District
Project Objectives	<p>Project Objective: To improve accessibility to secondary education as well as improve the learning environments in Sub-Counties which have been significantly impacted by the refugee influx in Arua, Koboko and Yumbe Districts.</p> <p>Outputs: Secondary education facilities are expanded at existing secondary schools in the target areas.</p>
Beneficiaries	<p>Direct Beneficiaries: 1,800 students (600 per school) from the target areas and refugee settlements as well as 18 teachers (6 per school) . Total 1,818 persons</p> <p>Indirect Beneficiaries: 200,140 residents of the target Sub-Counties and refugee settlements located in and adjacent to the target Sub-Counties.</p>
Relevant Government and Partner Organisations	<p>Central: Approval of facility planning content by the MoES Planning Office</p> <p>District: District Education Office in the Districts of Arua, Koboko and Yumbe: Review and approval of facility plan / progress supervision during construction / maintain facility maintenance after completion of construction / required personnel dispatch plan and budget allocation plans</p> <p>International Organizations: partial budget support needed for allocating teaching staff, based on discussions with Districts.</p>
Project Component	<p>Each school consists of the following facility components.</p> <ul style="list-style-type: none"> • Classrooms (3 classrooms/building) x 4Bldg. • Science lab building (laboratory) x 1 Bldg. • Library/ICT room x 1 Bldg. • Administrative office x 1 Bldg.

Item	Content
	<ul style="list-style-type: none"> • Latrines (5 stances pit latrine /building) x 3 Bldg. (1 each for boys, girls and faculty staff) • Pit Latrines for staff quarter (2 stances, 2 showers/building) x 4 Bldg. • Staff quarter (2 housing units/building) x 3 Bldg. • Student dormitory (32 people/dorm x 6 Bldg. [3 male/3 female]); Total 192 students • Latrines attached to student dorms. (5 stance pit latrines toilets/showers [20 people per toilet/shower]) x 2 Bldg. • Educational equipment (excl. textbooks), furniture <p>Proposed construction area: 10,214.13 m²: 3,404.71 m² per site x 3 sites</p>
Summarized Construction Plan and Schedule	<p>Preparatory Survey ~ Consultant Contract: 12 months Detailed Design ~ Tender Document Preparation ~ Tender ~ Contract: 10 months Construction Period: 1.5 years Construction Plan: Simultaneously implementing construction in 3 sites</p>
Site Conditions	<p>As for two of three proposed sites, facility plans will be designed based on the existing school sites. Basically there are no events of natural disasters at the schools according to hearing surveys to the staff of the schools. Although one of three proposed sites is new, we confirmed that no natural disaster is recorded according to healing survey conducted at the Primary school next to the site.</p>
Proposed Assessment Criteria	<p>Relevance</p> <ol style="list-style-type: none"> 1. Project Beneficiaries In line with Uganda's regional development plan promoting comprehensive support for refugees, the project will target the residents of the Sub-Counties hosting refugee settlements which have been significantly impacted by the refugee influx in Arua, Koboko and Yumbe Districts 2. Project Purpose and Urgency Educational indicators worsened by the influx of refugees: Improvement of the student classroom ratio (SCR) and the student-teacher ratio (STR) is required as soon as possible. 3. Contribution to Achieving Goals of Mid-to-long Term Development Plans In Uganda's National Development Plan (NDP2015/16–2019/20), developing the education sector is listed along with the health and water sanitation sectors under the goal of "Enhancing Human Capital Development." <p>Effectiveness</p> <p>[Quantitative Effects]</p> <ul style="list-style-type: none"> • Net and Gross Enrollment Rates in the target Districts at 3 years after project completion • Number of Classes implemented per year in new classrooms at 3 years after project completion <p>[Qualitative Effects]</p> <ul style="list-style-type: none"> • The shortage of classrooms and educational equipment is solved; student's learning environment and administrative work environment are improved. • Training rooms and equipment are improved in both quality and quantity, and the learning curriculum is appropriately implemented.
Social and Technical Considerations	<p>Target Sub-Counties and (Z/S) Arua District, Uriama Sub-County and (Zone 1,2,and 6 of Rhino-Camp Settlement) Koboko District: Lobule Sub-County and (Zone A and B of Lobule Settlement) Yumbe District: Ariwa Sub-County and (Zone 5 of Bidi Bidi Settlement)</p> <p>Specific considerations may be required in response to social situations in any of the target communities</p> <p>For refugee acceptance, it is necessary to arrange an interpreter as necessary not to make a language barrier.</p> <p>And also, since learning is influenced by the nutritional situation particularly for refugees, , it is important to secure food through such arrangements as school lunch programme supported by not only partners but also communities.</p> <p>In addition, since schools are expected to be used as a place of mutual understanding and dialogue in the community as "open facilities," they are to be open to the community at night and on holidays. In doing so, care must be taken so that the facilities will not be dominated by specific tribes or groups in multi-ethnic communities.</p>

Appendix 1: List of target schools and locations map

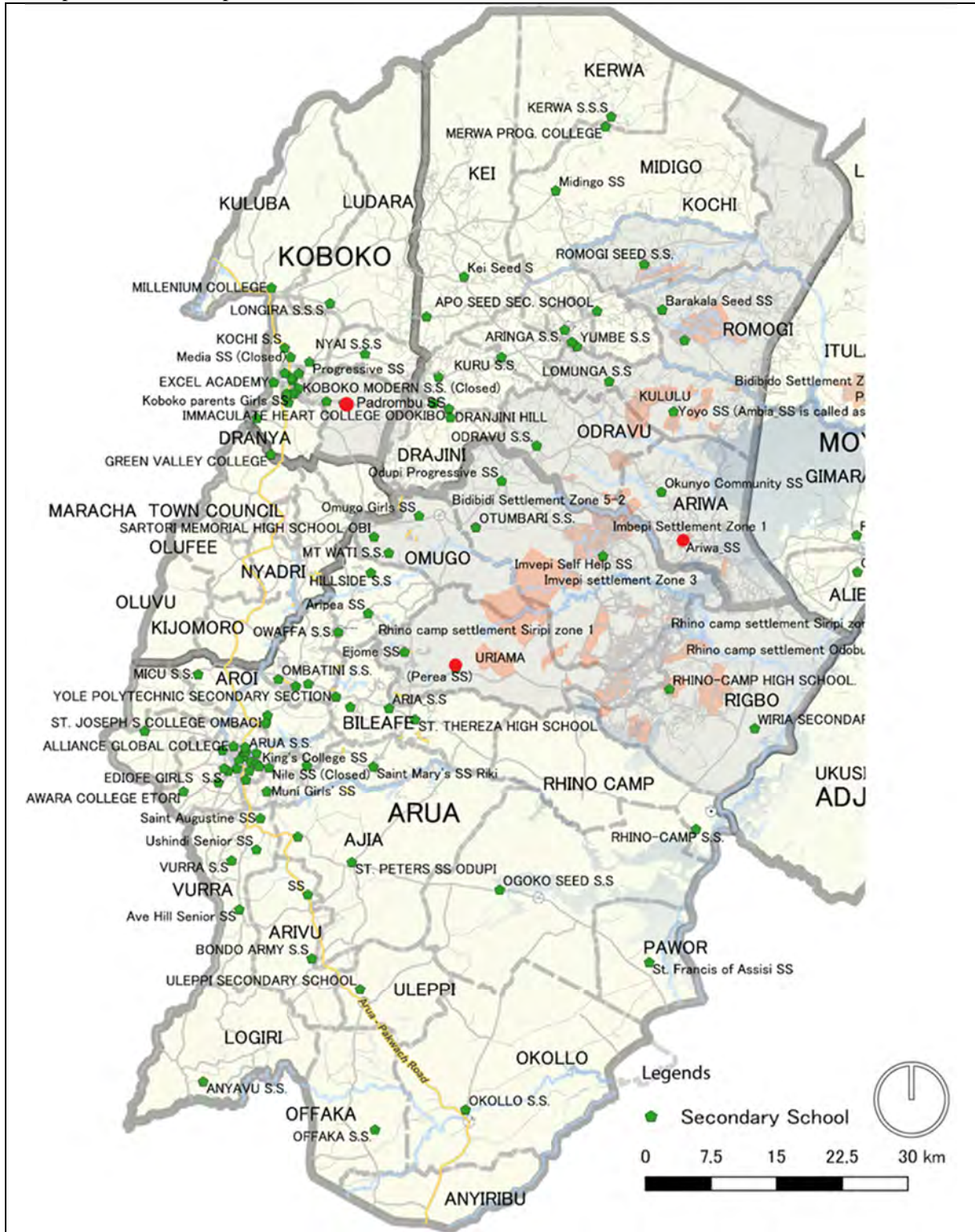
Appendix 2: Outline of target schools

Appendix 1: Proposed School list and locations

□ Proposed School list

No.	District	Sub-County	School name	# of Student			# of classroom		Student/Classroom ratio (Clrm = perm. +Temp.)	Priority
				Refugee	Ugandan	Total	Perm.	Temp.		
01	Arua	Uriama	Perea Hill SS (New)	N/A						1
02	Koboko	Lobule	Padrombu SS (Existing)	22	90	112	0	4	28.0	3
03	Yumbe	Ariwa	Ariwa SS (Existing)	390	47	437	0	6	72.3	2

□ Proposed School map



● Proposed Project Site

Appendix 2: Proposed School Data

01. Arua District Uriama Sub-County: Perea Hill Secondary School (New Site)

1. Information about School

School name:	Perea Hill Secondary School	Yr. of Est.	Yet to be established
Address:		Parish	Akinio
Tel:			
E-mail:			
Contact person:	Mr. Afeku James – sub county chief Uriama on 0772638416; Aluonzi Vincent Alioma – opinion leader on 0779235628 and Anzo Jacob – elder on 0775795133		

2. Students and Staff







3. Information about school facilities

Water:	Water source: a borehole nearby Perea Primary school has very poor yield.
Electricity	not available
Communication	
Land right	Government
Land availability	Enough for expansion
Disaster records	Nothing recorded but wind Storm occurred

4. Request

- A new secondary school is built next to Perea Primary School. The name of the school shall be **PEREA HILL SECONDARY SCHOOL**. The existing primary school together with the community has given land for the secondary school to be built.
- Classrooms, Laboratory, Staffroom, Office block, Kitchen and store and dining hall
- Staff Quarters, Dormitories
- All complete with VIP latrines

5. Photos

		
Classroom/Administrative Block land where the school is proposed to be built	Classroom/Administrative Block land where the school is proposed to be built	The nearby Perea Primary school block
		
Classroom/Administrative Block land where the school is proposed to be built	Stakeholders in the community showing the borders of the land for the proposed secondary school.	Stakeholders in a meeting about the proposed Perea Hill Secondary School to be built next to Perea Primary school.

02. Koboko District: Lobule Sub-County: Padrombu Secondary School (Existing School)

1. Information about School: Koboko District, Lobule SC

School name:	Padrombu Secondary School – Currently it is community school, but it is planned to be registered as a government-aided school	Yr. of Est.	2014
Contact person:	Headmaster-Rhone Manase Peterson-0772-960240		

2. Information about school:

Shift		1 Shift								
Students	Grade	No. Stream	No. of student							G.Total
			Refugee			National				
			Male	Female	Total	Male	Female	Total		
Lower Secondary	S1	1	5	2	7	18	4	22	29	
	S2	1	6		6	26	15	41	47	
	S3	1	7	1	8	11	8	19	27	
	S4	1	1		1	7	1	8	9	
Higher Secondary	S5	N/A								
	S6	N/A								
G.Total			19	3	22	62	28	90	112	
No. of Disables	Visual		0	Hearing			0	Others	0	
	Physical		0	Mental			0	Total	0	
Staff										
Teaching staff		Paid by GOU		0						
		Paid by UNHCR		0						
		Paid by PTA		17 (including 1 bursar)						
Supporting Staff		Cleaner, Warden, etc		Matron 1						
		Total		18						










3. Information about school facilities

No. of Block	Block 01 (administration block: HM room, teacher room, and store) built by Community (Yr-2014)
	3 classrooms and 1 store are borrowed from Padrombu PS which was also raised by the community
	1 classroom is borrowed from Church
No. Staff quarters	N/A
# of stance of Toilet	Student: Male:(), Female: () >> Total (only 5) stances, other 8 are non-functional
	Teacher: Male:(), Female: () >> Total (0) stances: Note it is too few to cover the number of students and teachers since 5 stances are shared with PS, Church, ECD
Other facilities	Male dormitory (12-15students are boarding) Kitchen
Water:	Water source is shared with adjacent PS and Church
Electricity	Solar Power
Communication	Mobile only
Land right	Currently Community
Land availability	Enough for expansion but the border between PS and Church shall be identified before planning
Disaster records	Nothing recorded

4. Request

<ul style="list-style-type: none"> - Permanent facilities such as Classrooms, Laboratories, Library, ICT room for students - Teachers houses, and boarding facilities

□ 5. Photos

	
<p>Administration Block</p>	<p>Head Teacher and Deputy HT room</p>
	
<p>Classrooms borrowed from Padrombu PS</p>	<p>Inside the classroom borrowed from Padrombu PS</p>
	
<p>Classroom borrowed from Church</p>	<p>Inside the classroom borrowed from Church</p>
	
<p>Toilet</p>	<p>Kitchen</p>
	
<p>The kitchen is attached with bedroom (Male Dormitory)</p>	<p>Inside Male Dormitory</p>

03. Yumbe District: Ariwa Sub-County: Ariwa Secondary School (Existing School)

1. Information about School

School name:	Ariwa Secondary School	Yr. of Est.	06/03/2017
Tel:	0782-021908(HM)/0772-874026(Sub county Chief) /0788-374360 (L111 Chair) /0787-849258 (Parish Chief)		
E-mail:	-		
Contact person:	Dawa Claudia scholastic/ Aluma Aziz/ Adiru Jamila/ Swale abdulanur		

2. Students and Staff

Shift	1 Shift								
Students	Grade	No. Stream	No. of student			National			
			Refugee			Male	Female	Total	G.Total
			Male	Female	Total				
	S1	1	109	58	167	23	9	32	199
	S2	1	70	31	101	6	2	8	109
	S3	1	90	32	122	4	3	7	129
	S4								
	S5								
	S6								
	G.Total	3	269	121	390	33	14	47	437
No. of Disables	Visual		0	Hearing		0	Others		
	Physical		2	Mental		2	Total		
Staff									
Teaching staff	GOU		0						
	UNHCR		14						
	PTA		0						
Supporting Staff	Cleaner, Warden, etc		1						
	Total		15						

3. Information about school facilities

No. of Block	Blocks (6CRs) Temporary built by (UNHCR)
No. Staff quarters	Hut: (7)
	Single SQ: (0)
	Semi-Detached SQ (2 house in 1 block) (0)
	4 in 1 SQ: (0)
	# of Teacher staying in SQs: (14)In total
# of stance of Toilet	Student: Male:(5), Female: (5) >> Total (10) stances
	Teacher: Male:(1), Female: (1) >> Total (2) stances
Other facilities	
Water:	No Water in school - There tape stand 400m in the community
Electricity	No Power
Communication	Mobile: Available
Land right	Government
Land availability	Enough for expansion: 25,000 square metres available
Disaster records	Nothing recorded

4. Request

- Permanent structures for all facilities

□ 5. Photos

<p>Classroom / Administrative Block – HM, LC 111 Chairman, Sub county Chief and Parish Chief</p>	<p>Classroom / Administrative Block- HM's Office</p>
<p>Classroom / Administrative Block (Interior)</p>	<p>Classroom / Administrative Block (Interior)</p>
	<p>No borehole</p>
<p>Latrines</p>	<p>Borehole</p>
<p>Land for construction</p>	<p>Staff Quarters</p>

Sector: Education (Secondary Education) Project Number: E-4
Health: H; Education: E; Water Supply: W; Roads/Small Bridges: RB

Item	Content
Project Name	The Project for Construction of Model Secondary Schools in the Eastern Districts in West Nile Sub-Region (Adjumani / Moyo Districts)
Project Description	This project will construct model day and boarding secondary schools in rural areas for serving full-fledged secondary education of both Ordinary “O” level (Lower) and Advanced “A” level (Upper) in the Sub-Counties which have been heavily impacted by the Refugee Influx in eastern Districts (Adjumani District/Moyo District) of West Nile Sub-Region. In order to achieve the goal of improving access to education for students in remote areas, this plan will prepare dormitories with an accommodating capacity of approximately 1/3 of the number of students.
Background	<p>In the five Districts hosting refugee settlements in West Nile Sub-Region - Adjumani, Arua, Koboko, Moyo, and Yumbe - the refugee influx from South Sudan has continued since June 2016 and it reached 750,000 refugees by the end of July 2017. 175,000 of the increased population are counted as school-age youths (age 13–18), accounting for about 23% of the total refugee population.</p> <p>As a result, the educational environment has seriously deteriorated due to a surge of students in educational facilities receiving refugees. Approximately 340 new classrooms need to be established to provide secondary education to approximately 62,000 people (including both Ugandan citizens and refugees) who are of school-age (age 13–18) due to the increase of population for a year since June 2016 in the Eastern Districts of West Nile Sub-Region.</p> <p>As for accessibility to secondary education, most secondary schools are located in urban areas with very few in rural areas. As is the case with this, in some rural areas, the nearest secondary school is 20 km away, making it impossible to access secondary education. Furthermore, many rural secondary schools lack the properly qualified facilities to provide upper secondary class, making it substantially impossible for the school-age population to pursue upper secondary education.</p> <p>As is the case with remote areas, Sub-Counties in the project area hosting refugee settlements are far from urban areas. While school facilities are planned, it is essential to allocate boarding facilities for students and teachers from the viewpoint of securing stable school operation. Teacher housing and student dormitory development lag behind classrooms and they are usually in much worse conditions. Particularly with regard to teachers, significant commuting time from urban areas and late arrival and absenteeism due to unreliable traffic conditions on unpaved roads are major issues. In response to the strong need to build teacher housing and student dormitories along with classrooms and latrines to improve the learning environment, these collective improvements have y been given a high priority in the Districts' development plan.</p>
Target Areas	Dzaipri Sub-County in Adjumani District, Itula Sub-County in Moyo District
Project Objectives	<p>Project Objective: To improve accessibility to secondary education as well as improve the learning environments in Sub-Counties which have been significantly impacted by the refugee influx in Adjumani and Moyo Districts.</p> <p>Outputs: Secondary education facilities are expanded at existing secondary schools in the target areas.</p>
Beneficiaries	<p>Direct Beneficiaries: 1,200 students (600 per school) from the target areas and refugee settlements as well as 12 teachers (6 per school). Total: 1,212 persons</p> <p>Indirect Beneficiaries: 303,201 residents of the target Sub-Counties and refugee settlements located in and adjacent to the target Sub-Counties.</p>
Relevant Government and Partner Organisations	<p>Central: Approval of facility planning content by the MoES Planning Office</p> <p>District: District Education Office of Adjumani, and of Moyo District: Review and approval of facility plan/progress supervision during construction / maintain facility maintenance after completion of construction / required personnel dispatch plan and budget allocation plans</p> <p>International Organizations: partial budget support needed for allocating teaching staff, based on discussions with Districts.</p>
Project Component	<p>Each school consists of the following facility components.</p> <ul style="list-style-type: none"> • Classrooms (3 classrooms/building) x 4 Bldg. • Science lab building (laboratory) x 1 Bldg. • Library/ICT room x 1 Bldg. • Administrative office x 1 Bldg.

Item	Content
	<ul style="list-style-type: none"> • Latrines (5 stances pit latrine/building) x 3 Bldg. (1 each for boys, girls and faculty staff) • Pit Latrines for staff quarter (2 stances, 2 showers/building) x 4 Bldg. • Staff quarter (2 housing units/building) x 3 Bldg. • Student dormitory (32 people/dorm x 6 Bldg. (3 male/3 female); Total 192 students) • Latrines attached to student dorms. (5 stance pit latrines/showers [20 people per toilet/shower]) x 2 Bldg. • Educational equipment (excl. textbooks), furniture <p>Proposed construction area: 6,809.42 m²: 3,404.71 m² per site x 2 sites</p>
Summary of Construction Plan and Schedule	<p>Preparatory Survey ~ Consultant Contract: 12 months Detailed Design ~ Tender Document Preparation ~ Tender ~ Contract: 10 months Construction Period: 1.5 years Construction Plan: Simultaneously implementing construction in 2 sites</p>
Site Conditions	<p>Since facility plans will be designed based on the existing school sites, basically there are no events of natural disasters at the schools according to hearing surveys to the staff of the schools.</p>
Proposed Assessment Criteria	<p>Relevance</p> <ol style="list-style-type: none"> 1. Project Beneficiaries In line with Uganda's regional development plan promoting comprehensive support for refugees, the project will target the residents of the Sub-Counties hosting refugee settlements which have been significantly impacted by the refugee influx in the Adjumani and Moyo Districts 2. Project Purpose and Urgency Educational indicators worsened by the influx of refugees: Improvement of the student classroom ratio (SCR) and student-teacher ratio (STR) is required as soon as possible. 3. Contribution to Achieving Goals of Mid-to-long Term Development Plans In Uganda's National Development Plan (NDP2015/16–2019/20), developing the education sector is listed along with the health and water sanitation sectors under the goal of "Enhancing Human Capital Development." <p>Effectiveness</p> <p>[Quantitative Effects]</p> <ul style="list-style-type: none"> • Net and Gross Enrollment Rates in the target Districts at 3 years after project completion • Number of Classes implemented per year in new classrooms at 3 years after project completion <p>[Qualitative Effects]</p> <ul style="list-style-type: none"> • The shortage of classrooms and educational equipment is solved; student's learning environment and administrative work environment are improved. • Training rooms and equipment are improved in both quality and quantity, and the learning curriculum is appropriately implemented.
Social and Technical Considerations	<p>Target Sub-Counties and (Z/S) Adjumani District: Dzaipi Sub-County and (Pagirinya, Nyumanzi settlements, etc.) Moyo District: Itula Sub-County and (Zones 1, 2, 3 and 4 in Palorinya settlement)</p> <p>Specific considerations may be required in response to social situations in any of the target communities.</p> <p>For refugee acceptance, it is necessary to arrange an interpreter as necessary not to make a language barrier.</p> <p>And also, since learning is influenced by the nutritional situation particularly for refugees, it is important to secure food through such arrangements as school lunch programme by not only partners but also communities.</p> <p>In addition, since schools are expected to be a place of mutual understanding and dialogue in the community as "open facilities", they are to be open to the community at night and on holidays. In doing so, care must be taken so that the facilities will not be dominated by specific tribes or groups in multi-ethnic communities.</p>

Appendix 1: List of target schools and locations map

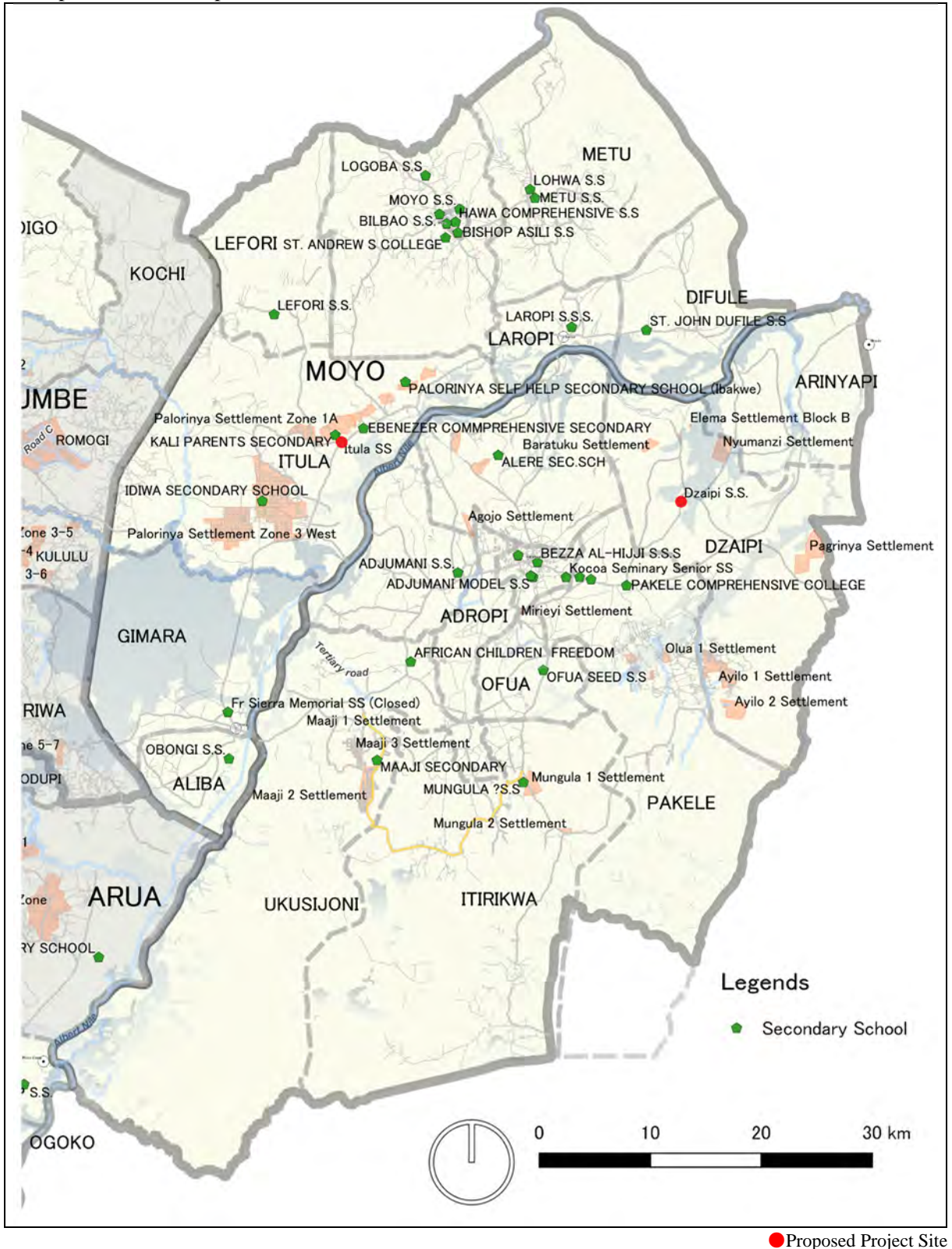
Appendix 2: Outline of target schools

Appendix 1: Proposed School list and locations

□ Proposed School list

No.	District	Sub-county	School name	# of Student			# of classroom		Student/Classroom ratio (Clrm = perm.+Temp.)	Priority
				Refugee	Ugandan	Total	Perm.	Temp.		
01	Adjumani	Dzaipi	Dzaipi SS (Existing)	65	240	305	4	1	60.1	2
02	Moyo	Itula	Itula SS (Existing)	1,611	180	1,791	10	5	119.4	1

□ Proposed School map



Appendix 2 : Proposed School Data

01: Adjumani District: Dzaipi Secondary School (Existing School)

1 Information about School

School name:	Dzaipi Secondary School – Upscaling of an existing secondary school was requested by DEO	Yr. of Est.	1994
Address:	P.O.Box 156, Adjumani	Parish	Ajugopi
Tel:	0784500198 for the head teacher; 0787152920 for the board of governors' chairman.		
E-mail:	-		
Contact person:	Amizaro Jerome – head teacher and Amba Gabriel chairman board of governors		

2. Students and Staff

Shift		1 Shift									
Students	Grade	No. Stream	No. of student						G.Total		
			Refugee			National					
			Male	Female	Total	Male	Female	Total			
Lower Secondary	S1	1	2	0	2	31	13	44	46		
	S2	1	2	0	2	28	10	38	40		
	S3	1	2	1	3	36	16	52	55		
	S4	1	39	18	57	68	29	97	154		
Upper Secondary	S5	Arts/ sciences	0	0	0	0	0	0	0		
	S6	Arts/ sciences	1	0	1	9	0	9	10		
G.Total			46	19	65	172	68	240	305		
No. of Disables	Visual		0		Hearing		0		Others	0	
	Physical		0		Mental		0		Total	0	
Staff											
Teaching staff		GOU		13		UNHCR		0		PTA	7
Supporting Staff		Cleaner, Warden, etc		13		Total					33

3 Information about school facilities

No. of Block	Block 01 (1 CR) (Perm.) built in (Yr.1998) by (UNHCR)
	Block 02 (1 CR) (Semi-P.) built in (Yr. 1996) by (LWF)
	Block 03 (1 CR) (Perm.) built in (Yr. 2016) by (LWF)
	Block 02 (2 CR) (Perm.) built in (Yr.2016) by (LWF)
No. Staff quarters	Hut: (0)
	Single SQ: (0)
	Semi-Detached SQ (2 house in 1 block) (0)
	4 in 1 SQ: (0)
# of Teacher staying in SQs: (0)In total	
# of stance of Toilet	Student: Male:(5), Female: (5) >> Total (10) stances
	Teacher: Male:(2), Female: (2) >> Total (4) stances
Other facilities	Laboratory, Very small kitchen.
Water:	borehole 800metres away in the community
Electricity	Solar panel
Communication	Mobile for the head teacher
Land right	Government
Land availability	Enough for expansion
Disaster records	Nothing recorded

4 Request

<ul style="list-style-type: none"> - Dormitory for students - Staff quarters - Computers

□ 5 Photos



Classroom / Administrative Block



Classroom / Administrative Block



Classroom / Administrative Block (Interior)



Classroom / Administrative Block (Interior)



Latrines

No borehole and staff Quarters

Borehole, Staff Quarters

02: Moyo District: Itula Sub-County: Itula SS (Existing School)

□ 1. Information about School

School name:	Itula SS– Upscaling of an existing secondary school was requested by DEO	Yr. of Est.	1996
Address:		Parish	Palujo
E-mail:	aligasules@gmail.com		
Contact person:	Aliga Sules		

□ 2. Students and Staff

Students	Grade	No. Class	No. of student						G.Total
			Refugees			Nationals			
			Male	Female	Total	Males	Females	Total	
Lower Secondary	S1	4	365	213	578	36	31	67	645
	S2	3	318	123	441	34	26	60	501
	S3	3	236	116	352	36	17	53	405
	S4	3	101	108	209				209
Higher Secondary	S5		27	4	31				31
	S6								
G.Total		14	1,047	564	1,611	106	74	180	1,791
No. of Disables	Visual	0		Hearing	0		Others	0	
	Physical	1 Boy, 1 girl		Mental	0		Total	2	
Staff									
Teaching Staff	Paid by GOU		12						
	Paid by UNHCR		27						
	Paid by PTA		1 (Financial administrator: Bursar)						
Supporting Staff	Cleaner, Warden etc.		1 Librarian, 1 Lab assistant, 1 secretary, 1 Matron, 3 Watchmen and 15 cooks all paid by parents						











□ 3. Information about school facilities

No. of Bldg.	Total 15 of which temporary (5)		
No. Staff quarters	No. of staff quarter: 1 + 8 tukuls	Students' Dorm.	Male:No. of Beds:(160)
	How many teachers reside 12		Female: No. of Beds (300)
No. Toilet	Student: Male:(5), Female: (10) >> Total (10) stances		
	Teacher: Male:(), Female: () >> Total (2) stances		
Other facilities	1 Temporary Kitchen 1 Multi-purpose Lab		
Water:	Borehole		
Electricity	Solar panel		
Communication	Mobile		
Land right	Government,		
Land availability	Enough for expansion		

□ 4 Request (Challenges)

- Insufficient # for classrooms, the Modern lab is not adequate, No Library, No computer lab
- No enough teachers
- Only one borehole for both students and community
- insufficient # of dormitories and staff quarters
- No transport means
- No incinerator,
- The power source is not adequate
- Sanitation is another challenge, Hand washing facilities not enough

□ 5. Photos

	
Classroom	Some cracks on wall of existing blocks
	
Dormitory	No room to accommodate students for taking exams
	
Malfunctioned Lab	Teachers' room preparing learning material
	
Dormitory	Dormitory: Triple bunked beds are packed in a limited space
	
Toilet	Temporary toilet

13.4 Water and Sanitation

Sector: Water supply	Project code: W-1
Health (H), Education (E), Water Supply (W), Road/Small-Bridge (RB)	

Item	Description
Project Name	Project for the Improvement of Water Supply Systems in the Eastern West Nile Region (Adjumani District and Moyo District)
Project Description	Construct 100 new boreholes with handpumps and rehabilitate 43 existing ones, newly construct 5 motorized piped water supply systems, and rehabilitate/expand 3 existing piped water supply systems in the host communities of three Sub-Counties of Adjumani District and Moyo District, where water supply is deficient due to influx of refugees (Note: the figures are the totals of the three Sub-Counties. New/rehabilitated facilities may or may not be distributed evenly among the three Sub-Counties depending on the result of a subsequent Preparatory Survey.)
Background	<p>According to the JICA study conducted in 2017, the total daily water demand of Adjumani and Moyo Districts is 10,751m³ whereas water supply from safe and sustainable water sources remains as low as 6,178 m³, meaning that the two Districts are short of water by 4,573 m³ daily, or 8.51 liters per person per day.</p> <p>The Government of Uganda promulgated the Second National Development Plan 2015/16-2019/20 (NDP II) in June 2015, which aims to increase access to safe water from 65% in 2014/2015 to 79% in 2019/2020 in rural areas. In addition, the Water and Environment Sector Development Plan 2015/16-2019/20 addresses the problems of water supply shortage and groundwater contamination caused by population growth and household discharge and recommends that motorized piped water supply systems be constructed to supply safe groundwater efficiently to more points of use.</p> <p>The District Development Plans set out certain objectives based on their own key performance indicators such as water access rate and the functional rate of water supply systems, but have no specific plans for the target Sub-Counties of this proposed Project, meaning that there is no duplication between the District Development Plans and this Project (as of end of October 2017).</p>
Target Areas	Dzaipi Sub-County and Pakelle Sub-County of Adjumani District, Itula Sub-County of Moyo District
Projects Objectives	<p>(Project Objective)</p> <p>As a result of constructing/rehabilitating water supply facilities in Dzaipi and Pakelle Sub-Counties of Adjumani District and Itula Sub-County of Moyo District, where water supply is lacking due to the influx of refugees, a greater population will have access to safe drinking water.</p> <p>(Project Outputs)</p> <p>Deep wells with handpumps and motorized piped water supply systems will be constructed/upgraded in the target areas.</p>
Beneficiaries	<p>Direct beneficiaries: a total of 113,477 residents of Dzaipi and Pakelle Sub-Counties of Adjumani District and Itula Sub-County of Moyo District.</p> <p>Indirect beneficiaries: 276,008 refugees living in settlements in the above Sub-Counties. (Dzaipi Sub-County: Baratuku, Nyumanzi, Pagrinya, Elema, Pakele Sub-County: Ayilo1, Ayilo 2, Ulua Boroli, Olua1, Olua 2, Itula Sub-County: Palorinya-Zone A, Zone B)</p> <p>[Remarks] The above beneficiary number is a population projection for 2024, which is calculated by multiplying UBOS's 2017 population projection with the population growth rate that is described in National Population and Housing Census 2014, assuming that the growth rate will stay constant.</p>
Relevant Government & Partner Organisations	<p>Ministry of Water and Environment (MWE) will, as the owner of the facilities after their completion, establish rules and regulations to administer water services and act as the technical supervisor for water and sanitation services in urban and rural areas.</p> <p>Each District Water Office will submit a budget plan along with an Annual Work Plan to MWE each year to secure budget for activities related to the WASH sector.</p> <p>The constructed facilities will be transferred to their respective Sub-County Councils through Districts while their ownership remains with the national government. Each Sub-County Office will take charge of operational aspects, such as monitoring and large-scale</p>

Item	Description
	repair of the facilities.
Summary of Construction Plan & Schedule	Preparatory Survey, Consultant Agreement: 1.0 year Detailed Design, Tender Documents, Tender, Contract signing: 1.0 year Construction work: 1.5 years
Site Conditions	<p>Geophysical exploration, exploratory drilling, investigation of existing water sources (water volume and quality), precise survey (topographical and geological surveying necessary for designing the sites and routes of conduits, pipelines, water tanks, etc.) will be carried out as part of Preparatory Survey.</p> <p>The Project will be implemented basically by utilizing and expanding the existing water supply facilities. However, detailed investigations will be necessary through the Preparatory Survey to determine the serviceable population and how much expansion is possible for the existing facilities, as they may not be able to cover their respective service areas entirely depending on the conditions of water sources, topography, aged facilities, etc.</p> <p>This Project requires the construction/expansion of water sources and pipelines and land acquisition, involuntary resettlement of residents, etc. are expected. Initial Environmental Examination (IEE) level assessment will be conducted at the sites selected based on the result of the exploratory drilling, etc. to develop mitigation measures against major environmental/social impacts and draft a monitoring plan, to comply with the relevant policies/guidelines.</p>
Proposed Performance Indicators	The daily average of water supply-demand balance (m ³ /day), Water supply-demand balance per person per day (m ³ /person/day)
Social and Technical Considerations	It is important that water supply facilities shall be developed considering prevention of a further widening of disparities in the distribution of water supply facilities between host-community residents and refugees especially near boundaries of settlements. It is preferable to determine the coverage of pipe networks of water supply systems and the location of point water sources through discussion with local authorities and communities in the target areas so as not to make a considerable disparity in water supply due to the difference in water pressure among public water taps. Moreover, the formation of water user committees of water supply facilities should pay appropriate attention to a balance of committee members among different ethnic groups and gender so that their different opinions are evenly reflected in the operation and maintenance system of water supply facilities.

Appendix-1: Photos showing the present conditions of existing water supply facilities

<p>The broken Monolift pump of Pakelle Piped Water Supply System. Repair is technically difficult. (Pakelle Sub-County, Adjumani District)</p>	<p>Solar panels of Pakelle Piped Water Supply System with some modules stolen. (Pakelle Sub-County, Adjumani District)</p>
<p>The elevated water tank of Pakelle Piped Water Supply System. Not elevated enough to supply water to the higher land. (Pakelle Sub-County, Adjumani District)</p>	<p>Inside the pump room of Dzaipi Piped Water Supply System. Has not been operational since 2014 when the diesel generator was stolen. (Dzaipi Sub-County, Adjumani District)</p>
<p>The elevated water tank of Dzaipi Piped Water Supply System. (Dzaipi Sub-County, Adjumani District)</p>	<p>Water source well of Dzaipi Piped Water Supply System (Dzaipi Sub-County, Adjumani District)</p>



The elevated water tank of Itula Piped Water Supply System, leaking due to aging. The support structure and ladder are corroded and could collapse.
(Itula Sub-County, Moyo District)



The elevated water tank of Itula Piped Water Supply System. A resident is ladling up water from a puddle of leaking water.
(Itula Sub-County, Moyo District)

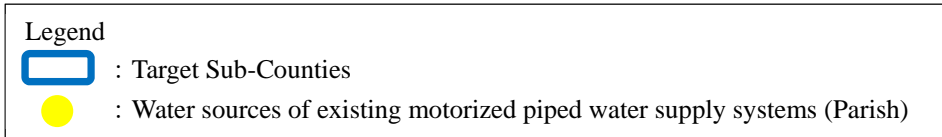
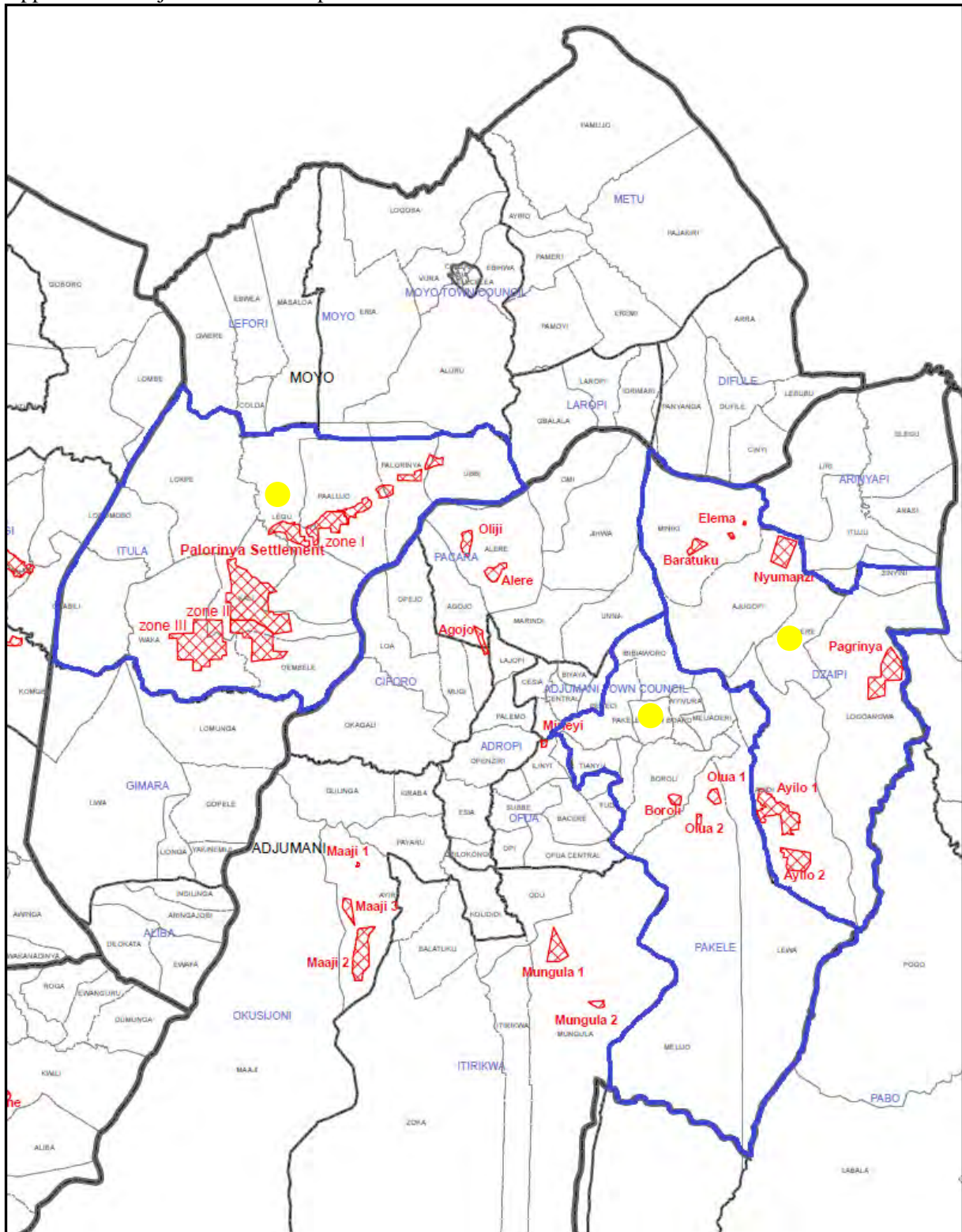


Distant view of Itula Water System's pump room.
(Itula Sub-County, Moyo District)



People are lining up in front of a borehole with a handpump.
(Pakelle Sub-County, Adjumani District)

Appendix-2: Project Location Map



Sector: Water supply	Project code: W-2
Health (H), Education (E), Water Supply (W), Road/Small-Bridge (RB)	

Item	Description
Project Name	Project for the Improvement of Water Supply Systems in the Eastern West Nile Region (Arua, Koboko, and Yumbe Districts)
Project Description	Construct 100 new boreholes with handpumps and rehabilitate 61 existing ones, newly construct 5 motorized piped water supply systems, and rehabilitate/expand 3 existing piped water supply systems in the host communities of five Sub-Counties of Arua, Koboko, and Yumbe Districts, where water supply is deficient due to influx of refugees (Note: the figures are the totals of the five Sub-Counties. New/rehabilitated facilities may or may not be distributed evenly among the five Sub-Counties depending on the result of the Preparatory Survey.)
Background	<p>According to the JICA study conducted in 2017, the total daily water demand of Arua, Koboko, and Yumbe Districts is 18,205m³ whereas water supply from safe and sustainable water sources remains as low as 8,509 m³, meaning that the three Districts are short of water by 9,696 m³ daily or 10.65 liters per person per day. The daily supply is less than half the demand.</p> <p>The Government of Uganda promulgated the Second National Development Plan 2015/16-2019/20 (NDP II) in June 2016, which aims to increase access to safe water from 65% in 2014/2015 to 79% in 2019/2020 in rural areas. In addition, the Water and Environment Sector Development Plan 2015/16-2019/20 addresses the problems of water supply shortage and groundwater contamination caused by population growth and household discharge and recommends that motorized piped water supply systems be constructed to supply safe groundwater efficiently to more points of use.</p> <p>The District Development Plans set out certain objectives based on their own key performance indicators such as water access rate and the functional rate of water supply systems but have no specific plans for the target Sub-Counties of this proposed Project, meaning that there is no duplication between the District Development Plans and this Project (as of end of October 2017).</p>
Target Areas	Odupi and Uriama Sub-Counties of Arua District, Lobule Sub-County of Koboko District, and Kululu and Kochi Sub-Counties of Yumbe District
Project Objectives	<p>(Project Objective)</p> <p>As a result of constructing/rehabilitating water supply facilities in Odupi and Uriama Sub-Counties of Arua District, Lobule Sub-County of Koboko District, and Kululu and Kochi Sub-Counties of Yumbe District, where water supply is lacking due to the influx of refugees, a greater population will have access to safe drinking water.</p> <p>(Project Outcome)</p> <p>Deep wells with handpumps and motorized piped water supply systems will be constructed/upgraded in the target areas.</p>
Beneficiaries	<p>Direct beneficiaries: a total of 237,068 residents of Odupi and Uriama Sub-Counties of Arua District, Lobule Sub-County of Koboko District, and Kululu and Kochi Sub-Counties of Yumbe District.</p> <p>Indirect beneficiary: 338,934 refugees living in settlements in the above Sub-Counties. (Odupi Sub-County: Imvepi-Zone 1, Zone 2, Zone 3, Rhino Camp-Zone 2, Zone 6, Uriama Sub-County Rhino Camp-Zone 1, Zone 2, Zone 6, Lobule Sub-County: Lobule-Zone A, Zone B, Kululu Sub-County: Bidibidi Zone 3, Kochi Sub-County: Bidibidi Zone 2)</p> <p>[Remarks] The above beneficiary number is a population projection of 2024, which is calculated by multiplying UBOS's 2017 year population projection with the population growth rate that is described in National Population and Housing Census 2014, assuming that the growth rate will stay constant.</p>
Relevant Government & Partner Organisations	<p>Ministry of Water and Environment (MWE) will, as the owner of the facilities after their completion, establish rules and regulations to administer water services and act as the technical supervisor for water and sanitation services in urban and rural areas.</p> <p>Each District Water Office will submit a budget plan along with an Annual Work Plan to MWE each year to secure budget for activities related to the WASH sector.</p> <p>The constructed facilities will be transferred to their respective Sub-County Councils through Districts while their ownership remains with the national government. Each Sub-County Office will take charge of operational aspects, such as monitoring and large-scale</p>

Item	Description
	repair of the facilities.
Summary of Construction Plan & Schedule	Preparatory Survey, Consultant Agreement: 1.0 year Detailed Design, Tender Documents, Tender, Contract signing: 1.0 year Construction work: 1.5 years
Site Conditions	<p>Geophysical exploration, exploratory drilling, investigation of existing water sources (water volume and quality), precise survey (topographical and geological surveying necessary for designing the sites and routes of conduits, pipelines, water tanks, etc.) will be carried out as part of Preparatory Survey.</p> <p>The Project will be implemented basically by utilizing and expanding the existing water supply network. However, detailed investigations will be necessary through the Preparatory Survey to determine the serviceable population and how much expansion is possible for the existing facilities, as they may not be able to cover their respective service areas entirely depending on the conditions of water sources, topography, aged facilities, etc.</p> <p>This Project requires the construction/expansion of water sources and pipelines and land acquisition, involuntary resettlement of residents, etc. are expected. Initial Environmental Examination (IEE) level assessment will be conducted at the sites selected based on the result of the exploratory drilling, etc. to develop mitigation measures against major environmental/social impacts and draft a monitoring plan, to comply with the relevant policies/guidelines.</p>
Proposed Performance Indicators	The daily average of water supply-demand balance (m ³ /day), Water supply-demand balance per person per day (m ³ /person/day)
Social and Technical Considerations	It is important that water supply facilities shall be developed considering prevention of a further widening of disparities in the distribution of water supply facilities between host-community residents and refugees especially near boundaries of settlements. It is preferable to determine the coverage of pipe networks of water supply systems and the location of point water sources through discussion with local authorities and communities in the target areas so as not to make a considerable disparity in water supply due to the difference in water pressure among public water taps. Moreover, the formation of water user committees of water supply facilities should pay appropriate attention to a balance of committee members among different ethnic groups and gender so that their different opinions are evenly reflected in the operation and maintenance system of water supply facilities.

Appendix-1: Photos showing the present conditions of existing water supply facilities

	
<p>Solar panels of Omugo Piped Water Supply System. (Omugo Sub-County, Arua District)</p>	<p>Inside of pump room of Omugo System. (Omugo Sub-County, Arua District)</p>
	
<p>Diesel generator for intake pump of Omugo System. (Omugo Sub-County, Arua District)</p>	<p>4 tap kiosk of Omugo System. (Omugo Sub-County, Arua District)</p>
	
<p>A well surrounded by a fence built by residents. (Odupi Sub-County, Arua District)</p>	<p>A well with a fence to protect the handle. (Odupi Sub-County, Arua District)</p>

Appendix-2: Project Location Map

