MARKET SYSTEMS DEVELOPMENT

FOR REFUGEE AND HOST LIVELIHOODS IN ARUA AND YUMBE DISTRICTS, UGANDA

09 February 2018

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The team thanks all those in the UN organisations, Implementing Partners, Operating Partners, the Local Governments of Arua and Yumbe and the members of the refugee and host communities in the settlements of Rhino and Bidibidi who gave the team time for the interviews, focus group discussions and workshops.

ACRONYMS

ABI-ZARDI	Abi Zonal Agricultural Research and Development Institute
DDP	District Development Plan
DPM	District Production and Marketing Department
DRC	Danish Refugee Council
DRC	Democratic Republic of Congo
GoU	Government of Uganda
HQCF	High quality cassava flour
ICRISAT	International Crops Research Institute for the Semi-Arid Tropics
IP	Implementing Partner
IFPRI	International Food Policy Research Institute
ILO	International Labour Organisation
LSTWG	Livelihoods Sector Technical Working Group
LSWG	Livelihoods Sector Working Group
MFI	Micro Finance Institution
NARO	National Agricultural Research Organisation
NRC	Norwegian Refugee Council
NRM	National Resistance Movement
OP	Operating Partner
POC	People of Concern
RWC	Refugee Welfare Committee
SOP	Standard Operating Procedure
SWP	Sector-Wide Plan
TOR	Terms of Reference
UNHCR	United National High Commission for Refugees
VC	Value chain
VSLA	Village Savings and Loans Association
WFP	World Food Programme
WHH	Werthungerhilfer
UNADA	Uganda National Agro-Input Dealers Association
WB	World Bank

EXECUTIVE SUMMARY

The present report on Market Systems Development (MSD) for refugee and host livelihoods in Arua and Yumbe districts in Uganda was commissioned by the United Nation High Commissioner for Refugees (UNHCR). The aim of the assignment is to identify value chains with potential to provide employment for refugees and hosts, analyse these chains in the context of Rhino and Bidibidi settlements, and their wider Arua and Yumbe district contexts, and formulate recommendations to upgrade the value chains to promote employment and business opportunities for refugees and hosts.

The approach used was to work with teams in the districts made up of local experts from the UNHCR, implementing partners (IPs), operating partners (OPs), local government, service providers and business actors to select value chains with high growth and employment potential, analyse the strengths and weaknesses of these value chains within their wider governance, regulatory, service provision, infrastructure and bio-geographic environments and make recommendations to upgrade the value chains and their environments.

The teams found that the crops with the highest current growth potential were cassava in both settlements, simsim (sesame) in Rhino and groundnuts in Bidibidi. The main obstacles to exploiting their potential are access to cultivable land in the settlements and, for those who do have access to land, the use of saved seed with low germination power, traditional cultivation methods, poor harvesting, post-harvesting and assembly methods and weak negotiating power with buyers.

The recommendations focus on re-orienting livelihoods programming towards achieving the goals of the Comprehensive Refugee Response Framework (CRRF) and the Phase 1, 2017-2020, objectives of the Refugee and Host Population Empowerment (ReHoPE) Strategy, namely to prepare joint programmes and action plans with the districts, begin implementation and draw lessons in preparation for Phase II, 2021-25, which will focus on district planning and implementation.

On governance, the report recommends that livelihoods proposals submitted by the IPs and OPs are assessed by joint meetings of the UNHCR and Office of the Prime Minister (OPM) against revised Standing Operational Procedures (SOPs) for livelihoods programming oriented to meeting the ReHoPE goals. It recommends that the UNHCR encourages its IPs and OPs to engage with and increasing work through the district Production and Marketing Departments (DPMs) to provide agricultural extension support to refugee and mixed farmer groups in the settlements, thereby strengthening the capacity of the districts to progressively take over these functions.

The recommendations for value chain upgrade focus on establishment of cassava, simsim and groundnut multi-stakeholders platforms to bring together the actors in these chains to promote the use of improved technologies and agronomic practices and strengthen post-harvest assembly, handling, packaging and marketing. Within the value chains it is recommended that demonstration plots and grain assembly centres are set up to demonstrate and popularise the benefits of improved farming methods and technologies and improved post-harvest handing, with the aim of stimulating crowding in within these input and output markets to create tipping points in behaviour leading to self-sustaining, market-driven development.

The report ends with an intervention framework and action plan. The action plan distinguishes immediate actions prior to the first rainy season in March 2018, and actions to lay the foundation for fuller implementation and testing of the different dimensions of the MSD approach during 2018 to 2020.

2. METHOD

2.1. Selecting the Value Chains

The terms of reference required the team to identify and analyse up to three value chains with the potential to provide employment and business opportunities for refugees and hosts. The first step, taken during the pre-mission phase, was to search for secondary data on the size and growth of economic sectors, commodities and services disaggregated to district level. Such data exists in the form of a study covering the period 2005 to 2015 and it was used as a starting point for value chain identification in the districts.[1]

The second step was to use the combined knowledge of the 18 MSD team members assembled for the hypothesis workshop in Arua in November 2017. The method used was to ask the team members to list all products and services originating in the settlements and surrounding districts and then estimate their market share and growth based on the team's collective knowledge. The products and services were then ranked within a Boston Consulting Group (BSG) Matrix using the team's estimates of growth and market share.[2] The results were then compared with the list derived from the 2005-15 study and a provisional selection of 3 value chains made using, commodities that scored high from both sources. The final step was to verify this provisional selection with actors in the settlements and wider districts through the fieldwork.

Applying these methods, the team arrived at cassava as the top scoring crops in Rhino and Bidibidi, simsim as the second top scoring crop in Rhino, and groundnuts as the second top scoring crop in Bidibidi.

2.2 Territorial Value Chain Mapping and Analysis

Based on its provisional selection of cassava, simsim and groundnuts, the team undertook an initial mapping and analysis of these three value chains during the hypothesis workshop.

The objective of the analysis was to generate hypotheses about the strengths and weaknesses of these value chains and how to upgrade them to enhance their competitiveness and increase employment and business opportunities for refugees and hosts within them.

Figure 2 represents the conceptual framework used for the value chain analysis. It is a heuristic device designed for participatory market systems analysis. The oval represents the territory, in this case the district of Arua or of Yumbe. The green arrows represent a value chain. The value chain is embedded in the territory made up of a set of systems, including governance, regulations, services, economic infrastructure and a bio-geographic and climatic environment.

Using this framework, the team analysed the selected value chains within their wider environment and formulated hypotheses on the weaknesses and strengths of the value chains and their territorial environments.

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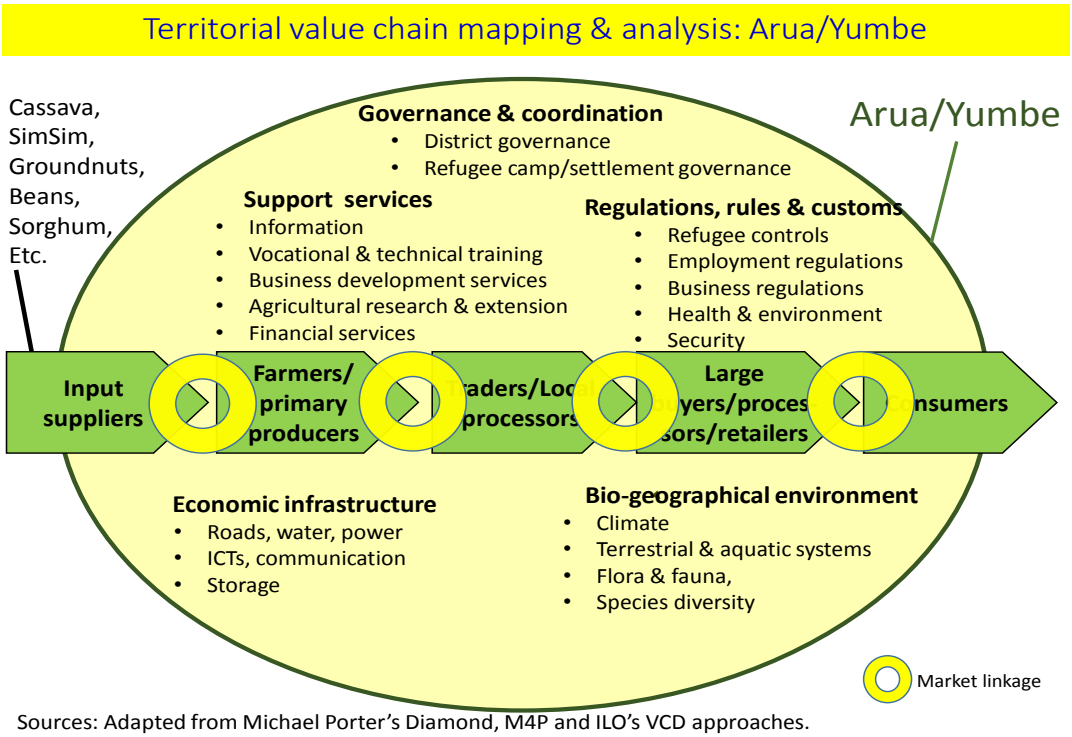
[1] Charbonière Julien & Smith Graham (2009) Agricultural Growth and Investment Options for Economic Growth and Poverty Reduction in Uganda: Implications for LED Strategy in the Pilot Districts of DDP111.

[2] https://www.smartinsights.com/marketing-planning/marketing-models/use-bcg-matrix/

Figure 2. Territorial Value Chain Mapping



Sources: Adapted from Michael Porter's Diamond, M4P and ILO's VCD approaches.

2.3 Skills Market Systems

Within the Comprehensive Refugee Response Framework (CRRF) skills training is singled out as playing a key role in providing sustainable solutions for refugee livelihoods. Figure 3 is a heuristic device developed by the International Labour Office (ILO) to analyse skills markets for refugees. The tool is used here to examine the same territories as those illustrated in Figure 2, now focussing not on single value chains but on cross-sector skills markets within a territory.

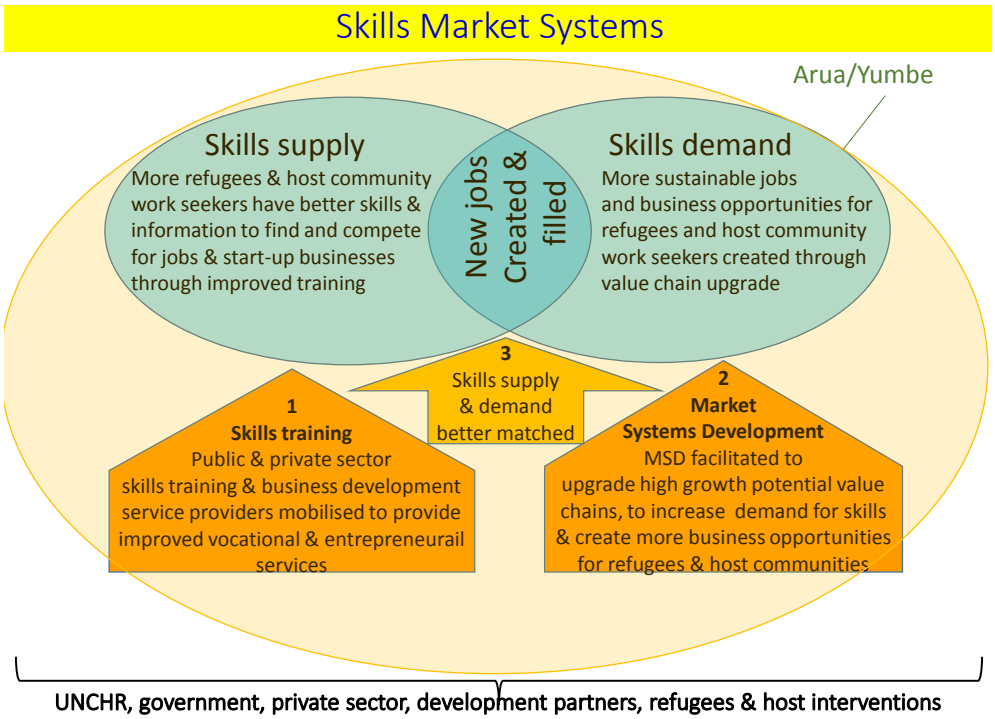
The blue oval on the top right illustrates skills demand. In the MSD model used in this assignment, skills demand is stimulated through the upgrade of value chains selected for their high growth potential. This upgrade results in market systems development (MSD), illustrated in the brown arrow on the bottom right of the diagram.

The skills demanded are within the value chain itself, such as crop production and marketing skills, and alongside and servicing the value chains, such as skills in agricultural extension, transport, ICTs, finance and so on. The skills demanded are agricultural, technical, vocational, entrepreneurial and financial. Refugees and hosts may have skills and experience in some of these areas, but to upgrade the value chain and render it increasingly productive and competitive requires skills enhancement amongst those working within and alongside the value chain.

The blue oval on the left represents skills supply. The skills upgrade involved is the result of skills training, illustrated in the arrow on the bottom right. This training may be provided by the public or the private sector. If skills demand is matched by increased and improved skills supply this results in increased and more productive employment, illustrated in the small brown arrow in the middle. Job centres or private business development services (BDS) suppliers can help match demand with supply by providing market information on jobs and job seekers.

Using this skills market tool, the team formulated hypotheses about skills demand and supply in the districts.

Figure 3. Skills markets



Source: Adapted from UNHCR/ILO (2017), p.5, Figure 2.

It must be noted that the three products selected for value chain analysis, cassava, simsim and groundnuts, offer the greatest opportunities for employment, business and farming development, but there are other agricultural and non-agricultural value chains that also provide opportunities for skills matching that are not included by this focus. To address this weakness would require a cross-sector, area-based skills market analysis, for example at the district level.

In the section below dealing with Business, Technical and Vocational Education and Training (BTVET), it is recommended that this form of market assessment is undertaken in future in order to address the needs of refugee and host community youth, in particular those who are drawn to non-agricultural economic activities.

2.4 Markets as Complex, Reflexive Systems

To use effectively use MSD as a means of promoting sustainable livelihoods for refugees and hosts, it is essential to take into account the way markets operate and how the actors within market systems respond to project interventions. Market systems are complex, reflexive systems.[3] A reflexivity-sensitive approach is important in all market situations due to the dynamism of markets and their unpredictability. Interventions designed to improve the functioning of markets may, and often do, have unintended effects. This requires an approach that promotes repeated hypothesis formulation and the use of small-scale interventions as probes to test hypotheses, learn from and adjust interventions.

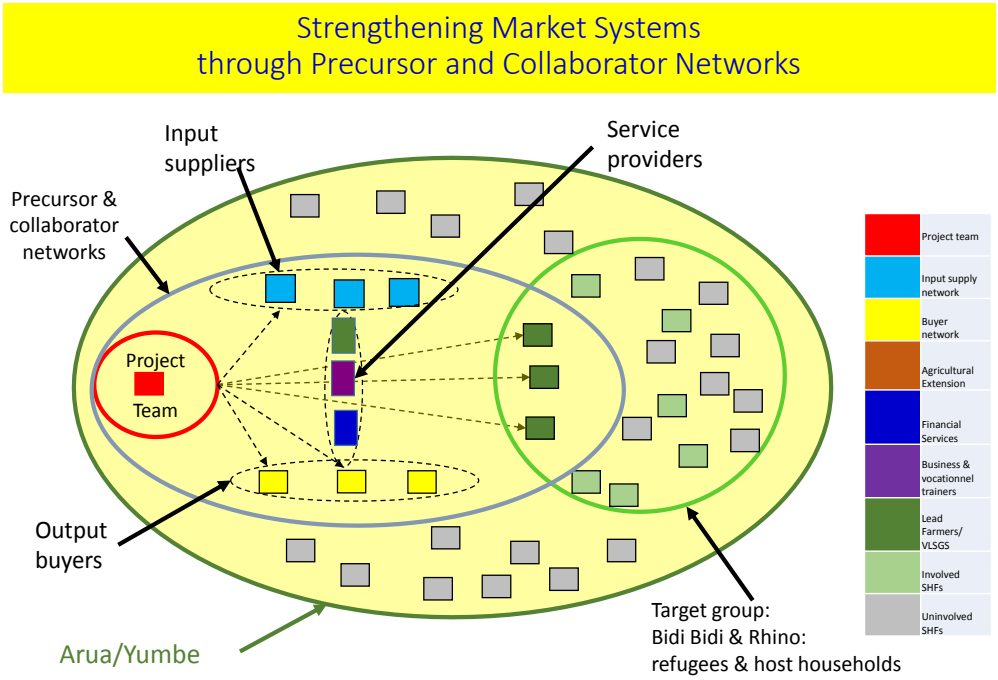
The approach in reflexivity-sensitive MSD is indirect. Rather than working directly with end beneficiaries the approach is to identify and work with what may be called pre-cursor entrepreneurs and their collaborator networks. Pre-cursor entrepreneurs are change agents. They are people who use their assets and capabilities to take the risk of innovating. A key characteristic of such agents is their commitment to bringing about change not only for themselves and their immediate families but also for their communities through demonstrating to those working and living around them the

[3] Beinhocker, (2014) Reflexivity, complexity, and the nature of social science, Journal of Economic Methodology.

benefits of adopting new methods and technologies. Such precursor innovators exist amongst both refugee and host communities and it is critical to the success of the MSD approach to seek them out and give them lead roles in the change process.

Figure 4 shows how the precursor and collaborator network model works. A project team, shown in red on the left, seeks out, identifies and establishes partnerships with precursor entrepreneurs, and encourages them to set up supply, demand and service networks that link them to collaborators amongst the end beneficiaries: the refugees and hosts located nearby and known to the pre-cursors within the settlements and in the wider district.

Figure 4. Precursor and Collaborator Networks



Source: Adapted from Osario-Cortes and Marcus Jenal (2013) Monitoring and Measuring Change in Market Systems, Rethinking the Current Paradigm, MAFI.

The small-holder farmers (SHFs) shaded in green rectangles, within the green circle, represent the refugees and hosts who are linked to each other through local economic and social networks and are mobilised by the precursors in the targeted implementation area. Those shown in grey represent households that, at first, do not join, but who later see the benefits of joining and decide to do so.

The hypothesis underlying this approach is that strengthening the productive activities and market engagement of refugee and host farmers and entrepreneurs in this indirect way can trigger tipping points. A tipping point occurs when an intervention induces a change within the markets that takes them across a threshold, after which they gain sufficient momentum to become self-sustaining without external support.

2.5 MSD Team and the People with whom it interacted

The MSD team was made up of two groups, one for Arua and one for Yumbe, a total of 18 people, excluding the international consultant.[4] The teams were made up of people drawn from the UNHCR, IPs, OPs, local government, refugee and host representatives and local business.

[4] See Annex 1 for the list of names.

The team interacted with a total of 385 people through 56 key informant interviews with representatives of OPM, district officials, IPs and OPs, traders, agro-input dealers, farmers associations and businesses, 10 focus group discussions (FGDs) with refugee and host farmer groups, mixed farmer groups and Village Savings and Loans Associations (VSLA).[5]

[5] See Annex 3 for the mission timetable, interviews and focus groups.

3. CONTEXT

3.1 The CRRF

The MSD assignment follows from the New York Declaration on Refugees and Migrants of the 19th September 2016, and the UNHCR's adoption of the Comprehensive Refugee Response Framework (CRRF), the core elements of which are set out in the New York Declaration.[6]

The CRRF declares that "Livelihoods programmes will strive to strengthen the local market, providing an injection of labour, consumers, and traders. UNHCR will work with local governments, businesses, trade and labour associations to build on existing market opportunities, benefitting both refugees and host communities."[7]

3.2. UNHCR's Minimum Criteria for Livelihoods Programming

The principles enunciated in the CRRF are similar to those already set out in the UNHCR's Operational Guidelines for the Minimum Criteria for Livelihoods Programming of 2015, which advocate market-driven approaches to achieving improved refugee self-reliance and livelihoods.[8] The Minimum Criteria state that "the starting point for UNHCR engagement in livelihoods is advocacy for the inclusion of persons of concern into existing local, national and/or regional livelihoods opportunities and services.

The essence of the UNHCR's approach since 2015 has thus been to promote sustainable refugee livelihoods by integrating refugees directly into the host community economy, opening access to its systems of service provision, while taking care to ensure that people of concern within the host community, namely the poor, vulnerable and excluded, are involved in this process and benefit from it.

3.3. The ReHoPE strategy

Uganda has long been recognised for its progressive approach to refugees. Here we focus on the recently formulated policy framework known as the Refugee and Host Population Empowerment Strategy (ReHoPE) strategy.[9] The ReHoPE strategy translates the CRRF framework into strategy in the context of Uganda, drawing on and re-enforcing the country's Self-Reliance Strategy[10] and Settlement Transformation Agenda.[11]

The aim of the ReHoPE strategy is to coordinate a transition from humanitarian to development support in Uganda's refugee-impacted districts. Its first goal is to foster sustainable livelihoods for refugees and host communities, thereby contributing to socioeconomic growth and increased individual income. It seeks to promote a transition within the refugee hosting districts from separate service delivery for refugees and hosts, which is the current situation, to integration of refugees into a strengthened district and service delivery system serving both refugees and hosts.

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[6] UNHCR (2016) New York Declaration for Refugees and Migrants.
[7] UNHCR (2016) New York Declaration, p.11.
[8] UNHCR (2015) Operational Guidelines for the Minimum Criteria for Livelihoods Programming, UNHCR/OG/2015/4.
[9] GoU, UN, World Bank (2017) ReHoPE – Refugee and Host Population Empowerment Strategic Framework, Uganda.
[10] GoU and UNHCR (2004) Self-Reliance Strategy 1999-2004, for Refugee Hosting Areas in Moyo, Arua and Adjami Districts, Uganda, Mid-Term Review.
[11] GoU, Office of the Prime Minister (2015) Settlement Transformation Project, Concept Paper.

ReHoPE is an area-based approach that will be aligned to and support the district development plans and district planning processes and will promote joint planning in the refugee-hosting districts. Phase I of the ReHoPE strategy, 2017-20, is devoted to preparing joint programmes and action plans, beginning implementation, drawing lessons and making adjustments. Phase II, 2021-25, involves rolling out the programmes developed and tested in Phase 1, with a particular focus on district level planning and implementation. Phase III, 2026-30, involves consolidation of the programme and a focus on national service delivery systems. The strategy document identifies 10 hosting districts for priority action, amongst which are Arua and Yumbe.

The implication of ReHoPE strategy is that it requires a shift in the focus of the UNHCR's livelihoods programming. From its current practice of using the IPs and OPs to provide livelihoods support directly to refugees the ReHoPE strategy calls for the re-orientation of support towards gradually building the capacity of the districts to play this role, beginning with joint UNHCR-district planning in Phase 1 and progressing to district level planning and implementation in Phase 2.

This is the key dimension of the change that needs now to take place within the UNHCR's approach to livelihoods planning in Uganda, and where the MSD assignment seeks to make a contribution.

3.4. War, Peace, Refuge & Refugee Policy

During its hypothesis workshop the MSD team put together a forty-year time line of War, Peace, Refuge and Refugee Policy in the West Nile.[12] The purpose of the timeline is to ensure that the MSD assignment is anchored in a realistic understanding of the historical context that has created the refugee crisis so that its recommendations are sensitive to the underlying processes at work.

Taken as a whole, what the timeline shows is that the conflict in the West Nile and in the neighbouring eastern DRC and Southern Sudan has been going on for most of the last 40 years. During this this period, waves of refugees moved in both directions, from Western Nile into the Democratic Republic of Congo (DRC) and southern Sudan and from the DRC and southern Sudan into West Nile.

Due in large part to the Ugandan governments approach to refugees, the West Nile region itself has experienced relative peace for the last 14 years. It has become a haven for hundreds of thousands of refugees from its neighbouring countries and is once again the main destination of the huge numbers of people fleeing conflict in southern Sudan.

It is against this canvass that the present MSD assignment has sought to understand the potential for market systems operating in the settlements and the districts that surround them and to seek ways of opening opportunities for refugees and hosts linked to markets – under the assumption that refugees may or may not be able to return to their erstwhile homes due to continuing conflict, and may or may not wish to do so even if the conflict ends at some future date and they are given the opportunity to return.

It must be kept in mind that the fundamental causes of the refugee crisis now lie outside Uganda. Refugee integration through MSD and other approaches can only provide durable solutions for those who decide to stay in their host country. The deeper solutions lie in peace and reconstruction in Uganda's neighbouring countries and peace in the whole region.

[12] See Annex 1 for details.

3.5 Country Economy Context

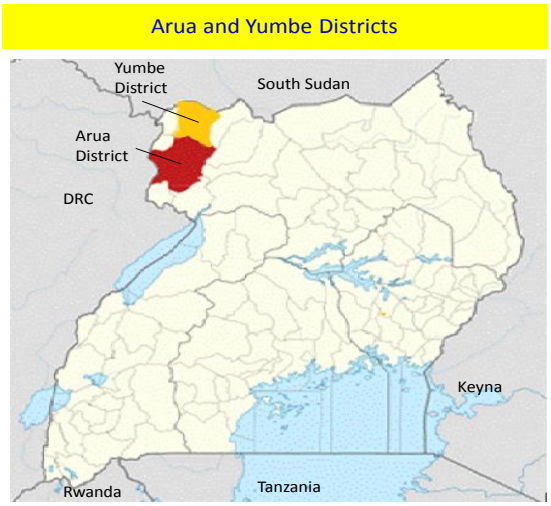
Uganda's economy grew at an average annual rate of 7% during the 1990s and early 2000s but slowed to a rate of 4.5% in the five years to 2016.[13] The recent slowdown in economic growth is due to a combination of factors, including protracted drought, continuing conflict in South Sudan, slow foreign direct investment inflows and slow public implementation of infrastructure projects.

Despite sustained growth and structural change in Uganda's economy since 2000, agriculture has continued to be the main source of employment, 62% of the population in 2015, though it contributed a much smaller share to the national economy, about 26% in the same year.[14] Growth in agriculture has been the main factor accounting for poverty reduction since the mid-2000s.[15] The transformation of agriculture is thus critical for further poverty reduction.

3.6 District and Settlement Contexts

Arua and Yumbe Districts are located in West Nile region of Uganda, as shown in Map 1. Rhino Refugee Settlement lies on the north-eastern borders of the Arua District, abutting the west bank of the Nile. Arua District's western border is with the DRC and its northern borders are with Yumbe and Moyo Districts. Yumbe District lies to the north of Arua and borders on the southern Sudan. Bidibidi settlement lies on the southern border of Yumbe District which is Arua's northern border. Thus the refugee settlements of Rhino, in Arua, and Bidibidi, in Yumbe abut.[16]

Map 1. Arua and Yumbe Districts



The numbers of refugees and the size of the host population in Arua and Yumbe in October 2017 are shown in Table 1. There were 223,097 refugees recorded in Arua on that date, which made 21% of the total district population of 1,062,367. In Yumbe there were 285,014 refugees, which made up 34% of the total district population of 838,276. There were thus roughly 4 locals to each refugee in Arua and three locals to each refugee in Yumbe. Bidibidi settlement, in Yumbe, is at this point in time

[13] World Bank in Uganda (2017) Economic Overview, October. http://www.worldbank.org/en/country/uganda/overview.

[14] Deloitte (2017) Uganda Economic Outlook 2016, the Story Behind the Numbers.

[15] World Bank, The Uganda Poverty Assessment Report 2016, p. 53-4, Table 3.1.

[16] https://ugandarefugees.org/wp-content/uploads/West-Nile-Guide-Map-for-Settlements-as-of-9-May-2017.pdf

the largest refugee camp in Africa and the second largest in the world, after the camp in Bangladesh for Rohinga refugees from Myanmar.[17]

Table 1. Refugees and host population in Arua and Yumbe, 2016-2017

	Refugees	Hosts	Total	% Refs	%Hosts	Hosts/Refs
Arua	223097	839270	1062367	21%	79%	3,8
Yumbe	285014	553262	838276	34%	66%	2,9

Source: UNHCR https://ugandarefugees.org/

In Arua, which contains Rhino Settlement, the majority of refugees, 99%, were from South Sudan. There were also 335 refugees from the Democratic Republic of Congo in 2016 and this figure increased to 4887 over the year that followed. In Yumbe, which contains Bidibidi Settlement, all refugees were from South Sudan.

Due to escalating conflict in Southern Sudan, the refugee population in Yumbe more than tripled from 84,140 in 2016 to 285,014 in 2017. These are staggeringly large increases in any context but even more so given the high levels of poverty and the relatively low service delivery capacity of local government in these districts. At present there are no signs of the conflict in South Sudan subsiding.

District economies

The economies of Arua and Yumbe are heavily dependent on agriculture. Over 81% of the economically active population is involved in farming in Arua and 72% in Yumbe, of which 79% is subsistence-based in Arua and 86.1% in Yumbe. Households use mainly family labour on small holdings using simple farming tools such as hoes, pangas and harrowing sticks.[18] Plot sizes are small and most farmers depend on rain fall. Poverty levels are very high, an estimated 62.9% of Yumbe's population in 2012.

The major food crops in Arua are cassava, beans, groundnuts, simsim (sesame), millet and maize, while tobacco is the major cash crop according to the district's state of the environment report in 2012.[19] Other crops are mangoes, avocado, cassava, matoke (plantain) and flowers. In Yumbe the main crops are cassava, sweet potatoes, sorghum, ground nuts, simsim, beans, rice tobacco and cotton.

In Arua, the main types of livestock kept by households are: goats, chickens, fish, pigs and bees. In Yumbe the main types of livestock are pigs, goats, poultry, sheep and cattle, but the livestock holdings of households in Bidibidi are smaller than in Arua. In BidiBidi, some households are involved in fish farming. Only a very small percentage of the population, 9% in Arua, was employed in the formal sector, from figures obtained in 2013.[20]

Land holdings

[17] AFP https://www.geo.tv/latest/163339-biggest-refugee-camps-in-the-world

[18] This and the following information was taken from the Arua District, Statistical Abstract 2012, June, p. 21 and Yumbe District Abstract 2013.

[19] GoU, Arua District Local Government, (2004) District State of Environment Report, p. 9.

[20] Arua District, Statistical Abstract 2012, June, p. 22.

According to the socio-economic survey undertaken by Reev Consult International late in 2017 for the UNHCR, the average area of land allocated to refugee households in Bidibidi is 30x30 metres, or just over a fifth of an acre, and in Rhino 50x50 metres, just over half an acre.[21]

There is further evidence on land holding sizes from the Interagency study of Rhino settlement undertaken in 2017. [22] This study found that 55% of refugee households held land of between 20x20 and 30x30 metres and 20% of households held land of between 50x50 and 50x100 meters. In the case of host community households, 17% had holdings of 30x30 to 50x100 metres while the remainder had holdings that exceeded the latter amount.

Economic activities

The proportion of people recorded as having no economic activity in Bidibidi in 2017 was 38% and in Rhino 48%.[23] Small business ownership represented the numerically most important economic activity in both settlements, accounting for 17% in both Bidibidi and in Rhino. In Rhino, 13% of the refugee population was involved agriculture, but in Bidibidi, only 2%. In Bidibidi, 13% of the population was involved in artisanal work, but none were involved in this kind of work in Rhino. Casual labour occupied 13% of the population in Bidibidi and 22% in Rhino. The next most important category was salaried employment, which occupied 7% of the employed in Bidibidi and 5% in Rhino.

In the search for livelihoods for refugees, it is important to try to match their skills and experience gained in their previous jobs with market opportunities in their present situations. This requires gathering information on the occupations in which they were engaged in their countries of origin. A study done on Werthungerhilfer (WHH) beneficiaries found that the majority, 56%, were involved in crop farming or livestock husbandry before they came to Rhino Camp. A significant number, 40%, were involved in non-farm activities in their country of origin, of which a substantial number were in businesses of various kinds, including wholesale, retail, hospitality, personal services and crop trading.

Sources of household income

Contrary to what might have been expected of a refugee settlement within an agricultural zone, the main source of refugee household income in both Bidibidi and Rhino is business activities. For Rhino, this is followed by agriculture, but for Bidibidi, the second main source is casual labour. Casual labour comes third for Rhino and incomes from salaried employment comes third for Bidibidi.

These figures suggest that the base of Rhino's economy remains agriculture, but the current base of Bidibidi's economy, for refugees, lies in non-farm business activities, coupled with salaried and wage employment. The high percentages of refugees involved in business and the low percentages involved in agriculture in Bidibidi may, in part, be explained by the fact that this camp was established in 2016, and this has left insufficient time for refugees to access and cultivate the land.

The large proportion of people involved in business may also reflect the monetisation by refugees of food and non-food aid to generate cash to purchase other non-food items or to invest in agricultural inputs, to hire land and to begin cultivation. This hypothesis is supported by the findings of a World Food Programme (WFP) study of cash and food aid in Rhino, discussed next.

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[21] Reev Consult International (2017) Livelihoods Socio-Economic Assessment in the Refugee Hosting Districts, p. 26.

[22] UNHCR & World Vision (2017) Inter-Agency Livelihood Assessment Targeting Refugees and Host Communities in IMVEPI and Rhino Camp Settlements, Arua District, Northern Uganda Report Prepared for UNHCR and World Vision Uganda, P. 14.

[23] UNHCR & World Vision (2017) Inter-Agency Livelihood Assessment Targeting Refugees and Host Communities in IMVEPI and Rhino Camp Settlements, Arua District, Northern Uganda Report Prepared for UNHCR and World Vision Uganda, p. 9.

The WFP study found that the largest source of household income in Rhino, in 2016, was in fact derived from the sale of food assistance, over 30% of the total. The second largest source was from "other sources", which are not specified, and the third from food aid, 17%, namely income in kind. It is noticeable that food crop production contributed only 6% to refugee household income, but this figure should be understood against the background of the fact that a large number of refugees had only recently arrived – the study does not distinguish between groups in terms of their length of stay in the settlement.

Crop production

In Rhino, in order of quantitative importance, cassava, simsim, sorghum, maize, beans groundnuts and vegetables were produced. According to the Reev Report, which questioned refugee households on the crops they were currently growing, the most important crops in Bidibidi were sorghum, maize and simsim, with some vegetables. Cassava is not mentioned as being cultivated by the refugees, although it emerged as the crop with the greatest market potential from the value chain selection process undertaken by the team and confirmed during the fieldwork in Bidibidi.[24] With the exception of sorghum, the output per hectare of land was higher in Rhino than in Bidibidi.[25]

Livestock

In Rhino cows, goats, pigs and chickens are kept by households whereas in Bidibidi, only goats and chickens are kept.[26]

Finance

The team found no comprehensive statistics on the savings and loans specifically for the two settlements, but this information is available for refugees in Uganda as a whole. Savings and loans are important for both refugee and host community household livelihood strategies.[27] Most of the refugees and most of the hosts borrow from friends and relatives, 58% and 37% of households respectively. The second most important source is from the VSLAs, from whom 20% of refugees and 27% of host borrowed. The use of banks was very much lower, only 4% of refugee households and 10% of host households.

The Reev report discovered thriving micro credit activities, mainly Savings and Credit Cooperative Organizations (SACCOs) and VSLAs in the refugee settlements across the country. Across the country the proportion of the refugee population using these micro credit schemes 30%. However, in Bidibidi and Rhino, the proportion of the population using micro credit schemes was only 8.1% and 5.9%, respectively, much lower than in the other settlements.[28]

The low proportion of the population engaged in savings and credit associations may be explained by the fact that these refugees have arrived only recently and that it takes time to organise these groups, especially for people previously not known to each other.

Technical/Vocational/Business Training

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[24] This inconsistency with the Reev report findings may be explained by the recent arrival of refugees in Bidibidi and the fact that the grains they chose to plant in their first season in the settlement have a quicker return than cassava. Uncertainty about the length of their stay in the settlement may have influenced this choice.

[25] Source: Reev Consult International (2017) Livelihoods Socio-Economic Assessment in the Refugee Hosting Districts, p. 48.

[26] Source: Reev Consult International (2017) Livelihoods Socio-Economic Assessment in the Refugee Hosting Districts, p. 29.

[27] Reev Consult International (2017) Livelihoods Socio-Economic Assessment in the Refugee Hosting Districts, p. 69-70.

[28] Reev Consult International (2017) Livelihoods Socio-Economic Assessment in the Refugee Hosting Districts, p. 33.

The report on the Arua District Development Plan II of 2015 states that there are 6 government and 9 private technical/vocational schools and no business training institutions in the district. A recent report on Business, Technical and Vocational Education and Training (BTVET) in the West Nile Region assesses two training institutions in Arua, the Arua Technical Training Institute Ragem and the Nile Institute for Management Studies Arua.[29] The former was under reconstruction in 2017. The latter, judged by the report to have only average facilities, offers various technical and management courses. The same report refers to the Lokopio Hill Technical Institute Yumbe District which had begun providing refugees, the former 234 and the latter 100 trainees, according to figures for the year 2015.

Economic Infrastructure

According to the report on the Yumbe District Development Plan, most of Yumbe's trunk roads, 77%, and most district roads, 76%, were in good to fair condition in 2015, but most community access roads, 69%, were in poor condition.[30] The Arua DDP III provides a table showing distances of feeder and community access roads in the district, but does not give information on their state.

Environmental factors

The Reev survey found that changes in weather patterns, including long periods of drought were impacting on all settlements in the county, and had affected many areas in the West Nile, including Yumbe.[31] Activities such as tree cutting for firewood and charcoal and for household construction, as well as bush burning to clear lands for cultivation were having a negative impact on the local environment. Confirming these findings, the 2017 Interagency Report on Livelihoods in Rhino and Imvepi camp settlements found that 81% of the refugees and 79% of the host communities stated they were concerned about the availability of fuel and only 4% of refugees and 5% of host communities are using fuel-efficient stoves.[32]

District Development Strategies

The economic objectives of the Yumbe Development Plan in 2015 were to "Improve household incomes through maintaining access and feeder roads, supporting profitable agricultural production, sustainable use of natural resources and enhancing peoples' access to credit and income generating activities."[33] The Arua District Development Plan of 2015 sets the following objectives for its Department of Production and Marketing (DPM):[34]

- Improve agricultural production and productivity for increased household food and income
- Create an enabling environment for competitive investment in agriculture
- Provide sustainable, quality extension services to farming communities
- Improve farmers access to timely market information and market facilities
- Build capacity of farmer institutions for effective service delivery.

These objectives are directly in line with those of the MSD assignment.

[29] Mubarak Bachu (2016) Needs Assessment of BTVET Skills in Kiryandongo, Adjumani and Arua Settlement Camps, Belgium Development Agency. BTC, p. 20, 35 & 44.
[30] GoU (2015) Yumbe District Development Plan, 2015/6-2019/20, DDP11, p. 40.
[31] Reev Consult International (2017) Livelihoods Socio-Economic Assessment in the Refugee Hosting Districts, p. 73-74.
[32] UNHCR & World Vision (2017) Inter-Agency Livelihood Assessment Targeting Refugees and Host Communities in Imvepi and Rhino Camp Settlements, Arua District, Northern Uganda Report Prepared for UNHCR and World Vision Uganda, p. 6.
[33] GoU (2015) Yumbe District Development Plan, 2015/6-2019/20, DDP11, xiii.
[34] GoU (2015) Arua District Development Plan, 2015/6-2019/20, DDP 66.

4. FINDINGS AND PROPOSED ACTIONS: ENVIRONMENT FOR MARKETS

This section sets out the team's findings and proposed action on the environment for MSD. The section begins with governance and then takes up services and economic infrastructure and ends with the bio-geographic and climatic environment. The environment for MSD has some features that are relevant to all three value chains and some features that are specific to each of them.

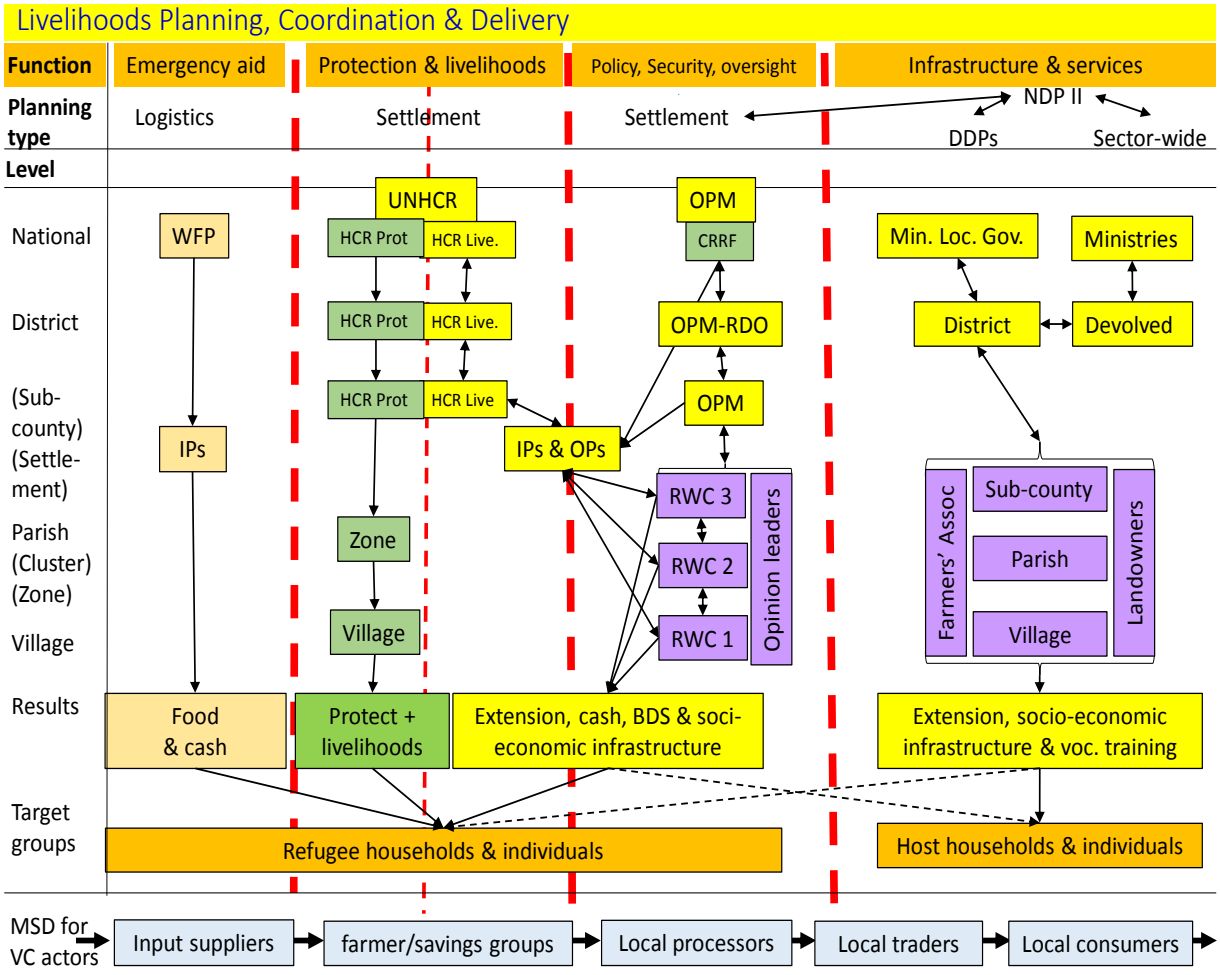
For each section, findings are summarised and then a list of actions recommended.

4.1 Governance and regulation

4.1.1 The Governance System in the Settlements

The governance system in the settlements exerts a strong influence on the situation of refugees and hosts and is highly complex. It thus deserves close examination. We approach governance here from the perspective of livelihood planning, coordination and service delivery in the settlements. The main features of the system are shown in Figure 5.

Figure 5. Livelihoods Planning, Coordination and Service Delivery



To orient interpretation of the figure, consider first the top row, which shows the main functions performed by different institutions involved in livelihoods promotion. These are, from left to right, delivery of emergency food aid mainly by the WFP, delivery of non-food core relief Items , protection and livelihoods support services by the UNHCR, IPs and OPs, policy formulation, security and oversight by the Office of the Prime Minister (OPM) and infrastructure and service delivery by district the local authorities and the national sector ministries.

The second row shows the type of planning that corresponds with these different functions: logistics planning for emergency aid delivery by the WFP, settlement planning and planning of protection and livelihoods for the UNHCR, settlement planning and planning for security and oversight by the OPM and national development planning, the NDP, for the government of Uganda, under which falls district development planning for the local authorities and sector planning for the sector ministries.

Corresponding to each of these functions and planning modes is the third row from the bottom of the figure which shows the intended results of delivery: food and cash from emergency aid for the WFP, protection and livelihoods support from the UNHCR, security and oversight of the settlements for the OPM, and infrastructure and service provision through the local authorities and devolved sector ministries: roads, water, health, economic infrastructure and education and training.

Note that the delivery of these results is targeted at the refugee and host populations, shown in the second row from the bottom, and that these two groups are serviced through distinct channels, the former provided and overseen by the WFP, the UNHCR and OPM, and the latter provided and overseen by local government and the devolved branches of the sector ministries.

Now consider the left hand column, which shows the different levels of governance: national, district, sub-county (which corresponds roughly to the settlements), parish and village.

Using this framework, it is possible to trace through the delivery roles of the different organisations and the governance systems involved.

4.1.2 Livelihoods Coordination & Delivery

Looking at the WFP column, it is clear that for WFP the main focus is on delivery of emergency aid and the main form of planning is logistics. WFP delivers food aid either in kind or cash through its implementing partners (IPs) such as World Vision. Not shown in the WFP column is livelihoods support. This is a function the WFP has recently begun to take on. It is focussed mainly on providing livelihoods support to the most vulnerable sections of the refugee and host population.

Consider next the UNHCR column. The UNHCR's traditional function, and currently still its main preoccupation, is protection, shown in green. This function is exercised through structures at international (not shown in the figure), national, district (sub-branch), settlement (corresponding roughly to sub-county), zone (corresponding roughly with parish) and village level.

The UNHCR column is split in two, with the second column showing the livelihoods support function, in yellow. The livelihoods function is a more recent acquisition for the organisation, one that is beginning to play an increasingly central role as a result of the world refugee crisis, the protracted nature of the refugee situation in many cases and the consequent adoption of the CRRF internationally and ReHoPE in Uganda.

In practice, the team found that the different UNHCR sector interventions and livelihoods functions are organisationally disconnected. Many of those within the UNHCR who are responsible for different sector interventions such as protection find it difficult to see how the livelihoods function relates to their work and question whether it is justified. Some of those involved in livelihoods promotion find it difficult to monitor and coordinate livelihoods interventions without clear reporting lines and without a full understanding of the role of livelihoods by the UNHCR decision makers. The UNHCR is in a phase of testing and developing its approach to livelihoods support and this aspect of its work has not yet settled into the functioning of the organisation in the way that protection has.

Note next that the livelihoods function is not under the exclusive control of the UNHCR because the UNHCR does not have the required staff to play a livelihoods coordination role at all levels. The work of the IPs is funded by UNHCR and this involves approving their proposals, but the Operating Partners (OPs) have their own funding sources and their right to operate depends on authorisation

by the OPM. The role of the OPM is to approve the operation of NGOs, not to screen the proposals of the IPs and OPs.

There are no dedicated UNHCR livelihoods officers either at the district or at the settlement level in Rhino or Bidibidi. The UNHCR field officers report directly to their Sub-Office in Arua, without a direct line of reporting and communication with the livelihoods staff based in Kampala. This makes monitoring and coordination of livelihoods activities difficult. The double accountability and complicated reporting lines for IPs and OPs is a source of frustration for those within the UNHCR who are responsible for the livelihoods work. In practical terms it complicates livelihoods planning and coordination in a situation where planning is already highly complex given the differing approaches to delivery, time frames and area coverages of the different IPs and OPs involved.

The one-year planning horizon used by UNHCR and its policy of contracting for short periods for most of its staff adds to instability and uncertainty in livelihoods coordination. The organisation has recently moved to multi-year planning and this should help render planning easier and the impact of interventions more sustainable.

Next, turn to the OPM column. The OPM has its own governance structure of Refugee Welfare Committees (RWCs), parallel to and corresponding with the district, sub-county, parish and village structures within local government. At each of these levels there is a distinct structure of governance for the area, made up of local leaders and sector committees. The leadership within these structures are called “opinion leaders”. The team met with several of them, individually and in groups. They revealed themselves to be well informed, highly competent and well-respected leaders with strong relationships to the refugee communities in their areas. Some of them have the characteristics of the precursor entrepreneurs discussed earlier in this report and their relations with refugee communities represent potential collaborator networks.

It is through these RWC structures that livelihoods services are channelled to refugee households and through them that the OPM exercises its security and oversight functions. Note that although the infrastructure and services channelled through the RWCs are mainly focussed on the refugee population, some sections of the host community benefit from them, as indicated by the dotted lines from the results row on the refugee side to the beneficiary row on the host side of the diagram.

The existence of parallel delivery, coordination and monitoring structures responsible for protection and livelihoods both within the UNHCR and between it and the OPM, with complicated and sometimes overlapping reporting lines, makes for a highly complex situation. It is a situation that has evolved out of the urgent and simultaneous need for emergency aid, protection and security. It is not a system that can be rapidly and easily dismantled or transformed to meet the end objective of the ReHoPE strategy, namely to integrate the settlements into the regular systems of local and national government. Although it is possible to begin to move in this direction, the full transition to integration of refugees into the regular governance system will only become possible once the refugee crisis comes to an end.

Finally, consider the governance and service delivery structures in the column on the far right of the diagram. This is the regular governance system to be found in all the districts of Uganda. At the top, planning at national level takes the form of the NDP, which is currently in its second phase, NDP II. The NDP II explicitly takes into account refugees located in the country. The NDP informs and is informed by two distinct sets of plans, the District Development Plans (DDPs) and the Sector-Wide Plans (SWPs) of the sector ministries, notably those responsible for infrastructure and service delivery. The DDPs are area-based, which requires holistic planning within defined territories, the districts. The sector ministries undertake SWP, namely planning that cross-cuts geographical and administrative boundaries. The delivery of services by the sector ministries is devolved to the district level where the sector service departments interact with the district planners to coordinate delivery within the district.

Below the districts are governance structures at the sub-county, parish and village levels. These are the mirrors of the RWC structures that come under the OPM, with the difference that in the case of the districts, these are governance structures involving the host population, not refugees. It is through these structures of representation that public infrastructure and service delivery is planned and implemented for the host communities. Note that such infrastructure and services may benefit some of the refugee population, shown by the dotted line from the results row to the beneficiary row.

There is thus a disconnection between refugee and host governance and service delivery systems in the present setup. There are good historical reasons for this, but it complicates service delivery for both the refugee and host communities and, particularly for certain elements in the host community, notably those who refer to themselves as landlords. The system has led to a degree of resentment and frustration on the part of some landlords, based on unrealised expectations regarding the benefits due to them as the refugees' hosts.

Mention must be made of the mechanisms within the system designed to enable coordination between the donors, the OPM and the regular system of government. There are regular meetings of the Livelihoods Sector Technical Working Group (LSTWG) in Kampala that bring together the UNHCR, IPs, OPs and OPM. UNHCR together with OPM has regular interagency meetings at national level, where all UN agencies, NGOs and other actors and stakeholders discuss the refugee situation and the state of protection and livelihoods interventions.

There are monthly coordination meetings at the district level co-chaired by OPM and UNHCR, which bring together the UNHCR, OPM and district authorities. The purpose of these district-level inter-agency meetings is to facilitate the transition from separately provided support to an integrated infrastructure and service delivery system under the ambit of the local authorities. The inter-agency, district level coordination structure is a key structure that will gain in importance as the implementation of the ReHoPE strategy begins to gather momentum. It is through this structure that the integration of the refugees into the district infrastructure and service system, including livelihoods support services, will be planned, implemented and monitored.

In Bidibidi there is functioning Livelihoods Sector Working Group (LSWG) where the OPs and IPs come together in regular meetings that are designed to help coordinate livelihoods interventions and to monitor their progress. These meetings are co-chaired by a UNHCR field officer (not a dedicated livelihoods officer) and a member of staff of one of the IPs. The work is carried out in consultation with the Refugee Welfare Committees (RWCs). This system is working well and could provide a model for other settlements. There is no equivalent system in Rhino. During the transition period, LSWGs at the settlement level will play key roles in livelihoods coordination and it is important that district extension officers and other service providers who are doing parallel work with the host populations should be included in these meetings.

The LSWG in Bidibidi include has an information collection and reporting system based on weekly IP and OP updates. The material gathered includes information and data on land allocation, seed and tools distribution, demonstration plots, crop yields, cash grants, VSLAs, cash for work, income generating activities and vocational skills training. This information and the reporting system in place provides a good starting point for an M&E system to track livelihoods interventions. An equivalent system does not yet exist in Rhino settlement.

4.1.3 MSD for Value Chain Actors: A Factor of Integration

The bottom row of Figure 5 shows the links in a value chain, from inputs through to final markets for consumers. This is where the focus of the present study lies and where it is intended to make its main a contribution to the ReHoPE strategy.

Unlike the governance structures which are organised as vertical hierarchies, the value chains are horizontal structures that hold the promise of integrating refugees and hosts all along the chain. The value chains are thus a potentially powerful factor of integration across the communities. The team found that this is already happening. There are refugees and hosts involved in agro-input supplies, farmer groups and in processing and trade. Value chain upgrade initiatives should support this spontaneous integrating potential of the value chains.

4.1.4 Governance, coordination and ReHoPE

The aim of the ReHoPE strategy framework is to integrate refugees and the refugee settlements into the local government system, represented by the column on the right of the diagram. This would mean that as the situation stabilises, the UNHCR's protection role would shrink to focus on those refugees requiring protracted protection, namely the most vulnerable.

Similarly, the OPM security and oversight functions would shrink as able-bodied refugees established themselves independently within the market system and found permanent places to settle within the settlements, elsewhere in the districts or in Uganda more widely. This would entail, at the corresponding pace, the downgrading of the OPM governance structures and the integration of refugees into the regular district and national governance and service delivery structures at the various levels of government from the village to the district.

However, ReHoPE's aim of empowering refugees and hosts within the context of strengthened local district governance and service delivery systems pre-supposes that at some point the inflow of refugees will subside and some of the refugee households will begin returning to their countries of origin. But there are no signs of this at present. Therefore the entire service delivery apparatus of the WFP, UNHCR and OPM has, for the foreseeable future, to stay in place, and may even need to be expanded, if the flow of refugees into northern Uganda continues, as is currently the case.

The implication is that the approach to MSD has to be conceived on the assumption that the situation could either stabilise or become even worse. Livelihoods support should therefore cater both for those who might seek to stay and integrate while conditions in their countries of origin remain unsafe, those who may arrive and swell the existing refugee population and those who might stay on, even if and when returning home actually becomes a possibility.

The complex apparatus of governance, protection, food and other forms of emergency aid, security and livelihoods support has therefor to be kept in place for the time being while nevertheless beginning the process of refugee and settlement integration into the district system. One of the tasks of this assignment is to provide recommendations on how this could be done, which do next.

4.1.5 Governance: Proposed Actions

To strengthen the livelihoods coordination and service delivery functions of the UNHCR we propose the following actions:

1. Develop and gain approval from the LSTWG for Livelihoods Standard Operating Procedures (SOPs) to guide delivery of livelihoods support services. These SOPs should be based on the UNCHR's Minimum Criteria for Livelihoods Programming updated to take into account ReHoPE's approach and strategy objectives, in particular those of Phase 1, which is to begin joint planning with the districts and phase 2, to focus on district planning and implementation . These SOPs to

be used to help orient and guide livelihoods interventions to meet ReHoPE objectives, not as a rigid set of requirements for approval of livelihoods proposals.

2. Conduct joint UNHCR/OPM assessment and approval of IP & OP livelihoods projects at the monthly National Interagency meetings, using the livelihoods SOPs described in 1 above as the guide.

3. Strengthen livelihood management structures at national and field level, particularly at the level of sub offices through the appointment of dedicated livelihoods staff.

4. Use District Inter-Agency Coordination meetings to encourage the district service delivery departments to become jointly and directly involved in planning and delivering livelihoods services in the settlements.

5. Mount an information campaign on ReHoPE principles, goals and implementation programming for the UNHCR staff, IPs, OPs, refugees, hosts, government and other actor.

6. Encourage all the IPs and OPs to formulate and submit livelihoods proposals that are explicitly conceived in terms of the ReHoPE framework, as translated into settlement and district programming.

7. If facilitation is needed for refugees to gain access to land for cultivation, engage landlords on land opening via the sub-counties and districts, in preference to involving OPM, UNHCR or IPs and Ops, since the involvement of the latter tends to raise unrealistic expectations on the part of some land owners.

8. Taking as a starting point the model already established in Bidibidi's LSWG, develop a harmonised M&E system to track key livelihoods indicators in both settlements. These indicators should include numbers of refugees and hosts involved, number of input suppliers drawn into the process, land allocated to and being used by refugees for cultivating, quantities of improved seed being bought and sown, crop yields, sales of outputs, proportion of crops being sold on local, regional and national markets.

4.2 Agricultural extension

4.2.1. In the Settlements

The UNHCR's livelihoods coordination challenges are accentuated by the fact that IPs and OPs have differing approaches, time frames and spatial coverage within the settlements. Some are there for periods as short as three or four months, while some are there for much longer periods. They are accountable to their organisations and concerned about having sufficient exposure to gain the continuing support of their sponsors. The different approaches, area coverage and time frames also have a positive potential. The could be consciously used to promote experimentation, learning and adaptation of methods and techniques, but these aims would need to be taken up explicitly by the LSTWGs and mechanisms of regular assessment and adaptation set in place.

The District Production and Marketing (DPM) departments are responsible for provision of extension services in the districts, but they focus exclusively on the host communities and are not as yet involved in extension support for refugees apart from within some recently mounted IP and OP initiatives. The DPMs have extension workers based at the district and sub-county levels, who are generally well qualified, but do not have the staff, technical or financial capacity to provide regular services down to the parish and village levels.

The recommended ratio of extension workers to farmers in the West Nile region is 1/500.[35] The actual ratio in Arua and Yumbe is 1/10-15000. In an attempt to overcome this shortfall, the DPMs in Arua and Yumbe work closely with their District Farmer's Associations (DFAs) which have membership down to village level. In Yumbe the DFA has 23000 members and in Arua 17000.

The role of the DFAs is to mobilise farmers into the association and to transmit information on the availability of improved crop varieties, improved agronomic practices and integrated pest and disease management techniques and methodologies. They also lobby to promote farmers' interests within the local authorities.

The Danish Refugee Council (DRC) has started an initiative to involve the Arua DPM in a forum combining refugee and host farmers in Rhino. It is also supporting the Arua DFA to link more effectively with the Arua DPM. It has established a farmer working group in Rhino on livelihoods, comprising hosts and refugees. The working group is facilitated by the Arua District Commercial Officer. This initiative could prefigure wider efforts to integrate refugees into the district extension system.

Another promising initiative is that of World Vision (WV), which in partnership with Makerere University, is developing an SMS platform (called M-Omulimisa) to link farmers with extension workers.

These initiatives are amongst the first attempts to begin to translate the intentions of the ReHoPE strategy into practical actions on the ground.

4.2.2 In the Surrounding districts

There have been initiatives to increase the district coverage and training capacity of agro-input dealers in Arua and Yumbe. These have worked through the Uganda National Agro-Input Dealers Association (UNADA), which has helped encourage local seed multipliers to establish themselves in the districts and, with the support of donors, has run training courses for their members on the use of the products they sell.

The existence of local seed multipliers is important in countering the negative impact of "fake" seeds, the term used for non-certified, poor or mixed-quality seeds that are present on the national and local markets. The local seed multipliers are located within the districts, close to the farmers, and therefore more easily accountable for the performance of the seeds they sell.

Abi Zonal Agricultural Research and Development Institute (ABI-ZARDI) multiplies seeds at its site in Arua, which serves the whole of West Nile region. Farmers coming to the institute for help have created a demand for extension advice, and ABI-ZARDI has begun to respond to this demand by providing more organised training in the use of improved seeds for farmer groups.

4.2.3 Actions to strengthen agricultural extension

The following are actions were formulated by the MSD team and presented and approved at the stakeholder workshops in Arua and Kampala.

In the Settlements

- Bring the DPM staff and the DFAs into joint (with IPs and OPs) extension service coordination and supervision of delivery within the refugee settlements for both hosts and refugees.

[35] Nkonya E (2009) Current Extension Service Models, What Works and What Does not Work, International Food Policy Research Institute.

- Explore the scope for the use of private extension services under contract arrangements using, as a start, private sector input suppliers, members of UNADA, trained to give training to farmers in the use of their products.
- Use the SOPs to help orient and co-ordinate IP and OP interventions for more even and deeper impacts across refugee groups within the settlements. This involves more careful deployment of IPs and OPs in terms of their area coverage in the settlements, closer monitoring of impacts and adjustments to take advantage of positive emergent trends and to constrain negative trends, for example inflating land rentals in some areas by providing cash support to rent land.
- Promote provision of agricultural extension to mixed refugee/host farmer groups. This means analysing and drawing lessons from experiences where efforts to form mixed groups have been successful and where they have not been successful and adapting accordingly.
- Use monitoring and evaluation of livelihoods interventions as a tool for learning from these interventions to enable testing of interventions and adaptation to create more effective and sustainable support.

In the Surrounding Districts

- Strengthen district extension capacity and penetration down to sub-county/settlement level by mobilising and building the capacity of the DFAs to work with the DPMs at parish and village levels.
- Encourage farmers to join the DFAs.

4.3 Business, Technical and Vocational Education and Training (BTVET)

4.3.1. In the Settlements

There is a vocational training centre in Rhino for refugees and hosts, recruitment for which follows the ReHoPE 70/30 principle. The centre was built with funding from the Norwegian Refugee Council (NRC) and currently has 200 trainees. The WeltHungerWilfe (WHH) funded the establishment of the vocational training centre in Siripi, Rhino with 80 places for trainees. There is also a government funded vocational centre in Bidibidi Zone 2, with some 80 trainees, but it is inaccessible to zones 1, 3, 4 and 5. All these training centres provide non-formal training courses which are certified by the Directorate of Industrial Training (DTI) in the Ministry of Education.

The practice in the centres is for candidates to be interviewed on their job and their employment preferences and business plans compared with skills demand in the job market in the district, including in the towns. An effort is made to ensure that the trainees find and secure jobs once the training is complete. In the vocational centre in Rhino, the one funded by the NRC, the camp commandant appoints a member of the OPM staff to sit in during the interviews.

These centres provide training in masonry, electrical work, plumbing, motor mechanics and maintenance, tailoring, catering, sewing, hairdressing and ICTs. They couple vocational skills training with training in basic business skills including customer service skills.

Demand far outstrips supply for vocational training in these centres. For example in the NRC funded centre in Rhino, there were 200 places for 800 applications in 2017.

4.3.2. In the Surrounding Districts

There are a number of BTVET centres in the districts: the Arua Technical Institute Ragem in Arua town, St. Joseph's Vocational Training Centre, Ediofe, Arua, Flamingo Vocational Training Centre, Arua, Innovative Institute of Agribusiness and Capacity Building, Arua Bits Digital Design School, Ma

Ecora Youth Centre, Manibe Public Vocational Training school, Tumaine Africa Foundation, Arua and the Lokopio Hill Technical Institute in Yumbe. The team visited the Ragem and Lokopio centres.

Ragem provides formal and non-formal training for recruits from the host population and for some refugees, the latter having access to non-formal courses only. Ragem is hostel-based for trainees doing the formal courses but for those doing non-formal courses, which includes all refugee trainees, accommodation has to be found in town. The trainees in the non-formal courses use the same facilities as the students doing formal courses, but at times when the facilities are vacant, during the evenings and on Saturdays.

The courses offered are in masonry, carpentry, plumbing, metal work, motor mechanics, catering, hairdressing, tailoring and ICTs. As part of their training, students are taught basic management and customer service skills.

Candidates are interviewed on their job preference and an attempt is made by the centres to align their recruitment and training with the demand for skills in the district markets. A feature of considerable interest given the traumatic experience that young refugees have been through is the psycho-social care they are given as part of their training.

As in the case of the courses given in the vocational centres in the camps, demand far outstrips supply.

4.3.3 Actions on BTVET

It should be recalled here that the skills supply and demand markets within which the BTVET operate go beyond skills supply and demand connected with agricultural value chains, and that this form of training has particular relevance for sections of the refugee youth, those who are not drawn to agriculture and seek employment and business opportunities in non-farm activities.

It is for this reason that the recommendations that follow call for cross-sector skills markets surveys to provide the information base to ensure that the BTVET training responds to skills market demand of interest to youth and others seeking opportunities, including opportunities outside agriculture.

In the Settlements

- Undertake comprehensive surveys of skills demand and supply in the districts and assemble information on skills demand in the wider national economy. (These actions should be undertaken in collaboration with the training centres inside and outside the settlements – see the next section on the surrounding districts).
- Expand the existing BTVET facility in Rhino to take on a larger number of trainees from the refugee and host communities.
- Establish further BTVET facilities in Bidibidi, based on the Rhino model, and make these facilities more accessible to zones 1, 3, 4 & 5.
- Provide staff housing for trainers in Rhino (and in Bidibidi when the time comes).

In the Surrounding Districts

- Undertake more comprehensive surveys of skills demand and supply in the districts and assemble information on skills demand in the wider national economy.
- Expand the capacity for non-formal training in Ragem and Lokopio Hill.
- Establish residences for refugees doing non-formal training courses at Ragem and Lokopio Hill, either in town or on site at the centres.
- Create apprenticeship opportunities for trainees.

- Set down a time frame and steps for an exit strategy for NGOs supporting training linked to integration of training centres into Ministry of Education.

4.4 Financial Services

4.4.1. In the Settlements

Cash-based interventions

A number of IPs and OPs have begun to introduce cash-based interventions (CBIs) to partially replace direct food and non-food aid and to support livelihood activities. These interventions are helping to stimulate local market development, but have led to inflation in prices of staples because the local markets are not capable of responding rapidly enough to the increased demand.

Conditional cash grants are being given to some refugees to help them access land for cultivation, but this inflates land rentals and creates high expectations amongst landowners, and thus difficulties for refugees who do not have these grants but wish to access land for cultivation. Not all landowners are demanding rentals from refugees for the use of their land. In many parts of Rhino and in Bidibidi, hosts have given land free to refugees or negotiated low rentals and this has opened access to land for refugees who want to farm.

The system that appears to be working best is where refugees and hosts form mixed farmer groups who clear and work the land together. In these cases support in the form of agricultural inputs helps stimulate production and marketing and benefits both host and refugee households without creating tensions between the refugee and host communities. The approach builds solidarity between the communities, whereas rental relations tend to create a social divide and are currently generating tensions between refugees and hosts in some localities.

A working group has been established in the West Nile to look into the principles and procedure for cash-based interventions and to formulate standard procedures for CBI interventions.

Village Savings and Loans Associations

As reported earlier, the proportion of households in Bidibidi and Rhino using credit schemes is very low compared to other refugee settlements in Uganda, probably due to the fact that a large majority of refugees in these settlements arrived only recently.

Considerable effort is being put into the organisation of VSLAs by the IPs and OPs and this appears already to have helped build solidarity between refugees. These efforts have thus far focussed mostly on meeting the needs of VSLA members for funds to cover social expenditure, for example on burial fees, health care or clothing for school-going children, but there have also been a number of experiments using VSLAs to establish investment funds for the purchase of agricultural inputs and for SME development.

The results have thus far been mixed. Some associations have been successful in establishing investment funds, and have started using these funds to buy seed and other agricultural inputs, while others have been reluctant to venture beyond the use of the savings funds to cover social expenditures or have resulted in failure of the start-ups and repayment default from the members who have taken out the loans for investment purposes.

4.4.2. In the Surrounding Districts

In the towns of Arua and Yumbe there are well-established banks, but these are inaccessible to all but a few refugees and commercially-oriented host farmers, those with assets that can be used as collateral for investment loans.

There are also mobile services based in both towns. Mobile banking is technically accessible to a large number of refugees and hosts since phone reception in Rhino and Bidibidi is generally fair to good, but the service itself is beyond the reach of most refugees.

4.4.3 Actions on Investment Finances

- Develop guidelines for the provision of aid in kind and cash that include the impact of these forms of aid on local markets, to ensure that the benefits of cash aid are not outweighed by their negative impact on markets.
- Coordinate and harmonise WFP, IP and OP CBIs to avoid uneven impacts across different zones of the settlements, mismatched expectations (hosts and refugees) and negative impacts on land rental markets.
- Encourage the direct negotiation of refugees with hosts to form mixed farmer groups, and support these groups with inputs to encourage more effective methods of agricultural production. This is an area of IP and OP work that should be prioritised early in 2018.
- Follow well-articulated and coordinated project beneficiaries selection based up on cost sharing and subsidy arrangements to encourage ownership of the livelihood interventions and their sustainability.
- Strengthen the capacity of the VSLAs to accumulate and use savings for investment in agriculture and SME establishment. This involves drawing on the experience of VSLAs that have been successful in establishing investment funds and applying the same or similar methods to other associations.
- Support the creation of investment loan products and services for farmers and for SMME start-ups. This involves approaching Micro Finance Institutions (MFIs) operating in the districts and developing services specifically tailored to meet the needs of refugees and hosts for investment finance.
- Lobby mobile phone companies to offer preferential rates for users in settlements to transfer funds telephonically (based on high population density in the settlements).

4.5 Economic Infrastructure

4.5.1. In the Settlements

Compared to the situation prior to 2015, the road networks within the settlements have improved due to rehabilitation and maintenance funded by UNHCR.

The UNHCR has funded cash-based support for community road rehabilitation and this is greatly appreciated by both the refugee and host communities because it creates local employment, improves road access to the villages and injects cash into the local economy.

In terms of ICT infrastructure, tele-communications coverage in the refugee settlements is generally fair to good, with some blind spots. This is a very important resource for refugees as it enables them to communicate with relatives, friends and associates in their countries of origin and across the globe and opens up a wide range of opportunities for enterprise development serving local, national and international markets.

4.5.2. In the Wider Districts

There is a good, macadamised national road network connecting Arua and Yumbe to Kampala and the other major towns in Uganda. There is also an established system of gravel district roads that are regularly graded.

A large number of heavy trucks pass regularly over these roads to deliver aid to refugees and this damages their surfaces, particularly during the rainy season. Some villages do not have community roads linking them to the district network.

Tele-communications network coverage is generally good in and near the larger urban centres, but becomes patchy or absent in most of the rural areas of the districts where population densities are low. Compared to these more isolated rural areas, the refugee settlements are well covered.

4.5.3 Economic Infrastructure: Actions

- In the short term, there is a need for the UNHCR to prioritise road maintenance on sections damaged by its heavy vehicles.
- In the medium and longer term, planning is needed to plan for transfer of responsibility and the building of the capacity to carry out road maintenance to the districts.
- Lobby mobile phone companies to improve coverage, particularly over settlements (to take advantage of dense populations)

4.6 Bio-Geographic and Climatic Environment: Findings

4.6.1 Strengths

The soil and climatic conditions in Rhino and Bidibidi are favourable for Cassava, Simsim and groundnut production. There is already considerable experience of growing these crops within the host and refugee populations.

In Rhino[36] and Bidibidi[37], the UNHCR has mapped the settlements and distinguished residential, farming, wetland and riverine zones. This provides the basis for land use planning and regulation.

4.6.2 Weaknesses

Climate change has made weather unpredictable. The recent experience of extended drought followed by heavy rains and flooding in the West Nile region has greatly increased farmer uncertainty about the weather and this is a disincentive for farming.

Soil testing capability exists at the national level and there are coarse-grained maps of soil composition for regions, but there is no localised, fine-grained soil testing capability at present.

There are threats to crops from stray domestic and wild animals (wild boar and warthogs) and certain pests (locusts, gall midges) and diseases.

The large and rapid influx of refugees has had a negative impact on natural resource base through the removal of trees, vegetation cover and degrading of water sources.

4.6.3 Actions on Bio-Geography & Climate

The focus of support should be on reducing the impact of climate change and other negative environmental factors through the use of better adapted and improved inputs and methods of cultivation, namely climate-smart agriculture and integrated pest and disease management, including:

- The development and use of more drought-resistant crop varieties.

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[36] UNHCR (2017) Rhino Camp Refugee Settlement in Arua District Masterplan, draft VII as of 26th October 2017.

[37] UNHCR (2016) Bidibidi Refugee Settlement Reshaping Master Plan, draft XIII as of 15th November 2016.

- Better timed and managed cultivation of improved crop varieties.
- Small-scale irrigation, particularly for vegetable and other cash crops.
- Local soil testing to match crops to soil types more accurately.
- Better use of integrated pest and disease management.
- Making early weather forecast information more accessible to people living in the settlements.
- Adapting and building resilience through community based disaster risk reduction and preparedness.
- Zonal land use planning and regulation to distinguish regulate the use of residential, farming and protected areas. Develop context specific and appropriate natural resource management and development techniques and apply them within the identified zones, including tree planting and water source protection to re-establish the natural resource base in zoned areas.

5. FINDINGS AND PROPOSED ACTIONS: VALUE CHAINS

The MSD team mapped and analysed the cassava, simsim and groundnut value chains, based at first on the team member's collective knowledge and then corrected and deepened using the information gathered during the field work and from documentary source gathered after the mission.

Each of the following sections begins with a description of the steps in the value chain, then provides the team's analysis of strengths and weaknesses in the value chain and finally proposes actions to upgrade the value chain.

5.1 Cassava value chain

5.1.1 General features of the value chain

Cassava is the second most important staple crop in Uganda, after bananas, and has been identified as one of the 10 strategic commodities expected to contribute to the transformation of the agricultural sector in Uganda.[38] Arua and Yumbe fall into the Northern Region which is the most important in Uganda for cassava growing.[39]

Cassava is both a food security and commercial crop, with an estimated 60% of the crop being consumed by the household and the remainder sold on the markets in Uganda and surrounding countries.[40] Of the traded crop, about 50% is sold as cassava flour, about 45% as dried cassava chips/pellets and 5% as raw cassava (5%).

The results of the cassava value chain mapping are shown in Figure 7.

Inputs

The column in yellow on the left illustrates inputs. For cassava, cuttings are the main input. For most farmers in the Rhino and Bidibidi, the cuttings are obtained either from existing stock on their lands or from neighbours. Farmers plant cassava cuttings of the varieties known locally as "bitter" cassava, called "sanje" or "change" by communities across West Nile.

The National Agricultural Research Organisation (NARO) has the mandate to undertake research on improved cassava. Improved cuttings, the so-called sweet varieties, are produced by ABI-ZARDI in Arua and local multipliers in the districts.

In Uganda as a whole, major cassava varieties grown are TME, Akena, MH97/2961, Bao (Land race), Nigeria, Ariwara, Omongole and Telengole.[41] Akena is preferred because it is early maturing, high yielding, has a good taste and is resistant to cassava mosaic disease. Bao is relatively bigger in size. TME is early maturing, high yielding, palatable and highly marketable. Nigeria is favoured for its resistance to disease.

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[38] UNDP (2012) A Value Chain Analysis of the Cassava Sub-sector in Uganda, Development of Inclusive Market in Agriculture and Trade (DIMAT) Project, p. 7.

[39] UNDP (2012) A Value Chain Analysis of the Cassava Sub-sector in Uganda, Development of Inclusive Market in Agriculture and Trade (DIMAT) Project, p. 7.

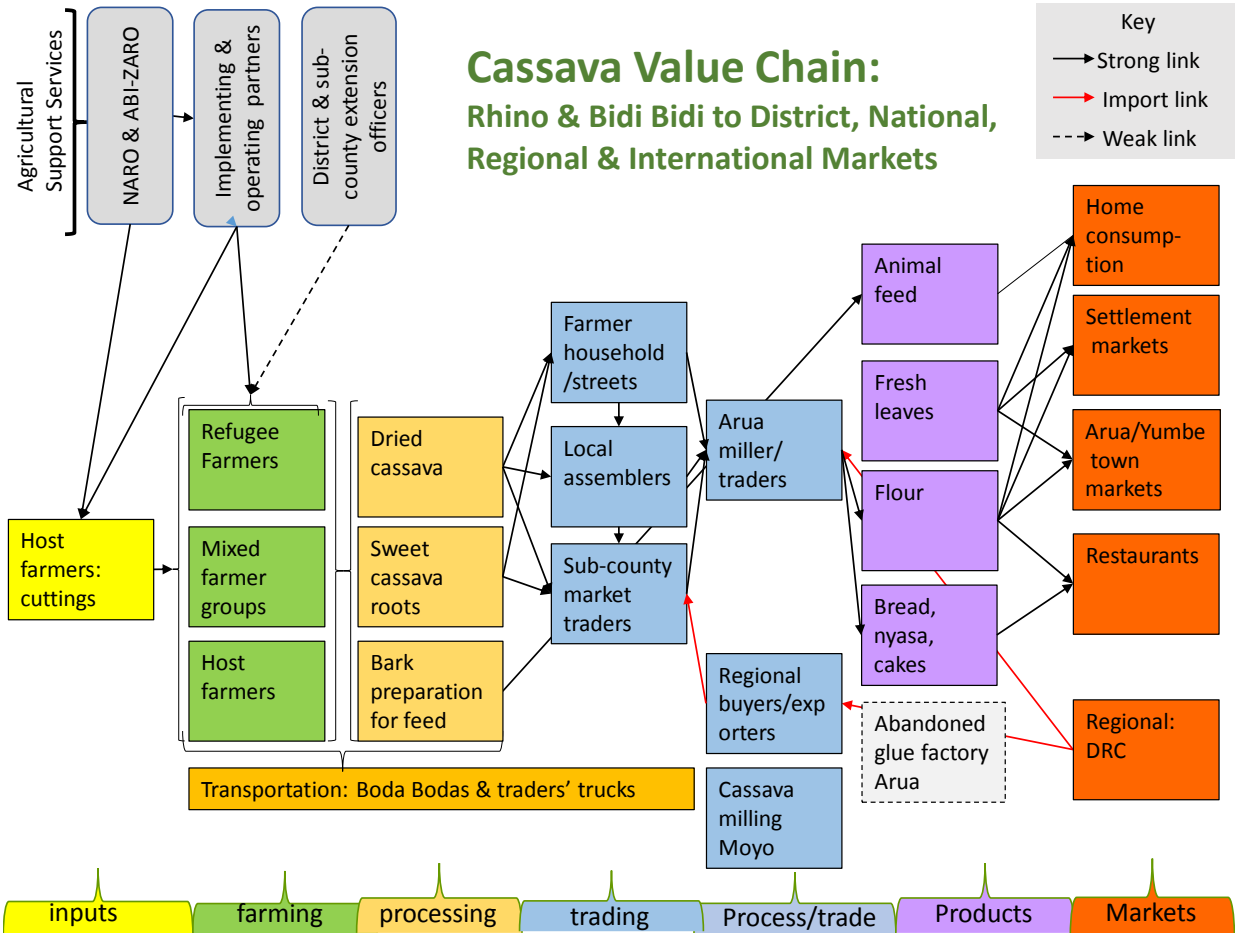
[40] Kleih, U et. al. (2012) Cassava Market and Value Chain Analysis Uganda Case Study, C:AVA, Cassava Adding Value to Africa, p. 12.

[41] UNDP (2012) A Value Chain Analysis of the Cassava Sub-sector in Uganda, Development of Inclusive Market in Agriculture and Trade (DIMAT) Project, p. 9.

"Sweet" cassava is now being introduced into the settlements by some IPs and OPs, including by Caritas in Rhino. The refugees who have been chosen for support are acting as multipliers of the sweet varieties. This is a new development and the results are not yet measureable.

There is some resistance from farmers to the sweet varieties on the ground of their perceived greater costs, and because they believe the bitter varieties more easily deter animals, pests and thieves.

Figure 6. The Cassava Value Chain



Farming

One of the advantages of cassava is that it can grow well on poor soils and is relatively resistant to climate change.

In Arua and Yumbe, the farmers are organised into groups or associations, some made up of hosts, some of refugees and some mixed. The farmers' groups obtain training on cultivation methods and technologies and on how to market the crop.

The farmers groups assist with land clearing and harrowing, but planting, monitoring and reaping the crop is generally done on an individual basis. In terms of the gender division of labour, men are predominant in the land preparation, pruning and marketing activities while women pre-dominate in planting. The majority of people involved in the farmer groups cultivating cassava are women.

The crop typically takes from 9 to 12 months to mature, but may be left in the ground for up to 36 months, though the root fibre then becomes less digestible. Since cassava does not have a narrowly

defined mature stage, the crop can be harvested at a farmer's discretion once the roots are sufficiently developed to meet consumer needs, or the harvesting may be delayed until the next season. This makes cassava a good crop for small-scale farmers as they can stagger their harvesting activities for food consumption and more easily take advantage of market opportunities than is the case for crops harvested over a short period.

The fact that the root may be left in the ground enables farmers to use it as a store of wealth which they can draw on during lean periods.

Simplified Gross Margins

A Simplified Gross Margins analysis for cassava in Rhino and Bidibidi based on the crops currently being grown, namely the traditional bitter variety, is shown in Table 2.

Even taking into account the imputed costs of family labour, the returns are high: 99% of the investment in Rhino and between 1.25% and 1.55% in Bidibidi. These high returns accord with the team's findings that there is currently a large excess of demand over supply for cassava in the two districts.

With improved varieties, the returns could be even greater. In Uganda as a whole, the current average farmer yields for the four most widely used varieties being cultivated are well below the potential –77% for TME 14, -52% for Akena, -86% for MH97/2961 and -78% for Nigeria.[42]

Table 2. Simplified Gross Margins for Cassava

		Rhino	**Rhino**	**Bidibidi**	**Bidibidi**
CASSAVA		**Exc. Family lab.**		**Inc. Family lab.**	
Code	**Variable**	**Min**	**Max**	**Min**	**Max**
a	Crop production (Kgs per acre)	25000	51000	1000	1500
b	Home consumption (kgs)	1800	2100	1800	2100
c	Crop sold (kgs)	23200	48900	-800	-600
d	Total direct costs	426000,00	600000,00	256000	412000
e	Price per kg	1500,00	1500,00	1300,00	1300,00
f	Value of crop sold (home consumption excluded)	34800000	73350000	-1040000	-780000
g	Value of crop including home consumption applying market price	37500000	76500000	1300000	1950000
h	Sales- direct costs (excluding home consumption)	34374000	72750000	-1296000	-1192000
i	Sales - direct costs (including home consumption)	37074000	75900000	1044000	1538000
j	Simplified Gross Margin excluding home consumption	0,99	0,99	1,25	1,53
k	Simplified Gross Margin including home consumption	0,99	0,99	0,80	0,79

Processing

[42] UNDP (2012) A Value Chain Analysis of the Cassava Sub-sector in Uganda, Development of Inclusive Market in Agriculture and Trade (DIMAT) Project, p. 9.

In Rhino and Bidibidi, initial processing is done by the household. It involves cleaning, removing the skin, chipping and drying the root. The dried chips are then transported to local markets where they are either aggregated for on-ward sale in the sub-county and town markets or are milled and sold back as flour to the farmers and to local clients coming to the markets.

At the settlement level, there are trader/millers using diesel-driven mills to grind dried cassava brought to them directly by the famers. Some of the flour is returned to the farmers and some sold directly on the sub-county market or sold to traders from the towns.

Some district level wholesalers own hammer mills and mill and trade from the same premises. They process the chips into flour, sell to local customers and store the flour in volumes that are sufficient to enable their customers to transport it to the next market destination.

Arua has a cluster of cassava miller/traders in the town who mill on site and sell to residents of Arua and, when the price is sufficiently high, to buyers who come from further afield. Arua used to have a glue factory processing cassava starch, but it is now abandoned. A cassava processing plant has recently been established in Moyo with a processing capacity of 2000 tons a day.

Trading

There is a well-developed network of cassava traders, who connect the household to local sub-county to town markets. People carry the fresh root and the dried chips to the sub-county markets where some of the crop is sold to final consumers and some aggregated and transported to the towns for milling, sale to town consumers or onward sale to markets further afield.

Most cassava retailors obtain their cassava chips and fresh cassava direct from the farmers. The larger retailers source their supplies from cassava wholesalers. The other suppliers include middlemen traders and local processors.

Transportation is done on foot, by bicycle, motor-cycle and, in the case of town traders, by truck.

Final markets

In the past, substantial quantities of cassava were exported to neighbouring countries, including South Sudan and the DRC, but the conflict in South Sudan has had the doubly negative effect of reducing effective demand from that region and making supply to South Sudan more dangerous, difficult and costly.

At the same time, the influx of refugees from South Sudan has suddenly, and massively, increased demand for cassava in the districts of Arua and Yumbe. From being an exporter of cassava, the West Nile region has become a major importer and this has created an exceptional opportunity for farmers cultivating the crop in the districts and in the refugee settlements within them.

5.1.2 Strengths and weaknesses in the value chain

Strengths

Cassava is a crop that it relatively tolerant to climate adversity, with a low risk of crop loss. Although most farmers currently cultivate the traditional variety, there are disease-resistant varieties available, for example from ABI-ZARDI, and there is on-going research on developing improved and well-adapted varieties. The improved varieties hold out the prospect on very substantial increases in farmer incomes.

Cassava has many different uses. The roots are processed into flour which is used to make “enyasa”, a local food in which cassava is mixed with millet or sorghum. The peels from the roots are compacted into blocks for use as animal feed. The leaves are used as a vegetable and the stalks are used for fuel. Cassava is fermented to make a form of beer.

High quality cassava flour (HQCF) can be used as a substitute for 10 percent or more of a range of wheat products including pies, pastries, cakes, biscuits, and doughnuts. The industrial use of HQCF is significant in adhesives. Cassava flour is also converted into sugar syrups used to produce ethyl alcohol.[43]

In Rhino and Bibibidi there is sufficient suitable land available to expand cultivation of cassava. Local informants reported that roughly one third of the land with cassava cultivation potential owned by the hosts was currently being used.

In Arua and Yumbe, demand for cassava far outstrips supply, and an estimated 50% of the crop consumed in the districts currently comes from outside. This situation is the result of a combination of diminished supply due to three years of drought followed by torrential rain that damaged the crop, and the huge influx of refugees and consequently sudden increase in demand for cassava.

Many refugee families sell part of their maize ration at below market price to generate cash to buy cassava, thereby depressing the local maize market and stimulating the cassava market.

Weaknesses

Quality is critically important for cassava products. In traditional processing, the quality of products can be variable. Variations in drying, processing and storage can have major impacts on product quality. Cassava contains cyanogenic glucosides, which can form cyanohydrins during processing.[44] If ingested in sufficient quantities, these cyanogenic compounds can lead to acute intoxication resulting in nausea, dizziness, vomiting, and in some cases in death.

Cassava is vulnerable to brown streak virus disease, which attacks the leaves, especially of traditional varieties.

Many farmers in Arua and Yumbe are reluctant to adopt improved cassava varieties and associated cultivation methods due to the perceived risk of investing money and time with unpredictable results (for them in their current state of knowledge and experience regarding the improved varieties). There is therefore a need for visual demonstration of the cultivation, harvesting and processing of the new crop varieties, and not just verbal persuasion, if the new varieties and methods are to be adopted by local farmers on a large scale.

There are currently few demonstration plots being used in the districts and there is not much follow-up on those that do exist, so that the benefits of organised, public demonstration have not yet been widely realised.

Although well-suited land is widely available in the districts, access to the land has proved difficult for some refugees, particularly in parts of Rhino, where some landowners are demanding rents that are beyond the reach of refugees.

There is little animal- or tractor-drawn ploughing taking place in the districts. One of the reasons is that there are few privately owned tractors in the districts and as yet no organised market for ploughing services. The average size of the plots under cultivation is small, around ½ acre per household for refugees, and cultivation is undertaken mainly with hand-tools.

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[43] Meridian Institute (n.d.) Cassava Value Chain Overview, Innovations for Agricultural Value Chains in Africa: Applying Science and Technology to Enhance Cassava, Dairy, and Maize Value Chains, p. 4.

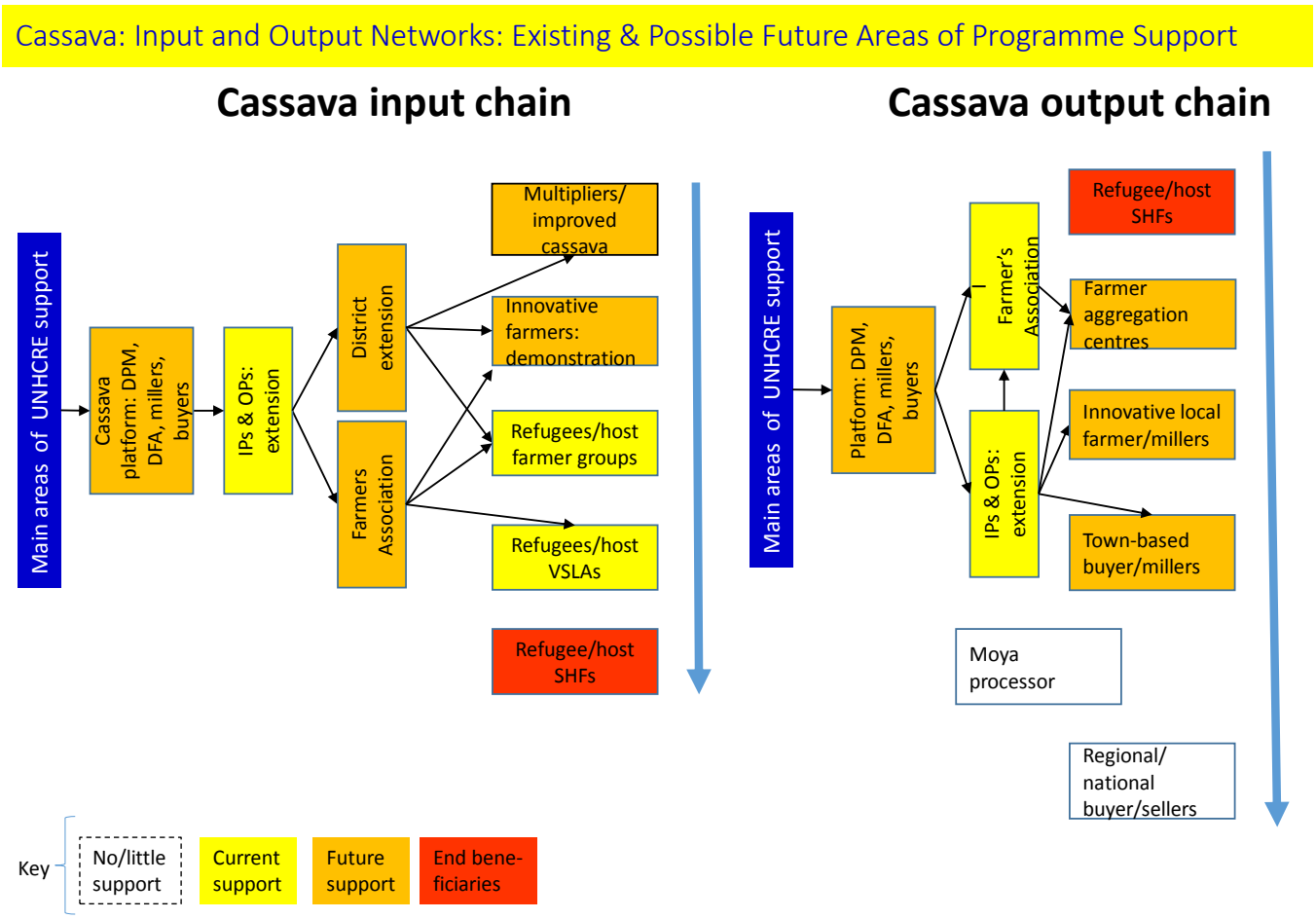
[44] Ibid. p. 10.

5.1.3 Actions to Strengthening the Value Chain

The approach to value chain upgrade recommended here is to identify pre-cursor farmers and entrepreneurs along the whole value chain and moblise them into a value chain upgrade exercise that makes use of their collaborator networks.

Figure 7 represents the cassava input and output chains and the areas of existing and potential future support that the team recommends should be given to strengthen the chains.

Figure 7. Cassava: Strengthening input and output networks



The actors involved in the input chain are represented on the left, from multipliers through farmers, farmer groups, VSLAs to the end target group, which is small holder farmers (SHFs), shown in red. The boxes in yellow illustrate where support has been focussed until now. The boxes in brown show where the team recommends support should be focussed in future to strengthen the value chain. The areas of existing support, show in yellow, should be continued and, in the case of the farmer group and VSLA organisation, considerably intensified.

The vertical brown box on the left of the cassava input chain represents a cassava multi-stakeholder platform, which the MSD team recommends should be established in the districts to promote the cassava value chain. The advantage of the stakeholder platform is that it brings all the key actors along the chain together to take actions that realise their common interest in strengthening the functioning and competitiveness of the chain.

On this platform would be represented the key actors in the chain, including the input suppliers (the cassava multipliers, ABI-ZARDI and the newly established private multipliers) the farmers (both refugee and host community representatives) DFAs, DPM, UNADA, the IPs and OPs, the traders, millers and buyers. The purpose of the platform is to discuss the major weaknesses and market opportunities in the value chain and to share responsibility to take action to strengthen the chain.

It can be seen that in this schema, the IPs and OPs continue to play an important role, but now within an intervention framework that emerges from the platform and through support to the DPMs and DFAs, who, in this model, progressively become the main providers of extension services. This means moving away from the uncoordinated, fragmented service provision now taking place in the refugee settlements towards a coordinated system coming increasingly under the DPMs and DFAs as their capacities are strengthened to do this.

The main form of support given by the UNHCR and its partners should be to link the precursor farmers to cassava cuttings suppliers, help set up demonstration plots and monitor and adjust project interventions as experience is gained. The support given should be to overcome obstacles created by market failures and to compensate for the risks taken in investing in the new varieties and techniques, until such time as the markets function without support.

The demonstration plots should be supported by the UNHCR and carefully monitored jointly by the settlement level LSTWGs and DPM extension officers. They should be set up in the fields being cultivated by precursor farmers in locations that are visible to the other neighbouring farmers and passers-by. Field days should be arranged and neighbouring farmers invited to participate. Through one or two production cycles, the benefits of planting improved cassava in terms of yields and sales should start to become evident.

In this approach, refugee and host farmers in the neighbourhood of the demonstration farmers will begin to take note of the performance of the improved varieties on the demonstration plots. They will see for themselves the benefits and decide to try out the improved crops and associated cultivation methods, perhaps at first on their own small scale “demonstration plots” and perhaps, for those who are convinced, on larger pieces of land to which they have access. In this way the new varieties and associated cultivation methods become popularised and their cultivation adopted amongst widening circles of refugee and host farmers. A tipping point is reached when farmers in the neighbouring villages and parishes start to adopt the new varieties and methods of cultivation.

Turning now to the right of figure, the same logic applies, but this time to the organisation and functioning of the output market. The key intervention areas depend on where there are existing obstacles to market functioning that can be overcome or where there are opportunities to improve the functioning of the markets to support farmers or famer/miller traders in ways that lead to independent, market-driven sustainable aggregation and sales of cassava roots, chips and flour.

From the fieldwork undertaken by the MSD team, it appears that there is scope for support to the existing and emergent cassava-chip aggregation centres and the link between the local traders and cassava millers. The key issues here are quality assurance for cassava root handling, drying, chipping, flour milling and storage to meet HQCF standards. As with the demonstration plots, the tipping point is reached when trader/millers who are not included in direct support, those operating within the village or in other parishes and sub-counties see the advantages of improved handling and storage and join in or create their own aggregation centres.

In terms of value chain development, support to VSLAs, described in an earlier section, should focus on creation of savings funds that are dedicated to investing in agricultural production and marketing. Currently, the focus of VSLAs is on investment in small scale production and trading activities within local market circuits where competition is stiff and margins low or non-existent. Investment within cassava farming and marketing opens the possibility of starting an accumulation process that takes

advantage of the expanding local and wider markets for cassava. Investment in this crop strengthens farmer household food security and opens the farmers to markets to generate cash incomes to meet non-food consumption needs. The returns from the investment are used to replenish the initial loans and accumulate capital for further investment. It is thus a safe area for VSLA investment.

Success with VSLA involvement in the cassava chain will strengthen the role of women in production and marketing and through this have positive impacts on all aspects of family life including nutrition, health, education and skills development.

5.2 Simsim value chain

5.2.1 General Features of the Simsim Value Chain

Simsim is grown for consumption and as a cash crop. Roughly one third of the crop is retained for home consumption and saved seed and two-thirds sold on the markets. With the growth in global demand for sesame seed and sesame oil, farmers in Uganda have turned increasingly to growing simsim as a cash crop.[45]

The value chain is mapped in Figure 8.

Inputs

Farmers in Rhino obtain simsim seed from a number of sources. Most save seeds from their harvest for planting the next season, or obtain seed from neighbours in an exchange system that plays an important role in knitting social relations between families. Seed loans are used to assist neighbours who lack seed for cultivation. Simsim based foods served during important cultural events such as marriages.

Agro-input dealers in the towns of Arua and Yumbe stock simsim seed, as do a number of local traders in the refugee settlements. The team met with three of the seven dealers in Arua town and met with the district representatives of the Uganda National Agro-Input Dealers Association (UNADA) in Arua and Yumbe. In addition to the input dealers, ABI-ZARDI is an important source of improved simsim varieties, although these improved verities are not yet widely used by local farmers. A network of local multipliers has been set up in Arua district by the UNHCR's IPs.

Farming

The average area planted under simsim in Northern Uganda is just under one acre and the mean crop per household is 222 kilograms.[46] Simsim farming is characterized by low resource use with little mechanization or use of inorganic fertilizer and chemical pesticides. Some farmers in Arua use animal draught but the majority in Rhino use hand held tools for land preparation, broadcasting for planting and manual weeding, harvesting, drying and threshing. Weeding and harvesting is mainly done by women with assistance from their children. The construction of simsim drying racks is done exclusively by men.

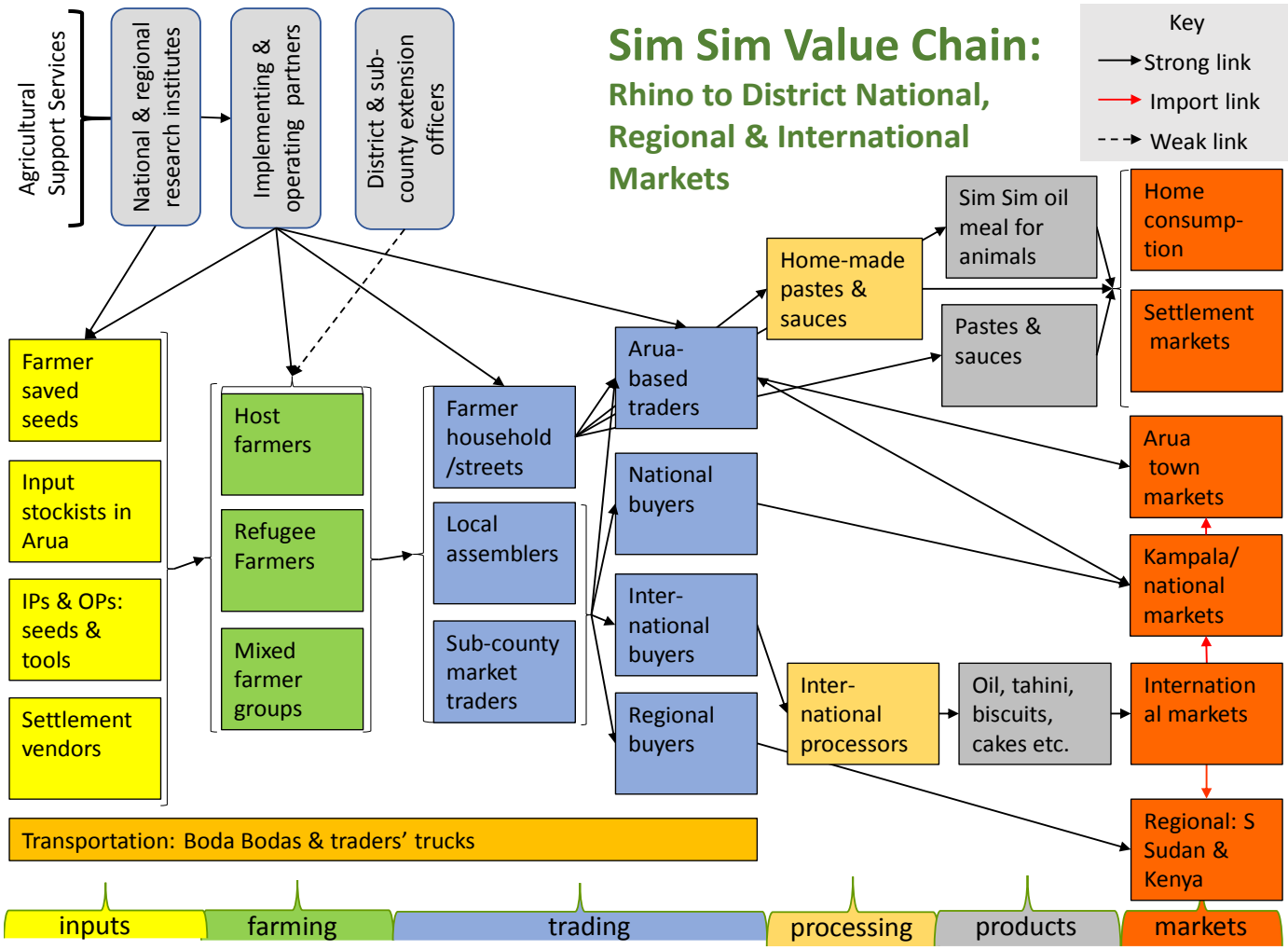
Most host community simsim farmers are organised into famer groups or associations that assist with collective marketing and transmission of information and training on improved sesame varieties and how to cultivate them. The host farmer groups are members of the Arua District Farmer's Association, which provides information on improved varieties and farming methods.

Within Rhino settlement, IPs and OPs have been involved in establishing and supporting refugee and mixed refugee/host farmer groups involved in simsim production. The IPs and OPs have also been

[45] Munyua B and Okwadi AOJ (2013) Open Sesame: A Value Chain Analysis of Sesame Marketing in Northern Uganda, ICRISAT, Series Paper, No. 6, p. 1.
[46] Ibid. p.

organising VSLAs amongst the refugee farmers, most of the membership of which is made up of women. Given the currently low percentage of refugees in Rhino involved in VSLAs, relative to other refugee settlements in Uganda, this is an area in which there should be a strong push in 2018.

Figure 8. The Simsim Value Chain



Simplified Gross Margins

The results of gross margin analysis for simsim in Rhino are shown in Table 3. These figures are for farmers using saved seed. In a poor year, losses are made, whereas in a good year, a positive margin of 40% is made for the part of the crop sold, and this margin rises to 58% if home consumption is taken into account. With improved seed varieties and cultivation methods, production of sesame grain and seed for on-sale could be increased by some 50% and household income roughly doubled, according to findings for the use of improved seed in Northern Uganda.[47]

[47] Munyua B et. al. (2013) Open Sesame: A Value Chain Analysis of Sesame Marketing in Northern Uganda, ICRISAT, Series Paper Number 6, p. 13.

Table 3. Simplified Gross Margins for Simsim

SIMSIM		RHINO	RHINO
Code	Variable	Min	Max
A	Crop production (Kgs per acre)	100	300
B	Home consumption (kgs)	30	90
C	Crop sold (kgs)	70	210
D	Total direct costs (UGX)	271000	314000
E	Price per kg	2500,00	2500,00
F	Value of crop sold (home consumption excluded)	175000	525000
G	Value of crop including home consumption applying market price	250000	750000
H	Sales- direct costs (excluding home consumption)	-96000	211000
I	Sales - direct costs (including home consumption)	-21000	436000
J	Simplified Gross Margin excluding home consumption	-0,55	0,40
K	Simplified Grass Margin including home consumption	-0,08	0,58

Trading

Due to the fragmented and small-scale nature of production, considerable effort is required to assemble sesame into economically viable volumes for trade. Farmers sell seeds on the roads that connect the settlements to the towns and some of them have started to act as local assemblers in the villages and in the sub-county markets.

Various actors are involved in moving sesame from the farm gate to the market. They include traders on foot, bicycle traders, rural open-air market traders, rural wholesalers, and rural shopkeepers. Other traders involved in assembly are stationary rural wholesale and retail traders who operate from permanent premises such as shops and grain stores. The bulked sesame is then transported to larger market centres at the sub-county, county, district and regional levels and sold to urban wholesale produce dealers.[48]

Exporting and processing companies based in Kampala have agents who run buying centres in Arua where they purchase from local traders, pack and transport the grain to Kampala, most of which is exported. These buyers obtain the grain either directly from the famers or from local assemblers and traders.

Processing

The grain is processed in the home to make pastes and sauces and is also mixed with honey to make a locally known and appreciated biscuit. Sesame from Uganda is exported to the Middle East, India, China and Europe where it is used in a range of confectioneries and processed into sesame oil and tahini.

Final markets

Roughly a third of simsim output is consumed in the household or exchanged with neighbours through the customary system of seed loans. The remainder finds its way into national and

[48] Munyua B and Okwadi AOJ (2013) Open Sesame: A Value Chain Analysis of Sesame Marketing in Northern Uganda, ICRISAT, Series Paper, No. 6, p. 4-5.

international markets. Sesame derives its high value from its many uses both in domestic and export markets. It is used as an additive for bread and confectionery in the Middle East and as a source of high quality oil.[49] The oil has medicinal and pharmaceutical value and is being used in health care products and as an ingredient in disinfectants.

After oil extraction, the remaining meal contains high levels of proteins and calcium and is used for animal feed.

5.2.2 Strengths and Weaknesses of the Value Chain

Strengths

An oil seed platform for West Nile operated in Arua until recently and this has helped to strengthen the linkages between improved simsim seed multipliers, local agro-dealers, farmers and traders. In Arua there are 10 local seed multipliers set up by the IPs, with one seed multiplication cooperative, Machecora, in Rhino. Currently, improved seed varieties are available on local markets, though they are not yet being widely used.

In Rhino, in particular, soils and climate are good for simsim. Simsim is a relatively pest- and disease-resistant plant.

There is substantial unused land available for simsim cultivation. Labour is not a significant constraint to production as it is customary for men, women and youth work together on the fields on this crop.

There are already some innovative farmers hiring tractor services for ploughing and some farmers in Rhino are combining farming with simsim assembly and trading. The existence of these innovative farmers has created local dynamism in the simsim chain that can be built upon with support from the UNHCR's IPs and OPs.

There are ready markets for simsim in the district and these are linked to national and international buyers.

Weaknesses

There is a serious problem of so called "fake" seeds. This is the local term used for seeds of mixed and generally poor quality which do not germinate well. Disappointment with these seeds has spread disillusionment amongst famers with commercial seed input suppliers and encouraged reversion to saved seeds in preference to the purchase of improved varieties.

Access to land for refugees is an obstacle in some parts of Rhino settlement where some land owners are demanding rentals that refugees cannot afford. There was considerable debate within the team during the MSD exercise over the nature and importance of the land access issue and how to resolve it. It appears that the most effective approach is for refugees and hosts to form mixed farmer groups. This helps resolve the land access issue because the beneficiaries of land cultivation are the land owners and the refugees together. It also reduces problems that have arisen over landowner expectations regarding cash based support from IPs and OPs and the resulting inflation of land rentals.

Despite the success of some mixed farmer groups, there are some locality-specific situations in which refugees continue to have difficulty accessing land. In these cases it appears that the most effective way of resolving the issue is for the local authorities, rather than either the UNHCR or the OPs or IPs or the OPM to intervene.

[49] Ibid. p. 1.

The productivity of simsim farming in the two districts is currently low. Part of the reason for this is use of traditional hand tools for farming, use of low yielding traditional varieties and lack of improved agronomic practices. Other reasons for the low return to simsim farming are the presence of gall midges, stray animals and the theft of harvested crops left in the field, as well as poor post-harvest handling and storage.

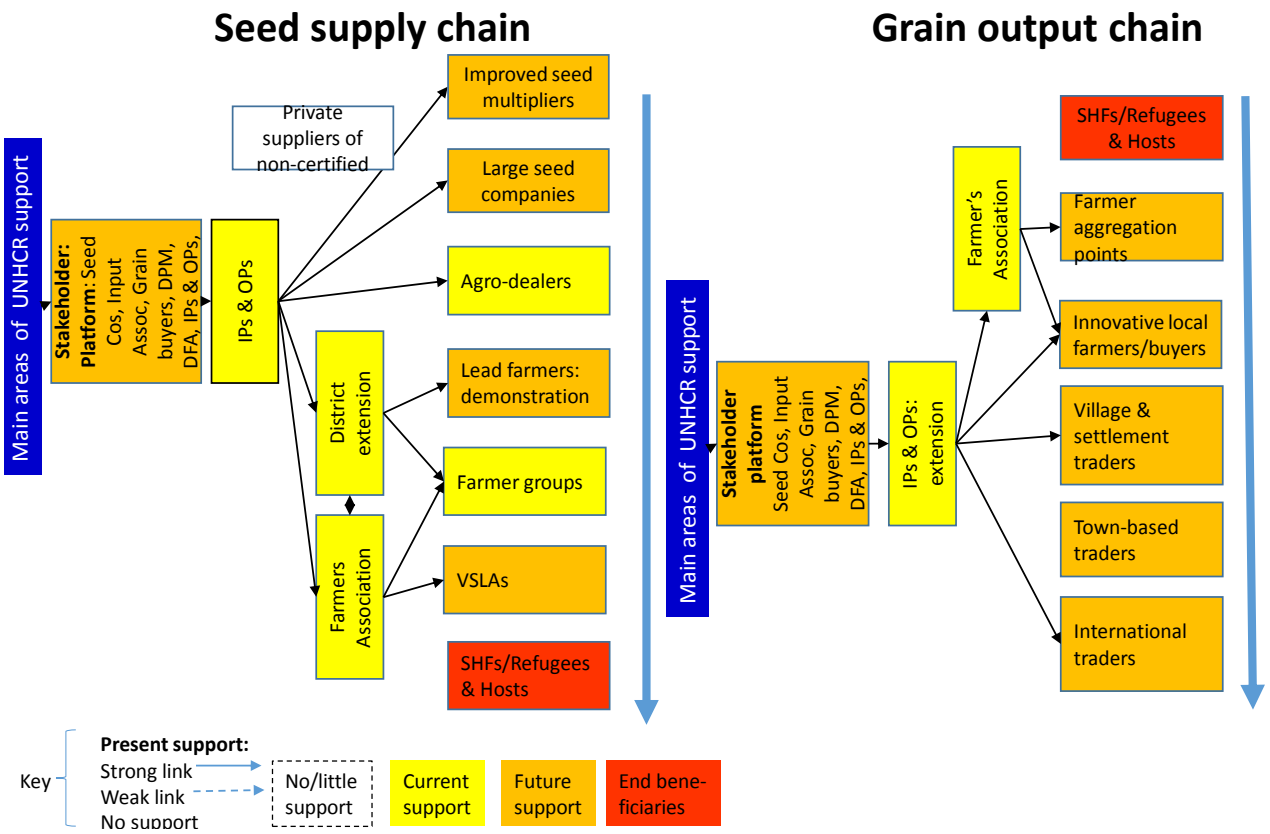
Price fluctuations, which are unpredictable and large are another reason for the low returns to the crop at times.

5.2.3 Actions to Upgrade the Value Chain

Figure 10 illustrates the simsim seed input and grain output chains. It shows where current intervention effort is taking place and where it is proposed effort should, in addition, be focussed in 2018 and beyond.

Figure 10. Simsim: Strengthening Input and Output Markets

Sim Sim: Input and Output Networks: Existing & Possible Future Areas of Programme Support



On the side of the simsim supply chain, the connection between seed multipliers and suppliers of improved simsim seeds is one of the important areas for intervention support. The identification of precursor, innovative simsim farmers is a key to developing the value chain. The field work revealed that there are already such famers already operating in the settlements. The task is to identify and support them, and set up demonstration plots with these precursor farmers to directly expose other famers to the benefits of using improved inputs, agronomic practices and post-harvest handling.

As in the case of cassava, the settlement level LSTWG and district and sub county extension officers should be involved in regular monitoring and support of these demonstration plots and gather and disseminate information on seeds and agronomic practices that work well and do not work well. The demonstration plots will create widening demand for improved seed that can be met by traders bringing inputs to local seed fairs and providing on-the-spot information and advice on how to use these inputs.

In terms of value chain development, support to VSLAs, described in an earlier section, should focus on creation of savings funds that are dedicated to agricultural production and replenished by returns from the sale of the crop. Investing VSLA funds in production of simsim holds greater risks than does investment in cassava. The returns are likely to fluctuate from year to year, but in good years this could help the VSLAs to tap into a source of expanding savings and investment. The aim of the intervention should be to help precursor farmers and assemblers with support to reduce risk until they are able to operate independently on the markets. This may require two or three seasonal cycles to allow for weather adversity and other unforeseen negative factors.

On the grain output side, the approach recommended is to identify precursor assembler entrepreneurs already emerging within the settlements and to provide them with the support need to take their initiatives further. Simsim assembly packaging and stocking is a key area for improvement that could trigger increased downstream demand and improved prices for the grain. There are farmers and local traders who have already begun assembling on a small scale and it would be a matter of encouraging them to go further with support targeted not at subsidising their activities but at reducing the risk needed to start operating at a larger scale, using improved practices. The aim would be to increase the quality of simsim and thereby gain higher prices to increase the income of the families involved.

As in the case of cassava, the objective of demonstration on the farming and assembly sides would be to encourage crowding in leading to tipping points that enable the market improvements to become self-sustaining.

5.3 The Groundnut Value Chain

5.3.1 General Features of the Groundnut Value Chain

The groundnut value chain is less well entrenched in Arua and Yumbe than the other two crops. It is a crop that is more vulnerable to damage from pests and it is less resistant to climate change. It nevertheless holds potential because it is an important food security crop and, when quality and market conditions come together, can be an important source of cash for farmers.

Groundnuts are an important part of the diet of Ugandans, an important source of protein and the raw material for groundnut oil. They are used in making confectionaries. One of the by-products of groundnut oil production is a highly nutritious cake used for stockfeed.

Inputs

The chain has similar features to that of simsim, with inputs, including certified seed, available from agro-input dealers in the towns, although the majority of subsistence farmers currently still use seed obtained from other farmers or saved from their own crop. It is more difficult to find input dealers providing groundnut seed than it is for simsim because groundnut seed has a shorter shelf life. Dealers hold small stocks because they need to sell them off rapidly before the seed loses it germination power.

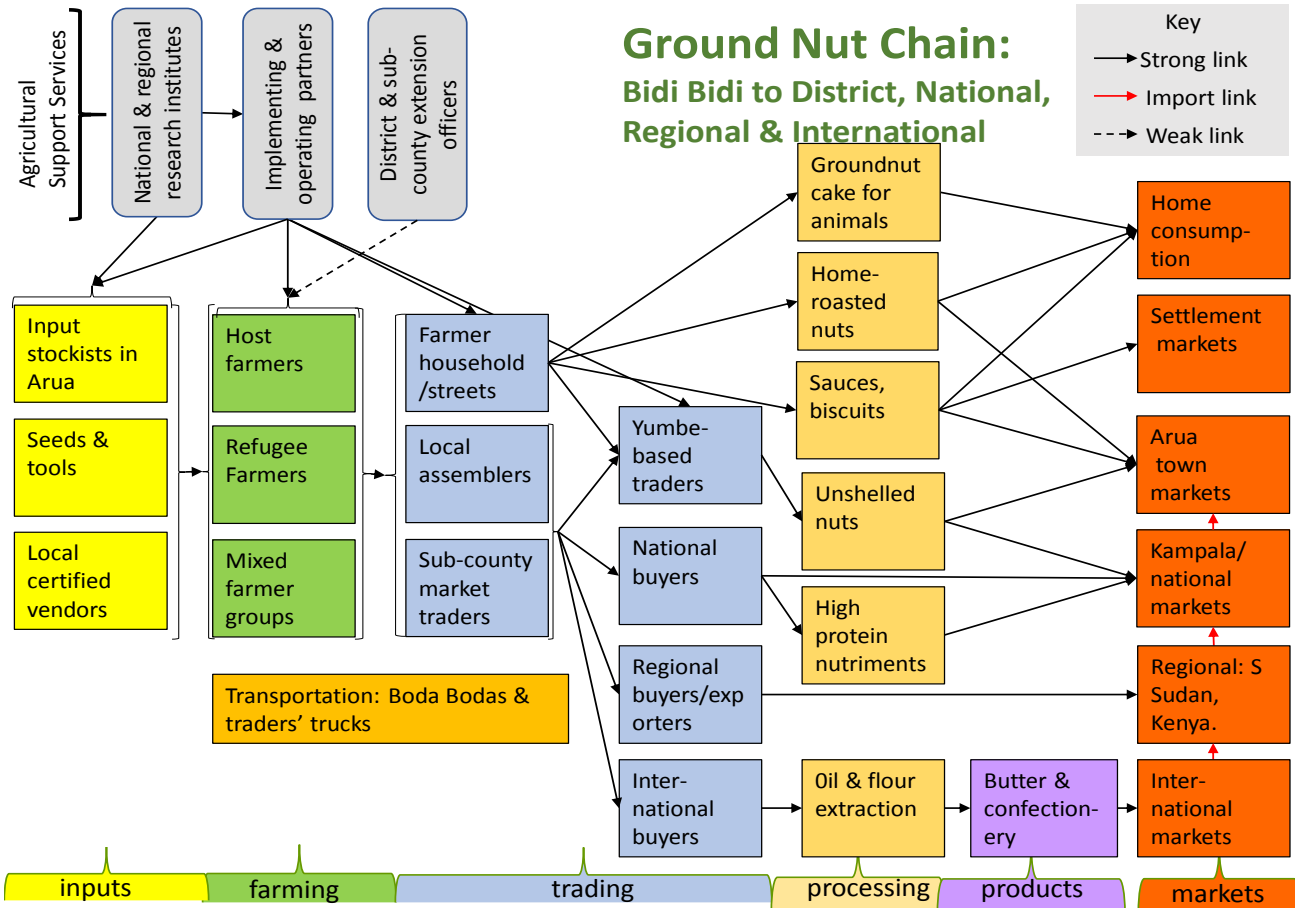
Currently, groundnut research is being conducted by the National Semi-Arid Research Resources Institute at Serere, which supplies high yielding, high quality pest- and disease-resistant varieties and instructions on appropriate cultivation and handling methods.[50]

Farming

The conditions in certain locations in Bidibidi are more favourable for groundnuts than are conditions in most parts of Rhino. In Bidibidi, the crop is usually farmed in stands of about one acre that are dedicated to groundnuts, using the traditional varieties of the 'Manyema group', such as Roxo, and the small-seed group, such as Red Beauty.

These traditional varieties are vulnerable to rosette disease, as well as early and late leaf spot. The crop in the field is also vulnerable to aphids. Groundnuts are subject to aflatoxin, particularly where there are poor methods used during harvesting and post-harvest handling of the crop. Disease resistant varieties, such as Serenut 1, 2, 3 and 4 are available on the market, but their uptake by farmers has been slow due to their colour and taste, which render them less favoured than red beauty. They thus attract lower prices on local markets.

Figure 11. The Groundnut Value Chain



[50] Mugisha J et. al. (2014) Value Chain Mapping and Analysis for Groundnuts in Uganda, ICRISAT, Series Paper 14, p. 12.

Simplified Gross Margins

A Simplified Gross Margin analysis for groundnuts using saved seed is shown in Table 4. The results confirm the risky nature of the crop. In a poor year, there are likely to be substantial losses made and in a good year the margin on the investment in the crop is positive only if home consumption is taken into account.

The use of improved varieties and cultivation methods could substantially increase production and household income gained from groundnuts. A study undertaken in 2014 shows that output of groundnuts with improved varieties could be increased by almost 60% and household income by over 60%.[51]

Table 4. Simplified Gross Margin Analysis for Groundnuts

GROUNDNUTS		BIDIBIDI	BIDIBIDI
Code	Variable	Min	Max
A	Crop production (Kgs per acre)	240	900
B	Home consumption	160	720
C	Crop sold	80	180
D	Total direct costs	392800	434000
E	Price per kg	1300,00	1300,00
F	Value of crop sold (home consumption excluded)	104000	234000
G	Value of crop including home consumption applying market price	312000	1170000
H	Sales- direct costs (excluding home consumption)	288800	-200000
I	Sales - direct costs (including home consumption)	-80800	736000
J	Simplified Gross Margin excluding home consumption	-2,78	-0,85
K	Simplified Grass Margin including home consumption	-0,26	0,63

Trading

Many of the farmers themselves trade their products in local markets. The farmer households take the unshelled nuts to market, where some are shelled on site for sale to local buyers and some are sold in the husk to outside buyers. There are some locals who specialise in trade, but these are in the minority compared to farm households trading their own crops. The farmer-traders do not have stores – they sell their produce in the open-air. They have very limited market information especially for markets outside the districts so that prices are determined by local demand and supply on the market day.

There is a network of regional, national and international buyers, with agents who travel to Arua and Yumbe at harvest time, some of whom buy directly from farmers and some from local assemblers. The agents (rural traders and town traders) connect the farmers and buyers. The main services they

[51] Mugisha J et. al. (2014) Value Chain Mapping and Analysis for Groundnuts in Uganda, ICRISAT, Series Paper 14, p. 22.

provide are transport and local market information. Some buy from the farmers, assemble and store the crop in buyer centres in the towns for on-ward sale to the buyers based in Kampala.

Processing

At village and town level, groundnuts are shelled and roasted by small-scale vendors who sell directly to customers in the streets and to shops and restaurants. Some shopkeepers grind the groundnuts into flour or into a paste for sale to customers. The groundnut paste is used for sauces that accompany “matoke” (plantain mash), potatoes, yams, cassava, millet, rice, “enyasa” and other foodstuffs. The husks can be used for fuel.

Final markets

Most roast nuts are destined for the local markets, while most raw nuts are exported. The two varieties that are most sought after locally are red beauty and Serena4. The former is more susceptible to disease and climate uncertainty and the latter more resistant, but less favoured by locals. There is strong market potential for good quality groundnuts, at district, national and international levels.

In the local and national markets there is a large and steady demand for roast nuts, which form an important part of the diet of Ugandans and refugees. There is also a substantial market for groundnut paste which is used in sauces and for making biscuits. The crushing of groundnuts to make oil results in a by-product of an oil cake that is used for stock feed. High protein products combining groundnuts with maize flour are produced by a factory in Kampala.

There is strong demand for groundnuts in India, China and Europe, for consumption as an aperitif, for conversion into cooking oil and for use in a range of confectionary products. However, to reach the international markets, the quality of the product has to meet high standards, currently not met for most producers in the districts.

5.3.2 Strengths and Weaknesses of the Value Chain

Strengths

Input suppliers in Yumbe and Arua hold stocks of improved varieties of groundnuts, though currently only in small quantities. The UNHCR’s IPs and OPs are a major source of improved seed for refugees.

Groundnuts is a crop in which women are heavily involved, in the cultivation, processing and sale, and is an important source of protein in the diets of Ugandans. When mixed with maize flour it can be used as a nutritional supplement for babies.

The crop has two seasons, a minor and a major season. The minor season crop is used mainly for household consumption. The crop from the major season is used for sale to generate cash for the household.

Weaknesses

There is widespread use of saved seeds, which results in low yields. Improved seeds are available but difficult to come by because of the storage and timing problems associated with groundnuts. ABI-ZARDI carries stocks of groundnuts, but not in bulk.

In the districts, groundnuts are currently a risky crop due to their susceptibility to disease and climate uncertainty. Careful timing of planting in relation to the onset of the rainy seasons is needed if the crop is not to be greatly reduced or even entirely lost.

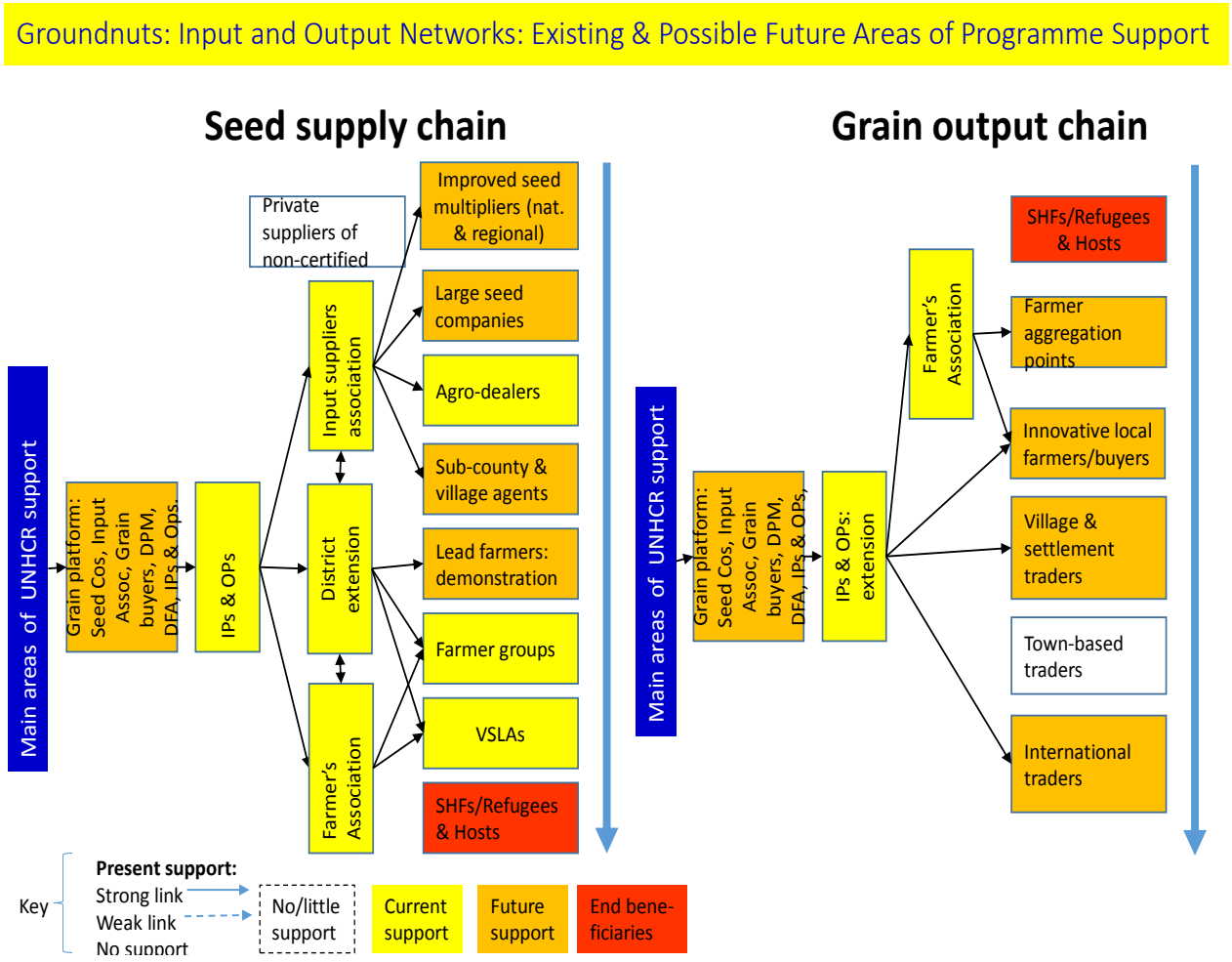
The crop is vulnerable to aflatoxin if not properly handled in the field and during harvesting and storage. High aflatoxin rates are a danger to local consumers and prevent the product entering into international markets.

Although there is high market potential for the crop, it is currently being planted mainly for home consumption.

5.3.3 Actions to Upgrade the Value Chain

The recommended areas of support to upgrade the groundnut value chain are illustrated in Figure 12, following a similar approach to that taken for cassava and simsim.

Figure 12. Groundnuts: Strengthening Input and Output Markets



Up until now, the main focus of support by the UNHCR's partners has been on formation of farmer groups and providing inputs and training for farming. This work should continue at an even higher pace in 2018, particularly of mixed farmer groups to help gain access to cultivable land.

In the MSD approach being advocated here, the focus would widen to include the whole input and output chain, and the emphasis should be on providing support to precursor farmers, through demonstration plots and local precursor entrepreneurs, through assembly centres, strengthening the farmer and assembler organisations and their linkages to input suppliers and grain buyers along the chains.

VSLAs have an important role to play here, as they do with the cassava and simsim chains, though creation of dedicated savings for investment in production, post-harvest handling, storage and sales. Given the low rate of organisation of refugees in Arua and Bidibidi into VSLAs, an intensified effort is needed in this area of work, linked to the other aspects of value chain upgrade recommended here.

Given that women are the driving force within the VSLAs and are heavily involved in groundnut cultivation, this would strengthen their decision-making role along these value chains.

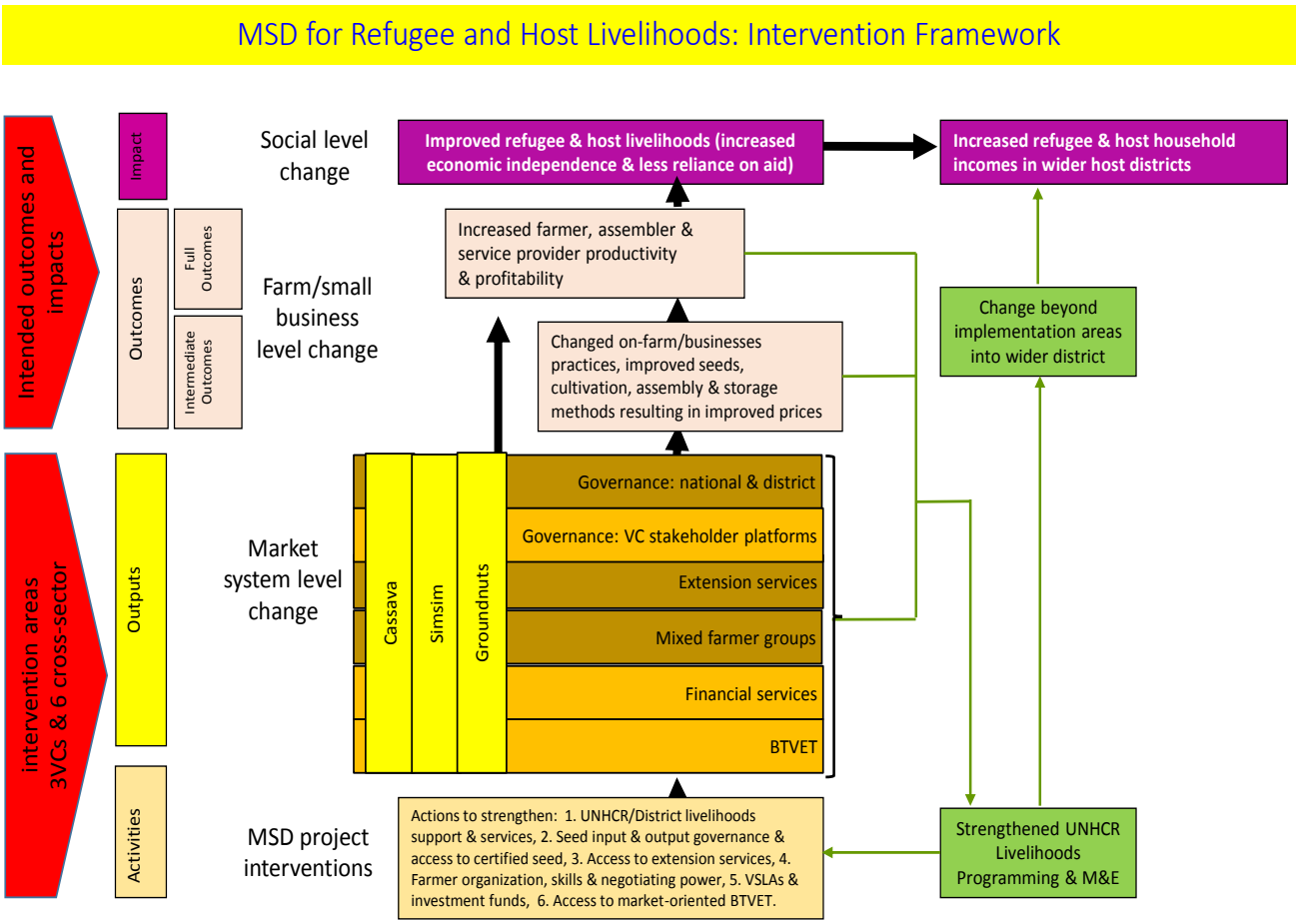
6. INTERVENTION FRAMEWORK & ACTION PLAN

6.1 Intervention framework

This section sets out an intervention framework and action plan to implement MSD in Arua and Yumbe. Figure 13 illustrates the intervention framework.

The intervention framework is based directly on the ReHoPE strategy, notably its goal to foster sustainable livelihoods for refugees and host communities, thereby contributing to socioeconomic growth and increased individual income.

Figure 13. Intervention Framework for Refugee & Host Livelihoods



The overall objective of MSD, shown at the top of the middle column, is to improve refugee and host livelihoods and thereby increase their economic independence and decrease their reliance on aid. This is the change desired at the social level.

The project's full outcomes are shown in the second row of the middle column. Improved livelihoods and household incomes are achieved by increasing the productivity and effectiveness of farming, assembling, trading and service provision within the value chains. These outcomes flow from the intermediate outcomes of the adoption of improved farming methods and technologies, improved post-harvest handling, assembly and storage of farm outputs, and thus better quality standards and

higher prices achieved for the outputs. This is the level of change sought within farming, business, trading and service provision.

The market systems level of change occurs at the output level. The three vertical bars represent improvements in the functioning of input and output markets directly within the selected value chains: cassava, simsim and groundnuts. Further value chains may be added to this framework, using the methodology described earlier in the report and undertaken during the field mission. Once experience is gained with cassava, simsim and groundnuts, it will become simpler and quicker to include other products.

The six horizontal bars represent change within the environment for value chain development that are cross-cutting in that they affect all three value chains. These cross-cutting output areas are strengthened national and district livelihoods promotion capacity, strengthened value chain governance, improved extension services, strengthened mixed farmer groups, improved farmer access to finance, and improved access to market oriented BVET.

The bar at the bottom of the central column shows the project actions that give rise to these outputs.

The green bar in the right hand column on the right shows strengthened UNHCR livelihoods programming and monitoring and evaluation (M&E). The M&E system gathers information from the output and outcome levels and this is used to evaluate actions, draw lessons and adjust the interventions. The lessons learned from monitoring provoke changes beyond the implementation areas and leads to wider impacts within and beyond the host districts of Arua and Yumbe.

6.2 Action Plan

Based on the intervention framework, this section describes the main elements of an indicative implementation plan.

The plan is structured to accord with the time frame and objectives of Phase 1 of ReHoPE, namely to run from 2018 to 2020 and to use action plans to begin implementation, draw lessons and make adjustments, as set out in Section 3.3 above.[52]

Figure 14 illustrated the action plan. The two top rows represent months between February 2018 and January 2021. The next two rows illustrate the two rainy and harvest seasons in Arua and Yumbe. These seasons frame the timing of interventions in the value chains.

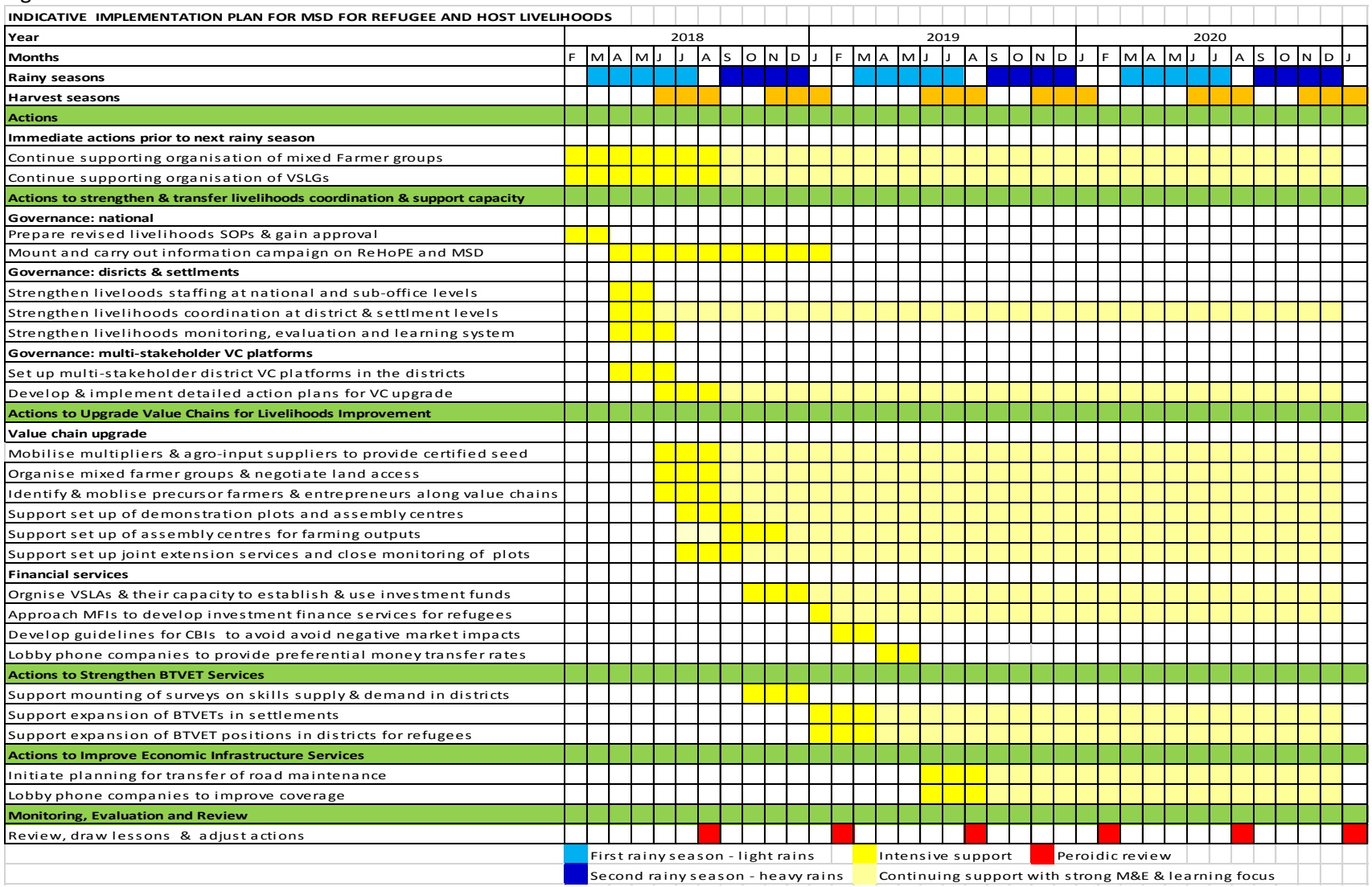
In the rows showing actions, the darker yellow represents the start-up phase and the lighter yellow represents the continuation of actions over time, with adjustments based on learning from M&E, which should be continuous throughout the life of the initiative.

Immediate actions

The plan distinguishes immediate actions in the period between February and April 2018 and actions that require a longer set-up phase before implementation. The immediate actions are intended to help strengthen two key areas of on-going support in the build up to the next rains. These two actions are to support the formation of mixed farmer groups and, though this, gaining access to cultivable land in time for the first season rains in March, and again in September. These actions are critical because access to land is the key opportunity and, as the same time, the main current stumbling block to rapid, large-scale livelihoods improvement for refugees.

[52] GoU, UN, World Bank (2017) ReHoPE – Refugee and Host Population Empowerment Strategic Framework, Uganda, Section 19.

Figure 14. Indicative MSD Action Plan



Actions to strengthen and transfer livelihoods coordination and support capacity

The plan envisages actions to strengthen livelihoods capacity and coordination at the national, district and settlement levels.

National level
In terms of national livelihoods coordination, the first step is for the UNHCR to prepare revised livelihoods SOPs to take into account the aims of ReHoPE and provide orientation and guidance for livelihoods proposals.

Running parallel with this action, the UNHCR should mount an information campaign on ReHoPE and the role of the MSD initiative within the ReHoPE strategy. This campaign should be adapted to the needs of all the actors involved, including those within the UNHCR, government, the districts and the settlement areas.

District and settlement levels
At the district level, the key action is to bring livelihoods promotion into the district planning process within the inter-agency meetings. This is to begin the process of joint livelihoods planning through bringing together the IPs and OPs with district service providers doing parallel work, notably that of agricultural extension service provision.

At the same time, district extension officers and others providing services for host communities that are parallel with those being provided by the IPs and OPs for refugees should participate in the LSWG meetings at the settlement level.

District Multi-Stakeholder VC platforms
The UNHCR, working in collaboration with the districts, and with the support of the IPs and OPs, should set up district multi-stakeholder value chain platforms, once approval has been obtained from the UNHCR and OP for the MSD initiative.

Drawing on the interest and engagement of the value chain stakeholders, the main task of these platforms is to further analyse the value chains and commit to actions to strengthen input and output markets and the functioning and competitiveness of the value chains.

The VC platforms should be formed in time for land preparation for the second rainy season, which begins in September 2018.

Livelihoods M&E and Learning
The existing LSWG information gathering and reporting system in Bidibidi should be further developed and extended to Rhino, with direct reporting lines to the UNHCR national livelihoods staff and a more detailed system of data collection and analysis within indicators of refugee and host involvement in value chains, use of improved seeds, crop yields and sales, changes in host and household incomes, savings and investments.

Actions to Upgrade Value Chain for Livelihood Improvement

Value chain upgrade
The actions to upgrade the value chains are, firstly, to mobilise seed multipliers and input suppliers to provide improved seed and other inputs to farmers and farmer groups through agro-dealer outlets and trade fairs at sub-county markets, coupled with training for agro-dealers to provide training in the use of improved seed and associated cultivation technologies.

Secondly, the organisation of mixed farmer groups begun in February should be continued, now focussing on training in the build up to the second rainy season in September where the effort should be focussed on the purchase and use of improved seed and training in associated cultivation methods and techniques.

Thirdly, it is important to give particular, focussed attention to organisation of precursor, innovative and socially engaged farmers, traders and service provider entrepreneurs along the value chains. These are the drivers of the MSD process on the ground and the MSD approach will stand or fall depending on the success of these actors and their influence on others within their localities.

The fourth and fifth actions are to organise cultivation demonstration plots and output assembly, packaging, storing and marketing centres. These actions are at the core of the value chain upgrade process and their success is critical to achieving the goals of refugee and host community livelihood improvement. They do this through demonstrating to individuals and groups of farmers and aspirant assemblers and traders the benefits of adoption the new methods and technologies with a market system, namely taking the risk to invest in new methods using household savings.

The fifth action, is to set in place a system of M&E to closely monitor the demonstration plots and assembly centres, as well as the activities of other actors along the chains including the seed multipliers, agro-input dealers, traders and buyers who become involved in the value chain upgrade process. The success of the initiative depends heavily on the UNCHR's capacity to monitor, evaluate, learn and adjust as trends emerge from the interventions and as conditions such as market prices or climate patterns change in often unexpected ways.

The actions set out in this section may be applied to additional value chains taken on following experience gained from the upgrade of cassava, simsim and groundnuts, using the methodology laid out earlier in this report, as the MSD initiative progresses.

Finance

The key actions are to continue to support the formation of VSLAs and to experiment with establishment of dedicated investment funds, using experience already gained in this area in the settlements.

The focus of action should be on using the investment funds accumulated by the SVLAs to invest in the new seeds, farming, harvesting, assembly methods and technologies. Because these investments are made in activities to farm and market products with high growth potential, they will, if effective, be compensated by increased returns to households which should the stimulate an endogenous household capital accumulation process, enabling further investment over time.

The second action is to approach micro-finance institutions (MFIs) operating in the districts with the aim of assisting VSLAs to open banking and loan accounts. This is an action that needs to be taken with great care because loan finance obtained from external sources can have negative impacts on the solidarity and functioning of SVLAs.

The third action relates to guidelines for CBIs. It is important, in the context of MSD, that CBIs should be used in ways that encourage farmers and entrepreneurs to use new methods and technologies that enable them to connect into and increasingly use improved seed input and improved grain output markets. CBIs that artificially inflate local markets, such as those given to refugees to pay land owners for land rental should be avoided because they can artificially inflate land prices.

The fourth action is to lobby phone companies to provide preferential rates for mobile banking. The case for this could be based on the size of the potential market in the settlements which have dense populations, with many refugees connected to family members outside.

BTVET Services

The actions on value chain upgrade relate directly and squarely to value chain actors. The BTVET services identified in the settlements and districts relate to skills markets that are cross-sector, and only partially support agricultural value chains. They are included here because they create opportunities for sections of the refugee settlement population, notably youth, who seek employment and business opportunities outside of agriculture.

Since market analysis for value chain identification and upgrade is too narrow to cover skills supply and demand relevant to all refugees, the first action recommended under BTVET services is to support the mounting of surveys on skills supply and demand in the districts and nationally. This is to establish where opportunities lie in the skills market and to tailor skills training to meet this demand.

The second action is to support the expansion of places for refugees and hosts in the training centres already established in the settlements. This is in order to respond more fully to unmet demand for skill training, particularly from settlement youth.

The third action is to expand the number of places available for refugees for non-formal training in the training centres in the district towns and to set up lodging for town-based refugees unable to travel daily to the training centres.

Economic infrastructure

The first action under economic infrastructure is to begin planning for the handover of road maintenance to the district national government transport departments. This is a process that can be begun within the inter-agency district meetings, but will only be able to be fully implemented if and when the refugee population begins to stabilise.

The second action relates to the telecommunications infrastructure in the settlements. The action is to lobby the telephone companies to improve reception in and around the settlement areas, expenditure that can be motivated on the grounds of the density of population in these areas and the growing demand for services such as internet access and mobile banking.

Monitoring, Evaluation and Review

The approach to MSD presented here depends heavily on the capacity of the implementation agencies to monitor, evaluate, learn from and adapt interventions. This is also at the heart of the objectives of the ReHoPE strategy in Phase 1, which is to focus on joint programming, action plans, beginning implementation, drawing lessons and making adjustments.

The action proposed here is to build on the existing system of monitoring and reporting within the LSWG in Bidibidi, giving particular attention to indicators related to value chain upgrade.

These indicators should seek to measure the impact of the interventions along the entire value chain. They would, *inter alia*, include the numbers of farmers and farmer groups who begin using improved seeds, changes in cultivation and harvesting methods, output of seeds and roots per acre or hectare, output and quality of cassava flour and simsim and groundnuts, the numbers involved in using improved assembly, storage and packaging, prices obtained for these products, indicators of crowding in and tipping points being reached within the markets along the input and output chains,

growth in VSLA accumulated investment funds and their use to purchase inputs and assembly and storage equipment, numbers of agro-dealers involved in provision of extension services and finding paid employment or in establishing businesses.

The work plan creates opportunities for review of the MSD initiative at six month intervals, shown in the red spaces at the bottom of the workplan. However, these reviews are only intended to be markets within a continuous process of monitoring, evaluation and learning. Corresponding with the end of Phase 1 of ReHoPE, a space is provided for a review of the initiative over the three year period in preparation for its second phase.

ANNEX 1. TEAM MEMBERS

Arua & Yumbe Teams

	ARUA			
	NAME	**SEX**	**TITLE**	**ORGANISATION**
1	Samuel Mamo Zewdu	M	Livelihood Officer	UNHCR Kampala
2	Felix Okello Obong	M	Associate Solutions and Devt Officer	UNHCR Mbarara
3	Khamis Felix	M	Refugee Welfare Council I	Rhino Camp
4	Alex Rwego	M	Assistant Livelihoods Officer	UNHCR Mbarara
5	Taban Kamala Asega	M	Field Associate	UNHCR Arua
6	Azu Albert	M	Program Manager	Palm Consults Arua
7	Paul Omach	M	Refugee Welfaire Council III	Rhino Camp
8	John Ezuma	M	District Commercial Officer	Arua DLG
	YUMBE			
1	Gerald Emoyo	M	Assistant Livelihoods Officer	UNHCR Kampala
2	Stephen Adeun	M	CBI Associate	UNHCR Kampala
3	Julius Muhenda	M	Snr Protection Assistant (CB)	UNHCR Kyangwali
4	Tonny Lawoko	M	Protection Assistant	Dan Church Aid
5	Abdullai Onzima	M	Agric Officer	Yumbe DLG
6	John Towongo	M	Refugee Welfaire Council II	Bidi Bidi Settlement
7	Fredrick Angualiga	M	Project Officer	Fin Church Aid
8	Zumura Saffi	F	Community Member	Host Community Yumbe
9	Vincent Odong	M	Monitoring and Evaluaiton Officer	World Vision
10	Olivier Lompo	M	Field Officer	UNHCR Bidibidi

What the team did & who the team met during the mission

- Kampala briefing 14th November
- Kampala workshop 15th November
- Arua fieldwork 16th – 18th November
- Team training/hypothesis workshop 20th – 23rd November
- Fieldwork 24th November – 5th December
- Team results workshop 6th December – 11th December
- Presentation workshop in Arua 12th December
- Presentation workshop in Kampala 14th December
- Fieldwork & writing in Kampala 15th – 17th December

Team Activity	Events	Women	Men	Total	%W	%M
Interviews						
District	6	2	11	13	15%	85%
OPM	3	0	3	3	0%	100%
IPs/OPs	5	3	9	12	25%	75%
Traders	30	16	18	34	47%	53%
Ag Input Dealers	7	2	5	7	29%	71%
Farmers Association	2	0	4	4	0%	100%
Others*	3	0	3	3	0%	100%
Total interviews	**56**	**23**	**53**	**76**	**30%**	**70%**
FGDs						
Farmers- Hosts	3	47	24	71	66%	34%
Farmers-Refugees	4	36	40	73	49%	55%
Mixed Farmers (Refugee+Host)	2	43	16	62	69%	26%
IPs/OPs	1	6	23	29	21%	79%
Total FDGs	**10**	**132**	**103**	**235**	**56%**	**44%**
Livelihoods Sector Kampala	1	5	14	19	26%	74%
Arua Stakeholders	1	1	23	24	4%	96%
Kampala Stakeholders	1	9	22	31	29%	71%
Total workshops	**3**	**15**	**59**	**74**	**20%**	**80%**
Grand total	**69**	**170**	**215**	**385**	**44%**	**56%**

*Palm, ABI-ZARDI, Yumbe Farmers' Association.

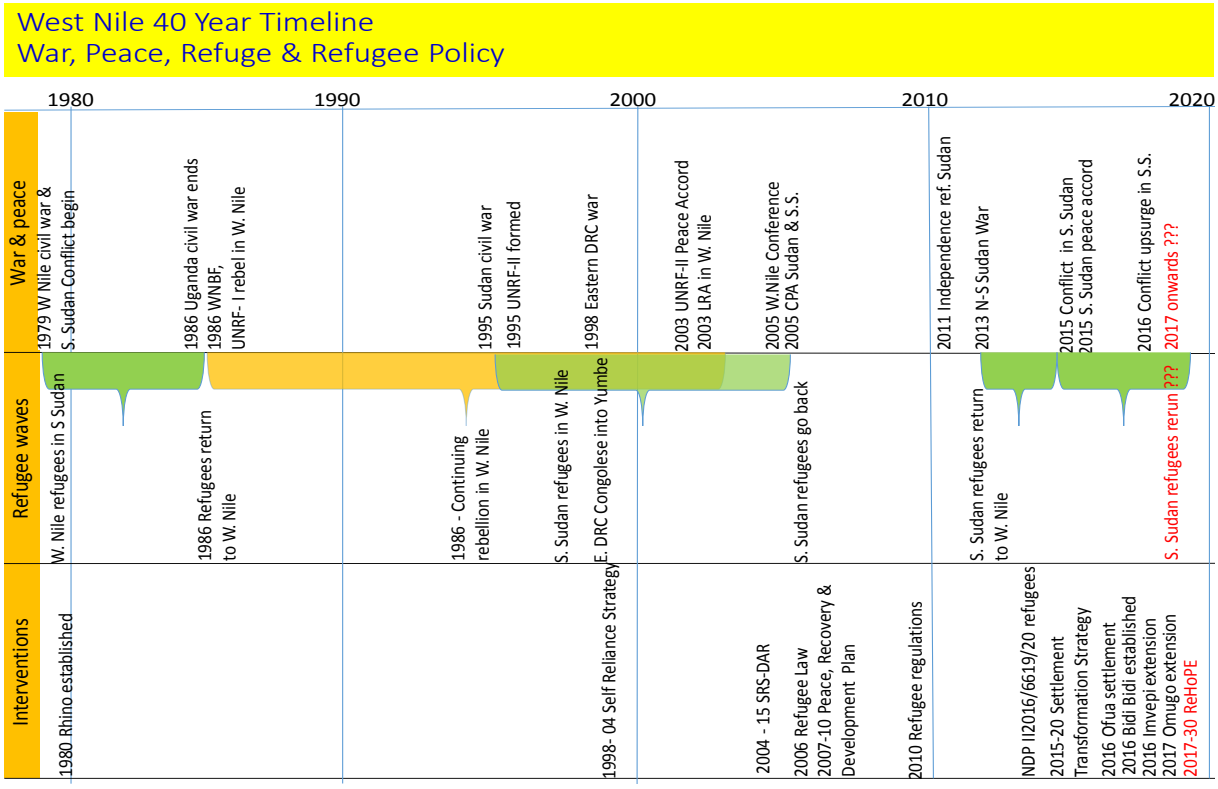
ANNEX 3. WAR, PEACE, REFUGE & REFUGEE POLICY

The top row shows the dates of the outbreak of wars and of achievement of peace accords. In 1979, civil war broke out in the West Nile between the troops loyal to Idi Amin, whose district of birth was Arua, and the troops mobilised by Museveni, who entered Uganda via Isingiro District and moved north across the country. In the same year, conflict broke out in Sudan.

The civil war in Uganda officially ended in 1986, but the West Nile Bank Front (WNBF), and the Uganda National Rescue Front (UNRF), rival rebel organisations operating in the same area simultaneously, mobilised to oppose Museveni's government, destabilising the region until around 2005, when the West Nile Conference brought peace to the West Nile region. In the interim, civil war broke out in South Sudan in 2015 and the UNREF morphed into UNRF II. Conflict broke out in the eastern Democratic Republic of Congo (DRC) in 1998.

In 2003, a peace accord was reached between government and the UNRF II, but the Lord's Resistance Army was formed in the same year, with similar objectives, namely destabilisation of the region, and similar tactics such as forcing children to become soldiers.

Figure 1. War, Peace, Refuge and Development Interventions



Source: MSD Team.

During the period 1995 to 2005, when the West Nile Conference was held to establish peace, there was thus a combination of conflict within the West Nile region and on its borders to the north, within Sudan, and to the west, within the north-eastern DRC.

The Comprehensive Peace Accord in Sudan in 2005 marked the beginning of a period of relative peace in the region, culminating in the referendum leading to the independence of South Sudan in 2011. But the peace was short-lived. In 2013, war again broke out between Sudan and South Sudan, and internal conflict flared up in South Sudan itself in 2015. There was a short moment of hope in

2015, with the South Sudan Peace Accord, but this was followed by an upsurge of conflict in 2016, conflict that has continued almost uninterrupted to the present day.

The second row shows waves of refugees and internally displaced people, shown in the green and brown brackets, respectively. The beginning of the waves correspond with the dates of outbreak of war and the end of the waves with peace accords.

The first wave was that prompted by the civil war in West Nile. It resulted in refugees from the West Nile crossing the border into southern Sudan to seek refuge there. Most of them returned at the end of the civil war, in 1986. However, this date also marks the beginning of the rebellions in West Nile, which resulted in much internal displacement, shown in the yellow bracket.

Internal conflict and displacement in West Nile was overlaid with refugees moving into the West Nile region from the DRC and Southern Sudan in 1995 and the eastern DRC in 1998. The South Sudanese refugees flooding down into West Nile were received in many cases by families in the West Nile who had themselves been refugees not long before. The helping hand was now being extended to people who had previously been hosts. It is important to note that these are people of the same clans, speaking the same language, with the same cultural practices and, in many cases, intermarried.

In 2005, there is a reverse flow, the South Sudan refugees in West Nile began returning to Southern Sudan, but this period of relative calm was short-lived. Only eight years later, conflict broke out in South Sudan itself and many who had returned home found themselves forced to flee back to West Nile. Since then the continuing conflict in South Sudan has driven increasing numbers of people across the border once again in search of security and livelihoods in West Nile.

The team met with some refugees who were in their third stay in West Nile, having fled each time from Southern Sudan. These people have personal and collective memories of these earlier flights and the conditions in which they lived as refugees in the West Nile in the past. These memories have raised expectations about how they should be treated now, which we will see are not all being met in the current situation.

The third row shows the main policy and development interventions in West Nile and in Uganda as a whole, related to refugees. Rhino settlement was established in 1980, to take refugees fleeing the conflict in Sudan which had already flared up then. This is a large settlement that borders the west bank of the Nile River and is contiguous with the southern boundary of Yumbe district.

The Self-Reliance Strategy (SRS), was adopted in 1998 and was intended to run until 2004. It morphed into the SRS-DAR (Self-Reliance Strategy-Development Assistance for Refugees) strategy, also described in Volume I, which ran from 2004 to 2015. In 2006, Uganda's Refugee Law was passed and the Peace, Recovery and Development Plan for Northern Uganda was adopted in the same year, to run until 2010.

From 2016, the pace of events speeded up. Three new settlements were opened to refugees: Ofua and Imvepi Extensions to Rhino settlement in Arua, and the massive Bidibidi settlement in Yumbe, abutting the northern boundary of Rhino settlement. In 2017, Omugo, an extension to Rhino, was established. Finally, the Refugee and Host Community Empowerment (ReHoPE) Strategy Framework, also described in Volume I, was unveiled in 2017. It now guides Uganda's approach to refugees, and is the guiding document for the present assignment.

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