Migration, Environment and Climate Change (MECC)

Data for Development: Understanding Environmental Migration in Uganda for Policy Development

Bududa District Dashboard

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ESTIMATED TOTAL MOBILITY FLOW VOLUMES

02
Flow Monitoring Points

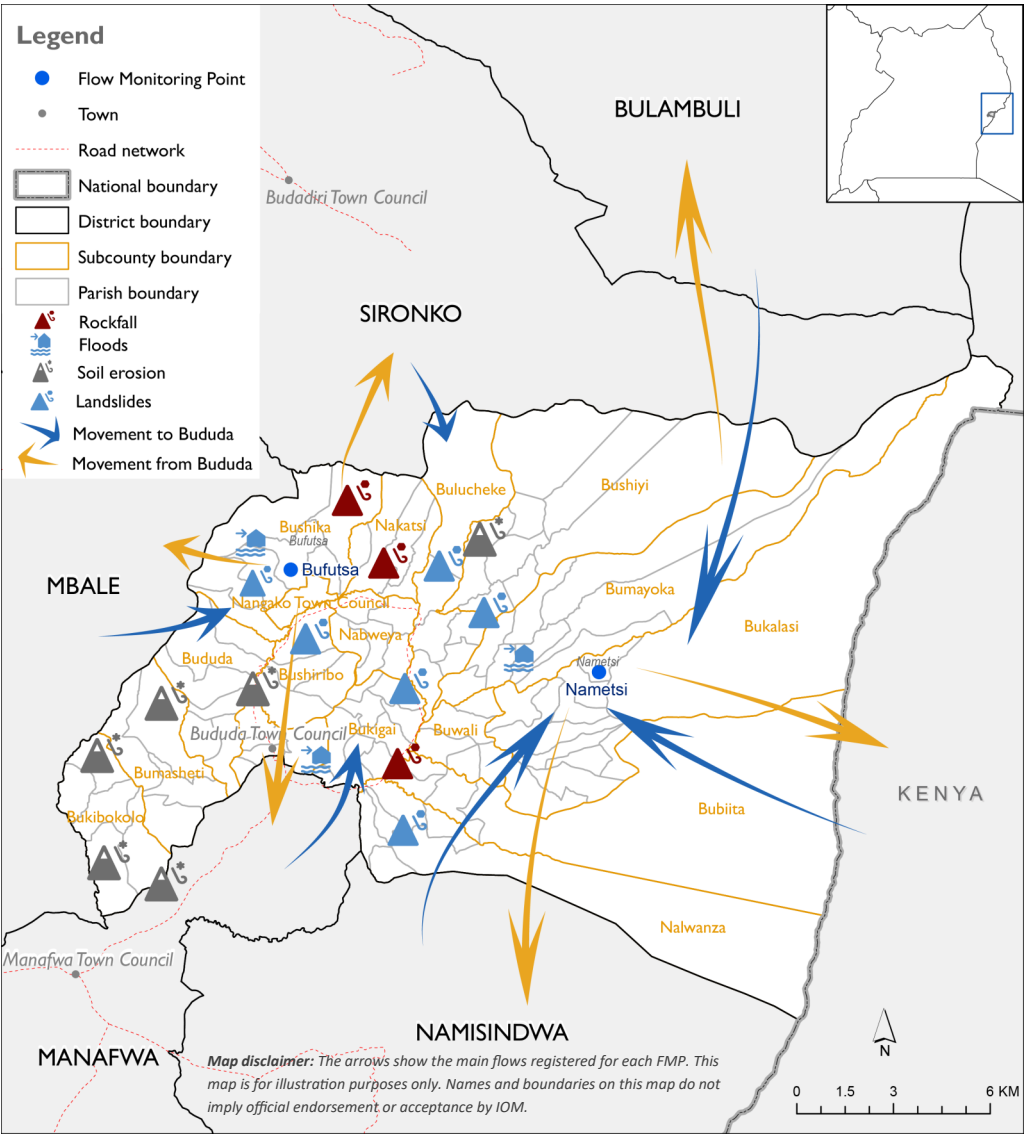
BUFUTSA PARISH

15% (690)
Out of 1,761 Persons

NAMETSI PARISH

80% (1,271)
Out of 2,487 persons

MOVEMENT ILLUSTRATION

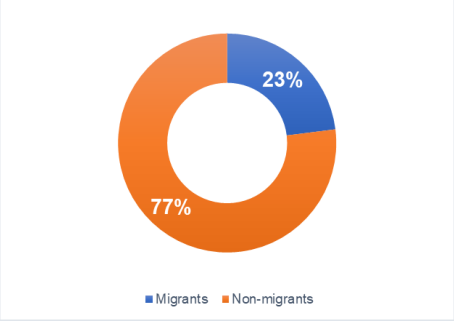


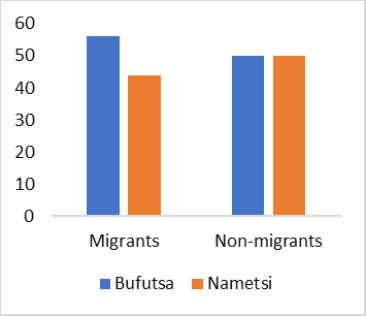
OVERVIEW AND TRENDS

The Participatory Mobility Mapping (PMM) exercise conducted in Bududa district in December 2020 estimated 1271 (averagely 48%) migration incidences at two Flow Monitoring Points (FMPs) situated at Bufutsa parish, Bushika Sub-county, and Nametsi parish, Bundesi Sub-county in Bududa district. The field surveys at the two FMPs captured few migration incidences (24%, n=40).

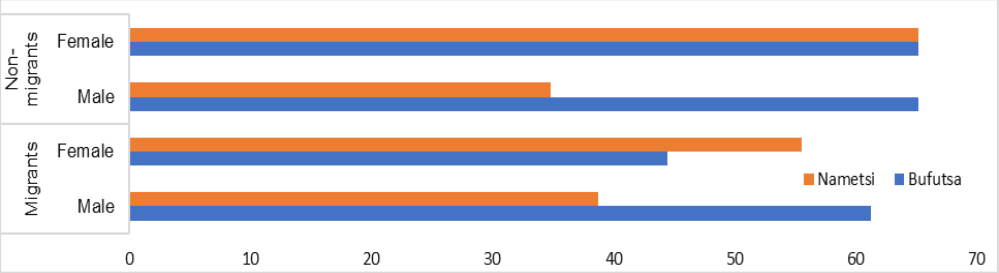
Migration flows were higher at Bufutsa (56%) as compared to Nametsi (44%). Migrants originate from within the FMPs communities (40%) and from within Bududa district (38%) i.e. areas like Nalwanza, Bufuna, Bulucheke, Bunambuti, Bukigai, Bududa Town Council, Bumayoko, Bukalasi, Bushilibo and Bunahayote. Some migrants originated outside the district but from within Uganda (23%) e.g Bulambuli, Mbale, Namisindwa, Sironko, Manafwa and Kilyandongo. 58% of the migrations were involuntary while 42% voluntary. 73% of the migrations were permanent, 10% temporary, and 17% of the migrants are not sure of their permanent or temporary stay within their destination areas. 24% of the migrants had reportedly stayed in the areas for less than 10 years, 30% for 10-20 years and 46% for more than 20 years.

MIGRATION STATUS





DEMOGRAPHIC

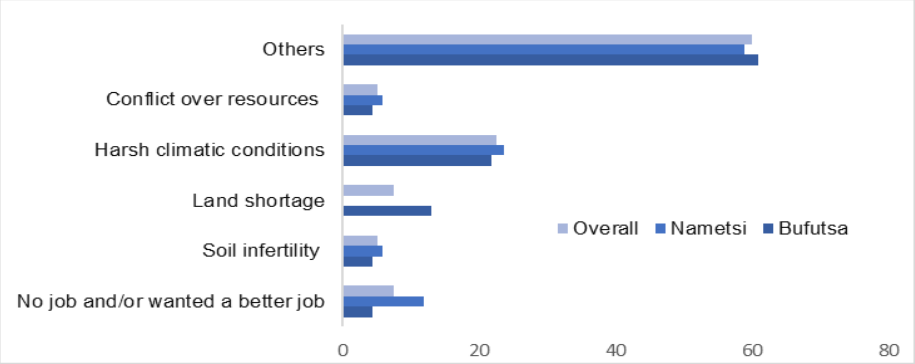


SOCIO-DEMOGRAPHIC CHARACTERISTICS

95% of the migrants were married and 5% were widowed. 65% of the migrants had received no formal education, 23% had completed primary education, and 3% and 5% had completed secondary and tertiary education respectively. The majority of migrants were aged 36-60 years, 28% were youth aged 18-35, and only 10% were above 60 years

DRIVERS OF MIGRATION

The main causes of migration across the FMPs were harsh climatic conditions (23%), search for jobs (8%), land shortage (8%), resource conflicts (5%) and other factors (60%) which included factors like occurrence of landslides (and food shortage. The main environmental and climate related shocks that forced mobility were landslides, flooding, declining soil fertility or land productivity.



MIGRANTS' CHOICE OF DESTINATION AREA

The migrants' choice of destination areas was influenced by availability of adequate land for farming (24%), safety from climate hazards (17%), absence of resource conflicts (15%), soil fertility or land productivity and other factors (32%) that include proximity to relatives, food availability, presence of as well as employment and business opportunities.

Some of the persons displaced by landslides at the FMPs and other parts of Bududu had been resettled in Kiryandongo and Bulambuli districts. However, some of resettled persons often to their areas of origin for farming activities more especially during planting and harvesting seasons. These cyclical migrations were also driven by cultural and family ties to the FMPs.

About 59% of non-migrants have ever thought about migrating due to landslides (56%), resource conflicts (4%), search for jobs (3%), flooding and reduced land productivity (2%), and shortage of pastures (1%). Land shortage was yet another factor that induce migration of people from the FMPs and the district at large. 70% of the migrants and 72% of non-migrants revealed having had a household member/s who migrated.

Factors for choice of destination area	Bufutsa (%)	Nametsi (%)	Overall (%)
Safety from climate hazards	17	18	17
Pasture availability	4	0	2
Adequate land for farming	30	18	24
Soil fertility/land productivity	9	12	10
No resource conflicts	9	24	15
Others	30	47	32

DURATION OF STAY

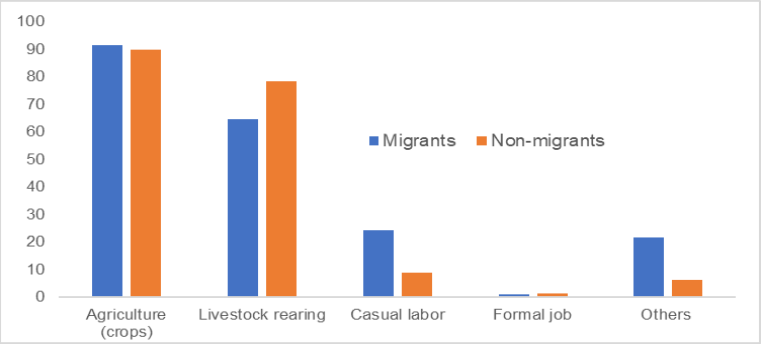
Duration of stay (years)	Migrants (%)
<10	24
10 - 20	30
21 - 30	16
31 - 40	19
40>	11

ECONOMIC ACTIVITIES AND LIVELIHOOD SOURCES

Crop cultivation (agriculture) is the dominant economic activities and means of livelihood for both migrants (92%) and non-migrants (90%). 64% migrants and 61% of the 78% non-migrants were engaged in livestock rearing. Migrants were also engaged in providing casual labor (5%), formal jobs and other activities (38%) such as small business. The main crops grown include; maize, millet, Irish and sweet potatoes, beans, sunflower, coffee, wheat, tomatoes, cabbage, passion fruits, onions and bananas. For livestock, exotic breeds of cows and goats, as well as pigs and sheep that are kept most of them obtained through the government of Uganda programmes like Operation Wealth Creation (OWC) and Northern Uganda Social Action Fund (NUSAF). Poultry keeping of chicken and turkey rearing was also observed. Overtime transitions of livelihoods was reported as communities are shifting away from subsistence agriculture to small scale commercial agriculture and trade is expanding within the different trading centers across the district. The youths are engaged in e-commerce through money transfer initiatives and also joined the transport sector. The proximity to Mount Elgon National Park has also boosted bee keeping for honey production. Such activities have enabled livelihood and income diversification among communities.

The main source of energy used for both lighting tadooba (52%), solar (50%), kerosene lamps (17%), candles (11%), electricity (2%) and pressure lamps (2%) and battery torches as the other kind of lighting energy sources (46%). For cooking, the main sources of energy used were firewood (99%), charcoal (24%) and biogas (1%). The main water sources were wells or springs, streams or rivers (33%), 16% from gravity water schemes or piped water (16%), rainwater tanks (1%), of which 93% of the water sources were permanent and only 7% were seasonal. Water contamination is a big problem during rainy seasons and landslides and floods occur.

MAIN ECONOMIC ACTIVITIES AND LIVELIHOOD SOURCES



IMPACTS OF CLIMATE CHANGE

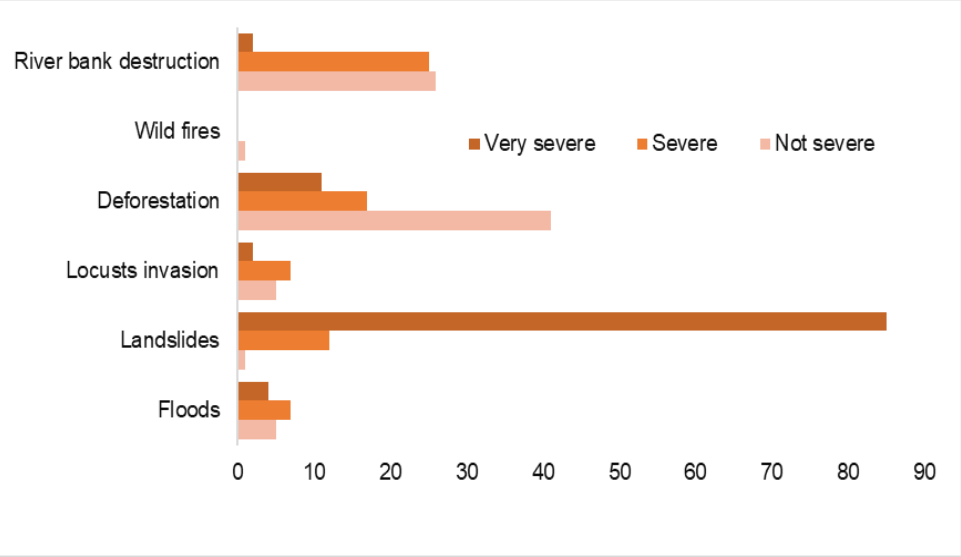
Migrants regarded intensive rainfall (83%), increased rainfall days (73%), increase in windstorms (60%, rise in temperature (58%) and unreliable rainfall (53%) as main harsh climatic conditions. Among the non-migrants the main harsh climatic conditions were rising temperature (85%), increase in rainfall days (65%), and intense rainfall (62%) .

The perceived changes in climate and weather conditions relatively correspond with the current rainfall predictions that reflect a decrease in rainfall and strongly associate with the projected increase in temperature between now and 2090. Landslides, rock falls and mudslides, and flooding were also on the rise due to the heavy rainfall received across the district.

Change in climatic conditions

Weather/Climate condition	Migrants (%)		Non-migrants (%)	
	Decreased	Increased	Decreased	Increased
Rainfall days	25	73	35	65
Temperature	40	58	15	85
Reliability of rainfall	48	53	52	45
Windstorms	60	35	39	61
Severity/Intensity of rainfall	18	83	62	34

SEVERITY OF HARSH ENVIRONMENTAL AND CLIMATIC CONDITIONS



EFFECTS OF ENVIRONMENT AND CLIMATIC CHANGES ON LIVELIHOODS

Among migrants, harsh environmental and climatic factors had caused displacement (30%), crop failure (30%), soil erosion (28%), destruction of shelter/housing (25%), access to gardens/farms and infrastructural damage (23%), death of people and animals (20%), loss income (18%), and reduced water quality (15%). For non-migrants, destruction of shelter (88%), displacement (86%), death of people (83%), loss of income and soil erosion (77%), crop failure (76%), infrastructural damage (68%), death of animals (65%), reduced water quality/contamination (64%), injury of people (51%) and constrained access to gardens (50%) were reported. Land/resource conflicts were common within communities bordering the national park boundary.

The commonly reported pests include; tsetse flies, ticks, caterpillars, liver worms, army worms, rinderpest, locusts and fungal infections. The indicated diseases manifest typhoid, malaria, foot and mouth disease, pneumonia, diarrhea, flu, lamb skin disease, chicken pox, nagana, coughs, swine fever, dysentery, bilharzia and cholera.

Effects of harsh environmental and climatic conditions on livelihoods

Livelihood effects	Migrants (%)	Non-migrants (%)
Displacement	30	86
Death of people	20	83
Injury of people	8	51
Death of animals	20	65
Crop failure/destruction	30	76
Water stress/scarcity	0	1
Reduced water quality/contamination	15	64
Pests and diseases outbreak	10	74
Infrastructural damage	23	68
Destruction of shelter/housing	25	88
Constrained access to gardens/farms	23	50
Soil erosion	28	77
Loss of soil fertility	10	39
Shortage of pastures	0	14
Poor animal quality	3	8
Loss of income	18	77
Loss of job	3	13
Others	8	15

EFFECTS ON FOOD SECURITY

Harsh climatic factors had caused food insecurity by causing crop failure, loss or decline in incomes, increase in food prices, difficulty in accessing gardens.

Effects of harsh climatic conditions on food security

Effects on food security	Migrants (%)	Non-migrants (%)
Crop failure/destruction	38	95
Reduced livestock productivity	5	11
Difficulty in accessing crop fields	25	47
Increase in food prices	23	55
Reduced food availability in markets	13	32
Unable to have balanced diet	18	39
Loss of job	13	14
Loss/decline of incomes	25	87
Others	5	2

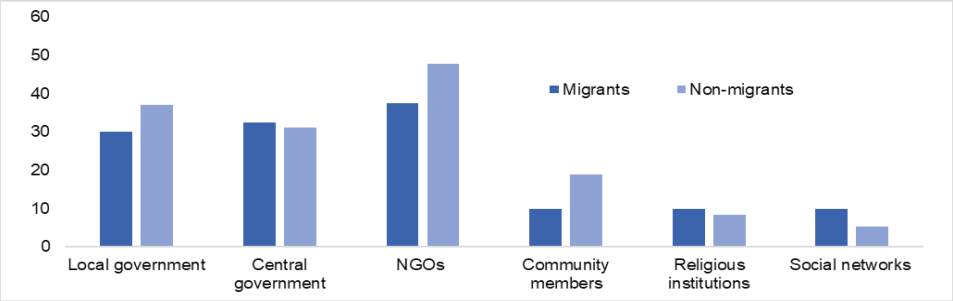
CLIMATE INFORMATION SERVICES AND COPING STRATEGIES

Access to climate information was very among migrants and non-migrants at 20% and 16% respectively. Migrants and non-migrants reportedly accessed information via radio (38% and 11%), village/community meetings (25% and 2%), disaster management committees (0% and 2%), and other channels (50% and 2%) including cultural leaders, examination of over saturated soils along slopes and information from neighbors. The Uganda National Meteorological Authority (UNMA) had installed automatic weather stations across the district to ensure real-time capture of down scaled weather information, but the information is never shared with local governant structures to inform disaster preparedness and planning.

Only 16% of non-migrants received early warning signals through social networks prior the occurrence of disasters. Non-migrants had adopted a number of strategies to cope with the prevailing landslides and flooding. Flood response measures included tree planting, removal of debris deposited by flood water, moving away from river banks, setting up terraces, trenches and mulches, contour ploughing and house repair. Coping up with landslide events is through tree planting, seeking refuge in established camps, nearby trading centers and friends, relocation to Kiryandongo where the government resettled flood victims, contour ploughing and seeking support from government and its development partners.

Various institutions helped communities to cope with the harsh climate and environment shocks including local government, central government (OPM), NGOs, community members, religious institutions, and social networks. The international agencies and NGOs providing support include Uganda Red Cross Society (URCS), United Nations Children's Fund (UNICEF), Plan International and Caritas Uganda. Other support was from Centenary Bank. The support was mainly composed food relief and household necessities. Other kinds of support provided were Taplins, temporary shelters, health services, psychological therapy, crop seeds, community sensitization, farm tools such as hoes, tree seedlings, house repair, financial assistance, and cash for work.

ORGANIZATION PROVIDING SUPPORT TO COMMUNITIES



KIND OF SUPPORT PROVIDED TO COMMUNITIES

Nature of support	Migrants	Non-migrants
Food relief	58	56
Household necessities	48	49
Psychological therapy	20	22
Health service	18	22
Temporary shelter	33	39
Financial assistance	3	3
Cash for work	3	0
Transport	5	6
Land	3	2
Others	10	25

METHODOLOGY

A Participatory Mobility Mapping (PMM) exercise was conducted Bududa district through which two FMP were prioritized for data collection i.e. Bufutsa parish, Bushika Sub-county, and Nametsi parish, Bundesi Sub-county.

The data collection exercise involved a survey involving migrants and non-migrants, site observations and key informant interviews Data was collected by trained enumerators and using already programmed tablets where the designed and validated questionnaires were uploaded on Kobo-Toolbox and integrated with Open Data Kit (ODK) online applications. The surveys were administered during face-to face interviews with migrants and non-migrants. The statistical information derived from the surveys was triangulated with results from key informants' interviews, site observations and existing literature to substantiate on key issues in relation to migration, environment change and climate change.

LIMITATIONS

Traditionally, FMPs are strategically identified to capture information on cross-border migration flows on key transit points and official Points of Entry (PoEs). However, the context of this study was different because data collection did not involve cross boarder migrants and the information herein does not reflect cross-border human mobility but internal migration and displacement driven by environment and climate change shocks and stresses.