Migration, Poverty, and Well-Being in Tanzania

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The purpose of this paper is to provide a comprehensive approach to analysing the migration status and do a mapping among the three variables Migration, poverty, and well-being, and their implications for social policy. It will also examine other factors in understanding nature, structures, and processes driving migration. Most of the migration of the poor is not much recognized, some of whom are children as migration tends to be defined as an adult activity.
This research study is using a micro dataset of the National Panel Survey (NPS) collected through national representation by the National Bureau of Statistics in five different waves. The NPS is a national-level longitudinal survey designed to provide data from the same household to understand poverty dynamics.
Apart from acknowledging the progress made by the government in tackling poverty and inequality, the research paper will outline reasons and factors that appear to be associated with economic insecurity such as regional, opportunity, household, and individual characteristics, household structure, and various policy issues related to migration. The associated socio-economic issue will be discussed in great detail in the paper.
Keynotes: *Migration, Poverty, and Well-Being.*

1.0 Introduction:

This paper provides a vivid situation of migration at the micro-level that occurs within the country. It also examines the movement rate by looking at migrant's duration of stay by sex, age, education, marital status and economic activity.
Furthermore, the research findings are an add-on to the already existing pool of knowledge with regard to migrants. The gaps in the information identified in this paper may be useful for further research in the area of migration.
Migration is a global challenge and a variety of reasons lie behind it. People migrate due to economic regional disparities, demographic, and environmental disasters in order to improve their economic situation**.**
Migration both positively and negatively influenced the households' resilience. For instance, remittances from migrants enhanced households' economic capital (notably livestock and agriculture), cultural capital such as food and health support, various household equipment and the improvement of formal education and skills. On the other hand, migration also subjected some households to threats related to financial constraints, inadequate human power and food insecurity.
In Africa, and particularly Sub-Saharan Africa (SSA), over 50 million people are predicted to migrate from rural to urban areas in the decade after 2011, leading to the doubled growth of most African cities ((Munishi, 2013)).
The high levels of dependence on agriculture that is not irrigated create a weakness in climate variability, which is seasonal and does not give a continuous flow of income, it makes people move to towns where there is an opportunity to earn a better living outside agricultural activity.

(Umutoni & Ayantunde, 2018) sees the increased competition over natural resources as an important factor leading to environmental degradation in areas where livestock mobility has

increased. Despite this trend, not many studies have been carried out to assess the impact of transhumance on natural resource management as perceived by the main actors (farmers and herders) in the Sudano-Sahelian and Sudano-Guinean zones of Mali
(Transhumant practices in Sudano-Sahelian and Sudano-Guinean zones are facing an increasing challenge in the context of demographic pressure, leading to the encroachment of cultivated fields into grazing areas and livestock corridors which constrains the mobility of the livestock. (Umutoni & Ayantunde, 2018)
Maasai nomadic pastoralists started migrating to urban areas on a large scale for wage labour in the 1990s, mainly due to poverty intensification resulting from the decline of the cattle economy, owing to unpredictable climatic variability that led to droughts and floods, as well as the loss of land to investments).(Munishi, 2013)
There is a strong trend of increasing female migration to towns in search of better economic prospects, particularly by those with primary education. However, their low level of education precludes them from obtaining well-paid jobs or any part-time employment at all.

2.0 Data and Methods

The dataset used is the National Panel Survey (NPS) a representative of the entire population; it comes from four waves in 2009, 2010, 2011, and 2013collected by the National Bureau of Statistics (NBS). The NPS is longitudinal data with detailed information on household characteristics including migration questions. Key variables used in this study were; duration of stay, employment status, age group, sex, education, and marital status.

A multinomial logistic regression model was used to examine factors influencing migration in Tanzania;

$$Y = log\left(\frac{P_i}{1-P_i}\right) = \beta_0 + \beta_1 x_1 + \beta_2 x_2 + \beta_3 x_3 + \beta_4 x_4 + \beta_5 x_5$$

Or

$$P_i = \frac{exp(\beta_0 + \beta_1 x_1 + \beta_2 x_2 + \beta_3 x_3 + \beta_4 x_{4+} \beta_5 x_5)}{1 + \exp\left(\beta_0 + \beta_1 x_1 + \beta_2 x_2 + \beta_3 x_3 + \beta_4 x_4 + \beta_5 x_5\right)}$$

Where dependent variable Y represents duration of stay at location i, $x_1 = age\ group, x_2 = education\ status, x_3 = employment\ status,\ and\ x_4 = marital\ status,$ and $x_5 = sex,$ $\beta_0 = constant,\ \beta_1, \beta_2, \beta_3, \beta_4\ and\ \beta_5$ are coefficients for variables $x_1,\ x_2,\ x_3\ , x_4\ and\ x_5$ respectively

3.0 Results

Table 1.0:

Migrants during of stay by sex and education level

Duration of stay	Sex			Education level			
	Male	Female	Total	Primary incomplete	Primary complete	Secondary and above	Total
<1 year	9.4	20.3	15.4	16.6	15.7	17.8	16.3
1-4 years	42.3	44.4	43.5	37.7	46.9	42.1	44.0
5-9 years	17.6	11.4	14.2	11.4	11.2	18.5	12.7
>10 years	30.7	23.9	26.9	34.3	26.3	21.6	27.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: National Panel wave 3

Table 1.0 presents the duration of stay by sex and educational attainment of migrants from less than one to more than ten years. The data was classified by sex and educational level, the migrants were further grouped into male, sex, primary incomplete, primary complete, and secondary above.

As can be seen from the data comparatively, duration of stay less than one to four years, there are more female migrants 44.4% and 20.3% than male migrants 42.3% and 9.4 % respectively, On the whole, at a shorter time period, female is more than male migrants, However, at greater than ten years both sexes prefer to stay a longer period, 30.7% men and 23.9 % females.

Looking at the entirety of education level distribution, there are a total of 44.0 % of migrants who had preferred to stay between one to four years, almost half of the migration population. Generally speaking, there are more migrations among those who stay a shorter time than a longer time period and the opposite is true as there is less migration rate for those people who stay more than ten years .(27.0%.)

Table 2.0:

Duration of stay by age group

	Age group				
Duration of stay	0-14	15-34	35-64	65+	Total
<1 year	17.3	20.7	6.0	3.0	15.4
1-4 years	50.4	52.2	27.5	18.8	43.5
5-9 years	23.6	12.3	16.5	5.8	14.2
>10 years	8.7	14.7	50.1	72.4	26.9
Total	100.0	100.0	100.0	100.0	100.0

Source: National Panel wave 3

Table 2.0 describes the age distribution of migrants; the data was classified into parts duration of stay less than a year to more than ten years and age group.

A further look at the table reveals that the duration of stay between 1 to 4 years is predominant by migrants aged 15-34 (43.5%) of the total, the rest were 26.9%, more than ten years stay, 15.4% for less than one year stay and 14.2% between 5-9 years duration of stay. Generally

speaking, there are more migrants in the youth group who mostly migrate from rural to urban/city, except in more than ten years longer period, however, the unemployment migrants age 65 and above years, found the conditions in urban become very hard for them to sustain life, therefore, many of them together with their families opt to move to rural areas where there is such as low cost of living.

Table 3.0:

Migrants' duration of stay by economic activity

Duration of stay	A paid employee	A self-employed (non-agric) with employees	A self-employed (non-agric) without emp	Unpaid family helper (non-Agric)	Unpaid family helper - Agric	On your own farm	Total
<1 year	24.5	8.9	11.4	16.3	13.8	4.2	18.1	14.2
1-4 years	43.7	27.3	41.9	61.3	44.6	28.2	68.0	41.4
5-9 years	12.3	38.6	17.0	6.3	14.6	13.8	9.5	14.2
>10 years	19.5	25.2	29.7	16.0	27.0	53.8	4.4	30.2
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: National Panel wave 3

Table 3.0 presents migration during of stay by economic activity, the data were further categorized into the group of the duration of stay and type of economic activity. As can be seen from the data there are more migrants with a duration of stay between 1 to 4 years representing (41.4%) and followed by those who stay more than 10 years, (30.2%). A further look at the table shows that the most economic activity is a paid employee followed by an unpaid family helper in agricultural activity and self-employed (non-agric) with employees.

Table 4.0:

Duration of stay by marital status

Duration of stay	Monogamous married	Polygamous married	Living together	Separated	Divorced	Never married	Widow(er)	Total
<1 year	12.4	4.5	19.6	16.6	20.0	20.1	5.9	15.4
1-4 years	41.9	30.3	42.0	53.7	34.7	49.9	26.7	43.5
5-9 years	13.0	18.2	13.0	4.5	13.1	15.9	14.6	14.2
<10 years	32.8	47.0	25.5	25.2	32.3	14.1	52.9	26.9
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: National Panel wave 3

Table 4.0 describes the duration of stay by marital status, the data were classified by type of marital status and as can be seen in the data there are more migrants with a duration of stay

between 1 to 4 years representing (43.5%) of the total migrants and followed by those who stay more than 10 years, (26,9%), the rest have 15.4% less than one year and 14.2 % between 5 to 9 years.
A further look at the table shows that there are more separated (53.7 %) and never-married migrates (49.9%) with a shorter duration of stay between 1 to 4 years.

Table 5:
Multinomial logistic regression model (coefficients)

Logistic Regression has been used in the biological sciences in the early twentieth century. It was then used in many social science applications. A logistic regression model allows us to establish a relationship between a binary outcome variable and a group of predictor variables. It (Venkatesan & Sasikala, 2019)

Duration of stay	Ind. variables	Coefficients	St.Err.	t-value	p-value	[95% Conf	Interval]	Sig
<1 year	age_	-1.984	.096	-20.56	0	-2.173	-1.794	***
	sex	.368	.089	4.15	0	.194	.542	***
	employ_status	-.258	.026	-10.07	0	-.308	-.208	***
	educ_c	-.019	.07	-0.28	.78	-.156	.117	
	mar_st	.047	.02	2.34	.019	.008	.087	**
	Constant	3.189	.384	8.30	0	2.436	3.941	***
1-4 years	age_	-1.808	.053	-34.36	0	-1.911	-1.705	***
	sex	.2	.053	3.78	0	.097	.304	***
	employ_status	-.175	.015	-11.70	0	-.205	-.146	***
	educ_c	.036	.042	0.85	.398	-.047	.119	
	mar_st	-.008	.013	-0.63	.532	-.032	.017	
	Constant	4.314	.233	18.53	0	3.858	4.771	***
4-9 years	age_	-1.191	.058	-20.36	0	-1.306	-1.077	***
	sex	.104	.061	1.70	.09	-.016	.224	*
	employ_status	-.119	.017	-6.92	0	-.153	-.085	***
	educ_c	.013	.049	0.26	.795	-.083	.109	
	mar_st	-.062	.015	-4.12	0	-.091	-.033	***
	Constant	2.449	.27	9.08	0	1.92	2.978	***
>10 years	(Base outcome)							
	Mean dependent var		3.020	SD dependent var			1.020	
	Pseudo r-squared		0.092	Number of obs			9949	
	Chi-square		2206.116	Prob > chi2			0.000	
	Akaike crit. (AIC)		21702.303	Bayesian crit. (BIC)			21831.997	

**** p<.01, ** p<.05, * p<.1*

Table 6:

Multinomial logistic regression model

Duration of stay	Ind. variables	RRR.	St.Err.	t-value	p-value	[95% Conf	Interval]	Sig
<1 year	age_	.138	.013	-20.56	0	.114	.166	***
	sex	1.445	.128	4.15	0	1.214	1.72	***
	employ_status	.773	.02	-10.07	0	.735	.812	***
	educ_c	.981	.068	-0.28	.78	.856	1.124	
	mar_st	1.048	.021	2.34	.019	1.008	1.09	**
	Constant	24.257	9.313	8.30	0	11.429	51.481	***
1-4 years	age_	.164	.009	-34.36	0	.148	.182	***
	sex	1.222	.065	3.78	0	1.101	1.356	***
	employ_status	.839	.013	-11.70	0	.815	.864	***
	educ_c	1.036	.044	0.85	.398	.954	1.126	
	mar_st	.992	.012	-0.63	.532	.968	1.017	
	Constant	74.765	17.408	18.53	0	47.37	118.003	***
5-9 years	age_	.304	.018	-20.36	0	.271	.341	***
	sex	1.109	.068	1.70	.09	.984	1.251	*
	employ_status	.888	.015	-6.92	0	.858	.918	***
	educ_c	1.013	.05	0.26	.795	.92	1.115	
	mar_st	.94	.014	-4.12	0	.913	.968	***
	Constant	11.579	3.125	9.08	0	6.823	19.651	***
>10 years								
	Mean dependent var		3.020	SD dependent var			1.020	
	Pseudo r-squared		0.092	Number of obs			9949	
	Chi-square		2206.116	Prob > chi2			0.000	
	Akaike crit. (AIC)		21702.303	Bayesian crit. (BIC)			21831.997	

**** p<.01, ** p<.05, * p<.1*

Table 6.0 presents that age, sex, marital status, and employment are significant risk factors for migration (duration of stay) while education was not a significant risk factor for migration.

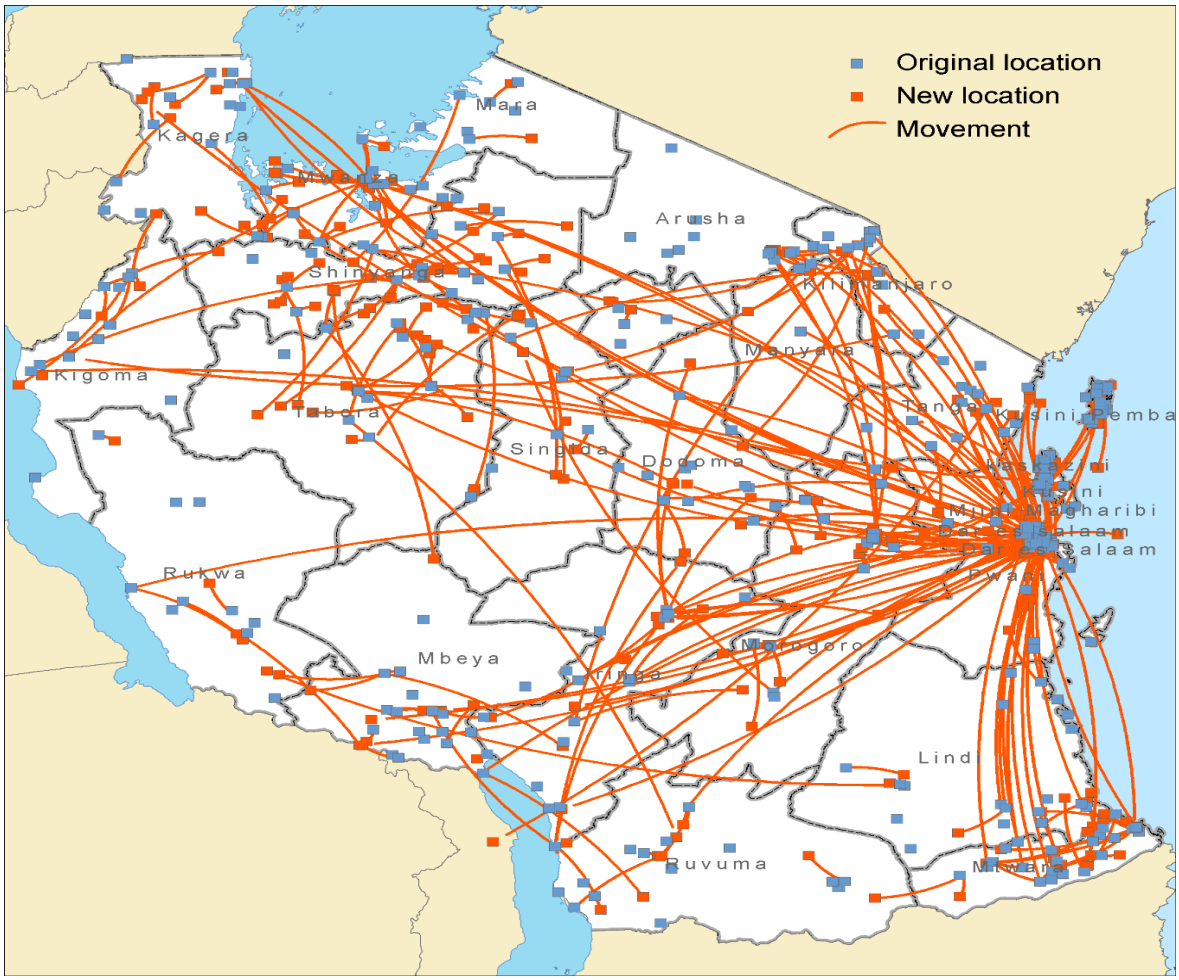
The result indicates that the relative risk for decreasing the duration of stay at a certain locality to less than one year is 31.3% higher for female migrants compared to male migrants. The results also show the relative risk for the duration of stay of 1-4 years for male migrants is not significantly different from that of female migrants. However, the relative risk for the duration of stay of 5-10 years for male migrants is also similar to that of female migrants.

The result shows that the relative risk for the duration of stay of less than one year for unpaid employees is about a half less than for paid employees. Similar results are seen in for both 1-4 years and 5-9 years duration of stay. This might indicate that paid employees are the most migrants compared to the rest of the other groups.

The relative risk for the duration of stay of less than one year for individuals aged 65+ is 15%, which is very small indicating that people of older age migrate in a small number compared to other mobile groups.

Tracking map 1.0: Movement of migrants in Tanzania

The tracking map explored geographical perspective of migrant's movement across the country. Rural-urban migration is composed of a large proportion of migrants, however, there is a lower rate of movement to rural areas



4.0 Conclusion

The basic information about migrants is one of the keys for policy formulation development in a country as the future migrants is likely to increase, due to both as result of the demand for labour and a better living condition

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