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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 some of whom are children is not much recognized, as migration tends to be defined as an adult activity.

This research study uses a micro dataset of the National Panel Survey (NPS) collected by the National Bureau of Statistics through national representation in five different waves. The NPS is a national-level longitudinal survey designed to provide data from the same households on 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 within the country. It also looks at the movement rate in terms of the percentage of the duration of stay, sex, age, education, marital status, and economic activity.

The research findings are an add-on to the existing pool of knowledge on migrants. The gaps in the information identified in this paper may call for further research in the area of migration.

Migration is a global challenge for a variety of reasons; People migrate due to regional disparities, economic, demographic pressure, and environmental disasters. They migrate in order to improve their situation.

Migration both positively and negatively influenced the households' resilience. For instance, remittances from migrants enhanced households' economic capital (notably livestock and agriculture), social services such as food and health support, various household equipment and the improvement of formal education and skills. On the other hand, migration also subject some households to threats related to financial constraints, inadequate human power and food insecurity.

In Africa, 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 and seasonals creates a weakness of not giving a continuous flow of income. It makes people move to towns where there is an opportunity to earning a better income outside agricultural activity.

(Umutoni & Ayantunde, 2018) see 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 of 2009, 2010, 2011, and 2013 collected 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, x_4= marital status, and x_5 =sex.

β_0= constant, β_1, β_2, β_3, β_4 and β_5 are coefficients for variables x_1, x_2, x_3, x_4 and x_5

3.0 Results

Table 1.0:

Migrants' percentage by duration of stay, 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 percentage of migrants by the duration of stay by sex (male, female) and educational attainment (primary incomplete, primary complete, and secondary above).
As can be seen from the table, the percentage of migrants whose duration of stay is up to four years is larger for 64.7 (44.4% and 20.3%) than male migrants 51.9 (42.3% and 9.4%) for the shortest duration of less than a year, the percentage of migrants is larger for females (20.4%) than males (9.4%). However, for the longest duration of ten years and above the percentage is larger for males (30.7%) than females (23.9%).
Under the percentage distribution of the total education level, the duration of stay with the majority (44.0%) of migrants is 1 to 4 years.
Generally, the duration of stay of most migrants (93.0%) is shorter (up to 9 years) and that of others (27.0%) is longer (10 years or more).

Table 2.0:

Migrants (percentage) by duration of stay and age group

Duration of stay	Age group				
	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 shows the distribution of migrants for specified age groups by duration of stay. It reveals that overall, the duration of stay for the majority (43.5%) of migrants is 1 to 4 years. It is followed by 10 years and above with 26.9 percent, less than one year with 15.5 percent, and 5 to 9 years with 14.2 percent.
the data was classified into parts duration of stay less than a year to more than ten years and age group.

Generally speaking, more migrants are from youth groups migrants in the youth groups who move from rural to urban areas. On the hand many unemployment migrants aged 65 and above who find life in urban areas unbearable move with their families to rural areas where the cost of living is low.

Table 3.0:

Migrants (percentage) by duration of stay and Employment status

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 percentage of migrants for specified employment statuses by during of stay. Overall, the duration of stay of 1 to 4 years has the majority (41.4%) of migrants, followed by 10 and above years. (30.2%). A further look at the table shows that under the most dominant duration of stay (1-4 years), the employment status with the largest percentage of migrants is unpaid family (non-agric) (61.3%), followed by unpaid family helper (agric) (44.6%), paid employee (43.9%), and self-employed (non-agric) without employees (43.9%)

Table 4.0:

Migrants (percentage) by duration of stay and 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 give percentage distribution of migrants with specified marital status by duration of stay. It shows that overall, the duration of stay with the largest by duration of stay percentage

(43.5) of migrants is 1 to 4 years followed by 10 years and above. (26.9%), less than one year (15.4%), and 5 to 9 years (14.2%).
A further look at the table shows that under the most dominant duration of stay (1-4 years) the status with the largest percentage of migrants is separated (53.7 %), followed by never-married migrants (49.9%).

Multinomial logistic regression model (coefficients)

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)

Regression methods have become an integral component of any data analysis concerned with describing the relationship between a response variable and one or more explanator variables. Quite often the outcome variable is discrete, taking on two or more possible values. The logistic regression model is the most frequently used regression model for the analysis of these data (Ziegel & Menard, 1996)

Table 5:

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 indicates that age, sex, marital status, and employment are significant risk factors for migration (duration of stay) while education is not a significant.

The results indicate 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 to 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 to10 years for male migrants is also similar to that of female migrants.

The results 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 explore the geographical perspective of migrants' movement across the country. Rural-urban migration account for a large proportion of migrants. However, there is a lower rate of movement to rural areas
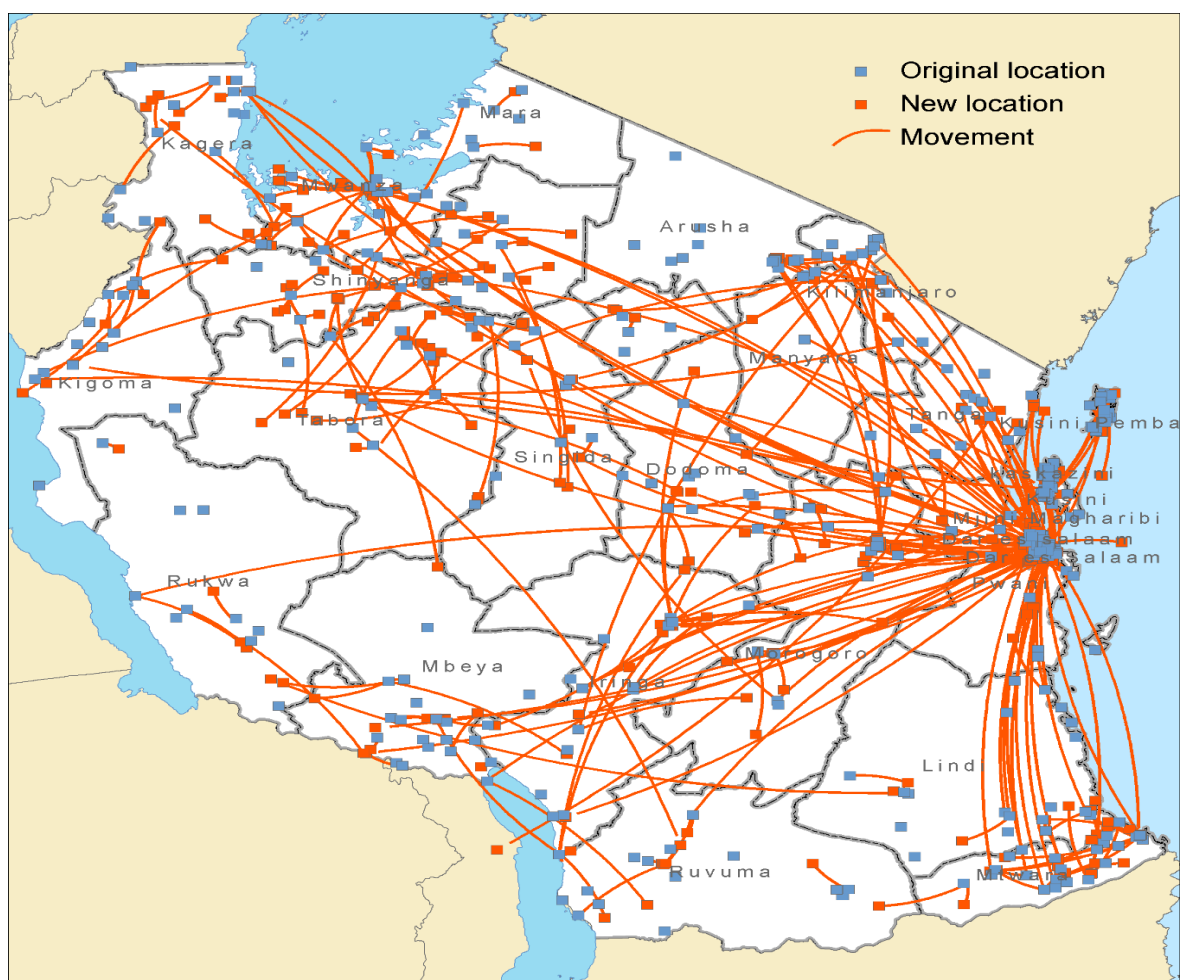
4.0 Conclusion

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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