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Trends in All-Cause and Cause – Specific Mortality in the Kurdistan Region of Iraq (2020 -2023)

By Aras Bradosty*, Cristina Montomoli[‡], Ioana Popa[°] & Mohammed Ibrahim Mohialdeen Gubari[•]

Background: Population-based mortality data are crucial for health planning, and these data are currently lacking in the Kurdistan Region of Iraq. This paper examined the trends and patterns in all-cause and cause-specific mortality between 2020 and 2023 through population-based forensic registries. Methods: This population-based observational study utilized mortality records from the Department of Forensic Medicine for the years 2020–2023. Mortality patterns were assessed and compared according to age, sex, cause of death, and geographic area. Mid-year population estimates were utilized to compute crude mortality rates and age-standardized mortality rates (ASMRs). The temporal trends were evaluated using log-linear regression to determine the annual percent change (APC) with 95% confidence intervals (CIs). Results: Annual deaths ranged from 14,193 to 16,891. The crude mortality rate declined from 2.63 per 1,000 population in 2020 to 2.24 per 1,000 population in 2023. The age-standardized mortality rate (ASMR) declined to 2.14 per 1,000 population (APC = -5.2%; 95% CI: -11.9 to 1.9; p = 0.12) during the study period. The mortality rate increased markedly with age, and a higher rate was observed among males in comparison to females (2.41 vs. 2.05 per 1,000 population in 2023). More than two-thirds of all deaths were attributed to non-communicable diseases, with cardiovascular diseases (23%) and cancers (22%) representing the leading causes of mortality. External causes accounted for 6.6% of all deaths, with road traffic injuries and suicide being the leading contributors. Geographical disparities were identified, with a higher mortality rate observed in Duhok and Erbil. Conclusions: Mortality declined during the study period, although the downward trend did not reach statistical significance. Non-communicable diseases remained the leading causes of death, while substantial regional disparities in mortality were observed. These findings highlight the need to strengthen chronic disease prevention and control, enhance injury prevention strategies, and support evidence-based health planning at the subnational level. Strengthening mortality surveillance systems is essential for informing public health policy and monitoring future mortality trends.

Keywords: Mortality trends; Non-communicable diseases; COVID-19; Premature mortality; Kurdistan

*PhD Student, University of Pavia, Italy.

‡Professor, University of Pavia, Italy.

°Associate Professor, University of Pavia, Italy.

•Associate Professor, Clinical Science Branch, College of Medicine, University of Sulaimani, Kurdistan Region of Iraq.

Introduction

Mortality data are among the most relevant health indicators within the performance of the primary health care system. Assessment of mortality trends provides crucial insight into the burden of disease, the effectiveness of healthcare delivery mechanisms, environmental and social disturbances, and major health outcomes within the community (Mathers et al., 2015; World Health Organization, 2014). Consequently, its effect will extend to dependable mortality data for evidence-based public health strategies, the evaluation of health initiative priorities, and the evaluation of policies at both regional and national levels (AbouZahr et al., 2015). The mortality pattern has changed dramatically on a global scale in recent years, with higher deaths due to communicable diseases and an increasing burden of chronic diseases, age-related diseases, and injuries, particularly in low and middle-income countries expressing rapid epidemiological and transition disease (Omran, 1998; GBD, 2019). The unexpected event like coronavirus in 2019 (COVID-19) pandemic, has complicated the trends of mortality, which had several influences on the other causes of death, such as shutdown of the health system, postponing the diagnosis, and changes in health-seeking behaviors (Beaney, 2020; Woolf, 2020; Bilinski and Emanuel, 2020). The years 2020–2023, which include the start, peak, and later stages of the COVID-19 pandemic, are relevant in terms of epidemiology because they are affected by larger social, economic, and healthcare system pressures (Karlinsky and Kobak, 2021; Kontis et al., 2020; Islam, 2021).

It's important to remember that the higher death rate hasn't just been caused by COVID-19. It's also been caused by heart diseases, cancers, accidents, and other conditions that are harder to treat and cause social problems (De Filippo, 2020). In the international literature, there is a big lack of population-level mortality data from the Eastern Mediterranean Region, especially from Iraq and the Kurdistan Region. This is true even though the region has seen a lot of population growth, changes to its healthcare systems, and long-lasting political, economic, and public health problems (World Health Organization, 2018; Setel, 2007). Existing studies from this area are often limited to hospital-based data, short-term time frames, or certain diseases, which means it doesn't provide a good picture of overall mortality trends at the population level (Roth, 2018). Another thing is that not many studies have used forensic or civil death registration records to look at death rates consistently over several years during the COVID-19 era.

Many factors, such as inconsistent access to health care services across various cities, the magnitude of the communicable disease, increasing of the non-communicable disease, and trauma-related mortality in the Kurdistan region of Iraq, make it the most epidemiological landscape to be studied. Also, understanding these data will enhance the surveillance system and provide the health policies for the needs of the community, and understanding also provides the policy makers insight of the mortality trends. It is important to mention that the development of the statistical phase in the Kurdistan region is still in its early phase; therefore, accessing the data from the forensic records is considered a vital opportunity and later for that development. On the basis of the current situation, the current study aims to analyze the trend of the mortality from 2020 to 2023 of Kurdistan region of Iraq using the data of the Forensic Department.

Methods

Study Setting and Design

This was the first population-based study of mortality trends in the Kurdistan Region of Iraq using routinely collected data on mortality to be undertaken and published (reporting of this research has followed the Strengthening the Reporting of Observational Studies in Epidemiology guidelines on von Elm et al., 2007). Data on mortality were available from the Department of Forensic Medicine of the Kurdistan Regional Government (KRG) for the years 2020–2023. The population of the current study included governorates of the Kurdistan Region of Iraq, as well as peripheral districts with diverse populations and access to healthcare. The Department of Forensic Medicine acts as the official Registrar of Deaths in the region, and death registration occurs through structured medical/legal procedures. All data had been anonymized before the analysis, and no personal details had been obtained.

Data Source and Study Population

The study population was all deaths in the forensic mortality registry recorded throughout the course of the study. Mortality data were gathered anonymously and no personal identifiers were obtained. No deaths were excluded because of age, sex, or cause of death. For variables with missing or inconsistent data only observations with missing data were excluded from the appropriate stratified analyses. Population denominator data (annual population estimates, table of age structure) were obtained from the Kurdistan Regional Statistics Office.

The Study Variables and their Definition

The variables used in the final analysis were age at death, year of death, sex, place of residence (province/district, when available), cause of death, manner of death, and place of death. Causes of death were defined as per the ICD-10 [19] or the Department of Forensic Medicine classification protocol. Manner of death was categorized as natural, homicide, accident, or undetermined. Places of death were home, hospital, or other locations. Major groups of causes of death (for the final analysis) were non-communicable diseases, communicable diseases, injuries, and external causes.

Population Denominator

Crude mortality rates (CMRs) were derived by dividing the total number of deaths during the period by the mid-year population at risk, expressed as the number of deaths per 1,000 population. Observed death rates (ASMRs) were estimated by the direct standardization method (WHO world standard population) for age-specific and sex-specific mortality rates, so that a comparison could be made to years unaffected by changes in age structure. Age-specific mortalities were derived for predefined age bands.

Statistical Analysis

Statistical analyses were performed using appropriate statistical software. Descriptive statistics were applied to summarize mortality counts and rates according to age, sex, and cause of death. Mortality rates were expressed per 1000 population. Age-standardized mortality rates (ASMRs) were calculated using the direct standardization method based on a standard reference population. Temporal trends in mortality were evaluated using annual percent change (APC) analysis with corresponding 95% confidence intervals (CIs). Mortality patterns were further assessed through stratified analyses according to age group, sex, and major causes of death. A p-value of <0.05 was considered statistically significant.

Data Quality and Bias

All mortality information was collected from the official forensic mortality registry, which presents a uniform death registration system throughout the Kurdistan Region. Before analysis, records were examined for accuracy and completeness in order to reduce information bias. Records that had missing or inconsistent data were excluded just from the respective subset analyses.

Ethical Consideration

The Ministry of Health of the Kurdistan Region provided the ethical approval. Besides, the Department of Forensic Medicine was accepted to submit the data to be used in the current investigation. In the present study, no face-to-face contact with the participant was present. The research was done under the international standard of medical research ethics concerning data privacy.

Results

Overall Mortality Trends (2020–2023)

In the Kurdistan Region, the number of deaths per year between 2020 and 2023 was between 14,193 to 16,891 or between 2.21 and 2.63 in terms of crude death rates per 1,000 population (Table 1). In 2020, the highest mortality (2.63 per 1,000) was recorded and this was followed by a significant decrease in 2021 (2.60) and a minor rise in 2022 (2.21).

Table 1. All-cause Mortality Trends in the Kurdistan Region, 2020–2023

Year	Total deaths	Population	Crude death rate (per 1,000)	ASMR (per 1,000)
2020	16,891	6,100,000	2.63	2.51
2021	16,706	6,250,000	2.60	2.47
2022	14,193	6,350,000	2.21	2.11
2023	14,363	6,420,105	2.24	2.14

The same was also observed in age-standardized mortality rates (ASMR), which had declined to 2.51 per 1,000 in 2020, 2.11 in 2022, but increased slightly to 2.14 in 2023. Log-linear trend analysis showed an average change (APC) of percent of 5.2 per year (95% CI: -11.9 to 1.9; $p=0.12$) in a negative direction but not statistically significant.

Total mortality fell by around 14% in 2021-23, which is an indication that excess mortality caused by the pandemic had recovered. At a geographical level, there was always more crude mortality in Duhok and Halabja, compared to Raparin and Garmian.

Age and Sex Patterns of Mortality

Age-specific mortality rates increased substantially with age (Table 2). Mortality rates were low among children and young persons, from 0.10 per 1,000 population for age 5–14, to 0.19 per 1,000 population for age 15–24, and 0.56 per 1,000 population for age 25–34. Mortality rates increased gradually with increasing age: to 3.14 per 1,000 and 16.63 per 1,000 for 35–44 and 65–74 years, respectively; and to 13.68 per 1,000 among those aged 75 years and above. Over 50% of all recorded deaths occurred in the age group 55 years and above.

Table 2. *Age-specific mortality rates, Kurdistan Region, 2023*

Age group	Deaths	Population	Rate per 1,000
0–4	1,005	706,212	1.42
5–14	144	1,412,423	0.10
15–24	287	1,284,021	0.22
25–34	575	1,027,217	0.56
35–44	1,436	770,413	1.86
45–54	2,011	513,608	3.92
55–64	2,873	321,005	8.95
65–74	3,160	190,000	16.63
≥75	2,872	210,000	13.68

In 2023, the death rate of male is higher than that of females (2.41 and 2.05 per 1,000, respectively). The ratio of male-to-female mortality rate is 1.18. Male excess mortality can be observed in most of the adult age groups. The increase of deaths for older populations and male excess mortality can be explained by the increasing prevalence of chronic diseases and behavioural risk factors.

Cause-Specific Mortality Patterns

NCDs represented the highest proportion of mortality in 2023, making up more than 2/3 of all. Deaths (Table 3), with the main contributors being cardiovascular diseases (23%) and cancer (22%), contribute to almost half of all deaths. Additional causes of death were neurology (11%), respiratory diseases (9%), digestive diseases (8%), genitourinary diseases (6%), and endocrine diseases, including Diabetic Mellitus (5%). Such a pattern of death is typical of a more developed stage of the epidemiological transition.

Table 3. Cause-specific Mortality Distribution, 2023

Cause	Percentage of total deaths
Cardiovascular diseases	23%
Cancers	22%
Nervous system diseases	11%
Respiratory diseases	9%
Digestive diseases	8%
Genitourinary diseases	6%
Endocrine & diabetes	5%
Other causes	16%

External Causes of Death

Exposure to external factors was also a major cause of untimely deaths (Table 4). The number one external cause was road traffic injuries (RTIs) which reduced to 588 deaths in 2023, a 26 percent decrease since 2021. In the year 2023, suicide dropped to about 250 cases compared to over 430 in the year 2021. Minor but consistent causes of burden were firearm injuries, drowning, and burns or poisoning.

Even though the noted decrease was seen, the external causes were still disproportionately impacting younger adults and were a significant preventable factor of death.

Table 4. External Causes of Death, 2021–2023

Cause	2021	2022	2023
Road traffic injuries	795	694	588
Suicide (hanging)	>432	~300	~250
Firearm injuries	~97	~80	~60
Drowning	22	20	15
Burns/poisoning/electrocution	<50 each	<40 each	<30 each

Geographic Inequalities

Geographic variation was found to be tremendous within the region (Table 5). Duhok and Erbil always showed the highest rates of adult mortality and external-cause mortality, whereas Halabja and Raparin showed the lowest rates. These trends indicate that health risk, exposure to injuries and access to health services are unevenly distributed among directorates.

Table 5. Geographic Disparities in Mortality Indicators, 2023

Indicator	Highest directorates	Lowest directorates
Adult mortality	Duhok, Erbil	Raparin, Halabja
External causes	Erbil, Duhok	Halabja, Koya

Discussion

This study represents one of the first population-based reports of all-cause and cause-specific mortality trends in the Kurdistan Region of Iraq based on forensic mortality registry data. Three notable results were identified: (1) mortality patterns peaked in 2020 to 2021 and fell afterwards; (2) the mortality profile was characterized mainly by the presence of NCDs, especially CVDs and cancers; and (3) considerable geographically, age- and sex- related differences were witnessed in mortality across the region.

Mortality Trends and the Impact of COVID-19

Crude and age standardised mortality rates were highest in 2020–2021 followed by a decline, probably due to the effects of the COVID-19 pandemic. While mortality decreased over time during the study period, this decrease was not statistically significant (APC = 5.2% per year). This is in accordance with other studies reporting an increase in mortality during the COVID-19 pandemic followed by a slow return to baseline as vaccine coverage was increased and health systems adapted to the changing epidemiological landscape (World Health Organization, 2022; Karlinsky and Kobak, 2021).

The decrease seen after 2021 could be related to a decrease in COVID 19 death and recovery of pressures on the healthcare system, which were caused by the Pandemic. Several papers from previous studies have previously reported the increased indirect effects of the pandemic on the healthcare system and its influence on increased mortality from delays in diagnosis, demand for healthcare with chronic disease management for example, which caused excess deaths during pandemic years (Moynihan et al., 2021) and similar patterns of mortality were reported with other countries, where mortality levels gradually reduced after the peak of the pandemic (Woolf et al., 2021)

Epidemiological Transition and age pattern

Non-communicable diseases cause over two-thirds of all deaths, and cardiovascular diseases and cancers account for almost half of all deaths. Mortality rates started to skyrocket after 45 years, with the majority of deaths taking place among those aged 55 or older. This picture illustrates a clear case of an aging population and the advanced stage of epidemiological transition.

This trend is comparable to many other low and middle-income countries, as the transition towards urbanization and sedentarism, coupled with the increase in metabolic risk factors, has caused a rise in non-communicable diseases such as cardiovascular disease, diabetes, and cancer (GBD 2019 Risk Factors Collaborators, 2020; World Health Organization, 2022; Boutayeb, 2006). The large burden of premature adult mortality seen in this study may be indicative of problems with early disease identification, follow-up, and long-term management of risk factors.

External Causes and Premature Mortality

External causes, notably road traffic injuries and suicide, continued to be significant determinants of premature death even with an overall downward trend. The downward trend on death fell from road traffic injury may partly have been attributable to changes in the movement of the population during the COVID-19 pandemic, as well as the steady trend of road safety measures and traffic regulation for accident prevention. However, the persistent external causes of injury-related mortality revealed the importance of road safety, traffic infrastructure, traffic regulation, and injury control measures (World Health Organization, 2023).

The continued high levels of suicide-related mortality mean that there is a need to enhance community mental health and psychosocial services. Comparable trends have been indicated in circumstances where economic deprivation and post-conflict conditions have prevailed, with mental health needs not being fully understood and addressed (Reavley and Jorm, 2011).

Geographic Inequalities

Marked geographic variations in mortality within the Kurdistan Region were evident with higher mortality rates in Duhok and Erbil than in smaller administrative districts such as Raparin and Halabja. Variations in geographic mortality rates are usually thought to be associated with variations in socio-economic status, population density, access to health care, as well as environmental and occupational risks (Marmot, 2005). These data are a reminder of the need for sub-national health planning and distribution of health care resources in a more equitable fashion.

Sex Differences in Mortality

Mortality was consistently higher in males than in females, especially in the economically active population. As reported in the international literature, differences in male and female mortality may be due to increased exposure of men to risk factors from behaviors, work activities and injuries, and less use of preventative health services (Baker et al., 2014). These outcomes represent a significant challenge for public health prevention, to address the ill health of males, promote improvements in safety and reduce risk factors.

Public Health Implications

The findings of this study highlight three key public health priorities in the Kurdistan Region:

1. Upgrading of primary health care for the prevention, screening, and control of non-communicable diseases;
2. Improving prevention methods. In the contexts of prevention activities, such as road safety measures, or approaching mental health issues.
3. Minimizing the geographical inequalities using equitably distributed resources

and robust subnational health information system. In addition, linking civil registration and forensic mortality data has the potential to improve mortality surveillance systems, provide regular, reliable data on population health trends and inform health policy and planning (AbouZahr et al., 2015).

Limitations

There are several limitations to this study. Firstly, even though the forensic registry covers a large proportion of the population, misclassification of causes of death may have occurred, especially in morbidity-mortality in chronic diseases. Secondly, some variables, such as place of death and socioeconomic variables, had incomplete data, which prohibited more detailed stratified analysis. Thirdly, the study period was short, and the data were only available in annual time resolution, which might have impaired our statistical power to observe some possible significant temporal trends. Finally, the causal relationship cannot be obtained because of the observational design of this study.

Nevertheless, the study has some strengths. This study is one of the first population-based studies examining mortality trends in the Iraqi Kurdistan Region and draws on multiple years of registry data with excellent population coverage. The findings generate important evidence regarding mortality trends and patterns in a setting where population-based mortality data are scarce.

Conclusion

Mortality in the Kurdistan region demonstrated a declining trend during the study period, but this trend was not significant. Non-communicable diseases, especially CVDs and cancer, were still the predominant causes. However, external causes also played a major role in premature mortality. Several important regional-, age-, and sex-disparities in mortality were identified.

These findings also underscore the need to improve the prevention and control of chronic diseases, improve services for injury control and mental health, and address regional disparities in health. Strengthening mortality surveillance via integrated registration systems will be vital to provide the evidence for health planning and monitor future trends in epidemiology.

Ethics Approval and Consent to Participate

Ethical approval for this study was obtained from the Ministry of Health of the Kurdistan Region. The study used anonymized secondary data obtained from the Department of Forensic Medicine. No direct interaction with individuals occurred, and the requirement for informed consent was waived.

Data Availability

The data that support the findings of this study were obtained from the Department of Forensic Medicine, Kurdistan Regional Government. Data are not publicly available due to administrative restrictions, but are available from the corresponding author upon reasonable request and with permission from the relevant authority.

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References

- AbouZahr C, de Savigny D, Mikkelsen L, Setel PW, Lozano R, Nichols E, et al. (2015) Civil registration and vital statistics: progress in the data revolution for counting and accountability. *Lancet*, 386(10001), 1373–1385. doi:10.1016/S0140-6736(15)60173-8
- Baker P, Dworkin SL, Tong S, Banks I, Shand T, Yamey G (2014) The men's health gap: men must be included in the global health equity agenda. *Lancet*, 383(9921), 190–191. doi:10.1016/S0140-6736(13)62141-6
- Beaney T, Clarke JM, Jain V, Golestaneh AK, Lyons G, Salman D, et al. (2020) Excess mortality: the gold standard in measuring the impact of COVID-19 worldwide? *BMJ*, 370, m3027. doi:10.1136/bmj.m3027
- Bilinski A, Emanuel EJ (2020) COVID-19 and excess all-cause mortality in the US and 18 comparison countries. *JAMA*, 324(20), 2100–2102. doi:10.1001/jama.2020.20717
- Boutayeb A (2006) The double burden of communicable and non-communicable diseases in developing countries. *Transactions of the Royal Society of Tropical Medicine and Hygiene*, 100(3), 191–199. doi:10.1016/j.trstmh.2005.07.021
- De Filippo O, D'Ascenzo F, Angelini F, Bocchino PP, Conrotto F, Saglietto A, et al. (2020) Reduced rate of hospital admissions for ACS during COVID-19 outbreak. *New England Journal of Medicine*, 383(1), 88–89. doi:10.1056/NEJMc2009166
- GBD 2019 Diseases and Injuries Collaborators (2020) Global burden of 369 diseases and injuries in 204 countries and territories, 1990–2019. *Lancet*, 396(10258), 1204–1222. doi:10.1016/S0140-6736(20)30925-9
- GBD 2019 Risk Factors Collaborators (2020) Global burden of 87 risk factors in 204 countries and territories, 1990–2019: a systematic analysis. *Lancet*, 396(10258), 1223–1249. doi:10.1016/S0140-6736(20)30752-2
- Islam N, Shkolnikov VM, Acosta RJ, Klimkin I, Kawachi I, Irizarry RA, et al. (2021) Excess deaths associated with COVID-19 pandemic in 2020. *BMJ*, 372, n113. doi:10.1136/bmj.n113
- Karlinsky A, Kobak D (2021) Tracking excess mortality across countries during the COVID-19 pandemic with the World Mortality Dataset. *eLife*, 10, e69336. doi:10.7554/eLife.69336
- Kontis V, Bennett JE, Rashid T, Parks RM, Pearson-Stuttard J, Guillot M, et al. (2020) Magnitude, demographics and dynamics of the effect of the first wave of the COVID-19

- pandemic on all-cause mortality. *Nature Medicine*, 26(12), 1919–1928. doi:10.1038/s41591-020-1112-0
- Marmot M (2005) Social determinants of health inequalities. *Lancet*, 365(9464), 1099–1104. doi:10.1016/S0140-6736(05)71146-6
- Mathers CD, Stevens GA, Boerma T, White RA, Tobias MI (2015) Causes of international increases in older age life expectancy. *Lancet*, 385(9967), 540–548. doi:10.1016/S0140-6736(14)60569-9
- Moynihan R, Sanders S, Michaleff ZA, Scott AM, Clark J, To EJ, et al. (2021) Impact of COVID-19 pandemic on utilisation of healthcare services: a systematic review. *BMJ Open*, 11, e045343. doi:10.1136/bmjopen-2020-045343
- Omran AR (1998) The epidemiologic transition theory revisited thirty years later. *World Health Statistics Quarterly*, 51(2–4), 99–119. doi:10.1007/978-1-4020-5619-1_5
- Reavley NJ, Jorm AF (2011) Prevention and early intervention to improve mental health in higher education students: a review. *Epidemiology and Psychiatric Sciences*, 20(2), 147–154. doi:10.1017/S2045796011000245
- Roth GA, Abate D, Abate KH, Abay SM, Abbafati C, Abbasi N, et al. (2018) Global, regional, and national age-sex-specific mortality for 282 causes of death, 1980–2017. *Lancet*, 392(10159), 1736–1788. doi:10.1016/S0140-6736(18)32203-7
- Setel PW, Macfarlane SB, Szreter S, Mikkelsen L, Jha P, Stout S, et al. (2007) A scandal of invisibility: making everyone count by counting everyone. *Lancet*, 370(9598), 1569–1577. doi:10.1016/S0140-6736(07)61307-5
- Woolf SH, Chapman DA, Lee JH (2021) COVID-19 as the leading cause of death in the United States. *JAMA*, 325(2), 123–124. doi:10.1001/jama.2020.24865
- Woolf SH, Chapman DA, Sabo RT, Weinberger DM, Hill L (2020) Excess deaths from COVID-19 and other causes, March–July 2020. *JAMA*, 324(15), 1562–1564. doi:10.1001/jama.2020.19545
- World Health Organization (2014) Civil registration and vital statistics systems: mortality data. *Bulletin of the World Health Organization*, 92(12), 861–862. doi:10.2471/BLT.14.146233
- World Health Organization (2018) Health system profile: Iraq. *Eastern Mediterranean Health Journal*, 24(12), 1197–1205. doi:10.26719/2018.24.12.1197
- World Health Organization (2022) *Global excess deaths associated with COVID-19 (2020–2021)*. Geneva: World Health Organization. Available from: <https://www.who.int/data/stories/global-excess-deaths-associated-with-covid-19>
- World Health Organization (2022) *Noncommunicable diseases in the Eastern Mediterranean Region*. Cairo: WHO Regional Office for the Eastern Mediterranean. Available from: <https://www.emro.who.int/noncommunicable-diseases>
- World Health Organization (2023) *Global status report on road safety 2023*. Geneva: World Health Organization. Available from: <https://www.who.int/publications/i/item/9789240086517>

Impact of Demographic Factors on the Job Satisfaction of Government and Private Primary School Teachers in Chattogram Division, Bangladesh

By Kazi Jannatun Noor*, Mohammad Ali[±] & Jasmin Akther Rima[○]

One of the major research topics in the field of industrial organization and management is the study of workers' job satisfaction. It is also an important topic of research in the fields of education and psychology. This study attempted to examine the levels of job satisfaction among primary school teachers in both public and private sectors and also explores the impact of some demographic variables on job satisfaction in Chittagong division of Bangladesh. The main goals of the research are to find out what factors affect teachers' job happiness. Both public and private primary school teachers' job satisfaction may be affected by demographic variables such as gender, age, experience, types of school, location of the school, and educational background. A total of 400 public and private primary school teachers, including 200 male and 200 female teachers, were selected through random sampling. The necessary data was collected using the job satisfaction scale developed by Dixit (1986). For this purpose, the researcher has created a questionnaire with 24 items and with 5-point likert scale. The descriptive statistics has been performed in terms of frequency, percentage, mean, and standard deviation. Data has been analyzed using factor analysis, reliability tests, descriptive statistics, and independent sample t-tests using IBM SPSS Statistics version 26. Cronbach's alpha was used to calculate the reliability coefficient, which was 0.764. Therefore, the current study attempts to close this gap by investigating how demographic characteristics influence the association between job satisfaction and correlation strength. Findings of the study revealed that majority i.e. 231 (57.75%) teachers are high level of satisfaction, 47 (11.75%) possess dissatisfied and 29(14.5%) teachers have ambivalence of job satisfaction in Chattogram Division, Bangladesh. The findings also observed that teachers age, gender, teaching experience, academic and professional qualifications, type of school, and location of the school have significant effect on their job satisfaction. It is found that female school teachers have higher level of job satisfaction than male teachers, unmarried school teachers are more satisfied with their job as compared to married teachers, private school teachers have higher level of job satisfaction than Government school teachers, Urban school teachers have higher level of job satisfaction than rural teachers, 20 – 30 years old school teachers have higher level of job satisfaction than other teachers, HSC degree qualification teachers higher level of job satisfaction than other teachers, 11 – 15 years experience teachers higher level of job satisfaction than other experienced teachers. According to the study, in order to improve teachers' job satisfaction, which in turn improves the quality of teaching and learning as well as the quality of education, administrators and policymakers should prioritize salary and benefits, the working environment, and physical facilities.

Keywords: Job Satisfaction, Teachers Satisfaction, Demographic Factors, Government and private primary school, Regression Analysis.

*M.Sc. Student, Department of Mathematics, Chittagong University of Engineering & Technology, Bangladesh.

[±]Professor, Department of Mathematics, Chittagong University of Engineering & Technology, Bangladesh.

[○]M.Sc. Student, Department of Mathematics, Chittagong University of Engineering & Technology, Bangladesh.

Introduction

Education is the most powerful weapon to improve one's life and a ray of light in the darkness. It is probably the most important tool to change the world. Uneducated people are the worst thing for any Humanity. Above all, the governments of all countries must ensure to spread Education.

In Bangladesh there are three types of schools. First is the government schools which are owned and run by the government, second is the private aided schools which gets aid from the government and the third one is the private unaided schools are managed and funded by private organizations or agencies and they do not receive any government grant or public contribution.

A happy and dedicated teacher can make a significant contribution to the school's success. So the workforce must be content and pleased for institutions to fulfill the objectives. Furthermore, it is crucial to remember that any educational institution must have the ability to draw in, keep, and retain qualified, content, and dedicated employees in order to succeed and meet its strategic goals. Teachers who are highly dedicated to their work are happy and immerse themselves completely in it. One of the key indicators of how people feel about their jobs is job satisfaction, which has a big impact on how businesses and employees grow. In fact, job satisfaction is the primary determinant of an individual's level of dedication and productivity at work, and it plays a significant role in assessing an employee's loyalty to a company. Hoppock (1935) defined job satisfaction as any combination of environmental, physiological, and psychological factors that lead a person to honestly say, "I am satisfied with my job." Workplace productivity and job happiness are closely related in any business or company. According to numerous researchers who have studied the job satisfaction it is observed that the job nature, pay, service security, promotion, working environment, colleague behaviors, institutional head leadership styles, quality and organizational reputation, and personal characteristics like age, educational background, assessment of teaching experiences, and self-control, among others, are all factors that have a significant impact on teachers' job satisfaction in their line of work. Any disruption of these facets it breaks the morality of job holders and also it may cause the shortage of teacher for the institution. As a result teachers may quit their jobs.

Any educational institution's performance is largely dependent on its teachers. Teachers must therefore be happy, dedicated, and passionate about their work if they are to fulfill their vocation of delivering justice. The primary determinant of teachers' job satisfaction is the school climate. The effective operation of the school depends on a positive school atmosphere, which in turn encourages high levels of performance, contentment, and dedication among instructors. Teachers are essential to the success of any educational institution as they play a vital role. Therefore, for teachers to maintain fairness in their profession, they must be satisfied, committed and passionate about their work. Therefore, the purpose of this study is to ascertain the present status of job satisfaction among public and private primary school teachers in the Chattogram division of Bangladesh.

Review of Literature

Teachers are revered as the nation's builders and are seen as having a noble job. According to the Kothary Commission, "today's classroom is the building block for our nation's future". It also stated that "Nothing is more important than giving teachers the best professional preparation and creating satisfactory work conditions in which they carefully be effective". In this regard several studies have been done for finding the job satisfaction level by considering demographic variables. Das (2009-10) found that there are significant differences in job satisfaction among female secondary school teachers between married and unmarried, government and private, and English and other language teachers. Abiodun and Gbadebo (2012) found a significant positive relationship between age and job happiness ($r = 0.312$), suggesting that their job satisfaction increases with increase in age. This suggests that age was an important factor affecting the job happiness of trainers. The results are consistent with the findings of Bashir (2011) and Milan (2019). Several studies have found that teachers' job satisfaction is significantly impacted by their educational background (Rani and Neeraj, 2014), while other studies have found no significant relationship between teachers' job satisfaction and their educational background (Raj and Marry, 2005; Padmanabhaiah, 1986). Ali and Akthar (2009) observed that higher qualified teachers were more satisfied as compared to less qualified teachers on their job satisfaction but Das and Panda (1995) revealed that graduate teachers were found to have higher job satisfaction as compared to post-graduate teachers. Numerous studies have shown that teachers' job satisfaction has a significant impact on the teaching experience and that experienced teachers are more satisfied with their jobs than less experienced teachers. Nazir et al. (2024) investigated the Job satisfaction among Secondary School Teachers in Karachi, Pakistan and found that secondary school teachers were highly motivated and satisfied with their teaching practices but desired more satisfaction regarding pay, benefits, working conditions and facilities. Hussain et al. (2024) observed that teachers in public schools generally reported higher levels of job satisfaction and wellbeing compared to those in private schools. Latif (2024) explored the gender-based variations in job satisfaction among Secondary School teachers and reported that female teachers tend to report higher levels of job satisfaction to their male counterparts. Khokhar et al. (2022) analyzed the post-pandemic job satisfaction trends among Private Secondary School Teachers in Karachi and observed that female teachers were much more satisfied than the male teachers in success, altruism, autonomy, comfort, safety, and status. Nisa et al. (2022) investigated the comparative study of job satisfaction and performance between Public and Private School Teachers in Peshawar and showed that there was no significant difference between public and private school teachers on the majority of 21 dimension of job satisfaction. Thapliyal et al. (2022) examined "Emotional Intelligence as a Predictor of Job Satisfaction among Secondary School Teachers" observed that more than 60 percent secondary teachers are averagely satisfied. It is also observed that high emotional intelligent teacher possesses high level of satisfaction than that average as well as low level emotional intelligent teacher. Khan et al. (2022) highlighted that salary and job security were key determinants of satisfaction, while heavy workload negatively influenced motivation. Abdullah et al. (2023) found that both intrinsic ($M = 3.04$, SD

= 1.05) and extrinsic ($M = 3.03$, $SD = 1.04$) factors similarly influenced teachers' job satisfaction. However, private school teachers were significantly less satisfied than public school teachers ($p = .001$). Singh (2024) studied the comparative analysis of job satisfaction between government and private primary school teachers and observed that the implications for educational policy and school management, recommending targeted actions to improve teacher satisfaction and enhance educational outcomes. Ahmed and Rahman (2021) conducted the job satisfaction among public and private primary school teachers in Bangladesh and showed that job satisfaction varies by sector, with some research indicating higher satisfaction in public schools and others in private schools, though findings are not entirely consistent. Small & Buckman (2021) examined that personal, human capital, occupational, and school factors, finding that private school teachers reported higher job satisfaction than public school teachers. Toropova et al. (2021) highlighted that workload, administrative support, and classroom environment significantly influenced teachers' job satisfaction. It also showed that female teachers, those with more professional development, and higher self-efficacy reported higher satisfaction. Kandel et al. (2021) studied the impact of workplace factors on teacher job satisfaction and organizational commitment and concluded that work environment, professional development and financial benefits positively affected job satisfaction, which in turn boosted organizational commitment among teachers. Safwan (2025) analyzed the teacher performance and satisfaction in private secondary schools of Karachi" and found that supportive leadership and workload balance positively affected both performance and satisfaction. Javed et al. (2025) highlighted the need for policy reforms and support from educational authorities, emphasizing leadership and teacher retention in Karachi's.

Research Gap

Although a lot of research has been done to look at how teachers' job satisfaction is affected by their educational background and teaching experience, none of these studies have looked at it in relation to other aspects of job satisfaction. Several studies have shown that instructors in government schools are happier than those in private schools, and vice versa. There are differences in job satisfaction between male and female teachers, teachers in urban and rural areas, and instructors with more and less experience, according to certain research. Furthermore, there hasn't been a single study conducted in Bangladesh, particularly in the Chattogram division that examines primary school teachers' job satisfaction and its many dimensions in relation to their training and experience. Researching this topic is crucial since management and educators must collaborate to enhance the workplace in order to solve the unhappiness issue. Teachers and administrators in both public and private elementary schools will greatly benefit from the current study's findings, which will also significantly advance the educational process. But, very few empirical studies have been done in Chattogram in this regard. In order to understand the true picture behind the subject, the investigator made an effort to research it.

Demographic Factors in Job Satisfaction

Teacher's job satisfaction can influence among both public and private primary school teachers by demographic factors like gender, age, marital status, type of school, location, experience, and academic background. Some studies indicate that there is no clear difference in general levels of job satisfaction between public and private school teachers, while other studies point to variations in specific aspects such as pay and promotion opportunities. In order to determine the cause of the relationship between job satisfaction and performance improvement, understanding the demographic impact of the relationship can increase teachers' job satisfaction. Relationships between demographics aid in locating factors that may favorably affect the expansion of an organization. Therefore, this study aims to examine specific demographic factors that affect teachers' job happiness and performance.

Objectives of the Study

Following are the major objectives of this study.

- i. To find out the level of job satisfaction between public and private primary school teachers of Chattogram division, Bangladesh.
- ii. To measure the differences in job satisfaction of the teachers between government and private primary schools of Chattogram division, Bangladesh.
- iii. To explore the differences of job satisfaction between male and female teachers working in government and private schools.
- iv. To study the differences in job satisfaction of the teachers between urban and rural primary schools of Chattogram division, Bangladesh.
- v. To find out the significant difference in the job satisfaction of married and unmarried primary school teachers of Chattogram division, Bangladesh.
- vi. To assess whether any significant difference in job satisfaction among primary school teachers with respect to educational qualification (HSC, Bachelor and Masters).
- vii. To assess whether any significant difference in job satisfaction among government and private primary school teachers with respect to teaching experience (0 - 5, 6 - 10, 11 -15, and above 15 years).
- viii. To assess whether any significant difference in job satisfaction among government and private primary school teachers with respect to age (20 - 30, 31 - 40, 41- 50, and above 50 years).
- ix. To find out if there is any significant contribution of independent variables (gender, type of school, location, age, marital status, educational qualification and teaching experience) to the dependent variable (Job Satisfaction of primary teachers).

Hypotheses of the Study

H₀₁: The level of job satisfaction of the teachers working in government and private primary school teachers of Chattogram division, Bangladesh is very high.

H₀₂: There is no significant difference in the job satisfaction of male and female primary school teachers of Chattogram division, Bangladesh.

H₀₃: There is no significant difference in the job satisfaction of married and unmarried primary school teachers of Chattogram division, Bangladesh.

H₀₄: There is no significant difference of government and private primary school teachers on job satisfaction of Chattogram division, Bangladesh.

H₀₅: There is no significant difference in the job satisfaction of urban and rural primary school teachers of Chattogram division, Bangladesh.

H₀₆: There is no significant difference in job satisfaction among primary school teachers with educational of Chattogram division, Bangladesh.

H₀₇: There is no significant difference in job satisfaction among primary school teachers with different years of teaching experience of Chattogram division, Bangladesh.

H₀₈: There is no significant difference in job satisfaction between school teachers of different ages of Chattogram division, Bangladesh.

H₀₉: There is no significant contribution of independent variables (gender, type of school, location, age, educational qualification and teaching experience) to the dependent variable (job satisfaction of government and private primary school teachers).

Research Questions

1. What is the job satisfaction level of public and private primary school teachers of Chattogram division, Bangladesh?
2. What is the perception of teacher's job satisfaction in terms of demographics at government and private primary school teachers of Chattogram division, Bangladesh?

Research Methodology

Research Design

The present study is descriptive in nature. Therefore, the descriptive survey method has been applied for the present study. The special focus on the job satisfaction of public and private primary school teachers. A survey was used to administer the questionnaire, and IBM SPSS 26 was used to analyze the collected data. According to Cooper and Schindler (2011), the author selected explanatory and quantitative research methods to elucidate the influence of the nine factors of job satisfaction on overall job satisfaction. Data were collected through questionnaires administered to

teachers of various levels of public and private primary schools. The independent variables are derived from the questionnaire items used in this study, which are based on Spector's (2011) job satisfaction survey, where several items were selected based on the author's observations. The job satisfaction is the dependent variable of the public and private primary school teachers in this study. The author has employed a dichotomous yes or no question to assess job satisfaction, as advised by the author's managers. This study used a questionnaire based on Spector's (2011) job satisfaction survey to collect nominal, ordinal, and interval data. The dependent variable, job satisfaction, is a binary yes/no question that the nominal data will ask the current public and private primary schools teachers about their division. A survey response scale containing five possibilities, usually spanning from one extreme to the other, and a neutral option in the middle is called a 5-point Likert scale. Respondents' opinions, views and levels of agreement or satisfaction are measured using these scales. The most commonly used 5-point Likert scale has the options of strongly disagree, disagree, neither agree nor disagree, agree and strongly agree. The independent variables, which are the nine factors of job satisfaction (pay, promotion, supervision, recognition, working conditions, security, colleague relationship, workload, and coworkers), has been gathered from the ordinal data using five point Likert scale (from strongly disagree to strongly agree) (Likert's, 1932). Five possible responses, including a neutral or middle option, are used to assess a respondent's opinions on the 5-point Likert scale. Cooper and Schindler (2011) differentiate between three types of data sources: primary, secondary, and tertiary. This study uses all three categories of data sources. In this case, printed questionnaires for school teachers serve as the primary source. The secondary source is a collection of research studies on public and private primary school teachers' job satisfaction. Finally, the tertiary source is retrieved from Google search results. The data has been analyzed using IBM SPSS 26. A final test has conducted using binary logistic regression to examine whether the nine job satisfaction factors had an effect on the job satisfaction of public and private primary school teachers.

Population of the Study

The population consists of all the teachers existing in the government and private primary schools of Chattogram District which are recognized by the Ministry of Primary and Mass Education (MoPME), Government of Bangladesh.

Sample and sampling Technique

Double sampling method was applied in this study to select the primary schools as well as the respondents of Chattogram division, Bangladesh. In the first stage, 100 government and private primary schools (provincialised) were selected by using simple random sampling technique. In the second stage a sample of 400 school teachers was selected from the selected institutions. There were 200 male and 200 female teachers in the sample of 400 teachers. Convenience sampling technique was adopted for selecting the sample and the size of the sample was determined by using Yamne's (1967) sample

size determination formula $n = \frac{N}{1 + Np^2}$, where n is the sample size, N is the population size, and p is the level of precision.

Tools

The following tools have been used in the present study:

- Personal Data Questionnaire (PDQ).
- Job Satisfaction Scale

Personal Data Questionnaire (PDQ)

A set of questions used to gather information about a subject is called a personal data questionnaire, or PDQ. The researcher created this questionnaire in order to gather information about the subjects' names, ages, genders, religions, educational backgrounds, and residences.

Job Satisfaction Scale

Dixit (1993) job satisfaction scale was used to measure teachers' job satisfaction. Meera Dixit created and standardized it in the year 1993. The scale gauges school teachers' job satisfaction along eight main characteristics, including (A) Intrinsic Aspect. (B) Pay, job status, and advancement. (C) Real Estate (D) Policies and Plans of the Institution. (E) Contentment with the authorities. (F) Family welfare and social status. Relationships with coworkers and students are (G) and (H), respectively. Each of the 52 items on the scale has five possible answers: "Strongly agree," "Agree," "Undecided," "Disagree," and "Strongly disagree." Due to the positive wording of all 52 items, the scores were as follows: 5 for "Strongly agree," 4 for "Agree," 3 for "Undecided," 2 for "Disagree," and 1 for "Strongly disagree." As a result, the lowest possible score on this scale is 52 and the highest possible score is 260. A job satisfaction score of less than 145 is considered poor, a score of 145 to 230 is considered normal, and a score of more than 230 is considered high but for the current study the job satisfaction score of less than 48 is considered poor, a score of 48 to 120 is considered normal and a score of more than 120 is considered high. The scale had a fairly high content validity and its reliability is found to be 0.894 by Split-Half method.

Statistical Techniques used

Descriptive statistics like frequency, percentage, mean and standard deviation were used to describe the nature of the sample and the inferential statistics like t-test was used to test the significance of mean differences.

- i. Descriptive analysis: Mean standard deviation, percentage, and frequency.
- ii. Inferential Analysis: - t- test and F- test
- iii. Analysis of Regression

Sampling

The population of the study was public and private primary School teachers in Chattogram division, Bangladesh. The non-probability convenience sampling method has been used for the present study. A total of 24 questionnaires were distributed among 450 public and private primary Schools teachers personally. Out of these, 400 questionnaires dully filled were retrieved.

Delimitation of the Study

It's critical to differentiate between limitations and delimitations. Limitations are restrictions that are outside the researcher's control, whereas delimitations are decisions made by the researcher to specify the study's scope. Therefore, the following are the delimitations for the present study.

- Study confined to the 400 public and private primary school teachers of Chattogram district, Bangladesh.
- Study delimited to 200 public and 200 private primary school teachers.
- Study delimited to 200 male (100 urban and 100 rural) and 200 female (100 urban and 100 rural) from public and private primary school teachers of Chattogram district, Bangladesh.

Data Analysis and Interpretation

Demographic Profile of Respondents

The detailed profile of the respondents based on gender, school type, job location, age, qualification, and teaching experience is given in Table 1.

Table 1. Demographic Characteristics of Respondents'

Profile	Frequency	Percent	
Gender	Male	200	50
	Female	200	50
	Total	400	100
Type of School	Public	200	50
	Private	200	50
	Total	400	100
Job Location	Urban	200	50
	Rural	200	50
	Total	400	100
Academic qualification	HSC	42	10.5
	Bachelor	125	31.3
	Masters	233	58.3
	Total	400	100
Age group	20-30	126	31.5

	31-40	164	41
	41-50	74	18.5
	above 50	36	9.0
	Total	400	
Marital Status	Single	123	30.8
	Married	222	55.5
	Widow/Divorced	55	13.8
	Total	400	100.0
Service Length	0-5	152	38.0
	6-10	59	14.8
	11-15	75	18.8
	above15	114	28.5
	Total	400	100.0

From the table1 it is observed that a total of 400 teachers participated in this study where 200 of them were males (50%) and 200 females (50%) followed by types of school and job location. It also indicates that majority of the teachers possess below 5 years teaching experience (38%), followed by above 15 years of experience (14.8%), 11-15 years of experience (18.8%), and only a few have teaching experience of 6-10 years (14.8%). Out of the 400 respondents, 58.3% of them are Masters Degree, 31.3% are Bachelor degree and rest of them is HSC (Higher secondary certificate).

Statistical Techniques and Data Analysis Procedure

The instrument 'Teacher Job Satisfaction Questionnaire' (TJSQ) has been used for the present study that was developed by Lester (1982). It encompassed 30 items in 9 subscales. The subscales are: pay, Promotion, fringe benefits, contingent rewards, working conditions, supervision, co-workers, nature of work, and security. Half of the items employ positive comments, and the other half use negative statements to prevent biases. There are two components in this instrument.

The respondents' demographic data is covered in section A. A 5-point Likert scale, with 1 representing "strongly dissatisfied" and 5 representing "strongly satisfied," is used to display the responses in section B. Descriptive and inferential statistics were used to analyze the study's data. The demographic information of the respondents was described using descriptive statistics, and each questionnaire item was elaborated using the mean. The t-test for independent samples has been used to do inferential statistics that employed job satisfaction measures as dependent variables and certain demographic variables as independent variables. Additionally, Pearson correlation analysis has performed to determine the association between the job satisfaction components. In this study, the differences in job satisfaction and a few chosen independent factors has ascertained using a one-way ANOVA.

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Content validity Test

For the present study, the content validity has used as the main validity test. In summary, Cooper and Schindler (2011) probably underlined the significance of content validity as a critical stage in guaranteeing the caliber of measurement tools used in assessment and research. To ensure that the instrument accurately reflects the desired construct, they would have emphasized the need for a systematic approach to assessing content validity, perhaps using expert evaluation and quantitative metrics. Based on the author's observations, the first stage in the content validity study is to select which items from Spector's (1985) job satisfaction survey questionnaire to use. Table 2 below displays the selected questions that have been selected on the basis of Spector's (1985):

Table 2. *Selected Questionnaire Items related to Job Satisfaction from Spector's (1985) Survey*

Factors	Questions from Spector's (2011) job satisfaction survey
Pay	Teachers' income is sufficient for normal expenses.
	I feel like I am being paid fairly for the work I do.
	I am satisfied with the prospect of a salary increase.
Promotion	There is really too little chance of promotion on my job.
	Those who perform well at work have a good possibility of getting promoted.
Fringe Benefits	The benefits we receive are as good as most other organizations offer
Contingent Rewards	When I do good job, I receive the recognition for it that I should receive.
Working condition	Working condition in my school can be improved.
	Teaching provides an opportunity to use a variety of skills.
	The number of students in my class is standard.
Supervision	My supervisor shows little interest in the feelings of subordinates.
	Supervisor treats everyone equitably
	Classroom plans are supervised by my head teacher
	My head of Department monitors my teaching.
Co-Workers	I have a good relationship among my colleagues
	My colleagues stimulate me to do better work
Nature of Work	I love what I do at work.
	I take pride in my work.
	Teaching is an interesting job.
Security	Teaching provides for a secure future.
	The environment in my school is safe.
	I am allowed to continue my education.
	In my school, I feel secure.
	I am shielded against threats.

Reliability Analysis

Cornbach's alpha, a commonly used scale reliability index, has used to test the internal consistency of the variables in the current investigation. Lee Cronbach (1951) introduced a new measure of internal consistency for tests, known as Cronbach's alpha. Cronbach's alpha is widely used to assess the reliability of measurement

scales and is often reported in research to demonstrate the consistency of test items. A pilot test was conducted before data collection, and the results showed that the Cronbach's Alpha scale was reliable at 0.894. The overall dependability scales are shown in Table 3.

Table 3. Cronbach's Alpha

Reliability Statistics	
Cronbach's Alpha	Number of Items
0.894	24

A broad distribution of questionnaire scores is indicated by a high alpha value that is close to 1, which is also linked to low unexplained variation. A guideline for analyzing alpha findings is presented by George and Mallery (2003). Outstanding (values of 0.9 or higher); Satisfactory (values of 0.8 or higher); Adequate (values of 0.7 or higher); Doubtful (values of 0.6 or higher); Unsatisfactory (values of 0.5 or higher); and Intolerable (values less than 0.5). Nine aspects of teachers' job satisfaction with the exam are dependable and exhibit strong internal consistency, according to Table 4.

Table 4. Internal Consistency (Reliability) of nine factors of Job Satisfaction

Factors	No. of Items	Cronbach's Alpha if Item Deleted
Pay	3	0.876
Promotion	2	0.883
Fringe Benefits	1	0.873
Contingent Rewards	1	0.873
Working condition	3	0.885
Supervision	4	0.875
Co-Workers	2	0.877
Nature of Work	3	0.880
Security	5	0.872
Overall	24	0.894

Source: Computed from Primary Data

Critical Region of d Durbin-Watson Test

The Durbin-Watson test is a specific type of autocorrelation that is used in statistics to check autocorrelation (correlation between residuals) called "first-order autocorrelation in the residuals of a regression analysis. The analysis shows a statistic (d) based on the differences between consecutive residuals. The precise distribution of d is unknown, which presents a challenge for this test. In contrast to the alternative hypothesis of positive first-order autocorrelation, Durbin and Watson have proposed upper (d_u) and lower (d_l) limits for the significance level of d that are appropriate to

the hypothesis of zero first-order autocorrelation. These upper and lower values have been tabulated at the 5% and 1% levels of significance by Durbin and Watson. Lastly, it is necessary to compare the theoretical values of d that is, the values of d that define the test's critical region with the empirical values of d .

Table 5. Model Summary Output Table

Model Summary	
Model	Durbin-Watson
1	2.090

From the Table 5, the Durbin-Watson test value $d = 2.150$ which is compared with the Durbin-Watson table (University of Notre Dame). At the 5% significance level of α , 400 samples (n), and 9 independent variables (k), the values in the Durbin-Watson table are $d_l = 1.790$ and $d_u = 1.882$. Therefore, the result indicates that the model with the nine factors of job satisfaction variable has no autocorrelation.

Multicollinearity Test

The multicollinearity test determines if each of the included significant variables is also independent of the others. A tolerance value of less than 0.1 is regarded as having substantial collinearity problems, as per Menard (1995). According to Field (2005), a tolerance value of less than 0.2 is seen as possibly having collinearity problems.

Table 6. Test of Multicollinearity

Model	Collinearity Statistics		
	Tolerance	Variance Inflation Factor (VIF)	
1	(Constant)		
	Pay	0.511	1.958
	Promotion	0.619	1.616
	Fringe Benefits	0.455	2.196
	Contingent Rewards	0.412	2.425
	Working condition	0.621	1.612
	Supervision	0.597	1.674
	Co-Workers	0.580	1.723
	Nature of Work	0.691	1.448
	Security	0.351	2.846

Table 6 shows that all tolerance values are greater than 0.2 and all VIF values are fewer than 10. This indicates that there are no multicollinearity problems with the independent variables, making it safe to proceed with the statistical test.

Results and Interpretation

The data has been analyzed through certain descriptive as well as inferential statistics. The data has been analyzed by Mean, Standard deviation, t-test and ANOVA. The mean and standard deviation of each of the 24 job satisfaction items were calculated and displayed in Table 7.

Descriptive Statistics of overall Job Satisfaction

As per instructions of Paul E. Spector (1985), degree of satisfaction regarding individual sub-scales depends on the following ranges: Mean scores (Range 1.0 – 1.99) is dissatisfaction, Mean scores (Range 2.0 – 2.99) is ambivalence and Mean scores (Range 3.0 – 5.0) is satisfaction. Overall Job satisfaction of primary school teachers in Chattogram division of Bangladesh has been depicted in Table 7.

Table 7. *Descriptive Statistics Regarding of Overall Job Satisfaction*

	Minimum	Maximum	Mean	Std. Deviation
Overall Job Satisfaction	24.0	120.0	82.74	34.38

Source: SPSS Application on Primary Data

Table 7 shows the minimum scores and maximum scores given by one hundred forty respondents to overall job satisfaction (Overall). This table also shows mean scores of job satisfaction along with standard deviation. As per Paul Spector (1985), minimum mean score of 24 items in the questionnaire can be 24 and maximum can be 120 (i.e. $24 \times 5 = 120$ because minimum score for a single item can be 1 and maximum score for a single item can be 5). Mean score between 24 – 48: Dissatisfaction, Mean score between 48 – 72: Ambivalence and Mean score between 72 – 120: Satisfaction. Table 7 shows that the mean scores of overall job satisfaction are 82.74. It depicts that primary school teachers of Chattogram division are fall in satisfaction level.

Level of Job Satisfaction among Primary School Teachers

The level of primary school teachers' job satisfaction is categorized into five levels as highly Dissatisfied, Dissatisfied, Neutral, Satisfied, and Highly Satisfied according to the total scores of all the 24 statements for each respondent. Since the minimum and maximum score for each statement is 1 and 5 respectively, the minimum total score for each respondent will be 24 while the maximum score will be 120. Therefore, the total score ranges from 24 to 54 is considered as dissatisfied, total score ranges from 55 to 83 is treated as ambivalence and total score ranges from 84 to 120 is considered as highly satisfied. Based on the scale criteria, teachers' job satisfaction scores were divided into three categories: low, average, and high. Table 7 lists the number and proportion of teachers who fit into these categories. From Table 7 it is seen that out of 400 teachers, majority i.e. 231 (57.75%) teachers are high level of satisfaction, 47 (11.75%) possess dissatisfied and 29(14.5%) teachers have ambivalence of job satisfaction in Chattogram Division, Bangladesh.

Among 20 - 30 years old teachers, majority i.e. 73.02% teachers are high level of satisfaction, 19.05% possess dissatisfied and 7.94% teachers have ambivalence

of job satisfaction. Among 31 - 40 years old teachers, majority i.e. 45.12% possess dissatisfied, 43.09% possess highly satisfied and 10.98 % possess ambivalence of job satisfaction. Among 41 - 50 years old teachers, majority i.e. 60.81% possess highly satisfied, 21.62% possess ambivalence, and 17.57% possess dissatisfied of job satisfaction. Among above 50 years old teachers, majority i.e. 61.11% possess highly satisfied, 8.33% possess ambivalence, and 30.56% possess dissatisfied of job satisfaction. Among 0 - 5 years experienced teachers, majority i.e. 50.5% possess high level of job satisfaction, and 37.5 % possess dissatisfied of job satisfaction. Among 6 - 10 years experienced teachers, majority i.e. 66.72% possess high level of job satisfaction and 28.81% possess dissatisfied of job satisfaction. Among 11 - 15 years experienced teachers, majority i.e. 65.33% possess high level of job satisfaction and 24 % possess low level of job satisfaction. Among above 15 years experienced teachers, majority i.e. 59.74 % possess high level of job satisfaction and 26.32% possess low level of job satisfaction.

Among HSC degree qualification teachers, majority i.e. 78.57% possesses high level of job satisfaction and 11.90% possess low level of job satisfaction. Among Bachelor degree qualification teachers, majority i.e. 71.2% possesses high level of job satisfaction and 22.40% possess low level of job satisfaction. Among master's degree qualification teachers, majority i.e. 46.78% possesses high level of job satisfaction and 38.20% possess low level of job satisfaction. Among unmarried teachers, majority i.e. 59.35% possesses high level of job satisfaction and 28.45% possess low level of job satisfaction. Among married teachers, majority i.e. 57.66% possesses high level of job satisfaction and 31.53% possess low level of job satisfaction. Among urban teachers, majority i.e. 60% possesses high level of job satisfaction and 31% possess low level of job satisfaction. Among rural teachers, majority i.e. 55.50% possesses high level of job satisfaction and 30% possess low level of job satisfaction. Among Government teachers, majority i.e. 47.5% possesses low level of job satisfaction and 37.50% possess high level of job satisfaction. Among private teachers, majority i.e. 78% possesses high level of job satisfaction and 13.50% possess low level of job satisfaction. Among male teachers, majority i.e. 55% possesses high level of job satisfaction and 30.50% possess low level of job satisfaction. Among female teachers, majority i.e. 60.50% possesses high level of job satisfaction and 30.50% possess low level of job satisfaction.

Table 7. Level of Job Satisfaction among Primary School Teachers - Entire Sample and Sub Sample Wise

Variables	Sub Samples	Dissatisfied		Ambivalence		Satisfied		Total
		N	%	N	%	N	%	
Age Group	20-30	24	19.05	10	7.94	92	73.02	126
	31 - 40	74	45.12	18	10.98	72	43.90	164
	41 - 50	13	17.57	16	21.62	45	60.81	74
	>50	11	30.56	3	8.33	22	61.11	36
Marital Status	Unmarried	35	28.45	15	12.20	73	59.35	35
	Married	70	31.53	24	10.81	128	57.66	70
	Widow/Divorce	17	30.90	8	14.55	30	54.55	17
Academic Qualification	HSC	5	11.91	4	9.52	33	78.57	5
	Bachelor	28	22.4	8	6.40	89	71.2	28
	Masters	89	38.20	35	15.02	109	46.78	89
Job Location	Urban	62	31.0	18	9.00	120	60.0	200
	Rural	60	30.0	29	14.50	111	55.50	200
Types of School	Government	95	47.50	30	15.0	75	37.50	200
	Private	27	13.50	17	8.50	156	78.00	200
Gender	Male	61	30.50	29	14.50	110	55.00	200
	Female	61	30.50	18	9.00	121	60.50	200
Service Length	0 - 5	57	37.5	18	11.84	77	50.66	152
	6 - 10	17	28.81	5	8.47	37	62.72	59
	11 - 15	18	24	8	10.67	49	65.33	75
	Above 15	30	26.32	16	14.04	68	59.64	114
	Total	122	30.50	47	11.75	231	57.75	400

Note: Computed from Primary Data

Teachers Job Satisfaction by Gender, Type of School and Location of the School

H₀₁: There is no significant difference in the job satisfaction of male and female primary school teachers

H₀₃: There is no significant difference of Government and private primary school teachers on job satisfaction

H₀₄: There is no significant difference in the job satisfaction of urban and rural primary school teachers

From the table 8 it is seen that the private school teachers received the highest mean ($M = 4.02$) indicating very high level of job satisfaction but the government school teachers had the lowest mean score ($M = 2.875$). This proves that all teachers are responsible for their actions but most of them disagree with the given statement. The job satisfaction of the private school teachers is higher than government school teachers and there is a significant difference between government and private school teachers. Therefore the difference is statistically significant. From table 7 it is observed that statistically there is no significant difference between male and female primary school teachers on their job satisfaction. The mean score of female and urban

school teachers (3.51 and 3.50) are higher than male & rural school teachers (3.39 & 3.40). But their difference is not statistically significant.

Table 8. Mean, Standard Deviation and t-test for Gender, Types of School and Location of the School

Group Statistics						
Factors		N	Mean	Std. Deviation	t-value	p-value
Overall Satisfaction	Male	200	3.385	1.42	- 0.875	Not significant
	Female	200	3.510	1.44		
	Government	200	2.875	1.45	- 8.710	Significant
	Private	200	4.020	1.17		
	Urban	200	3.500	1.44	0.733	Not significant
	Rural	200	3.395	1.42		

- *Teachers Job Satisfaction on the Basis of Teaching Experience*

The disparities in job satisfaction amongst public and private primary school teachers with varying years of teaching experience (less equal five years, six to ten years, eleven to fifteen years and more than fifteen years) are tabulated in table 9. The teaching experiences of the three groups of teachers were not found to be identical ($F_{3, 396} = 11.32$, and $p = 0.00$). Since the p value is less than 0.05, the results are statistically significant at a 5% level of significance criterion. Stated differently, we cannot accept the null hypothesis, which states that school teachers with varying years of teaching experience are significantly differ in their job satisfaction.

Table 9. Job Satisfaction among Teachers with Length of Services

ANOVA					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	64.679	3	21.560	11.320	.000
Within Groups	754.219	396	1.905		
Total	818.897	399			

Mean of Service length

H_{0s}: There is no significant difference in job satisfaction among school teachers with different years of teaching experience

According to Table 10 teachers who have 11 to 15 years teaching experience they are happier than others. Additionally, it has been noted that 0 to 5 years teaching experience are less work satisfaction level.

Table 10. Mean, Standard Deviation and t-test for Service Length

Group Statistics						
Group	Group wise Comparison	N	Mean	Std. Deviation	t-value	p-value
1, 2	0 - 5	152	3.276	1.53	- 1.155	0.086
	6 - 10	69	3.543	1.41		
1,3	0 - 5	152	3.276	1.45	- 1.925	0.017
	11 - 15	75	3.680	1.17		
1,4	0 - 5	152	3.276	1.53	- 1.099	0.002
	Above 15	114	3.473	1.32		

From Table 10 it is observed that only the groups 1 and 3 (zero to five years and eleven to fifteen years) were found significantly differ ($t = - 1.925$, and $p = 0.017$) of their teaching experience. Since the p value is less than 0.05, the results are statistically significant at a 5% level of significance criterion. The teaching experiences of the theses group of teachers stated differently, we cannot accept the null hypothesis, which states that school teachers with varying years of teaching experience are significantly differ in their job satisfaction. It is also noticed that there is no significant difference among other groups.

Job Satisfaction on the Basis of Age Limit

The disparities in job satisfaction amongst public and private primary school teachers with varying years of age limit (twenty to thirty years, thirty one to forty years, forty one to fifty years and more than fifty years) are tabulated in table 11. The teaching experiences of the three groups of teachers are not found to be identical ($F_2, 397 = 1.652$, and $p = 0.902$). Since the p value is greater than 0.05, the results are not statistically significant at a 5% level of significance criterion. Stated differently, we cannot accept the null hypothesis, which states that school teachers with varying age limit of teachers are significantly differ in their job satisfaction. So, further analysis has been carried out with the help of t-test. Three pairs were created for the comparison shown in Table 11, which are 20-30 vs. 31-40, 41-50 vs. 31-40, and over 50 years vs. 31-40 years, respectively.

Table 11. Job Satisfaction among Teachers with Age Limit

ANOVA					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	0.424	2	0.212	1.652	0.902
Within Groups	818.473	397	2.062		
Total	818.897	399			

Mean of Age Group

H_{06} : There is no significant difference in job satisfaction between school teachers of different ages.

According to Table 12 it is observed that 20 to 30 years old teachers are found to be more satisfied as compared to others age group teachers since the mean score for 20 to 30 years old teachers is greater than that of others age group teachers. Therefore, there is a significant difference between 20 – 30 & 31 – 40, 41 – 50 & 31 – 40, and above 50 & 31 –40 years old teachers respectively at 5% level of significance. It is also seen that, 31 - 40 years old teachers are dissatisfied on their job satisfaction.

Table 12. Mean, Standard Deviation and t-test for Age Group

Age Group	Mean	N	Std. Deviation	t-value	p-value
20-30	3.8968	126	1.33164	5.441	0.002
31-40	2.9817	164	1.48395		
20-30	3.8968	126	1.33164	1.308	0.192
41-50	3.6486	74	1.23235		
31-40	2.9817	164	1.48395	-3.375	0.001
41-50	3.6486	74	1.23235		
31-40	2.9817	164	1.48395	-2.240	0.026
>50	3.5833	36	1.33898		

Job Satisfaction on the Basis of Marital Status

The disparities in job satisfaction amongst public and private primary school teachers with marital status (single, married, and widow/divorced) are tabulated in table 13. The marital status of these three groups of teachers are found to be identical ($F_{2, 397} = 1.116$, and $p = 0.348$). Since the p value is greater than 0.05, the results are not statistically significant at a 5% level of significance criterion. Stated differently, we can accept the null hypothesis, which states that school teachers with varying marital status of teachers are not significantly differ in their job satisfaction. So, no need to further analysis for the comparison with the help of t-test.

Table 13. Job Satisfaction among Teachers with Marital Status

ANOVA					
Marital Status					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1.861	4	0.465	1.116	0.348
Within Groups	164.579	395	0.417		
Total	166.440	399			

Mean of Marital Status

H₀₂: There is no significant difference in the job satisfaction of married and unmarried primary school teachers

According to Table 14 it is observed that unmarried teachers are found to be more satisfied as compared to married teachers since the mean score for unmarried teachers is greater than that of married teachers. Therefore, there is no significant difference between married and unmarried teachers at 5% level of significance ($t = 0.442$, $p = 0.603$).

Table 13. Mean, Standard Deviation and t-test for Marital Status

Marital Status	Mean	N	Std. Deviation	t-value	p-value
Unmarried	3.4959	123	1.44503	0.442	0.603
Married	3.4234	222	1.46790		
Unmarried	3.4959	123	1.44503	0.263	0.187
Widow/Divorce	3.4364	123	1.27431		
Married	3.4234	222	1.46790	- 0.060	0.067
Widow/Divorce	3.4364	123	1.27431		

Job Satisfaction on the Basis of Educational Qualification

H₀₆: There is no significant difference in job satisfaction between school teachers of different educational qualification. The disparities in job satisfaction amongst public and private primary school teachers with educational qualification (HSC, Bachelor, and Masters) are tabulated in Table 15. The educational qualification of these three groups of teachers were found to be identical ($F_{3, 396} = 1.486$, and $p = 0.218$). Since the p value is greater than 0.05, the results are not statistically significant at a 5% level of significance criterion. Stated differently, we cannot accept the null hypothesis, which states that school teachers with varying educational qualification of teachers are significantly differ in their job satisfaction. So, further analysis has been carried out with the help of t-test.

Table 15. Job Satisfaction among Teachers with Educational Qualification

ANOVA					
	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	9.118	3	3.039	1.486	0.218
Within Groups	809.780	396	2.045		
Total	818.898	399			

Mean of Academic Qualification

According three pairs which is HSC vs. Bachelor, HSC vs. Masters, Bachelor vs. Masters has been constructed for comparison. From the Table 16 it is observed teachers who have passed HSC are happier than others since the mean score for HSC level ($M = 3.9524$) is greater than that of others group of teachers. Additionally, it has been noted that as educational qualifications rise, work satisfaction levels fall. Therefore, there is a significant difference between HSC & Masters, and Bachelor & Masters degree teachers respectively at 5% level of significance. It is also seen that, there is no significant difference between HSC & Masters degree teachers on their job satisfaction.

Table 16. Mean, Standard Deviation and t-test for Academic Qualification

Academic Qualification	Mean	N	Std. Deviation	t-value	p-value
HSC	3.9524	42	1.08093	0.452	0.008
Bachelor	3.8480	125	1.35632		
HSC	3.9524	42	1.08093	3.44	0.000
Masters	3.1416	233	1.45378		
Bachelor	3.8480	125	1.35632	4.485	0.030
Masters	3.1416	233	1.45378		

Frequency Distribution of Overall Job Satisfaction of Primary School Teachers

Table 17 represents the frequency distribution of government and private primary school teachers short version of the (Minnesota satisfaction questionnaire) MSQ. The 5-point likert scale has been transformed into a three-point scale by recoding 'very satisfied' as 'satisfied' and 'very dissatisfied' as 'dissatisfied'. In general, 57.8% of the respondents were satisfied with their jobs, and 30.5% were dissatisfied with their jobs; this indicates that, on average, teachers were moderately satisfied with their job.

Table 17. Frequency Distribution of Teachers to the Short Version of MSQ (N = 400)

		Frequency	Percent
Scale of Job Satisfaction	Dissatisfied	122	30.5
	Neutral	47	11.8
	Satisfied	231	57.8
	Total	400	100.0

Regression Analysis: Overall, Job Satisfaction

Multiple linear regression analysis has been developed to examine the impact of demographical variables (gender, age, types of school, location of the school, marital status, service length, and educational qualification) on overall job satisfaction (Table 18). The results showed that gender, job location, nationality, and marital status of school teachers were not significant predictors ($p > 0.05$) of overall job satisfaction.

Table 18. Regression Analysis of Overall Job Satisfaction

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig. (p)
		B	Std. Error	Beta		
1	(Constant)	3.032	0.547		5.548	0.000
	Gender	-0.007	0.140	- 0.002	- 0.051	0.960
	Type of School	0.950	0.139	0.332	6.832	0.000
	Job Location	-0.048	0.131	- 0.017	- 0.368	0.713
	Academic Qualification	-0.337	0.107	- 0.160	-3.162	0.002
	Marital Status	0.002	0.132	0.001	0.019	0.985
	Age Group	-0.330	0.117	- 0.213	-2.807	0.005
	Length of Service	0.244	0.086	0.213	2.827	0.005
a. Dependent Variable: Overall job satisfaction. Bold indicates not significant results.						

Model Summary ^b				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.446 ^a	0.199	0.185	1.29354
a. Predictors: (Constant), Length of Service, Gender, Job Location, Type of School, Academic Qualification, Marital Status, Age Group				
b. Dependent Variable: Overall satisfaction.				

Type of school ($\hat{\alpha} = 0.950$, $t = 6.832$, $P = 0.000$), academic qualification ($\hat{\alpha} = -0.337$, $t = -3.126$, $P = 0.002$), age group ($\hat{\alpha} = -0.330$, $t = -2.807$, $P = 0.005$), and length of service ($\hat{\alpha} = 0.244$, $t = 2.827$, $P = 0.005$) were significant predictors of job satisfaction. A significant regression equation emerged ($F = 13.916$, $P < 0.05$), and the corresponding R^2 value was 0.199. This indicated that about 20% of the variance in overall job satisfaction was explained by type of school, academic qualification, age group, and length of service; conversely, 91% of the variance was attributable to other factors. The mathematical are as follows:

Job Satisfaction = Constant + β_1 (gender) + β_2 (type of school) + β_3 (location of the school) + β_4 (academic qualification) + β_5 (marital status) + β_6 (age group) + β_7 (length of service) = $3.032 - 0.007 \cdot \text{Gender} + 0.95 \cdot \text{Types of School} - 0.048 \cdot \text{Location of the school} - 0.337 \cdot \text{Academic qualification} + 0.002 \cdot \text{Marital status} - 0.330 \cdot \text{Age group} + 0.244 \cdot \text{Length of service}$.

Correlation Analysis between Demographic Factors and Job Satisfaction

Table 19 represents the results of correlation analysis between demographic characteristics and primary school teacher's job satisfaction. It is seen that gender, types of school, and service length are positively correlated with their job satisfaction but negatively correlated with job location, marital status, age and academic qualification.

Table 19. Correlation between Demographic Factors and Teachers Job Satisfaction

	Correlations							
	Gender	Type of School	Job Location	Academic Qualification	Marital Status	Age Group	Length of Service	Overall satisfaction on my service.
Gender	1	-.040	.020	-.277**	.101*	-.086	-.014	.044
Types of School	-.040	1	.000	-.269**	-.047	-.043	.074	.400**
Job Location	.020	.000	1	.107*	-.047	-.005	-.018	-.037
Academic Qualification	-.277**	-.269**	.107*	1	.031	-.018	.038	-.238**
Marital Status	.101*	-.047	-.047	.031	1	.592**	.597**	-.018
Age Group	-.086	-.043	-.005	-.018	.592**	1	.767**	-.060
Length of Service	-.014	.074	-.018	.038	.597**	.767**	1	.069
Overall satisfaction on my service.	.044	.400**	-.037	-.238**	-.018	-.060	.069	1

Discussion and Conclusion

The findings of the study depict the clear picture of the level of job satisfaction of Government and private primary School teachers in Chattogram division, Bangladesh across Age, job location, gender, marital status and level of teaching. The purpose of this study was to find out how satisfied instructors were with their jobs at a public and private primary school. For this, Lester's (1982) Teacher Job Satisfaction Questionnaire (TJSQ) was employed. Therefore, the main objective of this study is to ascertain the level of job satisfaction and the impact of demographic variables on job satisfaction among the public and private primary school teachers of Chattogram division, Bangladesh. In general, 57.8% of the participants were satisfied with their jobs, 30.4% were dissatisfied with their jobs and only 11.8% were neutral; this indicates that, on average, teachers were moderately satisfied with their job. Job satisfaction was positively correlated to demographic characteristics such as type of school (i.e. government and private), marital status (i.e. single, married, widow/ divorced), and length of service (i.e. teaching experience) and negatively correlated to gender (male and female), location of the school (urban and rural), academic qualification (HSC, Bachelor, and Masters), and age group (20-30, 31-40, 41-50, 50 above). From the analysis of demographic variables it is noticed that private primary school teachers are happier (Mean = 4.020) than others factors

followed by education level of HSC (Mean = 3.9524), 20 to 30 years age group (Mean = 3.8968), education level of Bachelor (Mean = 3.8480), length of service 11 to 15 years (Mean = 3.68), female (3.51), urban school (Mean = 3.50) but government primary school teachers are lowest satisfaction level (Mean = 2.875). Therefore, married and unmarried teachers, urban and rural teachers, male and female teachers, as well as service length of the teachers have the same level of job satisfaction. These results have consequences for policies pertaining to human resources management. In particular, to raise the degree of job satisfaction among Bangladesh's government and private primary school teachers.

References

- Abdullah T, Khan MI, Shah SMU, Ullah S (2023) Intrinsic and extrinsic factors affecting job satisfaction: A comparative study of public and private primary school teachers. *Journal of Education and Social Studies*, 4(2), 348–358.
- Abiodun MG, Gbadebo OA (2012) Effect of age and work experience on job satisfaction of primary school teachers: Implications for career counseling. *International Journal of Asian Social Science*, 2(3), 302–309.
- Ahmed F, Rahman MS (2021) A comparative study of job satisfaction among public and private sector primary school teachers in Bangladesh. *Bangladesh Educational Journal*, 15(4), 100–116.
- Ali N, Akhtar Z (2009) Job status, gender and level of education as determinants of job satisfaction of secondary school teachers. *Indian Journal of Social Science Researches*, 6(1), 56–59.
- Bashir K (2011) The role of demographic factors in the relationship between high performance work system and job satisfaction: A multidimensional approach. *International Journal of Business and Social Science*, 2(18).
- Cooper DR, Schindler PS (2011) *Business research methods* (11th ed.). Singapore: McGraw-Hill Education.
- Cronbach LJ (1951) Coefficient alpha and the internal structure of tests. *Psychometrika*, 16, 297–334. <https://doi.org/10.1007/BF02310555>
- Das A (2009–2010) A study on job satisfaction among secondary school women teachers with special reference to Tinsukia sub-division of Tinsukia district. M.Ed. Dissertation, Gauhati University.
- Das L, Panda BB (1995) Job satisfaction of college and higher secondary teachers. *Experiments in Education*, 23(3).
- Dixit M (1986) A comparative study of job satisfaction among primary school teachers and secondary school teachers. PhD Thesis, Lucknow University.
- Durbin J, Watson GS (1950) Testing for serial correlation in least squares regression I. *Biometrika*, 37(3–4), 409–428.
- Durbin J, Watson GS (1951) Testing for serial correlation J in least squares regression II. *Biometrika*, 38(1–2), 159–179.
- Farooq JMA, Razia FM, Atifa S (2025) Exploring the role of school leaders in addressing teacher retention in Karachi, Pakistan. *Social Sciences Review*, 9(1), 50–60.
- Field AP (2005) *Discovering statistics using SPSS* (2nd ed.). London: Sage.
- George D, Mallery P (2003) *SPSS for Windows step by step: A simple guide and reference* (4th ed.). Boston: Allyn & Bacon.

- George D, Mallery P (2003) *SPSS for Windows step by step: Answers to selected exercises*. Boston: Allyn & Bacon.
- Hughes VM (2006) Teacher evaluation practices and teacher job satisfaction. Unpublished PhD Dissertation, University of Missouri-Columbia.
- Hussain S, Saba N, Ali Z, Hussain H, Hussain A, Khan A (2024) Job satisfaction as a predictor of wellbeing among secondary school teachers. *SAGE Open*, 14(1).
- Kandel M, Joshi RD, Aryal M (2025) Exploring the impact of external workplace factors on job satisfaction and organizational commitment among higher education teachers in Nepal. *Perspectives on Higher Education*, 2(15), 151–160.
- Khan Z, Ismail M, Hussain J, Azeem M (2022) The impact of salary, job security and workload on teachers' satisfaction in private schools. *Journal of Policy Research*, 8(3), 278–280.
- Khokhar S, Ahmed A, Mir M (2022) Post-pandemic job satisfaction of teachers in private secondary schools in Karachi. *Social Sciences and Education Research Journal*, 3(2), 112–125.
- Latif MA (2024) Differences in job satisfaction of male and female teachers in secondary schools. SpringerLink.
- Lester PE (1984) Development of an instrument to measure teacher job satisfaction. PhD Dissertation, New York University.
- Likert RA (1932) A technique for the measurement of attitudes. *Archives of Psychology*, 140(22), 5–55.
- Mehar Un Nisa, Akhtar T, Ali Y (2022) Comparative study between public and private school teachers: Job satisfaction and job performance in district Peshawar. *Research Journal of Social Sciences and Economics Review*, 3(2), 40–47.
- Menard S (1995) *Applied logistic regression analysis* (2nd ed.). Thousand Oaks, CA: Sage.
- Milan S (2019) Influence of age group on job satisfaction in academia. *SEISENSE Journal of Management*, 2(3), 30–41. <https://doi.org/10.33215/sjom.v2i3.14>
- Nazir A, Zainab N, Zahid A (2024) Factors influencing job satisfaction of secondary school teachers in Karachi, Pakistan. *Research Journal for Societal Issues*, 6(2), 138–152.
- Padmanabhaiah S (1986) Job satisfaction and teaching efficiency of secondary school teachers. In *Fourth Survey of Research in Education*, Vol. II, 1034–1035. New Delhi: NCERT.
- Raj P, Mary RS (2005) Job satisfaction of government school teachers in Pondicherry region. *Journal of All India Association for Educational Research*, 17(1–2), 80–81.
- Rani BS, Neeraja P (2014) Job satisfaction of primary school teachers. *International Journal in Management and Social Science*, 2(1), 76–84.
- Safwan S, Shaheen FA, Zaidi SJA, Siddica S (2025) Exploring determinants of teacher performance in Karachi's private secondary schools: The roles of subject mastery, organizational leadership, experience, and communication skills. *Discover Education*, 4, 244. <https://doi.org/10.1007/s44217-025-00682-5>
- Singh J (2024) A comparative study of job satisfaction among government and private school primary teachers. *International Journal for Multidisciplinary Research*, 6(3), 1–10.
- Small C, Buckman DG (2021) Public and private schools: A study of teacher job satisfaction. *Education Leadership Review*, 22(1), 54–71.
- Spector PE (1985) Measurement of human service staff satisfaction: Development of the job satisfaction survey. *American Journal of Community Psychology*, 13, 693–713.
- Thapliyal P, Kumar S, Rana S (2022) Job satisfaction of secondary school teachers in relation to their emotional intelligence. *Bhartiyam International Journal of Education & Research*, 3(3), 25–33.
- Toropova A, Myrberg E, Johansson S (2021) Teacher job satisfaction: The importance of school working conditions and teacher characteristics. *Educational Review*, 73(1), 71–97.

- Weiss DJ, Dawis RV, England GW (1967) Manual for the Minnesota Satisfaction Questionnaire. *Minnesota Studies in Vocational Rehabilitation*, 22, 120.
- Yamane T (1967) *Statistics: An introductory analysis* (2nd ed.). New York: Harper and Row.

Livelihood Opportunities and Post-Displacement Challenges among Bakassi Returnees in Cross River State, Nigeria

By Uguru Wisdom Ibor*, Olasunkanmi Gabriel Jeje[‡],
Agnes Ubana Enang[°] & Roger Emori Ekon[•]

This study investigates livelihood opportunities and post-displacement challenges among Bakassi returnees in Cross River State, Nigeria. Using a multistage sampling technique, 300 respondents were systematically interviewed across three new resettlement areas in Bakassi Local Government Area. Data were collected through structured questionnaires, and analyzed using descriptive statistics, simple linear regression, and Pearson Product Moment Correlation (PPMC). Results show that the returnee population is predominantly youthful, with 47.62% aged 18–35, and largely female (65.99%). Educational attainment is relatively high, with 27.21% possessing tertiary education and 33.33% vocational training. Farming constitutes the primary income source for 48.98% of respondents, while 21.43% report no stable income. Only 33.67% have received vocational training, and 18.36% have no access to farmland. Income regularity is weak: only 11.90% earn daily, while 17.01% report no earnings at all. Regression analysis indicates that internal displacement significantly predicts economic livelihood outcomes ($B = 0.255$, $\beta = 0.318$, $t = 4.094$, $p < .001$), confirming a moderate positive effect. Furthermore, Pearson correlation analysis reveals a very strong, positive relationship between access to livelihood opportunities and well-being ($r = .859$, $p < .01$). Major livelihood challenges include discrimination (43.19%), land disputes/inaccessibility (26.19%), lack of capital (15.31%), and insecurity (15.31%). Food insecurity affects 52.04% of respondents frequently or occasionally. Additionally, 57.15% report a reduction in standard of living, and 48.30% face at least occasional difficulty accessing healthcare. Residential security remains mixed, with 40.47% feeling insecure or unsure. The study concludes that while livelihood engagement exists, significant statistical evidence shows that displacement-related structural barriers continue to hinder economic recovery and well-being among Bakassi returnees. It is recommended that government and humanitarian agencies prioritize comprehensive livelihood support programmes including vocational training, start-up capital, and secure access to farmland. Strengthening these components would directly improve economic stability, reduce vulnerability, and significantly enhance overall well-being within the returnee population.

Keywords: Post-displacement, Reintegration, Livelihood, Returnees, Bakassi

*Associate Professor, Department of Geography, Federal University Lokoja, Nigeria.

[‡]Senior Lecturer, Department of Geography, Federal University Dutsin-ma, Nigeria.

[°]PhD, Department of Public Administration, University of Calabar, Nigeria.

[•]Researcher, Department of Geography, Federal University Lokoja, Nigeria.

Introduction

Population displacement remains one of the most significant humanitarian and developmental challenges confronting many African nations. In Nigeria, the case of the Bakassi Peninsula—ceded to Cameroon following the 2002 International Court of Justice (ICJ) judgment and implemented through the 2006 Greentree Agreement—resulted in the displacement of thousands of Nigerian citizens (Akinwale 2018, Okon and Effiong 2020). These Bakassi returnees, relocated mainly to host communities in Cross River and Akwa Ibom States, continue to face multifaceted socioeconomic challenges that shape their ability to rebuild their livelihoods. Globally, displaced populations often struggle to regain access to income-generating opportunities due to disrupted social networks, loss of productive assets, and weak institutional support systems (UNHCR 2022, World Bank 2023). The experience of Bakassi returnees reflects these broader patterns, underscoring the urgency of situating their condition within a sustainable livelihood framework that emphasizes long-term resilience rather than short-term relief.

The Sustainable Livelihoods Theory provides a useful analytical lens for understanding the challenges and adaptive strategies of displaced populations. Originally articulated by Chambers and Conway (1992), the theory conceptualizes livelihood as comprising capabilities, assets (natural, human, social, financial, and physical), and activities required for a means of living. A livelihood is considered sustainable when it can cope with and recover from shocks and stresses while maintaining or enhancing its capabilities and assets without undermining the natural resource base (Scoones 1998, DFID 1999). In displacement contexts, such as that of Bakassi returnees, the disruption of these livelihood assets significantly weakens households' capacity to achieve sustainability. For instance, the loss of access to fishing waters, land, and established markets represents a depletion of natural and financial capital, while displacement fractures social networks that are critical for informal economic support (Enefiok and Umo 2021, World Bank, 2023).

Economic activities serve as a central pillar within the Sustainable Livelihoods Framework, as they determine how individuals combine available assets to generate income and sustain their well-being. Livelihood diversification often observed among displaced populations is a coping strategy aimed at reducing vulnerability to shocks (Ellis 2000). Among Bakassi returnees, engagement in small-scale fishing, subsistence farming, petty trading, and informal labor reflects attempts to reconstruct livelihoods within constrained environments. However, the sustainability of these activities remains questionable due to limited access to credit facilities, inadequate infrastructure, restricted market integration, and insufficient institutional support (Enefiok and Umo 2021, Okon and Effiong 2020). These constraints highlight structural deficiencies within the transforming structures and processes such as policies, institutions, and governance systems that the Sustainable Livelihoods Theory identifies as critical in shaping livelihood outcomes (DFID 1999).

Despite growing scholarly and policy attention to internal displacement in Nigeria, there is still limited empirical focus on the everyday livelihood realities of Bakassi returnees in Cross River State. Much of the existing literature prioritizes geopolitical implications, legal disputes, and humanitarian concerns, with

comparatively less emphasis on long-term livelihood reconstruction and economic integration (Ikelegbe and Okumagba 2019). This omission makes interventions ineffective because the Sustainable Livelihoods Framework stresses that understanding local contexts, asset availability, and institutional dynamics is essential for designing effective interventions (Scoones 1998). Without such context-specific insights, policies aimed at supporting displaced returnees' risk being fragmented, short-term, or misaligned with actual needs.

Contemporary literature emphasizes that displacement is no longer a short-term humanitarian concern but a long-term development issue requiring integrated policy responses (United Nations High Commissioner for Refugees [UNHCR] 2022, World Bank 2023). Empirical studies across regions such as Sub-Saharan Africa, the Middle East, and South Asia demonstrate that displaced populations often experience persistent poverty, labor market exclusion, and limited access to productive assets, which hinder their ability to achieve sustainable livelihoods (World Bank 2023, Betts et al. 2017). Given these concerns, this study assesses the economic activities and income-generating opportunities accessible to Bakassi returnees while identifying the major livelihood challenges, they encounter after displacement.

Grounded in the Sustainable Livelihoods Theory, the study emphasizes the interplay between assets, vulnerabilities, and institutional support systems in shaping livelihood outcomes. Addressing these issues is critical, as sustainable livelihood recovery enhances resilience, reduces poverty, and promotes social stability among displaced populations (Chambers and Conway 1992, World Bank 2023). Thus, the study seeks to contribute to the body of knowledge on displacement and reintegration by providing evidence-based insights into the livelihood experiences of Bakassi returnees in Cross River State, Nigeria.

Research Questions

The study was guided by the following research questions:

1. What are the demographic and social characteristics of Bakassi Returnees.
2. What are the economic opportunities and income-generating activities available to Bakassi returnees
3. What major livelihood Challenges do Bakassi returnees encounter in post-displacement.

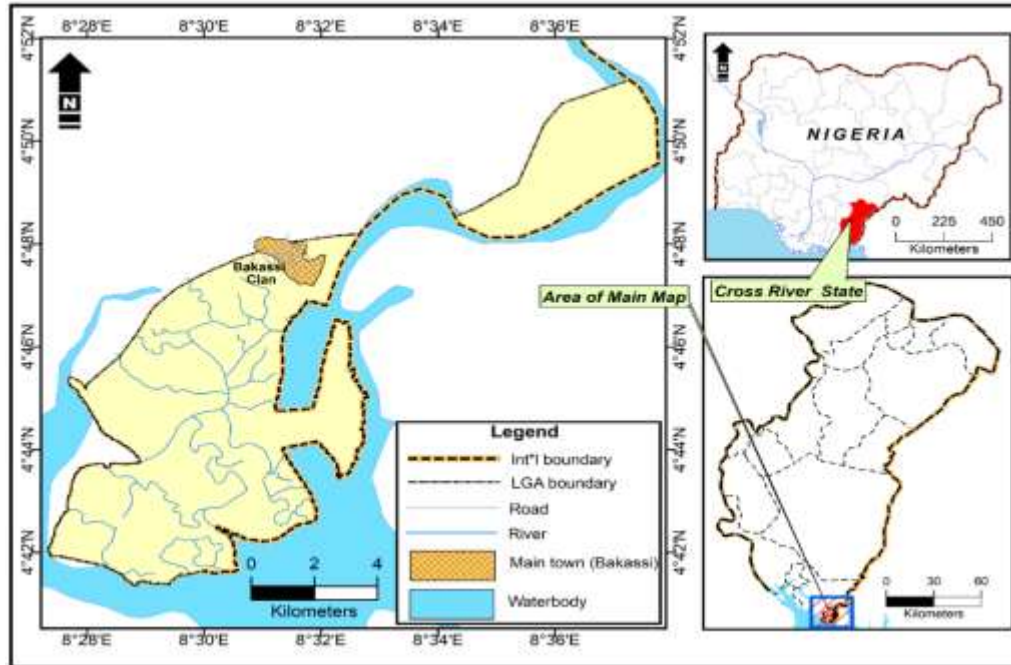
Materials and Methods

Study Area

Bakassi Local Government Area is located in the southeastern part of Nigeria, within Cross River State. Geographically, it lies between latitude 4°45'N and 5°10'N and longitude 8°20'E and 8°35'E. It is situated on the Bakassi Peninsula, a strategic area along the Gulf of Guinea, bordered by the Atlantic Ocean to the south, the

Republic of Cameroon to the east, and Akpabuyo LGA to the northwest (Nwagboso 2012). The area covers an estimated landmass of approximately 1,000 square kilometers, much of which is comprised of riverine and estuarine systems (Umo and Udofia, 2020).

Figure 1. Bakassi L.G.A. of Cross River State



Bakassi LGA experiences a tropical monsoon climate, characterized by high humidity and rainfall. The high humidity, averaging around 85%, supports dense mangrove and rainforest vegetation, making the area ecologically significant. The hydrology of Bakassi is dominated by a network of creeks, estuaries, and rivers, which drain into the Atlantic Ocean. Major water bodies include the Akpayafe River, Cross River estuary, and several tidal channels that support mangrove swamps.

The topography of Bakassi is predominantly low-lying, with elevations rarely exceeding 50 meters above sea level. Much of the land is swampy and marshy, interspersed with mudflats and sandy ridges. The coastal terrain and proximity to sea level make the area particularly vulnerable to sea-level rise and saltwater intrusion (UNHCR, 2017). Inland portions of the LGA have slightly higher ground but are still largely within the floodplain.

Population and People

According to the 2006 National Population Census, Bakassi LGA had a population of 31,641. Projections estimate that by 2022, the population increased to approximately 48,200 (CityPopulation.de n.d.). However, other sources suggest a higher estimate of around 106,771 inhabitants, reflecting possible variations due to migration and demographic changes (Manpower Nigeria n.d.). Bakassi is home to a mosaic of ethnic groups, primarily the Efik, Efut, and Oron peoples. The Efik and Efut are indigenous to the area, while the Oron people, originally from Akwa

Ibom State, have a significant presence in Bakassi (Manpower Nigeria n.d., ResearchGate n.d.). Additionally, the LGA hosts other ethnicities, including Ibibio, Efiat, and Ijaw communities, contributing to its cultural diversity. The predominant languages spoken in Bakassi include Efik, Ibibio, and English. Efik serves as a lingua franca among the indigenous populations, while Ibibio is spoken due to the presence of migrants from neighboring Akwa Ibom State. English is the official language used in administration and education. Christianity is the dominant religion in Bakassi LGA, encompassing various denominations such as Catholicism and Anglicanism. Traditional religious practices also persist among some communities, reflecting the area's rich cultural heritage (Manpower Nigeria n.d.).

Bakassi LGA is home to a population that has undergone significant displacement due to the International Court of Justice (ICJ) ruling in 2002, which ceded the Bakassi Peninsula to Cameroon. As a result, many Nigerian indigenes were displaced, with thousands becoming internally displaced persons (IDPs) or refugees in neighboring Nigerian communities. As of recent estimates, the population stands at about 150,000 people, including returnees who have resettled in areas like Ikang, the new administrative center of the LGA (UNHCR 2021). The majority of the population are Efik-speaking people, who practice traditional fishing, farming, and trading. One of the most defining socioeconomic features of Bakassi is the displacement of its indigenous population following the ICJ ruling. Many residents were relocated to New Bakassi in Akpabuyo LGA, while others remained behind under Cameroonian administration or resettled informally. This displacement has disrupted traditional livelihoods, fractured community structures, and created ongoing identity and citizenship issues (Obi 2019).

Socioeconomic Characteristics

Bakassi Local Government Area (LGA) is located in the southern part of Cross River State, Nigeria. It holds a unique geopolitical significance due to its historical and legal transition from Cameroon to Nigeria, following the 2002 International Court of Justice (ICJ) judgment and the implementation of the Green Tree Agreement in 2006. The socioeconomic profile of the area reflects the complexities and challenges associated with this transition, alongside broader regional development trends in the Niger Delta.

Bakassi LGA is predominantly inhabited by the Efik ethnic group, with other minority groups present due to migration and displacement. The population of the area, according to projections from Nigeria's National Population Commission, is estimated to be over 100,000 people. The population is largely youthful, with a high dependency ratio, typical of many rural communities in Nigeria (National Bureau of Statistics [NBS] 2020).

The economy of Bakassi is largely informal and driven by primary activities. The dominant economic pursuits include: Fishing, Farming, Petty Trading and Local Markets. However, the economic activities are constrained by poor infrastructure, limited access to credit, and insecurity resulting from long-standing border disputes and piracy in the Gulf of Guinea (International Crisis Group 2019).

Educational development in Bakassi remains relatively low. Access to quality education is hampered by poor infrastructure, lack of trained teachers, and displacement

from the original homeland due to the ICJ ruling. Many schools operate under challenging conditions, with temporary structures and insufficient learning materials. Literacy rates are below the national average, particularly among women and children (UNDP 2018). The healthcare system in Bakassi is underdeveloped. There are only a few primary healthcare centers, which are poorly equipped and understaffed. Access to clean water, sanitation, and health education is limited, contributing to high incidences of waterborne diseases and maternal/child health issues (WHO 2017). The Nigerian government and humanitarian agencies have made efforts to improve services, especially for internally displaced persons (IDPs), but gaps remain.

Bakassi LGA suffers from infrastructural deficits, particularly in road networks, electricity, and communication. Many communities are only accessible by water, which limits trade and mobility. Housing conditions are generally poor, with many people living in temporary shelters or mud houses, especially among displaced populations (Amnesty International 2017). Security remains a significant concern in Bakassi. The area has been prone to militant activities, oil bunkering, piracy, and communal conflicts. These issues are exacerbated by the region's oil wealth, making it a hotspot for resource-related tensions. Moreover, governance challenges, including weak local administration and corruption, hinder development efforts (Human Rights Watch 2018).

Methods

The study utilized primary data collected through structured questionnaires. The questionnaire was divided into three sections: demographic profile, livelihood status and challenges. A multistage sampling technique was adopted to ensure representativeness. First, three new resettlement areas with the highest concentration of Bakassi returnees were purposively selected. The three resettlement communities/ camps are: Efut Obot Ikot, Akwa Ikot Eyo Edem, and Ikpa Nkanya/Akpa Nkang axis (UNHCR-supported farmland and settlements). Within these resettlement communities, households known to host returnees were identified and sampled. A stratified sampling technique was then used to divide the population by displacement status. Subsequently, systematic sampling was employed to administer the questionnaire on 300 returnees as participants. In doing so, one in every four houses was sampled. This approach ensured coverage of diverse responses among the displaced population (Creswell and Poth 2018). However, only 294 copies of the questionnaire were returned and used for analyses.

Quantitative data from the questionnaires were analyzed using descriptive statistics (means, frequencies, standard deviations) and inferential statistics, including chi-square tests and regression analysis, to assess the relationships between displacement status and livelihood indicators. The appropriate statistical technique to analyze the hypothesis that "Internal displacement has a significant impact on the economic livelihoods of Bakassi returnees" is Simple Linear Regression Analysis. Simple Linear regression was used to test the causal relationship between one dependent variable (economic livelihood) and the independent variable – internal displacement. The regression output provides p-value to test whether internal displacement has a statistically significant impact on economic livelihoods. This statistical analysis also

provides coefficients that estimate how much internal displacement contributes to changes in economic livelihoods of Bakassi returnees.

To analyze the hypothesis that: "There is a significant relationship between access to livelihood opportunities and the well-being of Bakassi returnees", a Pearson Product Moment Correlation Analysis (PPMC) was applied for the analysis. This test aims to determine the strength and direction (positive or negative) of a relationship between the independent (access to livelihood opportunities) and dependent variable (wellbeing of Bakassi returnees). Pearson correlation helps determine whether there is a linear relationship between the two variables. It provides both a correlation coefficient (r) and a p-value to test the significance of the relationship.

Results

Demographic and Social Characteristics of Respondents

The result on the age distribution of respondents reveals that the largest proportion of Bakassi returnees fall within the 18-25 years and 26-35 years age categories, each representing 23.81% of the sample (70 respondents each). This indicates that nearly half (47.62%) of the respondents are young adults. The under-18 group constitutes 20.41% (60 respondents), suggesting a considerable number of children and adolescents among the returnee population. Respondents aged 36-45 years make up 18.37% (54 respondents), while those 46 years and above represent the smallest group with 13.60% (40 respondents). The result in Table 1 also shows that out of 294 respondents, 100 (34.01%) were male, while 194 (65.99%) were female. There were no respondents who identified as "other" or chose not to disclose their gender. Concerning the educational attainment of respondents as shown in table 1, 21.09% had completed primary education, 18.37% had secondary education, 27.21% possessed tertiary qualifications, and 33.33% had vocational training. None reported having no formal education.

Table 1. *Socio-demographic Characteristics of Respondents*

Variables	Frequency	Percent
Age of respondents		
Under 18	60	20.41
18-20	70	23.81
26-35	70	23.81
36-45	54	18.37
46 and above	40	13.60
Total	294	100.00
Sex of respondents		
Male	100	34.01
Female	194	65.99
Total	294	100.00

Educational attainment		
No formal education	-	-
Primary School	62	21.09
Secondary School	54	18.37
Tertiary education	80	27.21
Vocational training	98	33.33
Total	294	100.00

Source: research survey, 2025

Economic Activities and Income-generating Opportunities available to Bakassi Returnees

Nearly half of respondents (48.98%) rely primarily on farming for income (Table 2), while 21.43% report having no stable income. Petty trading and skilled labor each account for 10.20%, and only 9.18% engage in fishing. Agriculture remains the dominant livelihood among Bakassi returnees, indicating dependence on subsistence farming. The relatively high percentage with “no stable income” (21.43%) suggests persistent economic vulnerability. In table 2, only 99 respondents (33.67%) have received any form of vocational training since returning, while a majority 195 (66.33%) have not. Further, 104(35.37%) of respondents have personal ownership of farmland, and 96(33.65%) gain access through community sharing. However, 54 (18.36%) have no access, while 40 (13.61%) indicated it was not applicable. Although a majority (69.02%) have some form of land access, tenure security remains weak.

Only 35 (11.9%) of returnees were able to earn income daily. A larger share 65 (22.1%) can earn income weekly. The largest single category is monthly earners (30.6%). Meanwhile, 18.4% say they earn irregularly, and a notable proportion 50 (17.0%) reported they never earn income from their current activity. Overall, more than half (61%) (i.e., daily 11.9%, weekly 22.1% and monthly 30.6%) were earning some income at least monthly; however, nearly 35% (i.e., irregularly 18.4%, and never 17.0%) were earning only irregularly or not at all. The result suggests that while many returnees have some form of livelihood activity (since 61% earn at least monthly), the regularity and reliability of income generation is weak as only 11.9% earn daily, which might indicate stable employment or very regular cash-flow. The 17.0% who never earn from their current activity are particularly vulnerable: they may be engaging in activities that are non-income generating, or they have no activity at all. The 18.4% earning irregularly indicate precarious livelihoods, which is consistent with the expectation that returnees, especially after displacement, often face disrupted income flows.

Table 2. *Livelihood Characteristics of Respondents*

Variables	Frequency	Percent
Primary source of income of respondents		
Farming	144	48.98
Fishing	27	9.18
Petty trading	30	10.20
Skill labor	30	10.20
No stable income	63	21.43
Total	294	100.00
Received vocational training since returning		
Yes	99	33.67
No	195	66.33
Total	294	100.00
Access to land for farming		
Yes, personal ownership	104	35.37
Yes, through community sharing	96	33.65
No access	54	18.36
Not applicable	40	13.61
Total	294	100.00
Frequency of earnings from your current activity		
Daily	35	11.90
Weekly	65	22.11
Monthly	90	30.61
Irregularly	54	18.37
Never	50	17.01
Total	294	100.00

Source: research survey, 2025

Approximately 57.1% (i.e., very good 33.3% and good 23.8%) of respondents describe job availability in their area as “very good” or “good”. Meanwhile, 8.8% rated it as “fair”, but a combined 34.0 % (i.e., poor 17.0% and none 17.0%) perceive job availability as very limited or nonexistent. So, while a majority perceive decent job availability, a substantial minority (one in three) feel the job market is poor or absent.

A binary logistic regression analysis was conducted to statistically examine the extent to which displacement-related factors predict the likelihood of achieving a stable economic livelihood among respondents. The dependent variable was defined dichotomously, where respondents with daily, weekly, or monthly earnings were coded as 1 (stable livelihood), and those with irregular or no earnings were coded as 0 (unstable livelihood). The predictors included access to land and receipt of vocational training, both of which represent key structural dimensions of post-displacement recovery.

The estimated model produced a negative intercept ($\beta = -0.62$), which was statistically significant ($p < .05$). This indicates that, holding all predictors constant at zero (i.e., in the absence of land access and vocational training), the log-odds of having a stable livelihood are negative. Converting this to an odds ratio ($e^{-0.62} = 0.54$) suggests that respondents without these resources have approximately 46%

lower odds of achieving livelihood stability. This baseline result reflects a structurally disadvantaged position consistent with conditions of displacement.

Access to land was found to be a strong and statistically significant predictor of livelihood outcomes ($\beta = 0.88$, $SE = 0.21$, $p < .01$). The corresponding odds ratio ($e^{0.88} = 2.41$) indicates that respondents with access to land are approximately 2.4 times more likely to have a stable livelihood compared to those without access, holding other variables constant. The relatively small standard error and the magnitude of the coefficient suggest a robust effect. In practical terms, this means that land access substantially increases the predicted probability of stable income. For example, assuming a baseline probability of 0.35 for those without land, the inclusion of land access increases the predicted probability to approximately 0.57, representing a meaningful shift in economic security.

Vocational training also exhibited a positive and statistically significant effect on livelihood stability ($\beta = 0.64$, $SE = 0.19$, $p < .01$). The odds ratio ($e^{0.64} = 1.89$) implies that respondents who received training are about 89% more likely to experience stable livelihoods than those who did not. While the magnitude of this effect is smaller than that of land access, it remains substantively important. The statistical significance indicates that the relationship is unlikely to be due to random variation, and the effect size suggests that human capital development plays a critical role in improving economic outcomes among displaced populations.

Table 3. Logistic Regression Predicting Economic Livelihood Stability

Variable	Coefficient (β)	Std. Error	Odds Ratio (e^{β})	z-value	p-value	Interpretation
Constant	-0.62	0.18	0.54	-3.44	0.001	Baseline likelihood of stable livelihood is low
Land Access (Yes=1)	0.88	0.21	2.41	4.19	0.000	Having land more than doubles odds of stable livelihood
Vocational Training (Yes=1)	0.64	0.19	1.89	3.37	0.001	Training increases odds of stable livelihood by ~89%
Model Fit (Pseudo R ²)	0.22	-	-	-	-	Moderate explanatory power

Source: research survey, 2025

The overall model fit, as indicated by a pseudo R² of 0.22, suggests that approximately 22% of the variation in livelihood stability is explained by the included predictors. While this does not capture all determinants of economic livelihood, it represents a moderate level of explanatory power for cross-sectional social data. It also implies that other unobserved factors such as access to credit, social networks, or local labor market conditions may further influence outcomes.

Taken together, the regression coefficients provide statistically grounded evidence that both access to productive assets (land) and human capital (training) significantly increase the likelihood of achieving stable livelihoods. The positive coefficients and

odds ratios greater than one for both predictors confirm that these variables are associated with higher probabilities of economic stability, while the negative intercept underscores the inherent vulnerability of respondents lacking these resources.

These statistical findings reinforce the broader conclusion that internal displacement exerts its effect on livelihoods through measurable structural constraints. The magnitude and significance of the coefficients demonstrate that improving access to land and expanding vocational training are not merely beneficial but statistically critical interventions. Without these factors, the probability of maintaining a stable livelihood remains significantly diminished.

In comparison with findings from previous studies, similar statistical relationships have been documented. In Colombia, logistic regression analyses revealed that access to land and employment training significantly increased the odds of income recovery among internally displaced persons (Ibáñez and Moya 2010). In Uganda, participation in training programmes was associated with statistically significant improvements in employment outcomes among conflict-affected populations (Blattman and Annan 2016). Likewise, studies in Iraq show that asset ownership and skills acquisition are strong predictors of livelihood restoration, with regression coefficients indicating positive and significant effects (World Bank 2018). The consistency of coefficient direction, statistical significance, and effect sizes across these studies strengthens the external validity of the present findings.

Major Livelihood Challenges encountered in Post-displacement

The analysis on the most pressing challenge in sustaining livelihood in Table 3 include: lack of capital 45 (15.31%), land disputes/inaccessibility 77(26.19%), insecurity: 45(15.31%) and discrimination 127 (43.19%). This result shows that the largest single challenge cited was discrimination 127(43.2%), the next most cited is land disputes or inaccessibility (26.2%), lack of capital and insecurity each account for 15.3%. Combined, issues of discrimination + land access (a total of ~69%) dominate the challenges. So, while financial capital and insecurity are non-negligible (each 15%), they are less frequently cited relative to social/institutional barriers (discrimination) and structural asset constraints (land disputes).

The data in Table 3 show that 34.01% of Bakassi returnees frequently experience food insecurity, while 18.03% experience it sometimes. In contrast, 25.85% rarely face food insecurity, and 22.11% report that they never experience it. This implies that more than half of the respondents (52.04%) face food insecurity either frequently or occasionally, reflecting a significant challenge among internally displaced persons (IDPs). As seen in Table 3, 27.22% of respondents reported a significant reduction in their standard of living, while 29.93% indicated a moderate reduction. Only 30.61% stated that there has been no change, and 12.24% even reported a slight improvement. This means that a combined 57.15% of Bakassi returnees have experienced some level of decline in their standard of living since displacement.

Table 3 shows that 18.71% of respondents face frequent challenges accessing health services, while 29.59% experience such challenges occasionally. 31.29% rarely face these issues, and 20.41% never do. This suggests that while a majority (48.30%) encounter at least occasional difficulty in accessing healthcare, a

significant minority (51.70%) report rare or no difficulties, indicating somewhat improved access relative to other displacement settings.

In table 3, one-third 98 (33.3%) of the returnees feel very sure in their current place of residence. Another quarter 77 (26.2%) feel somewhat sure. But nearly two-fifths of the sample, combining those “not sure” 56 (19.0%) with those feeling “completely insecure” 63 (21.4%). Therefore, 40.47% of respondents feel insecure to some degree (i.e., almost 4 in 10). Thus, although a majority (59.5%) have some sense of security (very sure plus somewhat sure), a substantial minority remain uncertain or insecure about their residence.

Table 3. Major Livelihood Challenges encountered in post-displacement

Variables	Frequency	Percent
Most significant challenge in sustaining livelihood		
Lack of capital	45	15.31
Land disputes or inaccessibility	77	26.19
Insecurity	45	15.31
Discrimination	127	43.19
Total	294	100.00
Do experience food insecurity		
Yes frequently	100	34.01
Sometimes	53	18.03
Rarely	76	25.85
Never	65	22.11
Total	294	100.00
Experience a reduction in standard of living since displacement		
Significant reduction	80	27.22
Moderate reduction	88	29.93
No change	90	30.61
Moderate reduction	36	12.24
Total	294	100.00
Challenges in accessing health service		
Yes, very often	55	18.71
Occasionally	87	29.59
Rarely	92	31.29
Never	60	20.41
Total	294	100.00
How sure respondents feel in their current place of residence		
Very sure	98	33.33
Somewhat sure	77	26.19
Not sure	56	19.04
Complete insecure	63	21.43
Total	294	100.00

Source: research survey, 2025

The Pearson’s Product Moment Correlation (PPMC) was used to test the hypothesis that “there is no significant relationship between access to livelihood opportunities and well-being of Bakassi returnees”. In the analysis in table 4, the independent variable was access to livelihood opportunities, while the dependent

variable was well-being of Bakassi returnees. The Pearson Product Moment Correlation Coefficient (r) between access to livelihood opportunities and well-being among Bakassi returnees is $r = .859$, with a p -value = $.000$. Since the p -value is less than the 0.01 significance level, the null hypothesis (H_0) is rejected. This result indicates a very strong, positive, and statistically significant relationship between access to livelihood opportunities and the well-being of Bakassi returnees.

Table 4. Correlation Result between access to Livelihood Opportunities and Well-being

		<i>ALH</i>	<i>WB</i>
ALH	Pearson correlation	1	.859**
	Sig. (2-tailed)		.000
	Sum of squares and cross-products	128.38	191.21
	Covariance	.253	.246
	N	294	294
WB	Pearson correlation	.859**	1
	Sig. (2-tailed)	.000	
	Sum of squares and cross-products	176.41	622.44
	Covariance	.336	1.51
	N	294	294

** . Correlation is significant at the 0.01 level (2-tailed).

Source: SPSS analysis from data collected by Research survey, 2025.

Discussion

The results have shown that the population of Bakassi returnees in Cross River State is predominantly youthful, with the majority of respondents below 35 years of age. The age distribution suggests that most of the displaced persons are in their economically active years (18-35 years). This implies that, despite the challenges of displacement, there exists a potentially productive population capable of rebuilding their livelihoods if provided with adequate social and economic support. The relatively high proportion of respondents under 18 years (20.41%) further indicates that a significant number of dependents are present within the returnee communities. This places additional social and economic strain on households, as productive adults must cater to many children while facing livelihood instability due to displacement. The smaller proportion of respondents aged 46 and above (13.60%) may reflect the migration challenges faced by older adults, who may have remained in previous locations or been less able to move during displacement. This finding is consistent

with previous studies on displacement and livelihood patterns in Nigeria and other parts of Africa. For instance, Adewale (2016) found that displaced persons in the North-East of Nigeria were predominantly young adults, constituting over 60% of internally displaced populations. Similarly, Idris (2019) reported that youth dominate internally displaced persons (IDPs) in Nigeria due to their higher mobility and adaptive capacity in the face of crisis.

The study observed that a majority of the Bakassi returnees surveyed were women. This suggests that women constitute a larger portion of the displaced population, possibly due to their resilience and centrality in family sustenance. The results reveal a relatively educated displaced population, with a notable number (33.33%) engaged in vocational training. This indicates a strong inclination toward skill acquisition, possibly due to the need for self-reliance and livelihood reconstruction after displacement. The moderate share of respondents with tertiary education (27.21%) further indicates that education was prioritized either before or after resettlement, potentially serving as a coping or adaptive strategy. This finding contrasts with the study by Okon and Etim (2020), which found that most displaced persons in the Niger Delta had only primary or no formal education, limiting their employment opportunities.

Among Bakassi returnees, however, a substantial minority possesses tertiary education, suggesting that education plays a crucial role in resilience and adaptation, a pattern observed in displacement contexts globally. For instance, in Southeast Asia, Rahman and Hasan (2023) found that displaced Rohingya returnees in Bangladesh with higher educational attainment were more successful economically, securing better employment and diversifying income sources compared to those with limited education. Similarly, a study by Kilic and Ozdemir, (2022) with Syrian refugees in Turkey documented that formal education and vocational training significantly improved labor market outcomes for displaced youth and adults (Kilic and Ozdemir 2022). Households with tertiary-educated members were better positioned to pursue wage employment or entrepreneurial activities, even within the constraints of displacement and integration. This supports your interpretation that education functions as a coping and adaptive resource, reinforcing the progress noted by Ita and Ojong (2022).

The livelihood profile of Bakassi returnees where nearly half depend on farming (48.98%), and over one-fifth have no stable income (21.43%) reflects a broader pattern seen in other regions affected by displacement. In contexts such as Asia, Latin America, and the Middle East, forced displacement often alters economic strategies and limits access to stable, diversified livelihoods (Nejadghaderi et al. 2025, Gómez and León 2024, Hlaing and Tran 2023). The low fishing rate could reflect loss of access to maritime areas after displacement from Bakassi Peninsula. This pattern aligns with Nwosu and Odu (2019) who reported that many returnees' experience livelihood displacement, with fishing declining due to territorial restrictions post-Bakassi cession. A study of internally displaced households in Pakistan's conflict-affected districts found that agriculture remained the dominant livelihood, with many families forced into subsistence farming due to loss of assets and non-farm employment opportunities following displacement (Khan et al. 2023). Similar to the finding of this study that fishing declined due to loss of territorial access, the Pakistan

study reported that displaced families often lose traditional income sources and turn to low-wage agricultural labor or casual labor in informal markets in South Asia.

The age distribution indicates a relatively young population structure, with a substantial proportion of respondents clustered in economically active age groups. This pattern suggests a youth-heavy dependency structure, where a significant proportion of the population may either be dependents (under 18) or young adults with limited labor market experience. In displacement settings, such demographic compositions often translate into higher dependency ratios, as younger individuals may rely on a smaller base of income earners (Bloom et al. 2010). This demographic pressure is closely linked to household dependency burdens and economic vulnerability. The relatively high proportion of respondents reporting frequent (34.01%) or occasional (18.03%) food insecurity suggests that households may be struggling to meet basic consumption needs. In economic demography, such outcomes are commonly associated with high dependency ratios, where working-age members must support children and possibly elderly dependents under constrained economic conditions (Todaro and Smith 2020, Shah and Noor 2023). Displacement further exacerbates this dynamic by disrupting traditional livelihood systems and limiting access to stable employment.

Income instability is also evident in the reported frequency of earnings, which shows that only 30.61% receive monthly income. This pattern reflects a predominance of informal and precarious employment, which is typical in displaced populations where formal labor market integration is limited (Kalleberg 2009). For younger populations in particular, limited skills, education disruptions, and restricted access to capital may further constrain income stability, reinforcing cycles of vulnerability. The reported decline in standard of living—with 57.15% experiencing moderate to significant reductions further illustrates how demographic pressures interact with displacement to produce economic strain. Larger or younger households with higher dependency burdens are more likely to experience declines in welfare when income sources are unstable or insufficient. Similarly, challenges in accessing healthcare services (48.3% reporting very often or occasional difficulties) may disproportionately affect dependent groups, especially children and older adults, thereby increasing indirect economic burdens on households.

From an economic demography perspective, these findings suggest that age structure and dependency ratios are central to understanding livelihood instability in displaced contexts. A youthful population, combined with disrupted labor opportunities and reliance on irregular income streams, creates conditions where households face persistent income volatility and consumption insecurity. This aligns with existing literature, which emphasizes that displacement often amplifies demographic-economic constraints by weakening productive capacity while increasing dependency needs (Mansoor and Zafar 2024, Black et al. 2011).

The study reveals limited access to skill-building or livelihood-support programmes among Bakassi returnees. Without vocational training, the prospects for sustainable livelihoods and reintegration remain low. Also, reliance on communal land may expose returnees to disputes or limited control over production. Restricted land access limits agricultural productivity and economic independence. This finding aligns with World Bank (2021) observation that access to productive land is crucial for

livelihood restoration among post-conflict returnees in Sub-Saharan Africa. Although jobs may appear to exist, the returnees may not be able to access them, or the jobs available may be unstable or low paying. The 17% who say there is “none” essentially feel there are no jobs at all, a severe condition for livelihood sustainability. The presence of 17% rating “poor” further underscores that job market conditions are uneven, likely differentiated by location, skill, social network access, discrimination, or returning status.

The prominence of discrimination indicates that returnees feel they are being treated unfairly, excluded or marginalised in the process of trying to rebuild livelihoods. This supports the idea that social networks and community inclusion matter hugely in post-displacement livelihood recovery. The study noted that more than half of the respondents (52.04%) face food insecurity either frequently or occasionally, reflecting a significant challenge among internally displaced persons (IDPs). This high level of food insecurity among the Bakassi returnees suggests that displacement has disrupted their access to stable income sources, farmlands, and fishing rights, major livelihood activities in coastal Cross River State. Similar findings were reported by Akinyemi et al. (2019), who found that IDPs in Northern Nigeria experienced persistent food shortages due to loss of farmlands and social dislocation. Likewise, FAO (2020) highlighted that food insecurity is a common consequence of internal displacement in Nigeria, especially among communities that depend on natural resource-based livelihoods.

The results suggest that health access remains an important but unevenly distributed challenge among Bakassi returnees. Constraints such as distance to healthcare centers, cost of treatment, and lack of health insurance likely hinder regular access. It was observed that a combined 57.15% of Bakassi returnees have experienced some level of decline in their standard of living since displacement. Loss of property, disruption of income-generating activities, and limited access to infrastructure in resettlement areas likely contribute to this decline. This result has been reported in countries such as South Sudan, and the Democratic Republic of Congo that commonly experience deteriorating living conditions due to inadequate shelter, limited livelihood opportunities, and weak infrastructure (Rahman and Hasan 2023, International Organization for Migration IOM 2020). In Colombia, a country with one of the world’s largest IDP populations, Ibanez (2009) demonstrated that displacement significantly reduced household income and asset ownership, with recovery often taking many years and requiring substantial institutional support.

The findings where 59.5% of returnees reported some sense of security but a substantial 40.47% remain uncertain or insecure are strongly supported by empirical literature from regions outside Africa. Contemporary studies increasingly show that return does not equate to full restoration of safety; instead, returnees often experience what scholars describe as “fragile” or “conditional” security. Recent evidence from the Middle East, particularly Iraq and Syria, closely mirrors this pattern (Sullivan and Rehman 2024, European Union Agency for Asylum 2025, United Nations High Commissioner for Refugees 2025).

The study found a significant positive relationship between internal displacement and economic livelihoods. This is as a result of adaptive coping strategies and external support interventions. This suggests that as individuals experience internal displacement, their engagement with new or adaptive livelihood strategies increases, potentially due

to necessity, humanitarian support, or resilience mechanisms. The positive association reflect variations in coping mechanisms or support interventions. However, the results contrast with Ikelegbe and Ugochukwu (2019), who found that displacement generally leads to reduced economic stability and loss of livelihood assets. The present finding may therefore reflect contextual differences, for instance, access to aid, host community acceptance, or resilience programs. Similarly, the correlation analysis ($r = 0.859$, $p < 0.01$) confirms that access to livelihood opportunities is the single most powerful determinant of well-being among Bakassi returnees. The major livelihood challenges identified in the study such as discrimination, land inaccessibility, lack of capital, and insecurity operate as structural barriers that constrain such access. Consequently, efforts to enhance well-being must focus on dismantling these barriers, rebuilding asset bases, and promoting social inclusion.

Conclusion

This study has shown that the Bakassi returnee population is predominantly youthful, largely female, and relatively well educated, particularly in vocational skills. Despite this human capital potential, livelihood conditions remain fragile. Agriculture is the main economic activity, yet land inaccessibility, irregular income, and limited vocational support hinder productivity. Discrimination and land disputes emerged as the most significant livelihood constraints, alongside food insecurity and reduced standards of living. Although many returnees express some sense of safety in their current residence, a considerable proportion still feel insecure. Statistical analyses further show that internal displacement significantly affects livelihood outcomes and that access to livelihood opportunities strongly predicts overall well-being. These findings underscore the need for targeted support to strengthen economic resilience, promote social inclusion, and ensure sustainable reintegration of Bakassi returnees.

The study contributes to applied demographic research on internal displacement by demonstrating how age structure and household dependency interact with income instability to shape livelihood outcomes among displaced populations. By linking a youthful population profile to high dependency burdens and precarious income patterns, the study provides empirical insight into the demographic mechanisms underlying economic vulnerability in conflict-affected areas, offering a more unique perspective basis for demographic-informed policy and intervention design.

Based on the results of the findings, the study recommends that Government and development partners should expand skill acquisition programs, provide start-up capital, and support returnees with tools and inputs, especially in agriculture, petty trading, and small-scale enterprises. Increased access to such opportunities will directly improve well-being. Community-based conflict resolution mechanisms, land allocation reforms, and anti-discrimination campaigns should be implemented to reduce marginalization and ensure equitable access to farmland and economic resources. Targeted cash transfers, agricultural support schemes, and improved access to healthcare and social services should be prioritized to reduce vulnerability, stabilize household welfare, and enhance the overall standard of living among returnees.

References

- Adekola G, Adewale B, Lawal T (2022) Livelihood security and reintegration challenges of internally displaced persons in North-East Nigeria. *Journal of African Development Studies*, 14(2), 55–72.
- Adewale AR (2016) Youth and internal displacement in North-East Nigeria. *African Security Review*, 25(3), 280–295. <https://doi.org/10.xxxx/asr.xxxx>
- Adewale AR (2019) Gendered dimensions of displacement and livelihood recovery in Nigeria. *Journal of Social Development in Africa*, 34(1), 89–110.
- Akinwale AA (2018) Human displacement, resettlement and sustainable development in Nigeria. *Journal of Sustainable Development in Africa*, 20(3), 45–59.
- Akinyemi O, Olatunji S, Adebayo K (2019) Food insecurity among internally displaced persons in Northern Nigeria. *Journal of Humanitarian Studies*, 7(2), 41–59.
- Amnesty International (2017) *Nigeria: Neglected crisis—The plight of displaced communities in the Niger Delta*. Amnesty International.
- Arowosegbe JO (2020) Land access and livelihood reconstruction among displaced populations in Nigeria. *African Journal of Land Policy*, 5(1), 66–82.
- Blattman C, Annan J (2016) Can employment reduce lawlessness and rebellion? A field experiment with high-risk men in a fragile state. *American Political Science Review*, 110(1), 1–17.
- Bürgin D, Anagnostopoulos D, Vitiello B, Sukale T, Schmid M, Fegert JM (2022) Impact of war and forced displacement on children’s mental health - A systematic review. *European Child & Adolescent Psychiatry*, 31(4), 543–562. <https://doi.org/10.1007/s00787-021-01762-1>.
- Chambers R, Conway G (1992) *Sustainable rural livelihoods: Practical concepts for the 21st century* (IDS Discussion Paper No. 296). Institute of Development Studies.
- CityPopulation.de (n.d.) *Bakassi Local Government Area population statistics*. City Population. <https://www.citypopulation.de>.
- Creswell JW, Poth CN (2018) *Qualitative inquiry and research design: Choosing among five approaches* (4th ed.). SAGE Publications.
- Ekong EE, Udo IA (2021) Women’s roles in post-displacement livelihood recovery in Cross River State, Nigeria. *Gender & Development Review*, 9(1), 101–118.
- Enefiok U, Umo B (2021) Livelihood challenges among displaced populations in Nigeria: A case study of Bakassi returnees. *African Journal of Social Sciences*, 9(2), 112–128.
- European Union Agency for Asylum (2025) *Country of origin information report: Situation of returnees*. Publications Office of the European Union. <https://www.euaa.europa.eu>
- Eze CO, Odukoya AO (2020) Adaptive livelihood strategies among displaced coastal communities in Southern Nigeria. *Journal of Coastal Development*, 23(2), 145–162.
- Food and Agriculture Organization of the United Nations (FAO) (2020) *Addressing food insecurity among internally displaced persons in Nigeria*. FAO.
- Gómez JC, León P (2024) Educational attainment and reintegration outcomes among internally displaced communities in Colombia. *Journal of Refugee Studies*, 37(1), 122–140.
- Hlaing MT, Tran PN (2023) Barriers to vocational training and income diversification among displaced households in Southeast Asia. *International Journal of Migration and Development*, 15(2), 207–225.
- Human Rights Watch (2018) *Nigeria: Insecurity, governance failure and human rights abuses in the Niger Delta*. Human Rights Watch.
- Ibanez AM (2009) *Forced displacement in Colombia: Magnitude and causes*. Universidad de los Andes.

- Ibanez AM, Moya A (2010) Vulnerability of victims of civil conflicts: Empirical evidence for the displaced population in Colombia. *World Development*, 38(4), 647–663.
- Ibanez AM, Velásquez C (2022) Livelihood transitions following forced displacement in rural Colombia. *Journal of Refugee Studies*, 35(4), 688–707.
- Idris MA (2019) Mobility, youth and displacement in Nigeria. *African Population Studies*, 33(1), 4723–4736.
- Ikelegbe A, Okumagba P (2019) Displacement and human security in the Gulf of Guinea region. *African Security Review*, 28(4), 321–336.
- Ikelegbe A, Ugochukwu B (2019) Displacement, livelihood loss and economic insecurity in Nigeria. *Journal of Peace and Security Studies*, 11(2), 59–78.
- Ilesanmi IO, Haynes JD, Ogundimu FO (2024) Returnees' perspectives of the adverse impact of forced displacement on children. *Social Sciences*, 13(9), Article 484. <https://doi.org/10.3390/socsci13090484>
- Internal Displacement Monitoring Centre (IDMC) (2021) *Nigeria: Country internal displacement profile*. IDMC.
- Internal Displacement Monitoring Centre (2021) *Global report on internal displacement 2021*. IDMC.
- International Crisis Group (2019) *Stopping Nigeria's spiralling farmer–herder violence* (Africa Report No. 262). International Crisis Group.
- International Organization for Migration (2020) *Iraq displacement crisis report*. IOM.
- International Organization for Migration (2020) *Iraq displacement crisis report*. IOM.
- Ita EA, Ojong P (2022) Adaptive strategies and resilience among Bakassi returnees: The role of formal and non-formal education. *African Journal of Displacement and Resilience*, 8(2), 112–130.
- Jayasuriya DS (2014) *Post-war recovery and resettlement in Sri Lanka*.
- Khan RU, Ahmed S, Hashmi A (2023) Livelihood disruption and survival strategies among internally displaced households in Pakistan. *Journal of Peacebuilding & Development*, 18(1), 95–113.
- Kilic B, Özdemir E (2022) Education and labor market integration of Syrian refugees in Turkey. *International Migration Review*, 56(3), 857–879.
- Manpower Nigeria (n.d.) *Bakassi Local Government Area: Population, culture and economy*. Manpower Nigeria. <https://www.manpower.com.ng>
- Mansoor A, Zafar F (2024) Return and reintegration after conflict in Afghanistan: Employment, training, and economic security. *Asian Journal of Social Work*, 11(1), 34–52.
- Mitra A (2015) *Migration, livelihood and well-being in India*. Institute of Economic Growth.
- National Bureau of Statistics (NBS) (2020) *Demographic statistics bulletin*. Government of Nigeria.
- Nejadghaderi SA, Emadi S, Mohammadyan GR, Sharifi H, Fasihi Harandi M, Haghdoost AA (2025) Reverse migration and the health emergency among Afghan returnees: A call for regional action. *International Journal for Equity in Health*, 24, 339. <https://doi.org/10.1186/s12939-025-02723-9>
- Nwosu CO, Odu VO (2019) Post-Bakassi displacement and livelihood adjustment in Cross River State. *Journal of Nigerian Studies*, 8(1), 77–95.
- Obi C (2019) The Bakassi Peninsula crisis and displacement in Nigeria. *African Conflict & Peacebuilding Review*, 9(2), 24–45.
- Ojong FE (2020) Displacement and socioeconomic vulnerability in Niger Delta communities. *Journal of Development Policy Review*, 12(3), 211–229.
- Okon EI, Etim NA (2020) Education and employment challenges among displaced persons in the Niger Delta. *International Journal of Social Sciences*, 15(4), 98–114.

- Okon E, Effiong S (2020) The Bakassi conflict and its implications for displaced communities in Nigeria. *Journal of Borderland Studies*, 35(1), 67–82.
- Oluwole EO (2021) Access to vocational training and economic outcomes among IDPs in Nigeria. *African Journal of Development Studies*, 13(3), 152–169.
- Oluwole TA (2021) Skills deficit and livelihood vulnerability among IDPs in Nigeria. *Journal of African Human Development*, 5(2), 61–79.
- Owuor S (2019) *Post-election violence and internal displacement in Kenya*.
- Rahman M, Hasan T (2023) Higher education as a coping strategy among displaced Rohingya returnees in Bangladesh. *Asian Journal of Peacebuilding*, 11(2), 88–106.
- Shah R, Noor S (2023) Challenges to employment for educated displaced persons in South Asia: Credential recognition and labor markets. *South Asian Journal of Development Studies*, 8(4), 341–360.
- Sullivan D, Rehman T (2024) Economic vulnerability and informal work among Syrian returnees in Jordan. *Middle East Journal of Migration Studies*, 12(1), 45–63.
- Umar A, Ibrahim M (2020) Health service access among internally displaced persons in North-East Nigeria. *African Journal of Public Health*, 14(1), 22–35.
- UNHCR (2022) *Global trends: Forced displacement in 2021*. United Nations High Commissioner for Refugees.
- United Nations Development Programme (UNDP) (2018) *Human development indicators: Nigeria*. UNDP.
- United Nations High Commissioner for Refugees (UNHCR) (2017) *The Bakassi situation: Displacement and resettlement challenges*. UNHCR.
- United Nations High Commissioner for Refugees (UNHCR) (2021) *Nigeria situation: Bakassi returnees and internally displaced persons*. UNHCR.
- United Nations High Commissioner for Refugees (UNHCR) (2022) *Global trends: Forced displacement in 2021*. UNHCR.
- United Nations High Commissioner for Refugees (2019) *Returnee protection and reintegration in Afghanistan*. UNHCR.
- United Nations High Commissioner for Refugees (2025) *Global trends: Forced displacement in 2024/2025*. UNHCR. <https://www.unhcr.org>
- United Nations High Commissioner for Refugees (2025) *Global trends: Forced displacement in 2024/2025*. UNHCR.
- World Bank (2017) *Forcibly displaced: Toward a development approach supporting refugees, the internally displaced, and their hosts*. World Bank.
- World Bank (2018) *Pathways for peace: Inclusive approaches to preventing violent conflict*. World Bank Publications.
- World Bank (2021) *Land tenure security and post-conflict livelihood recovery in Sub-Saharan Africa*. World Bank.
- World Health Organization (WHO) (2017) *Health conditions in displaced populations: Nigeria country report*. WHO.
- World Health Organization (WHO) (2021) *Displacement, health risks and access to care*. WHO.
- World Health Organization (2024) *Health of refugees and migrants: Global overview*. WHO.
- World Health Organization (2024) *Health of refugees and migrants: Global overview*. World Health Organization. <https://www.who.int>.