

The Establishment of Health and Demographic Surveillance System (HDSS) in Bauchi State North East Nigeria; Baseline Findings, Challenges and Lessons Learned

Idris Muhammad Bose

Child Health and Mortality Prevention Surveillance (CHAMPS), Abubakar Tafawa Balewa University, Teaching Hospital Bauchi, Nigeria

Muhammad Mubarak Dabo

Child Health and Mortality Prevention Surveillance (CHAMPS), Abubakar Tafawa Balewa University, Teaching Hospital Bauchi, Nigeria

Muhammad Abdullahi Kobi

Child Health and Mortality Prevention Surveillance (CHAMPS), Abubakar Tafawa Balewa University, Teaching Hospital Bauchi, Nigeria

Abubakar Musa Sari

Child Health and Mortality Prevention Surveillance (CHAMPS), Abubakar Tafawa Balewa University, Teaching Hospital Bauchi, Nigeria

Lamaran Makama Dattijo

Child Health and Mortality Prevention Surveillance (CHAMPS), Abubakar Tafawa Balewa University, Teaching Hospital Bauchi, Nigeria

Muhammad Faruk Bashir

Child Health and Mortality Prevention Surveillance (CHAMPS), Abubakar Tafawa Balewa University, Teaching Hospital Bauchi, Nigeria

Abstract:

Background: The profound deficit of longitudinal health data in northern Nigeria necessitates robust surveillance systems. The Bauchi Health and Demographic Surveillance System (HDSS) was initiated in 2023 with the support from the Child Health and Mortality Prevention Surveillance (CHAMPS) network to provide reliable data for mortality and health surveillance.

Methods: A baseline household enumeration was conducted across 257 enumeration areas in 8 contiguous administrative wards of Bauchi and Ganjuwa Local Government Areas within geographically defined communities. Prospective longitudinal follow-up was established for 151,672 individuals in 23,476 households.

Results: The population structure reflects a high-fertility setting, with 35% aged 0–9 years and under-five children constituting 16.5%. The total dependency ratio is 104. Socioeconomic indicators show low formal education attainment and high unemployment (48%). Household conditions reveal substantial reliance on solid cooking fuels (78%) and on-site pit latrines, with 58.3% using tubewell/borehole water.