TANZANIA PANEL SURVEY

Wave 5, 2020-2021



Summary of key findings

The Tanzania National Panel Survey (NPS) is a nationally representative longitudinal survey that collects information on the living standards of the population, including consumption expenditure, farm and non-farm income-generating activities, and other socio-economic characteristics. The survey is designed to provide data from the same households over time in order to better track national and international development indicators, evaluate poverty dynamics, identify linkages between smallholder agriculture and welfare, and to evaluate policy impacts in Tanzania.

Since its inception in 2008/09, the NPS has been implemented by the National Bureau of Statistics (NBS) in collaboration with the Office of the Chief Government Statistician (OCGS) - Zanzibar. To date, five waves of the survey have been conducted. With availability of a new sampling frame from the 2012 Population and Housing Census and realignment of administrative boundaries in Tanzania – and to eliminate bias typically introduced in longitudinal surveys – the original sample was refreshed for the fourth wave in 2014/15, introducing a brand-new sample of households which were ultimately tracked and interviewed in the fifth and most recent wave.

The following are results from the fifth wave of the survey that was implemented between December 2020 and January 2022 and included a total of 4,164 households. In addition to being nationally representative, the sample design recognizes four explicit analytical strata: Dar es Salaam, Other Urban areas in Mainland, Rural areas in Mainland, and Zanzibar. To accommodate for rapidly growing urban centres in Tanzania, an additional sample of urban households outside of Dar es Salaam was included in the fifth wave, though was not included as part of this report. Finally, to preserve the panel sample, trends over time are only presented between the fourth (NPS 2014/15) and fifth (NPS 2020/21) waves.

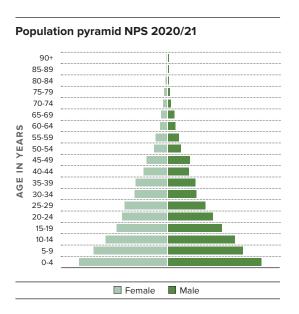


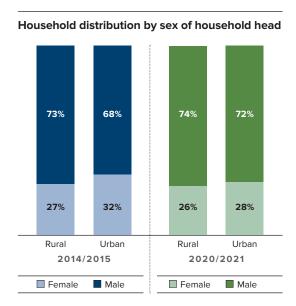






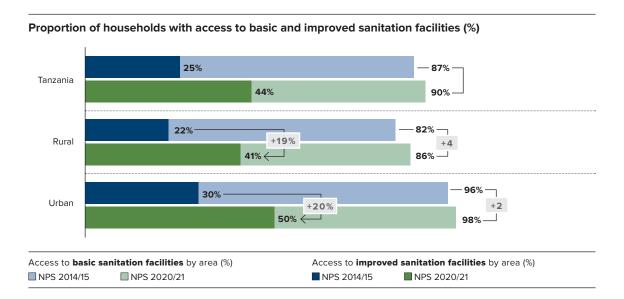
The population structure in Tanzania remains characteristic of developing countries, with rapid population growth and a large proportion of young people. The average household size (4.7 members) remained stable between 2014/15 and 2020/21 and continues to be slightly larger in rural areas than in urban areas (5.0 and 4.1 members, respectively). Women head one in every four households in the country.





INFRASTRUCTURE Housing, Sanitation, Energy

Access to safe and clean water and sanitation are internationally recognized human rights with great implications on the state of public health and economic growth in a country. Following exceptional improvements in access between 2014/15 and 2020/21, half of the population in Tanzania now has access to clean drinking water during the rainy season (an increase from 46 percent to 50 percent), while two-thirds have access during the dry season (an increase from 57 percent to 65 percent). However, these results are tempered by sharp geographic inequalities, with access in urban areas consistently better than rural areas, and access in Zanzibar consistently better than the Mainland.



Nationwide improvements were also seen in access to basic sanitation facilities. Nearly 90 percent of households now use basic sanitation facilities, an increase from 87 percent in 2014/15. However, while basic sanitation facilities are nearly universal in Dar es Salaam, access remains least common in rural areas of the country (86 percent).

A stricter measure – those with access to *improved* sanitation facilities – saw similar improvements. In Tanzania, more than four in ten households (44 percent) now have access to improved sanitation facilities, an increase from just 25 percent in 2014/15. In 2020/21, nearly 75 percent of households in Zanzibar had access to improved sanitation facilities compared to just 43 percent of households on the Mainland.

Proportion of households using electricity for lighting (%) +20% +15% +70 57 39 Tanzania Rural Rural

Energy sources – including electricity and clean cooking fuels – are also key drivers in the transformation of nations. Development initiatives such as the Tanzania Rural Electrification Project have been undertaken in an attempt to improve the availability and accessibility of such energy. Results from the NPS 2020/21 show that more than one-third of households (34 percent) in Tanzania now use electricity as their main source of energy for lighting (a proxy for access), an increase from just 24 percent in 2014/15. Though rural areas still face barriers, the proportion of rural households using electricity more than doubled between 2014/15 and 2020/21.

Additionally, more than 10 percent of households are now using alternative fuels – such as electricity and gas – for cooking, an increase from just 4 percent in 2014/15. Progress in the uptake of alternative fuels (as opposed to firewood or charcoal) was driven heavily by households in Dar es Salaam and urban areas of the country.

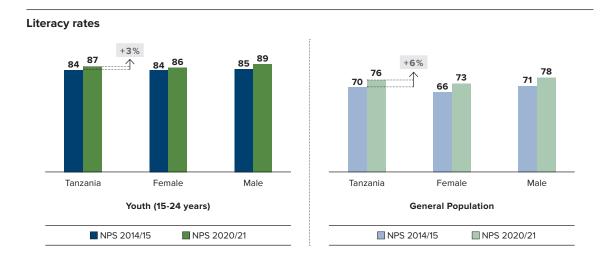
SOCIAL Literacy, Education, Food Security

NPS 2014/15

NPS 2020/21

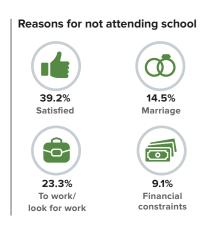
In Tanzania, 76 percent of the general population are literate. Improvements in literacy were widespread, though boosted in particular by those in Mainland Rural areas (increasing from 61 percent to 70 percent) and Zanzibar (increasing from 74 percent to 85 percent). Individuals in Dar es Salaam, where there is better access to educational services than rural areas, continue to have the highest literacy rates in the country (94 percent). While improvements were also reported across all areas for school-age children (now 68 percent for 6-12 year-olds and 77 percent for

7-13-year-olds), nearly 3 in 10 school-age children (7-13 years) in rural areas still cannot read and write. Literacy rates among youth ages 15-24 – those expected to have completed both preprimary and primary school – are considerably higher than those of the general population.



National and international efforts have also focused on achieving universal access to primary education. Since 2014/15, the national net enrolment rate in primary school for 7-13-year-olds has increased from 74 percent in to 82 percent in 2020/21, an improvement seen in all areas of the country and for both boys and girls. Although enrolment in rural areas remains lower than in urban areas, the gap is lessening. The Government of the United Republic of Tanzania further aims to ensure that the country's most vulnerable children – including orphans – be provided with access to education. These efforts are most apparent at the secondary level (Grades F1-F4), where the net enrolment rates for orphans (14-17 years) matches and even slightly exceeds that of non-orphans (39.3 and 39.0 percent, respectively).

One of the greatest barriers to education continues to be equity in access. For those who have stopped attending school, most indicate they are satisfied with the level of education they have acquired (39 percent), though 23 percent indicate they stopped in order to work – each reason more prevalent among males and those living in urban areas. Financial constraints were relatively non-existent in Zanzibar (1 percent), though fairly common in Dar es Salaam (16 percent). Females in rural areas and Zanzibar disproportionately reported that marriage was the main reason they were unable to attend currently school.





Substantial progress was also made in the health and nutrition of children in Tanzania. At the national level, stunting, wasting, and underweight rates for children under 5 each decreased between 2014/15 and 2020/21 and remain on track with national targets. Births attended by skilled birth workers increased from 70 percent to 85 percent – with vast improvements in rural areas – and 42 percent of women who gave birth did so in a hospital or maternity clinic.

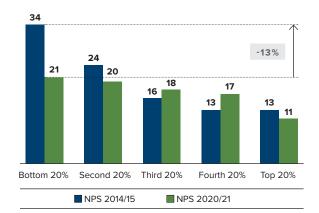
Steady progress in the economic and social development of Tanzania has been realized in an improved state of food security. Nationally, while 20 percent of the population were considered food insecure in 2014/15, just 17.5 percent of the population were food insecure in 2020/21. The proportion of the population experiencing each of the three elements of food insecurity – worried about not having enough food, experiencing negative changes in diet, and experiencing reduced food intake – all decreased between the two survey waves.

Remarkable improvements in food security were made in rural areas of the country and for the poorest population, two groups historically shielded from such improvements. Between 2014/15 and 2020/21, the proportion of the population in rural areas who were food insecure fell from 20 percent to 15.8 percent, and from 34 percent to just 21 percent for those in the poorest consumption-based welfare quintile. In contrast, urban food security has worsened and as of 2020/21 was higher in urban areas than in rural areas. Food security similarly worsened for those in the third and fourth quintiles. Those living on the Mainland, in addition to rural areas, reported the most notable improvements, while those living in Dar es Salaam and Zanzibar reported heightened food insecurity, nearly doubling in Zanzibar. Despite this, food insecurity in Zanzibar still remains low in comparison to the Mainland.

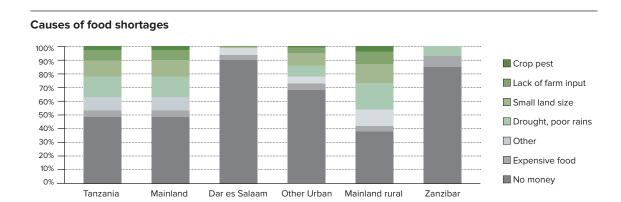
Population that is food insecure by area (%)

	NPS 2014/15	NPS 2020/21
Tanzania	20.1	17.5
Rural	20.0	15.8
Urban	20.4	21.6
Tanzania Mainland	20.6	17.6
Dar es Salaam	19.8	27.1
Other Urban	21.9	20.0
Rural	20.4	15.8
Zanzibar	6.5	11.2

Population that is food insecure, by welfare quintile (%)



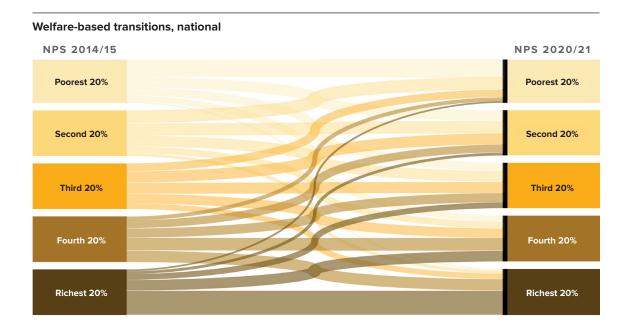
The average months with food shortage also fell, from 3.4 to 3.2 months, again driven by rural areas (3.4 to 3.1 months) and the Mainland (3.4 to 3.2 months). In Zanzibar, the number of months with food shortage *increased* – though still lower than the Mainland – from 2.5 to 2.7. Nationally, the most common causes of food shortages were a lack of money and drought. Financial constraints were much more common amongst non-farm households and those in urban areas, while drought/poor rains, along with small land size, a lack of farm inputs, and pests, expectedly affected more farm households.



In Dar es Salaam, nearly every household reporting food shortages said that the cause was a lack of money. Such financial constraints were similar in Zanzibar, except shortages here were additionally attributed to as expensive food costs.

ECONOMY Welfare, Labour, Agriculture

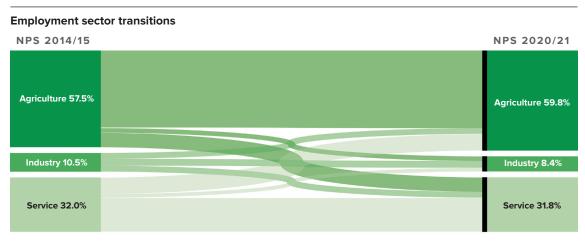
A key feature of the NPS is the ability to monitor and evaluate poverty dynamics in Tanzania. Nationally, welfare – expressed as consumption and spatially adjusted in the prices of each survey year – increased between 2014/15 and 2020/21 within each adult-equivalent consumption-based welfare quintile. For the poorest, average annual consumption was 2.4 TZS million (median: 2.1 TZS million) in 2014/15 and 2.6 TZS million (median: 2.3 TZS million) in 2020/21. Consumption in the highest quintile was 11.3 TZS million (median: 8.5 TZS million) in 2014/15 and 14.0 TZS million (median: 9.0 TZS million) in 2020/21. In 2020/21, median consumption for the bottom 40 percent was 2.8 TZS million, compared to 5.9 TZS million for the top 60 percent.



Welfare-based transitions evaluate the movement of households in and out of wealth quintiles over time. In Tanzania, these shifts have been vast and multi-directional. At the national level, fewer than half of the poorest households in 2014/15 remained in the poorest quintile, indicating that *more than half* were able to successfully transition to higher quintiles. Three percent of the poorest households were even able to transition to the wealthiest quintile. Those who were wealthy in 2014/15 generally remained wealthy in 2020/21, with more than half remaining in the wealthiest quintile (54 percent), and 24 percent transitioning down just one quintile.

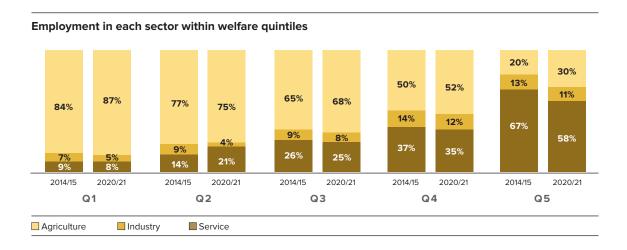
These welfare-based transitions were most pronounced in Zanzibar, where two-thirds of the poorest households moved out of the most extreme poverty and into higher wealth quintiles between 2014/15 and 2020/21. Here, the fewest wealthiest households also remained the wealthiest, with 6 percent transitioning to the poorest quintile. In contrast, welfare-based transitions were *least* fluid in Dar es Salaam, where the wealthy tended to remain wealthy and the poor tended to remain poor.

The labour force participation rate was stable at nearly 80 percent in 2020/21, with the highest rates among those 25-34 years of age (84 percent) and 35-64 years of age (89 percent). Youth unemployment and inactivity remains a concern, with 10 percent of those 15-35 years of age not taking part in either education, employment, or training. There are vast geographical discrepancies for this indicator, as this value is closer to 40 percent for youth in Zanzibar and 15 percent in Mainland urban areas.

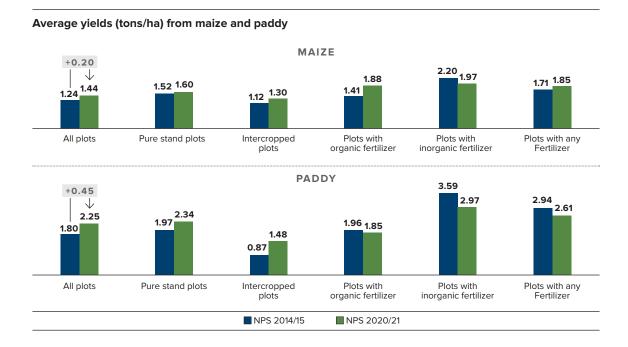


Employment proportions displayed here are calculated for a subset of the sample present in both waves and will not directly match round-specific point estimates

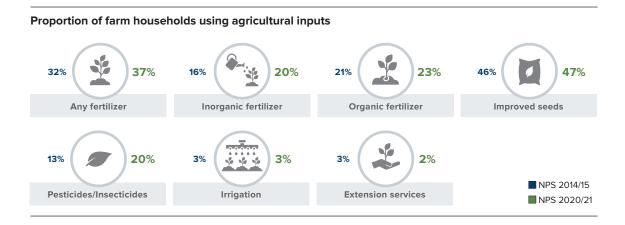
Agriculture remains the predominant sector in Tanzania, providing employment for 60 percent of the working population. Another 32 percent are employed in the service sector, increasing with urbanisation and as non-farm opportunities become more readily available. Employment in industries – though least common – was the most transitionary, as approximately two-thirds of those employed in the industry sector in 2014/15 had moved into the agriculture and service sectors by 2020/21.



Employment in agriculture expectedly decreased as household wealth increased, with 87 percent of individuals from the poorest households working in agriculture in 2020/21 and just 30 percent of those in the wealthiest households doing the same. In contrast, employment in services increased with household wealth as more than half of those in the wealthiest quintile worked in the service sector.



As the agriculture sector transforms alongside urbanisation, Tanzania remains a predominantly agrarian country and much of the untapped potential for economic growth relies on efficient and increased productivity. Results from the NPS 2020/21 indicate engagement in agricultural intensification appears increasingly common in farm households, with use of organic fertilizer, inorganic fertilizer, pesticides/herbicides, and improved seeds all increasing between 2014/15 and 2020/21. Nearly forty percent of farm households are now using fertilizers, while nearly half are using improved seeds.



Crop production remains dependent on rainfall, as just 3 percent of plots were irrigated. The use of mechanization in farm operations – crucial for increasing farm power – and agricultural extensions also remained low. In 2020/21, just 2 percent of farm households used agricultural extension services, with services from the government and large scale farmers most common.

The productivity of both maize and paddy plots increased between the 2014/15 and 2020/21, with an average yield of 1.4 tons/ha for maize and 2.3 tons/ha for paddy (using a GPS-based measurement of the area planted). For both crops, plots using inorganic fertilizer were the most productive as the average yield was 2.0 tons/ha for maize and 3.0 tons/ha for paddy.