Introduction
The first case of COVID-19 in Tanzania was confirmed in March 2020. The government immediately imposed restrictions on mass gatherings, suspended international flights and established special medical camps for COVID-19 patients. They also published guidelines and health measures to be followed by citizens and emphasised these through media and physically through local government officials located across the country.

Context
This study aimed to assess the real-time impact of the COVID-19 crisis on food systems and rural livelihoods in the APRA Tanzania study sites in mid-July 2020. A stratified random sample of 102 farmers (52 male and 50 female) was drawn from a larger APRA study of rice farmers in Kilombero District, along with five key informants, who were interviewed using mobile phones. The farmers and informants are residents of five villages, Chita, Makutano, Mchombe, Mkusi and Njage, which are believed to have had a high influx of people actively trading in various commodities including paddy/rice, and where there were some suspected/confirmed COVID-19 cases. Two additional rounds of research are planned in these sites during late 2020/early 2021 and the findings will be presented in later reports.

Health and disease
Findings show that all respondents were aware of the pandemic and just under 4% said they experienced COVID-19 symptoms in their households. Roughly 15.7% had heard of confirmed cases of COVID-19 in their villages. Only a quarter (24.5%) said they did not comply with official guidelines and health measures to prevent the spread of COVID-19.

“Agriculture has brought relief to people who have lost off-farm income during the COVID-19 crisis.” - Ward extension officer; Chita Ward

Farm labour and marketing
Following the onset of the COVID-19 pandemic, availability of labour for farming activities remained high, with 75.5% of farmers managing to hire labour to continue with their harvesting activities. The cost of hiring farm labour varied across households and villages, with a quarter (24.5%) of respondents reporting a decline, some 13.7% experiencing an increase, and just over half (53.9%) reporting no change. The availability and decline in the cost of labour was partly the result of people losing their jobs in off-farm sectors and returning to rural areas to seek short-term employment.

Respondents reported that their ability to sell produce at the farm gate (81.4%) and in local markets (56.9%) had decreased since the start of the pandemic. The price of rice, the main cash crop, declined by 40%, as the number of traders to the area had decreased by 70%, which has resulted in a significant decline in purchasing power.

Availability of services for agricultural production
Most respondents suggested that the availability and cost of certain food production services generally remained unchanged. The majority of respondents revealed that farm production services,

Key findings
- All farmers confirmed that they were aware of COVID-19, and the majority (75.5%) were following official guidelines for preventing the spread of the virus.
- Few farmers had been able to access extension services since COVID-19 began.
- Many people who earned a wage income had lost their jobs. Youths, in particular, had joined agricultural and fishing activities to cope with the loss of other opportunities.
- Farm labour had become more available, and local rates had gone down, but the post-harvest cost of paddy increased as the price of harvesting material rose.
- The number of paddy/rice traders had decreased by 70% since the start of COVID-19, leading to an oversupply of produce and a decline in prices by 40%.
- Roughly 50% of female-headed households reported experiencing increased food insecurity during the peak of the pandemic.
- Grains such as maize, and vegetables (e.g. tomato and onions) became less available and prices increased.
- More than half (58.8%) of farmers reported a decline in living standards since the start of COVID-19.
such as farm inputs, agriculture land for rent and agricultural extension services, were available, but their ability to access these services was constrained by financial difficulties imposed by the pandemic.

### Food and nutrition security

- Findings show that about 31.4% of respondent households were food insecure. Female-headed households (50%) were more food insecure than male-headed households (13.5%).
- Farmers had experienced a decline in their purchasing power and a rise in the cost of living following the start of the COVID-19 pandemic.
- The majority of respondents (92.9%) reported that they experienced a reduction in their food security status, with 60.7% stating that they were unable to eat healthy and nutritious food, and 61.9% consuming fewer types of food.
- Tomatoes and onions, key ingredients of daily meals, had become scarce and their prices had increased in local markets. The availability of maize, the local staple, had also decreased and market prices had increased.

### Responses to the threat of COVID-19

- Mass gatherings were prohibited; occasions such as sports, games and recreation were closed.
- Restrictions were imposed on the number of people attending religious services, funerals and wedding ceremonies.
- All educational institutions were closed for about three months.
- Over three-quarters (75.5%) of respondents stated that they followed the guidelines for controlling the spread of the virus.
- Roughly 30% of adult farmers stated that they reduced their movement both within and outside their villages, but young people reported lower levels of compliance.
- Agricultural extension officers stopped meeting farmers in groups and visited some of them one-on-one instead.
- People who lost their informal off-farm jobs and businesses, particularly youth, sought employment on local farms, and others took up fishing activities to secure their livelihoods.
- Other people increased their earnings by selling soap, sanitiser, face masks and buckets to reduce COVID-19 transmission.