

## 2 ZERO HUNGER



February 2023

# Helping eliminate hunger through DIGITAL FINANCIAL INCLUSION

In 2020, just under 2.4 billion people were without food or unable to eat a consistently healthy, balanced diet.<sup>1</sup> The food system is under increasing stress due to climate change and conflict. Women are more likely than men to report food insecurity in almost two-thirds of countries worldwide.<sup>2</sup>

## OPPORTUNITY

Digital innovation offers new opportunities for smallholder farmers to access more productive agricultural inputs, connect to new markets and value chains, and use financial products to improve productivity and bolster resilience to shocks.<sup>3</sup> As well as being highly reliant on their own agricultural produce for their food and nutrition security,<sup>4</sup> smallholder farmers play a critical role by producing 35% of the global food supply.<sup>5</sup>

## CHALLENGES

- A cash-based agricultural value chain creates information asymmetries between smallholder farmers and markets, resulting in **higher costs, less income for crops, and higher risks for farmers**.<sup>6</sup>
- The **visible impacts of climate change**—including extreme weather, higher temperatures, desertification, salinization, and the loss of biodiversity—pose significant risks to food security.<sup>8</sup>
- Food insecurity and malnutrition in all their forms are made worse by high and persistent levels of **inequality, including in access to information and technology**.<sup>10</sup>
- Women's financial exclusion can be in part due to the **restrictive social norms** that give them less access to assets and less decision-making authority than men.<sup>12</sup> These social norms can negatively affect food consumption and diet within households.<sup>13</sup>

## SOLUTIONS

- Digital financial services **improve the efficiency and transparency of agricultural value chains**. Farmers benefit through less-expensive inputs and greater market access. Digital financial services can also reduce farmer dependency on intermediaries and shorten transaction times.<sup>7</sup>
- Index-based agricultural insurance, which offers payouts based on external weather indicators, gives a **buffer against climate change shocks**. It thereby improves food security, particularly for rural smallholder farmers.<sup>9</sup>
- The digital delivery of social protection can positively impact **diet diversity and help to address food insecurity** for the undernourished, particularly in low-income and rural communities.<sup>11</sup>
- Digital financial services promote women's empowerment, economic participation, and food security. Women with bank accounts are more likely to have **greater bargaining power** and to allocate more household resources to buying nutritious food.<sup>14</sup>

## BANGLADESH

Households who received mobile money transfers ahead of peak flooding as part of a government emergency program were 36% less likely to go a day without eating.<sup>15</sup>



## UGANDA

The use of mobile money accounts **increased food security by 45% for rural households** in a year. It also led to cost savings for remittance transactions, and cut the share of households with very low food security.<sup>16</sup>



## CÔTE D'IVOIRE

In 2017, nearly 14,000 cocoa farmers saved around \$600,000 using mobile savings wallets. They were 50% less likely to have trouble feeding their families.<sup>18, 19</sup>



## BURKINA FASO AND SENEGAL

Women who bought index-based agricultural insurance had higher average yields and were better able to manage food insecurity and income shocks.<sup>17</sup>



## LEBANON

Digital transfers to 87,000 Syrian refugees via cards increased food and water expenditure by \$25 per month relative to non-recipients. **Each dollar that recipients spent generated \$2.13 of GDP for the Lebanese economy.**<sup>20</sup>



## KENYA

The use of mobile money helped farmers to overcome market access barriers. They were able to buy more inputs such as fertilizer, pesticides, and hired labor, and so had higher harvest sales.<sup>21</sup>

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