FEWS NET
FAMINE EARLY WARNING SYSTEMS NETWORK

# MALAWI Food Security Outlook JUNE 2018 to JANUARY 2019

## *Households in southern and central Malawi will face food and livelihoods deficits*

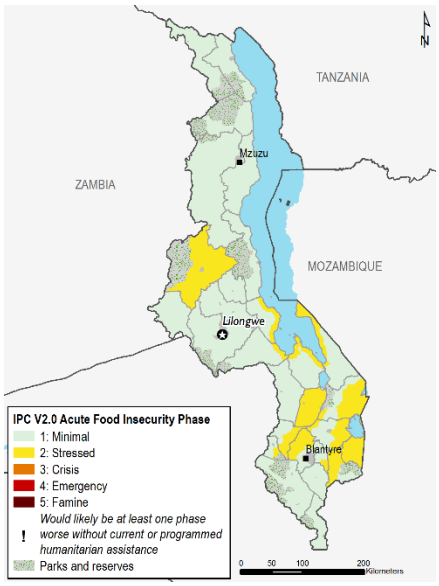
### KEY MESSAGES

- As the postharvest period continues, very poor and poor households in districts in the southern and central region will face Stressed (IPC Phase 2) outcomes from June to September. Most of these districts will transition to Crisis (IPC Phase 3) during the lean season from October to January, when food prices are at their highest and local cereal supplies are at their lowest. Drivers of the projected area outcomes include below-average access to income from casual labor opportunities and crop sales because of dryness and erratic rains during the 2017/18 cropping season, and above-average maize prices from November to January.

- The 2nd round production estimates showed that overall cereal production for the 2017/18 season was below average. Production of maize is 15 percent below the five-year average and other crops that registered a decrease include groundnuts, pulses, and cotton. Despite these reductions maize grain is readily available in markets and carryover stocks from the previous season will fill some of the national requirement gap.

- Maize prices are currently trending lower than the same time last year and slightly below average. Normal season trends for prices are expected during the outlook period. Maize prices are expected to increase from July to October, pushing prices closer to average during this period. From November onwards, maize prices will increase and trend above average. The increasing price and longer than normal length of time households will be required to make purchases will constrain purchasing power and result in livelihood protection and food deficits.

Current food security outcomes, June 2018




Source: *FEWS NET*

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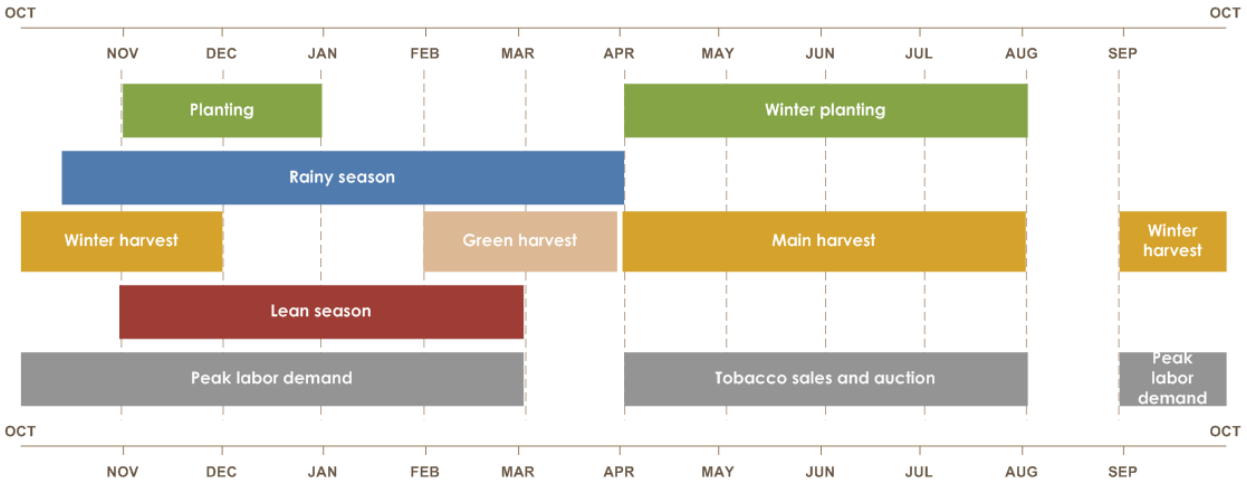
### SEASONAL CALENDAR FOR A TYPICAL YEAR




Source: *FEWS NET*

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## NATIONAL OVERVIEW

*Current Situation*

Households across the country began accessing food from their own production between March and May 2018. In the northern and most of the central region, households are consuming their own-produced crops, but due to prolonged dry spells and erratic rainfall, poor households in most of the south and parts of the central region are currently facing constrained access to food and cash during the postharvest period. Between April and June, households in most of the south began to rely on market purchases for food consumption a lot earlier than normal. Limited availability in harvest labor opportunities and lower crop sales for households is constraining cash flow. Labor opportunities in areas where irrigated/winter cultivation typically occur are also lower than normal.

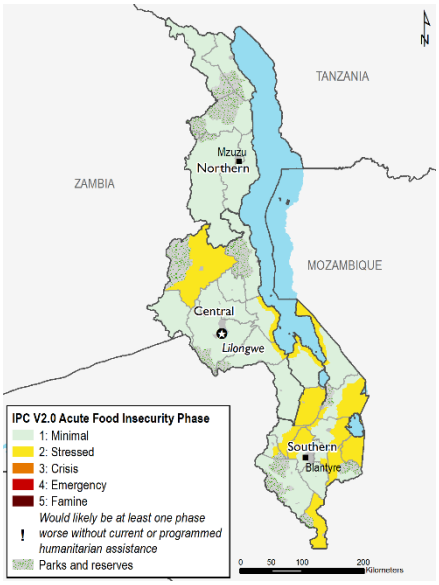
2nd Round production estimates released in April by the Ministry of Agriculture (MoA) showed that overall cereal production for 2018 was below average. Estimates showed that maize production is 15 percent below the five-year average and 19 percent below last year, while production of rice and millet are near average. National sorghum production registered a slight increase at 7 percent above the five-year average. Other key crops that registered a decrease include groundnuts, pulses, and cotton.

Decreases in crop production are expected to result in a decrease in household food availability among the very poor and poor wealth groups during the outlook period since agriculture and agricultural labor are key sources of food and income during a typical year. During the outlook period, livelihood and food deficits will be more pronounced in most of the south and a few parts of the central region of the country. Households that began consuming their own-production between March and May will finish their food stocks by October in parts of the central region. In the south, many households have finished consuming their own-production and have started to rely on market purchases for food. Most households in the north will have adequate own-production for the entirety of the consumption period.

Despite below-average cereal production, maize grain is readily available in most markets and prices are at or slightly below average. Supplies in markets are from the recent 2018 harvests as well as some carryover from the previous surplus-production season. National maize stocks in the Strategic Grain Reserve and Agricultural Development Marketing Corporation (ADMARC) are estimated at over 200,000 MT. Even though 2018 cereal production is 15 percent below national requirements, the carryover stocks from the previous season will bring the total estimated deficit to about 7 percent below national requirements. Alternative crops including legumes and tubers may help to cover the remaining requirement gap.

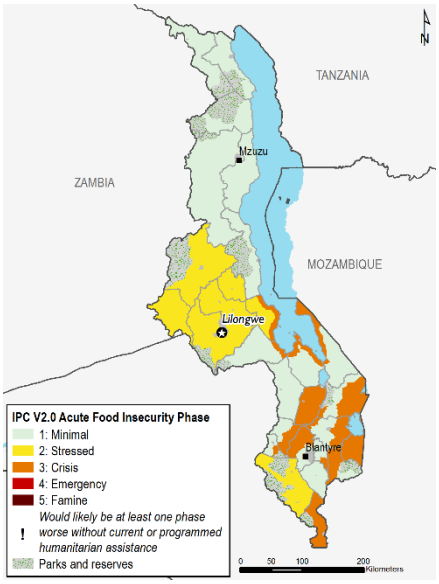
Maize prices are currently trending lower than the same time last year and slightly below the five-year average. Increases are expected from July to October, and prices will be closer to the five-year average at that time.

Projected food security outcomes, June to September 2018




Source: *FEWS NET*

Projected food security outcomes, October 2018 to January 2019




Source: *FEWS NET*

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*National Level Assumptions*

From June 2018 to January 2019, the projected food security outcomes are based on the following key assumptions:

- **National food stocks/ADMARC /Informal trade/Imports**: Maize stock levels at the national level is below normal and will remain this way throughout the outlook period and consumption year. Based on the Ministry of Agriculture 2nd round

estimates, cereal production for the 2018-18 cropping season was 2,791,741 MT. This is about 15 percent below the five-year average and 15 percent below national requirements. However, the total estimated cereal deficit comes to 7 percent below national requirements once over 200,000 MT of carryover stocks from the Strategic Grain Reserve and Agricultural Development Marketing Corporation (ADMARC) are taken into consideration. FEWS NET estimates that the remaining cereal deficit (7 percent) can easily be covered by informal inflows and alternative foods including legumes and tubers.

- **Informal cross border trade**: Informal cross border trade of staples continues to play an important role in ensuring food availability between neighboring countries. Levels of informal cross border trade inflows, especially of maize staple, will increase during the outlook period. FEWS NET historical data shows that increased volumes of informal maize imports from neighboring Mozambique, Zambia, and Tanzania typically range from 20,000-65,000 MT during deficit years (based on the level of national deficits and local demand). In March 2018, import levels were 11 percent above the five-year average and month-on-month flows of informal maize grain from Mozambique and into deficit areas in the south increased by 21 percent. Additionally, month-on-month exports to Tanzania declined by 49 percent, decreasing from 4,562 MT in February to 2,314 MT in March. This decline is likely due to the existing export ban, stricter controls, and reduced demand from Tanzania.

- **Household food stocks (own produced crops/local food purchases):** Cereal stocks at the household level will remain below average in the central and southern regions of the country due to a below-average production for the 2017/18 season because of seasonal dryness and erratic rainfall. As a result, households in these regions will need to rely on market purchases for consumption for longer periods than normally expected. Households in the south will only have 3-4 months of own-produced crop for consumption, while in the central region households will likely have about 9 months of own-produced crop for consumption. Households in the north experienced a favorable cropping season and will have adequate own-produced food stocks.

- **Income availability from crop sales:** Earned income from the sale of cash crops (e.g. tobacco, cotton, soya bean) will be below average due to the decrease in 2018 crop production levels. Households normally sell their crops and access income from these crop sales from mid-April to August. According to the 2nd round crop estimates, tobacco production decreased to 14 percent below average, while cotton declined to levels that are 64 percent of the five-year average. Additionally, alternative cash crops like legumes (e.g. soya, groundnuts, and beans) face dwindling demand and decreasing prices. Ministry of Agriculture market information indicates that soya, groundnut, pigeon pea, and cow pea prices have decreased by 50 percent since the previous marketing season.

- **Income availability from livestock sales:** Household livestock levels and prices will remain slightly above average from June to September because of the previous surplus-producing cropping season. During a FEWS NET assessment in May 2018, the price of one goat was enough to purchase three 50 kg bags of maize grain. Livestock prices will begin to decline from October to January as more households begin to engage in desperate sales to buy food. An increase in the sales of goats and chickens during this period will also decrease prices. Normally during the lean period following a poor cropping season livestock prices decrease by as much as 40-50 percent below normal levels, while maize prices will increase, worsening livestock terms-of-trade.

- **Agricultural labor availability and rates:** FEWS NET's assessment in May revealed that harvest and irrigated cultivation labor was limited and lower than normal. From June to September, agricultural labor opportunities and rates will be below normal. Factors affecting these levels include the poor 2017/18 production season, increased competition for *ganyu*/labor because of the need to purchase food, and reduced incomes for the middle and better-off households that typically hire labor. Once the 2018/19 farming season begins, labor opportunities will increase to normal levels from October to January, however wage rates will still be below average owing to the two factors listed above.

- **Non-agricultural labor availability and rates**: Throughout the outlook period, non-agricultural labor (e.g. self-employment, firewood, and charcoal sales) opportunities and wages for poor and very poor households will remain below normal because of the reduced incomes earned by middle and better-off household from the 2018 crop harvest.

- **Seasonal forecast for irrigated production (June-Sept):** Residual moisture levels for parts of southern Malawi that do 2nd season cropping will be below average through the end of the 2nd season, thereby reducing irrigated crop prospects.

- **Seasonal forecast for 2018/19 main production season**: The most likely ENSO phase for October 2018 to January 2019 is El Niño, but there is some uncertainty in this forecast, particularly regarding Indian Ocean SSTs. Based on the El Niño forecast, below-average rainfall is the most likely outcome during the early portion of the southern Africa rainy season between October 2018 to January 2019. There is still a lot of uncertainty in this forecast and it may shift in the periods closer to the start of season. In addition, there is an increased probability for a late start of the rains in some eastern and central areas, which are likely to be erratic in terms of spatial and temporal distribution. Current forecasts point to an average production season in the northern half of Malawi and below-average production in the southern half of Malawi for the 2018/19 season.

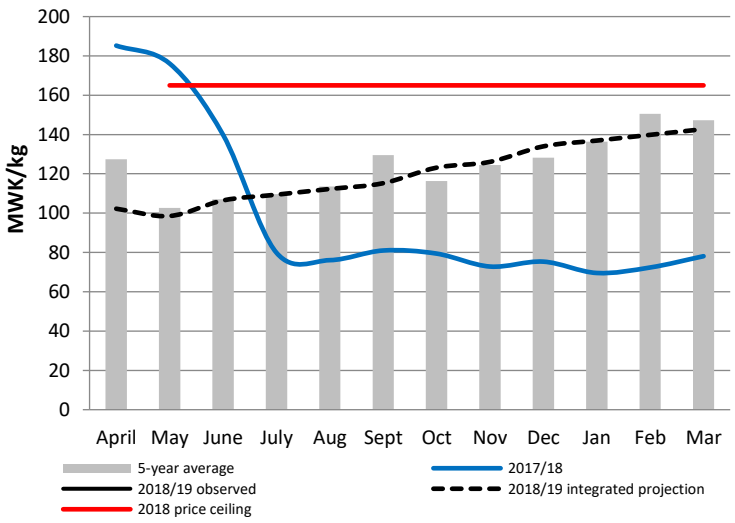
- **Crop and animal pests and diseases:** High density populations of Red (Nomadic) Locusts were reported in Lake Chilwa/Lake Chiuta Plains and are being sold in markets near the outbreak areas. Although Fall Armyworm (FAW) infestations were reported to affect approximately 290,000 Ha of maize, sorghum, and millet and about 963,000 farming households during the previous 2017/18 season (*Ministry of Agriculture*), no evidence of the impact of the infestation on production was reported. During FEWS NET's assessment in May, FAW infestations were reported in irrigated cultivation areas. The FAW is expected to be a threat to crops during the 2018/19 cropping season. An outbreak of foot and mouth disease in Blantyre and Neno has disrupted livestock markets and resulted in a temporary ban of livestock slaughter as the MoA works to contain the disease.

- **Integrated maize grain price projections**: National average prices for maize are trending slightly below average during the immediate post-harvest period but will start increasing from July to October and trending near average. From November through the end of the 2018/19 consumption year, maize prices will experience significant increases and trend above the five-year average. FEWS NET's integrated analysis shows that prices will decline in June 2018 before starting to increase and follow season trends onwards. Between July and September maize prices are projected to range between MWK 100-120/kg, and MWK 114-154/kg between October and January.

- **Humanitarian assistance**: Humanitarian assistance is not currently planned, funded, or likely at this time. Identification of populations requiring humanitarian assistance will be completed by the Malawi Vulnerability Assessment Committee (MVAC) in July 2018. FEWS NET will be updating this assumption as new information emerges.

- **Prevalence of acute malnutrition:** In January/February 2018, the MVAC conducted a SMART survey. The survey results indicated that the GAM prevalence during the peak of the lean season was at 1.3 percent (CI 95% : 09-1.9). This GAM prevalence was within acceptable WHO thresholds and lower than the prevalence recorded in December 2016, one of the worst lean seasons in the recent past. The results from the 2018 nutrition survey is the only recent nutrition data available, yet the results reflect the favorable food security conditions during the 2017/18 consumption year. Based on nutrition data that is currently available, FEWS NET assumes that the GAM prevalence will continue to be low during the June to September period, but may start to increase during the October 2018 to January 2019 period in the absence of humanitarian assistance to fill current and projected livelihood protection and food deficits.

**Figure 1.** Mitundu, Malawi Maize Grain prices and projections (MWK/kg)




Source: *FEWS NET Estimates based on Ministry of Agriculture data.*

*Most Likely Food Security Outcomes*

**June-September 2018:** Food security outcomes for districts in the northern region will be Minimal (IPC Phase 1) due to the average to above average 2018 production because of the favorable rainfall during the cropping season. In the central region, Stressed (IPC Phase 2) outcomes are expected among very poor and poor households in three districts (Kasungu, Dedza, and Salima) within the Kasungu-Lilongwe Plain Livelihood Zone (KAS) and Southern Lakeshore (SLA) livelihood zone. These areas will face Stressed (IPC Phase 2) outcomes due to below-average production and lower than normal labor opportunities caused by the erratic rains experienced during the 2017/18 cropping season. In the south, several districts (Machinga, Zomba, Chiradzulu, Mulanje, Phalombe, Blantyre, Mwanza, Neno, Balaka, Mangochi, and Nsanje) spanning the Lake Chilwa Phalombe Plain (PHA), Middle Shire (MSH), Lower Shire (LSH), and Southern Lakeshore (SLA) livelihood zones will also face Stressed (IPC Phase 2) food security outcomes during this period. Households will have lower than normal access to incomes from crop sales, agricultural labor, and non-agricultural labor. Based on nutrition assessment trends in the recent past, and the SMART survey conducted during the lean season in January/February 2018, the national GAM prevalence will continue to fall within 'acceptable' WHO thresholds. Food consumption is expected to be at borderline and acceptable levels. Food prices will be near the five-year average.

**October 2018-January 2019:** During this period prices are normally at their highest and food supply levels are at their lowest. As very poor and poor households in the central region deplete their own-produced food stocks and rely on market purchases for consumption, Kasungu, Lilongwe, Ntchisi, and Mchinji districts will be facing Stressed (IPC Phase 2) outcomes, while Dedza and Salima will begin facing Crisis (IPC Phase 3) outcomes and will need humanitarian assistance. In the south, very poor and poor households in Chikwawa district will begin to experience Stressed (IPC Phase 2) outcomes while outcomes are expected to deteriorate to Crisis (IPC Phase 3) outcomes in Machinga, Zomba, Chiradzulu, Mulanje, Phalombe, Blantyre, Mwanza, Neno, Balaka, Mangochi, and Nsanje districts and households will need humanitarian assistance. Based on historical nutrition trends, the GAM prevalence may worsen slightly during this period in the affected districts but is still expected to fall within 'acceptable' WHO thresholds.

## AREAS OF CONCERN

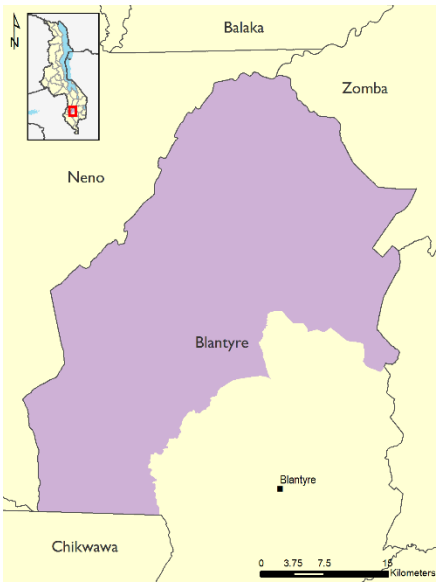
### *Middle Shire Livelihood Zone, Blantyre District*

*Current Situation*

- The Middle Shire Livelihood Zone (MSH) is in the middle section of the Shire River in southern Malawi. Conditions are typically dry in this livelihood zone that includes parts of Mwanza, Neno, Balaka, Blantyre, Machinga, and Zomba district. Although the main topographical feature of this zone is a river, fishing activities are very small-scale, and irrigation is limited to those villages close to the river. Rainfall levels in MSH are low and the mean annual precipitation ranges from 500–850 millimeters.

- Rainfed crop cultivation drives the rural economy in this zone and there is some small-scale irrigated farming in the riverine valley during the winter season. Maize is the dominant crop and supplementary crops include sorghum, sweet potato, cassava, pigeon peas, cowpeas, and groundnuts. Due to lack of grazing, households only keep a few small livestock as a safety-net. Overall, the zone is only a moderately productive and most years it is a food deficit area.

**Figure 2.** Reference map for MSH Livelihood Zone, Blantyre district.




Source: *FEWS NET*

- During FEWS NET's field assessment in May, households were engaged in vegetable production, irrigated cropping, casual labor, and selling firewood, charcoal, and thatch grass.

- During the 2017/18 cropping season, effective rains started in early November 2017 and during this time approximately 40 percent of farming households planted their crops. In early December more rain came, and the remaining households planted their crops. By the end of December, the rainfall distribution was poor, and the district began experiencing a dry spell. Despite rainfall resuming in early 2018, by May 2018 the mean rainfall in the district was 485.4 mm in 32 rainy days. At this same time last season, the district had received 564.1 mm in 37 rainy days (*Ministry of Agriculture* reports).

- Overall, the prolonged dry spells occurred at a critical time for crop development and erratic rainfall throughout the season had negative impacts on germination, causing permanent wilting in some cases. In addition to the rainfall factors, the presence of plant pests and diseases this season, including Fall armyworm (FAW), aphids, and rosette disease in groundnuts were lesser factors that contributed to reduced production in the area.

**Table 1.** Blantyre district production trends.

| | 2012/13 (MT) | 2013/14 (MT) | 2014/15 (MT) | 2015/16 (MT) | 2016/17 (MT) | 2017/18 (MT) |
|---|---|---|---|---|---|---|
| Maize (Rainfed) | 102,683 | 107,018 | 81,202 | 52,422 | 96,142 | **50,149** |
| Ground Nuts | 7,687 | 7,615 | 8,105 | 6,666 | 9,658 | **8,091** |
| Sorghum | 4,065 | 4,212 | 4,168 | 2,918 | 4,521 | **4,183** |
| Tobacco (Kgs) | 129,213 | 174,637 | 178,940 | 89,482 | 112,031 | **92,967** |
| Sweet Potatoes | 92,916 | 104,700 | 117,389 | 103,970 | 136,446 | **85,544** |
| Pigeon Peas | 23,772 | 26,565 | 26,746 | 25,470 | 31,570 | **26,809** |
| Cotton | 2,559 | 1,697 | 1,271 | 321 | 744 | **100** |

Source: *MoAIWD*

- Rainfed crop production for the 2017/18 production season was below average and district-level production data shows that maize production is 43 percent below the five-year average.

- Production for other key food and cash crops including groundnuts, cotton, pigeon peas, and leafy vegetables were also below average. In contrast, because households rushed to the irrigated production of tomatoes after rainfed crop losses, tomato production is estimated to be above average. Current crop sales were minimal or non-existent due to very low production.

- Some households did not harvest anything during the 2017/18 season. Very poor and poor households in MSH harvested enough crops to provide about 1 month of food consumption and have begun relying on market purchases for their food. Community interviews revealed that most households were consuming two meals per day as compared to the normal three meals, and some were already consuming one meal per day. Most households also reported being restricted to a diet of *nsima* or maize meal with vegetables, legumes, or silver fish. Typically, during the harvest and post-harvest period households have improved access to a more diverse diet, but this is not the case this year.

- In general, casual labor opportunities on farms are low during the April-June period during a typical year. Since the 2018 harvests are below average, households found very few harvesting labor opportunities during that period. Most of the available agricultural labor was in far-off estates. Labor wage rates ranged from average to above average. Off-farm labor opportunities were lower than normal as well, but wage rates were high.

**Table 2.** Available food security outcome data for Blantyre.

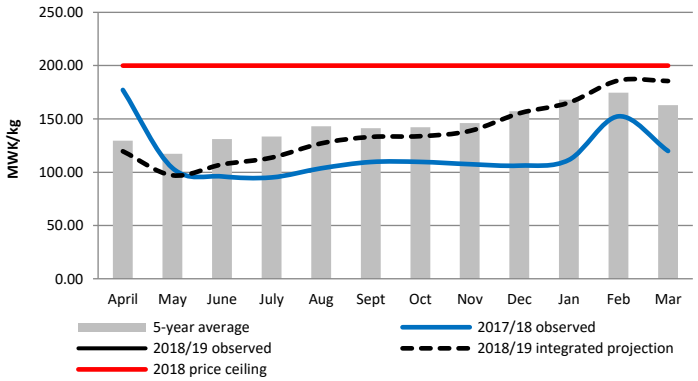
| Outcome | Evidence Type and date | Indicator | Results | Indicative IPC Phase |
|---|---|---|---|---|
| Food Consumption | FEWS NET HEA Outcome Analysis, May 2018 | HEA | Very poor HHs: SD of 23%, LP deficit of 100%<br>Poor HHs: SD of 16%, LP deficit of 100% | Phase 4<br>Phase 3 |
| | MVAC/UNICEF SMART Survey, Jan/Feb 2018 | HHS | 6.9 percent had HHS between 4 and 6; 48.3 percent had HHS between 2 and 3; 44.7 percent had HHS between 0 and 1 | Phase 3 |
| | | FCS | 10.3 percent "poor" FCS, 40.8 percent "borderline" FCS, 48.9 percent "acceptable" FCS food consumption | Phase 3 |
| Nutrition | | GAM | 1.3 percent (95% CI: 0.5 to 3.2) | Phase 1 |
| Mortality | | Crude death rate | 0.17 (CI: 0.02-1.52) | Phase 1 |
| | | Under 5 death rate | 0.00 (CI: 0.00-0.00) | Phase 1 |

Source: MVAC/UNICEF, *FEWS NET*

- Based on community interviews and Ministry of Agriculture reports, households reported walking long distances to farms to find work to afford food purchases. Households were going to Blantyre city for casual labor and to sell firewood and thatch grass.

- Maize, rice, sweet potatoes, beans, pigeon peas, cowpeas, soya, groundnuts, and cassava were available on markets and prices were lower than at the same time in 2017. In April, maize prices were about 17 percent below the five-year average. In Lunzu market, maize grain was MWK 119.62/kg compared to 165/kg in April 2017.

**Figure 3.** Lunzu, Malawi Maize Grain prices and projections (MWK/kg)




Source: *FEWS NET Estimates based on Ministry of Agriculture data.*

- During FEWS NET's field assessment in May, community interviews revealed a mix of decreasing and increasing livestock numbers. In some villages, goat holdings have generally increased and are higher than normal. These increases are mostly due to assistance interventions where breeding livestock is given to households without livestock. In other communities, livestock numbers generally declined. The livestock conditions were still okay due to the good pasture and very good rainfall received during the 2016/17 season. Livestock prices were also higher than normal in May.

- The most recent SMART survey was conducted in this area during the peak of the lean season in January/February 2018. The GAM prevalence, HHS, and FCS at that time were indicative of IPC Phase 1 and IPC Phase 3 outcomes (see table). Based on the timing of these nutrition and food security indicators, FEWS NET assumes that these indicators have improved because of the green harvest, access to the 2018 harvest, as well as some income from on-farm and off-farm labor.

- FEWS NET's HEA Outcome Analysis was conducted on data collected in May 2018 and found that poor and very poor households are already facing Stressed (IPC Phase 2) outcomes due to reduced income earning opportunities and below-average 2018 production.

*Assumptions*

- Availability of own-produced crops will be minimal for poor and very poor households since most produced only enough food to last until May. Households that realized very small harvests or none started purchasing food in May.

- Incomes earned by farming households will be limited due to the impact of seasonal dryness on maize, cotton, groundnuts, and other legumes.

- Agricultural labor opportunities are expected to become available at the start of the 2018/19 main cropping season in October/November and will be average. Labor opportunities during the peak labor period (December 2018 – January 2019) are assumed to be average. However, wages may likely be lower due to more households looking for labor.

- Prices for livestock are expected to continue to be above-normal levels during the post-harvest period, dropping once desperate sales increase during the lean season period (October 2018-January 2019).

- Income from crop sales (cotton and pigeon peas) will be significantly reduced for households between June 2018 and January 2019 due to the below-average 2018 production.

- FEWS NET's integrated price projections for maize indicate that slightly below-average prices are expected between June and August due to the surplus maize that is available from the previous good season. During the September 2018 to January 2019 period, prices are expected to rise to slightly above average.

*Most Likely Food Security Outcomes*

Below-average production during the 2018 cropping season has resulted in households relying on food purchases earlier than normal and for a longer period than typical. Normally very poor and poor households can consume their own-produced crops for 4-6 months, but this consumption year households have produced considerably less. The HEA Outcome Analysis conducted by FEWS NET shows that households are experiencing livelihood protection deficits and are Stressed (IPC Phase 2) currently. These deficits are expected to increase from June onwards. During the postharvest period, households will search for casual labor opportunities in Blantyre City, and will sell vegetables, charcoal, and firewood for income so that they can make food purchases, but these amounts will be inadequate. As the 2018/19 cropping season begins, outcomes among very poor and poor households will deteriorate further. Households will not be able to cover approximately 16-23 percent of their food needs during this period. Crisis (IPC Phase 3) area outcomes are expected for October 2018 to January 2019. Humanitarian assistance will be required to protect livelihoods.

### *Phalombe-Lake Chirwa Plain Livelihood Zone, Zomba District*

*Current Situation*

- The Phalombe plain-Lake Chirwa (PHA) Livelihood Zone includes parts of Machinga, Zomba, Mulanje, Phalombe, and Chiradzulu districts. The topography is generally flat with poorly drained sandy to clay soils, lending to the generally poor crop production potential. Maize (both rainfed and irrigated), rice, sorghum, cassava, sweet potatoes and pigeon peas are grown for consumption. Rice, along with pigeon peas and cassava are the main cash crops.

- Livestock sales, small-scale trade, self-employment (such as firewood sales and brick making), and a range of casual seasonal employment opportunities, mostly on local farms, but also in construction, provide households with additional cash income.

- Normally the rainfall season starts in this area by mid-November. During the 2017/18 cropping season, the majority of Zomba district received effective rains between late October and late November, resulting in planting among most farming households during this period. A few other areas received rains between late November and early December.

**Figure 4.** Reference map for PHA Livelihood Zone, Zomba district.


Source: *FEWS NET*

**Table 3.** Zomba district production trends.

| | 2012/13 (MT) | 2013/14 (MT) | 2014/15 (MT) | 2015/16 (MT) | 2016/17 (MT) | 2017/18 (MT) |
|---|---|---|---|---|---|---|
| Maize (rainfed) | 130688 | 152973 | 85166 | 46123 | **140650** | **87756** |
| Sorghum | 5702 | 6138 | 5800 | 5065 | **6673** | **5541** |
| Rice | 8409 | 9182 | 8311 | 1699 | **7650** | **5847** |
| Groundnuts | 7726 | 8068 | 6719 | 5302 | **8044** | **7223** |
| Pigeon peas | 28294 | 29917 | 25952 | 26905 | **30425** | **26328** |
| Cassava | 216128 | 200606 | 184468 | 172388 | **188137** | **192506** |

Source: *MoAIWD*

- The district experienced dry-spells between late December and late January across all EPAs. Since this was during the critical stage of crop development, requiring a lot of water, the dryness caused wilting of approximately 43 percent of 75,000 hectares of maize. Approximately 2.5 percent of this crop was written-off while the remaining crop recovered minimally, resulting in reduced yields.

- 2018 Rainfed maize production for Zomba district is 21 percent below the five-year average, while rice, pigeon pea, and sorghum production are below average as well. Production of cassava is almost at average levels while sweet potatoes is the only crop that registered an increase in production of about 28 percent above the five-year average.

- Harvesting and agricultural labor (*ganyu*) opportunities were below average due to significant reductions in crop production.

- During FEWS NET's field assessment in May, very poor households were eating two meals per day and consuming a low diversity diet of mostly maize (*nsima*), vegetables, and pigeon peas. Some very poor and poor households in the worst- affected areas were already relying on the market at a time they usually consume own produced foods. Middle and better-off households produced enough just to last until August, so they are still consuming their own produced food.

**Table 4.** Available food security outcome data for Zomba district.

| Outcome | Evidence Type and date | Indicator | Results | Indicative IPC Phase |
|---|---|---|---|---|
| Food Consumption | FEWS NET HEA Outcome Analysis, May 2018 | HEA | Very poor HHs: SD of 16%, LP deficit of 100%<br>Poor HHs: SD of 0%, LP deficit of 98% | IPC Phase 3<br>IPC Phase 3 |
| | MVAC/UNICEF SMART Survey, Jan/Feb 2018 | HHS | 6.5 percent had HHS between 4 and 6; 44.2 percent had HHS between 2 and 3; 49.2 percent had HHS between 0 and 1 | IPC Phase 3 |
| | | FCS | 11.1 percent "poor" FCS, 42.4 percent "borderline" FCS, 46.5 percent "acceptable" FCS food consumption | IPC Phase 3 |
| Nutrition | | GAM | 1.4 percent (95% CI: 0.7 - 3.0) | IPC Phase 1 |
| Mortality | | Crude death rate | 0.41 (CI: 0.21-0.81) | IPC Phase 1 |
| | | Under 5 death rate | 0.00 (CI: 0.00-0.00) | IPC Phase 1 |

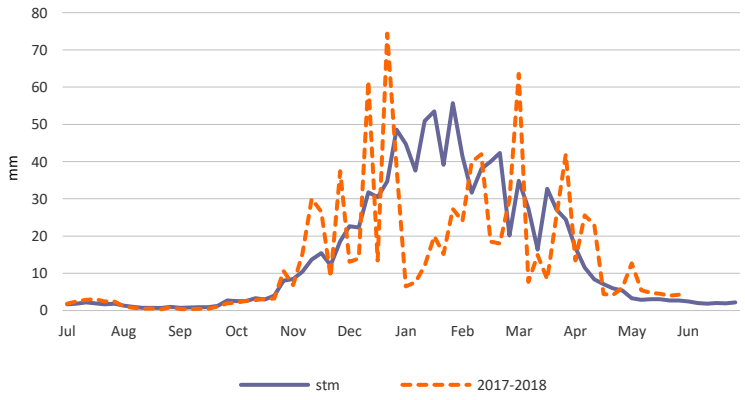
Source: *MVAC/UNICEF, FEWS NET*

- In May, the prices of major food commodities were below average. Maize prices were 16 percent below average according to data from the Agricultural Market Information System (AMIS). However, in comparison to the same month in 2017, the current price is 18 percent higher.

- Major commodities that are currently available on the markets include maize, rice, sweet potatoes, pigeon peas, and all vegetable types. Current supply levels for the maize grain are near normal owing to slightly above-average carry-over stocks from the 2017 production season and subsequent lower demand during that consumption period.

- Current livestock conditions as well as prices are generally normal for this time of the year. Goat prices range from MWK 15,000-18,000, which at that time would allow a household to purchase three 50-kilogram bags of maize for consumption.

**Figure 5.** Pentadal 2017-2018 rainfall distribution for Zomba district




Source: *FEWS NET/USGS/EROS*

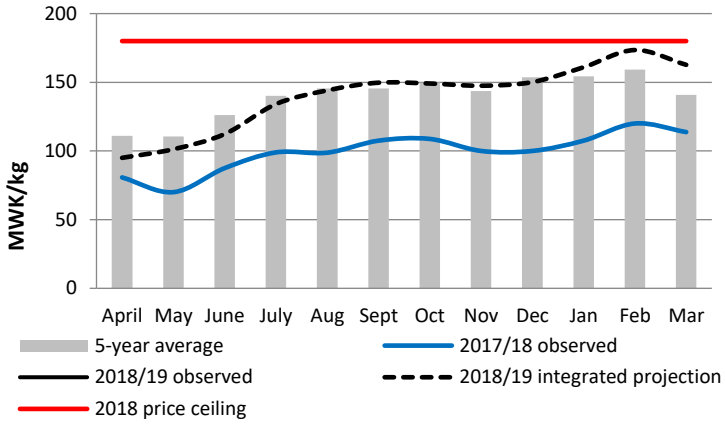
- Typically, households start migrating to Mozambique in search of labor opportunities between October and February, but in May very poor households were already migrating to Mozambique in search of agricultural labor opportunities. Households that have access to *dimba* land are weeding their irrigated crop and are doing vegetable production.

- FEWS NET's HEA Outcome Analysis was conducted on data collected in May 2018 and found that poor and very poor households are already facing Stressed (IPC Phase 2) outcomes due to below-average production of maize, pigeon peas, and rice, as well as the reduced income earning opportunities associated with farming activities.

*Assumptions*

- Typically, own-produced crops are accessed between the months of April and September. Due to the below-average 2018 production, households in this area are expected to have access to significantly less own-produced cereals between from June to October. Households are also assumed to have to make market food purchases much earlier than normal during the June to October period.

**Figure 6.** Phalombe Maize Grain prices and projections (MWK/kg)




Source: *FEWS NET Estimates based on Ministry of Agriculture data.*

- Due to below-average moisture levels during the 2018 season, it is assumed that residual moisture levels for irrigated crop production will be below average during the June to October period. Second round agricultural production estimates already indicate that irrigated maize will be 7 percent below normal this season. FEWS NET therefore assumes that total irrigated production will only be about 75 percent of normal production. Irrigated maize provides about 10 percent of income for very poor households in PHA and is typically accessed in September and October.

- Both on-farm and off-farm labor availability in the post-harvest period (June to September) and lean period (October to January) is expected to be below normal due to reduced income for better-off households that normally hire the very poor and poor households. This is expected to negatively impact labor opportunities and hence income for the poorer households. Most of the on-farm activities during the first half of the projection period includes land clearing while off-farm activities include brick production. The second half of the outlook period is the most agricultural labor-intensive period.

- Overall, livestock conditions and prices are expected to follow normal trends throughout the outlook period owing to the availability of pasture for animal feed.

- FEWS NET's integrated price projections for maize indicate that prices will likely follow regular seasonal patterns. In June prices will likely trend below average until August. Afterwards, prices will start to trend towards above-average levels through September. This upward trend is expected to continue for the remainder of the outlook period due to dwindling supplies. During the August 2018 to January 2019 period, prices are expected to trend above 2017-levels and above average.

*Most Likely Food Security Outcomes*

Very poor and poor household food stocks are expected to be finished much earlier than usual due to the below-average crop production this season. Despite the limited availability of income from cultivation labor that will become available in August, households relying on markets for food purchases will be unable to meet their livelihood protection needs. Stressed (IPC Phase 2) outcomes are projected for this area. FEWS NET's HEA Outcome Analysis indicates that during the latter half of the outlook period, very poor households will experience food deficits while poor households will experience very large livelihood protections deficits, resulting in Crisis (IPC Phase 3) area outcomes. Humanitarian assistance will be required to protect livelihoods.

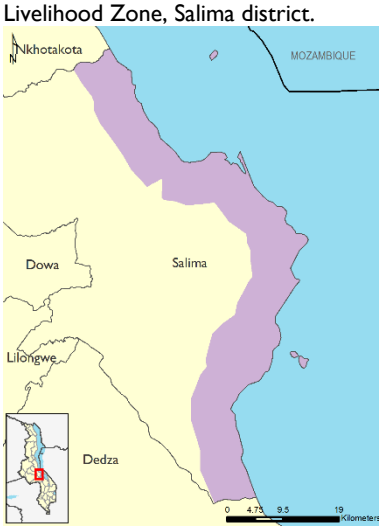
***Southern Lakeshore Livelihood Zone, Salima District***

*Current Situation*

- The Southern Lakeshore (SLA) Livelihood Zone is comprised of a thin strip of land extending approximately five-kilometers inland from Lake Malawi, including Salima district on the western side of the lake and the northeastern part of Mangochi

district on the opposite side of the lake. Soils within the zone are poorly drained and not very fertile in this area. Rainfall is unreliable, and averages range from 600-1,000 mm per year. SLA is a principle fishing area in the country and poor households can earn income from casual labor related to fishing, although in recent years the scale of fishing has declined, and the importance of livestock and trade has increased.

**Figure 7.** Reference map for SLA Livelihood Zone, Salima district.




Source: *FEWS NET*

- Own crop production is the main source of food for households, followed by market purchases. Food assistance and fishing typically provide a small amount of food for households, as well as food obtained in exchange for work. Maize (mostly rainfed) is the major crop in this zone, with a small amount of irrigated maize during the winter months. Households also grow and consume rice, cassava, sweet potatoes, groundnuts, and a variety of vegetables. All crops are typically sold, along with cotton. In a typical year, 55-70 percent of caloric needs are covered by own production.

- Crop production for the 2017/18 season was below average. Rainfed maize production for Salima district was below the five-year average. Other key food and cash crops that registered below normal amounts this season included rice, cotton, cassava, and sweet potatoes.

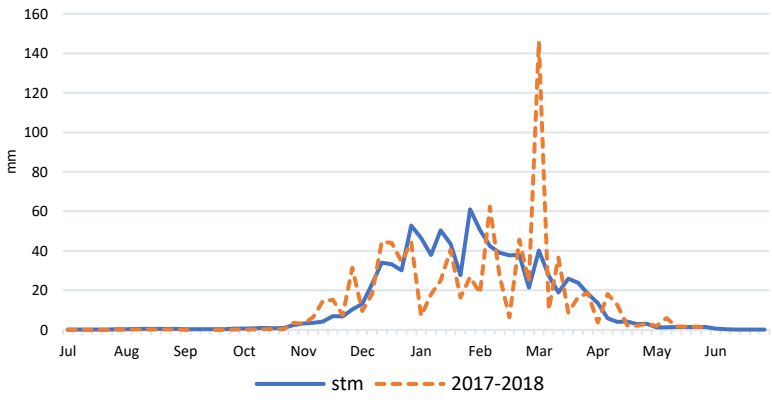
- Rainfall for the 2017/18 cropping season started in mid to late December. By early January most areas in the district began to experience a prolonged dry spell that would last 2 months. Rains resumed in late February, followed soon thereafter by another dry spell in early March. During April, rains were light, and distribution was erratic. According to Ministry of Agriculture reports, despite the area having a cumulative rainfall total higher than the previous season, the erratic and poor moisture distribution caused poor germination of seeds, wilting among crops, premature drying, poor grain filling (for maize). In addition to the impact of the dryness on cropping conditions, several plant pests and diseases, including Fall Armyworm, also infested crops during the season. The current crop sales were minimal or non-existent due to very low production.

- During FEWS NET's field assessment in May, households were participating in some agricultural labor, fishing labor, petty trading activities, and livestock sales.

- Maize prices in the Salima market are around five-year average levels and approximately 40 percent below prices during the same month in 2017.

- Very poor and poor households in SLA produced enough own production to cover approximately 3 months of consumption. Most households will only manage to consume this food for April, May, and June, before starting to rely on market purchases. Some households that were hit hard by the dry spells and did not harvest anything began relying on market purchases for food as early as April 2018.

**Figure 8.** Pentadal 2017-18 rainfall distribution, Salima district.




Source: *FEWS NET/USGS/EROS*

- Community interviews revealed that in May households were consuming two meals per day as compared to the normal three. Most households reported low dietary diversity in their diet. They were consuming a diet of *nsima* (maize meal) with either vegetables, legumes, or silver fish.

- FEWS NET's field assessment in May revealed that livestock holdings among households were below average. Among the middle and better-off households, the size of cattle herds had declined in comparison to average. Livestock prices were still higher than normal owing to reduced desperate sells in the previous year where households produced surplus food.

- Current *ganyu* and non-agricultural labor opportunities, including fishing, were low at the time of the assessment. However, wage rates were above normal. Households also reported engaging in minimal irrigated cropping labor.

**Table 5.** Salima district production trends.

| | 2012/13 (MT) | 2013/14 (MT) | 2014/15 (MT) | 2015/16 (MT) | 2016/17 (MT) | **2017/18 (MT)** |
|---|---|---|---|---|---|---|
| Maize | 71,215 | 102,163 | 56,987 | 59,446 | 79,820 | **68,253** |
| Rice | 1,916 | 4,384 | 2,220 | 1,970 | 2,776 | **2,592** |
| Ground Nuts | 5,942 | 7,260 | 5,271 | 6,259 | 9,182 | **9,695** |
| Beans | 1,257 | 1,060 | 1,069 | 927 | 935 | **1,052** |
| Cassava | 803,454 | 28,709 | 27,502 | 27,897 | 29,061 | **27,630** |
| Tobacco (Kgs) | 24,574 | 1,283,455 | 964,661 | 794,878 | 302,081 | **560,955** |
| Cotton | 24,574 | 20,117 | 11,994 | 7,396 | 2,605 | **3,052** |
| Sweet Potatoes | 24,014 | 27,173 | 29,188 | 33,956 | 31,256 | **45,024** |
| Pigeon Peas | 274 | 202 | 113 | 135 | 152 | **87** |
| Cow Peas | 409 | 658 | 643 | 1,050 | 2,422 | **1,905** |
| Soya | 509 | 635 | 542 | 767 | 770 | **886** |

Source: *MoAIWD*

*Assumptions*

- Typically, own-produced crops are accessed between the months of April and September, but due to the below average 2018 production, households in this area are expected to have access to significantly less own-production between June and September.

- Livestock conditions are likely to deteriorate between June and September due to the low seasonal rainfall and poor recharge of pasture. Prices for livestock are expected to continue to be above-normal levels during the post-harvest period, dropping once desperate sales increase during the lean season period (October 2018-January 2019).

- Both on-farm and off farm labor availability in the post-harvest period is expected to be below normal due to reduced income for better-off households that normally hire the very poor and poor households. Agricultural labor is expected to be average during the peak of the 2018/19 agricultural season, October-January. However, labor wages may be lower than normal because of increased household competition for labor opportunities.

- Household income from crop sales will be significantly reduced this consumption period due to reduced cash crop production in the 2017/18 production season.

- Prices are currently near the five-year average and 40 percent lower than the same time in 2017. These price levels were being driven by surplus production registered during the 2017 harvest. FEWS NET's integrated price projections for maize indicate that prices between June and September will be near average and the 2017 price levels. Between October and

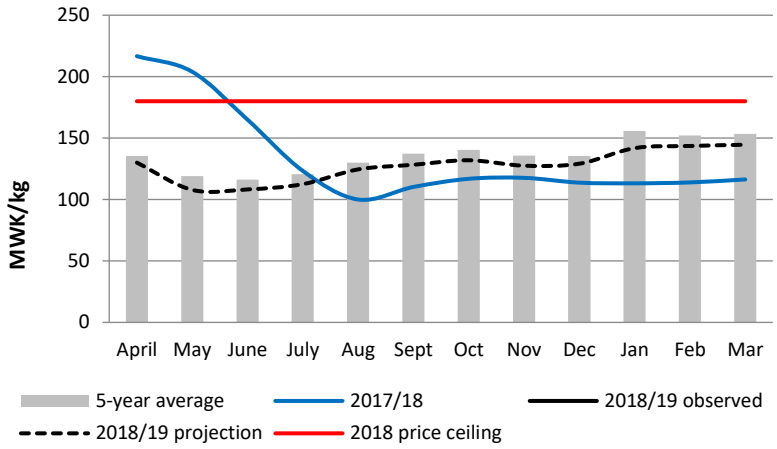
**Table 6.** Available food security outcome data for Salima district.

| Outcome | Evidence Type and date | Indicator | Results | Indicative IPC Phase |
|---|---|---|---|---|
| Food Consumption | FEWS NET HEA Outcome Analysis, May 2018 | HEA | Very poor HHs: SD of 6%, LP deficit of 100%<br>Poor HHs: SD of 0%, LP deficit of 68% | IPC Phase 3<br>IPC Phase 2 |
| | MVAC/UNICEF SMART Survey, Jan/Feb 2018 | HHS | 2.2 percent had HHS between 4 and 6; 35.4 percent had HHS between 2 and 3; 49.2 percent had HHS between 0 and 1 | IPC Phase 3 |
| | | FCS | 7.4 percent "poor" FCS, 39.3 percent "borderline" FCS, 53.3 percent "acceptable" FCS<br>food consumption | IPC Phase 3 |
| Nutrition | | GAM | 1.5 percent (95% CI: 0.7 – 2.9) | IPC Phase 1 |
| Mortality | | Crude death rate | 0.11 (CI: 0.04-0.35) | IPC Phase 1 |
| | | Under 5 death rate | 0.30 (CI: 0.04-2.24) | IPC Phase 1 |

Source: *MVAC/UNICEF, FEWS NET*

- January, maize prices will rise to be above the five-year average, but still near 2017 price levels and will likely follow regular seasonal patterns. In June prices will likely trend below average until August. Afterwards, prices will start to trend towards above-average levels through September. This upward trend is expected to continue for the remainder of the outlook period due to dwindling supplies. During the August 2018 to January 2019 period, prices are expected to trend above 2017-levels.

**Figure 9.** Salima Maize Grain prices and projections (MWK/kg)




Source: *FEWS NET Estimates based on Ministry of Agriculture data.*

### *Most Likely Food Security Outcomes*

From June to September, very poor and poor households will rely on market purchases for food in the postharvest period (June-September) when they normally consume own produced food. During this time households will be obtaining incomes from agricultural labor, fishing labor, trading and livestock sales earlier than normal. Stressed (IPC Phase 2) outcomes are projected for this area. Between October and January, very poor households will face food deficits. Households will continue earning incomes through agricultural labor, fishing labor, trading, and livestock sales, however this income will not be adequate for very poor households to cover all survival needs and livelihoods protection needs. For poor households, incomes will barely cover survival needs but will not be adequate to cover their livelihood protection needs. Crisis (IPC Phase 3) outcomes are projected for this area. Humanitarian assistance will be required to protect livelihoods.

## EVENTS THAT MIGHT CHANGE THE OUTLOOK

**Table 7.** Possible events over the next eight months that could change the most-likely scenario.

| Area | Event | Impact on food security outcomes |
|---|---|---|
| National | ▪ Humanitarian assistance that is planned, funded, and likely<br>▪ Lifting of the maize export restriction<br>▪ Decrease in local currency exchange rates | ▪ Humanitarian assistance would improve food security outcomes in districts in southern and central Malawi<br>▪ May result in increased demand on Malawi maize, and could result in higher maize prices (further limiting access to market purchases)<br>▪ Could trigger price increases that could limit market food access and worsen the food security conditions |

**ABOUT SCENARIO DEVELOPMENT**

To project food security outcomes, FEWS NET develops a set of assumptions about likely events, their effects, and the probable responses of various actors. FEWS NET analyzes these assumptions in the context of current conditions and local livelihoods to arrive at a most likely scenario for the coming eight months. Learn more here.