Harvest prospects remain good despite pest infestation and delayed input support

KEY MESSAGES

- **Minimal (IPC Phase 1)** acute food insecurity outcomes are expected to continue in most parts of the country during the first half of the outlook period. In the extreme southwest and southeast, areas will remain **Stressed (IPC Phase 2)** during the February and March period as poor households continue to rely on income from labor and face diminishing purchase power due to high staple prices.

- Given the good seasonal rainfall, crop conditions are good and households will start consuming their green harvest and supplementing it with market purchases by March. By April and May, household level food stocks will significantly improve, reducing dependency on food purchases. By June, households will start consuming staples other seasonal foods, improving their food consumption and dietary diversity. With the improved food availability at the household level, Minimal (IPC Phase 1) outcomes are projected for the June to September period throughout the country.

- Maize and meal prices have remained exceptionally high despite the large in-country stocks and the continued maize export ban. These above average prices are increasingly making it difficult for poor households to access food. Given the continued high demand for maize and meal from the DRC and Malawi, maize prices are projected to remain high up until March. In April, maize prices typically begin to decrease as food supplies from the green and main harvests enter the market and demand for food purchases declines. By June, maize prices will remain above the five-year average, but will fall to levels below last season.

SEASONAL CALENDAR FOR A TYPICAL YEAR

Source: FEWS NET

This map represents acute food insecurity outcomes relevant for emergency decision-making. It does not necessarily reflect chronic food insecurity. Visit [www.fews.net/IPC](http://www.fews.net/IPC) for more on this scale.
NATIONAL OVERVIEW

Current Situation

Rainfall and Agricultural Seasonal Progress

After a 10 to 20-day delay to the start of season (Figure 1), rainfall improved by mid-December in terms of both amounts and distribution. Since mid-December, widespread moderate to heavy rainfall has been received, which has promoted planting and good crop development. Due to the slight delay at the beginning of the season, most planting was completed in mid-December, which is still within the optimal planting period.

In January and February, widespread heavy rainfall continued and improve water availability for domestic and livestock use. These rains have increased the water bodies required for domestic and livestock use. As of February 10th, all areas had received in excess of 400 mm of rainfall (Figure 2). Consequently, many areas (especially in western Zambia (Figure 3)) show surplus water requirements for the maize crop. It should be noted that most of these areas produce low amounts of maize but high amounts of rice therefore, the rice crop will benefit from increased moisture after two consecutive below average rainfall seasons. Field reports indicate that farmers planted additional rice in February due to the good rainfall, which is likely to increase overall rice production for the country.

After receiving persistent heavy rains in the first twenty days of January, there was reduced rainfall for the remainder of January in western Zambia, reducing the risk of flooding (Figure 4). So far, there are no reports of atypical flooding in the Zambezi plains. The crops typically affected include the off-season crops planted along the Zambezi River, which as usual were already being harvested.

Similarly, no reports of atypical flooding have so far been received from the central and eastern parts of the country, with the exception of Luangwa District (Lusaka Province) which has experienced some flash floods. However, field information has confirmed that any flooding damage to crops was minimal.

At the start of the season, most seeds (maize, soybeans, sunflower, and beans) and fertilizer were generally available on the market for purchase, allowing farmers to plant on time. Government subsidized input support (seeds/fertilizer, electronic vouchers) was very late and was mostly made available in January, outside of the optimum planting period for most crops. In some cases, farmers began to use inputs/vouchers as late as February. Groundnut seeds were received so late at district level such that farmers decided not to redeem the seeds, since it was too late to plant them and instead planted recycled seed. Based on field observations and information, during the planting period groundnuts and cowpea seeds were in high demand, but appeared in short supply.

Since most planting took place in mid-December, most crops are currently in the flowering to grain filling stage and field observations and reports indicate that crops are mostly in good condition. In response to the good market and prices, field reports indicate that farmers planted more maize, soybeans, groundnuts, sunflower, and cowpeas this season, with respect to the previous year. In contrast and as expected, due to the poor prices in recent years, the area planted to cotton and tobacco is reported to have significantly reduced this season with respect to both average and the previous season.
Armyworms and stalk borers affected 77 districts out of the 105 districts in Zambia. The Fall armyworm was identified for the first time in Zambia. The Copperbelt Province, parts of Western (including Luampa, Nkeyema and Kaoma districts), Southern Province (including Kalomo, Choma, Namwala, Mazabuka, and Siavonga districts), and Eastern Province (including Nyimba, Mambwe, and Lundazi districts) were most affected by the outbreak. The infestation was highest for maize crops in the vegetative stage.

Although the pests were first sighted and reported in late November, lack of an effective early warning system and an under-resourced agricultural extension service resulted in delayed interventions and widespread infestation beyond the initial Copperbelt Province outbreak area to the remaining nine provinces.

By the first week of January, 129,128 ha of maize had been infested (Ministry of Agriculture estimates). In early January, the Government through the Disaster Management and Mitigation Unit (DMMU) procured and started distributing chemicals in batches to all affected areas. In areas where effective spraying was done, the armyworm was contained. Some farmers started procuring their own chemicals to supplement what the Government was providing.

Overall, a combination of chemical control and heavy rainfall appears to have reduced pest activity and may have helped bring the situation under control. However, it is still premature to conclusively indicate the extent of the damage by the armyworm outbreak in the absence of an impact assessment, since very little research has been done on the new pest in the region. Despite the armyworm/stalk borer infestation causing some damage to the maize crop, very little replanting was necessary since some of the damaged crop appeared to have recovered.
A few farmers that experienced excessive damage from the armyworm outbreak did have to use their own seed for replanting the maize because the Government distributions were late. A significant amount of replanting took place in a few areas that experienced infestation during the early stages of crop development in late December and that crop is now near the mid-vegetative stage and in good condition. Reports of waterlogging and flooding due to heavy rainfall have been negligible since rainfall was below average for the past two consecutive seasons.

In addition to the armyworm/stalk borer problem, reports by the International Red Locust Control Organization (IRLCO) have communicated the risk of locust infestation since August 2016. Locusts have reached the hopper stage in the breeding area of Kafue Flats (Central Zambia) with densities of up to 30 hoppers/m² spread over 10,000 ha. Aerial surveys in the Kafue flats and other breeding areas (Lukanga Swamps – Central Zambia and Simalaa plains-south west) were done in February by the IRLCO in collaboration with the Ministry of Agriculture. Reports indicated that over 1,600 ha of maize fields located in grassland between maize fields covering over 9,000 ha were affected by hoppers ranging in density from 2-10 hoppers/m².

Field reports from Mumbwa district (in Central Province) confirmed that an estimated 878 ha of maize belonging to 126 small-scale farmers in Nalubanda Agricultural Block (neighboring Itezhi Tezhi District) had been affected by the red locusts. The extent of damage has yet to be established. Spraying by the IRLCO is expected to commence in February, with financial assistance from the Government, in order to contain the problem before extensive damage is done.

Overall, based on current crop conditions and continued good rainfall, prospects for the green and main harvest are good and expectations are that at the very least an average crop output will be attained for maize for the 2016/17 season, assuming that the increased area planted to maize could to some extent make up for potential yield losses due to pest infestations.

**Internal trade and market functioning**

National maize stocks (at least 800,000 MT) are currently more than adequate to meet national demand up to the harvest period of May/June and beyond. Most stocks are in the hands of the grain traders, while the Food Reserve Agency (FRA) purchased an estimated 280,000 MT this marketing season and have below 300,000 MT.

Meanwhile retail prices of maize and meal have remained much above average and above the previous year’s level despite the large in-country stocks. These high price levels have been sustained by the exceptionally high regional demand, which pushed prices up substantially. January maize retail prices are about 24 percent above the previous season and 78 percent above the five-year average. Consequently, maize meal retail prices are around 100 ZMW per 25 kg and 85 ZMW per 25 kg of roller meal. On average, these prices are about 33 percent and 74 percent above last season and the five-year average, respectively.

Based on community demand, the FRA has continued community maize sales in some remote rural districts in the current season. The price of maize which had remained at 85 ZMW per 50 kg from the previous season, increased to 135 ZMW per 50 kg in January, representing a 59 percent increase. Millers have been lobbying the Government for access to cheaper maize in response to the Government’s call for lower maize meal prices. At the same time, the extension of the maize export ban has forced grain traders to rely heavily on local markets for retail. An agreement was reached whereby grain traders will sell maize at 2,650 ZMW per MT to millers. However, the millers will access the maize at ZMW 2,200/MT. The FRA will meet the difference through a Government subsidy in the form of a maize provision to millers.

Formal exports have remained low and at levels of about 20,000 MT per month since June. These export levels are half of export amounts during the first quarter of 2016. Formal exports have been limited to WFP for humanitarian purchases for the region. The extended maize export ban has continued and will remain in place indefinitely. Despite this ban, informal exports of mostly maize meal have continued into the Democratic Republic of Congo (DRC) and largely into Malawi, which is contributing to the sustained high prices.
**Current Food Security**

General livestock conditions have improved significantly with increased water availability, good pasture, as well as routine vaccinations being carried out for Contagious Bovine Pleuropneumonia (CBPP) and Foot and Mouth Disease (FMD) in different parts of the country. As a result, there are no reports of these disease outbreaks. However, there is an outbreak of Anthrax in the endemic areas of the Western Province, affecting Kalabo, Nalolo, Shangombo, Sioma, and Limulunga districts. In response to this outbreak, the Government has begun vaccinations and campaigns to sensitize consumers about eating infected meat. Additionally, the Government has imposed an indefinite restriction on the movement of livestock in Western Province in order to contain the outbreak.

Current acute food insecurity outcomes continue to be Minimal (IPC Phase 1) in most parts of the country during the peak lean period, with the exception of areas in the extreme southwest and south. Most rural households are depending on the market for staple food at this time of the year. Poor households are receiving income through the sale of labor, livestock, and livestock products, vegetable sales, petty trading, and charcoal sales. In general, agricultural labor and wages are at normal levels, and since less weeding is usually needed this month in comparison to January, labor demand is slightly lower.

**National Level Assumptions**

The February to September 2017 food Security Outlook is based on the following national-level assumptions:

**Input availability situation:** Generally, seeds for maize, soybeans, sunflower, and beans have been adequately available on the market to meet demand. Only cowpea seed seemed to be in short supply based on field information. Inputs (seed and fertilizer) from the Government subsidy program were delayed for longer than usual (and some farmers did not receive them until January. Since input delivery is normally late in most years, farmers still access their own inputs and complement them with the subsidized ones once they arrive. Therefore, FEWS NET assumes that the late delivery will not have a significant impact on the overall production.

**On farm labor wages, demand and supply:** FEWS NET assumes that labor wages and demand will be normal during the February to June period. In February and March, demand for labor will be typically lower than January because that month is the peak weeding period. Nonetheless, demand for labor will peak again in May/June during the harvest period. Wages are expected to remain within the normal range during these months as well. Labor supply is also expected to remain normal during the February to September period given the good progression of the season so far and therefore expected good harvest for better-off households.
Off farm labor wages, demand and supply: Typically, during the agricultural season, off-farm labor is insignificant. Most rural households are engaged in agricultural labor. This same trend is expected up until June. Between July and September, FEWS NET is assuming normal labor demand and wages given the positive progression of the season so far.

Updated rainfall forecast: The updated forecast released by the Department of Meteorology on January 12th indicated that Zambia has a high likelihood of receiving normal to above normal rainfall during the January to March period. The eastern parts of Northern and Muchinga Provinces are likely to receive normal rainfall during the same period. This suggests and FEWS NET assumes that crops will receive adequate rainfall to promote crop growth to maturity. However, given the heavy rains being experienced, in some low-lying areas of southern and western Zambia, localized flooding could occur while waterlogging and leaching is possible in areas with sandy soils.

Impact of armyworms and stalk borer: Although the pest infestation is under control and the damage on the crop is yet to be established, the impact on maize production is likely to be low to moderate. Spraying is still ongoing in some areas, since the strain of both the armyworm and stalk borer appears more difficult to control. FEWS NET assumes that the increased planted area this season may help to cover some of the loss in yields due to pests, to some extent.

Green harvest availability: Given the favorable rainfall and that most planting commenced by mid-December, FEWS NET assumes that the green harvest will be available from late February to the April period. The early foods will include pumpkins, seasonal vegetable, squashes, green maize, and fresh groundnuts.

Cash crop production: FEWS NET assumes that average production is attainable this season based on the current crop conditions of soybeans, sunflower, and groundnuts. More farmers planted these crops this year because of the good 2016/17 prices. Farmers have been abandoning cotton and tobacco crops over the past few seasons due to their fluctuating prices in the past few seasons, so FEWS NET assumes that production for these crops is likely to be below average this season.

Maize crop production: Current maize crop conditions are good for the 2016/17 harvest, despite pest outbreaks and the possibility of localized flooding due to heavy and torrential rainfall. FEWS NET assumes that the country is likely to attain at least average maize production. This is supported by the indicative increase of 10 percent in area planted under maize in the Southern Province, in response to last season’s good prices.

Pre-and post-harvest national maize stocks: With relatively low maize exports, FEWS NET assumes that Zambia is likely to have a large carryover stock into the 2017/18 marketing season, which commences in May. With the average 2015/16 maize production despite a poor start to the season, the current in country stocks (at least 800,000 MT) are more than adequate to meet the demand for the remaining part of the marketing season (February to April 2017). Given the good harvest prospects and expected large carryover stocks, national maize stocks are expected to be average to above average from June to September period.

Pre-and post-harvest integrated maize price projections: Given the already high prices and that most stocks are in the hands of the private sector, maize prices will continue steadily rising until seasonally peaking in February/March at prices 15 percent and 50 percent above last year and the five-year average respectively. Thereafter, the prices will typically drop up to June following the availability of new harvest, which will reduce market demand as household food stock increases.
From June prices will be at least 7 percent below last year (Figure 6). From July to September, prices are likely to typically remain relatively stable given the good harvest prospects.

**Impact of maize export ban:** The extended maize export ban has continued and will remain in place indefinitely. Despite this ban, informal exports of mostly maize meal have continued into the Democratic Republic of Congo (DRC) and largely into Malawi, which is contributing to the sustained high prices. The private sector will enter the next marketing season with large stocks and have a limited market for it, as production in the region is expected to be good for the 2016/17 season. Consequently, participation by the private sector (large grain traders) that purchased grain from small-scale farmers last season is likely to be reduced during the 2017/18 marketing season.

**Locust situation:** Apart from the Fall armyworm and stalk borer outbreak, there is also a risk of locust infestation in the country based on information from the IRLCO. Having reached hopper stage, the locusts currently concentrated near districts of Mumbwa, Itezhi Tezhi (Central Province), Namwala (Southern province) and Kazungula/Sesheke (Southern and Western Province) if left uncontrolled could cause widespread damage to the maize crop. Having committed to releasing the required funding, Government with the help of the International Red Locust Control Organization is likely to bring the situation under control by end of February.

**Livestock disease situation:** The ongoing anthrax outbreak in the Western Province is likely to reduce income for better-off households as income from livestock sales will be cut off in affected districts. For other districts in Western Province, the market will shrink as they may not be able to sale their animals outside the Province during the outlook period of February to September.

**Most Likely Food Security Outcomes**

The large in country maize stocks will be more than adequate to meet the national needs beyond the current marketing season, which ends in April. Zambia will have large carryover stocks into the next marketing season, which commences in May. Despite the pest attack and anticipated slight yield reduction, harvest prospects are good going by the current crop stand. An average green harvest is expected by early March, which should reduce market demand for staple food. An average maize harvest is attainable in May, as part of the reduction in yield will be compensated by the indicative increase in area planted. A good harvest is also expected for other crops such as groundnuts, soybeans, beans, cowpeas, and sweet potatoes which will improve food access and dietary diversity during and after harvest (May to September) and likely to improve nutritional status of households.

Despite the assured comfortable stock level, maize retail prices are likely to remain high (above last season and above five-year average) up to peak period in February/March as most stocks are in the hands of the private sector who will not sell at lower prices. However, prices are expected to significantly fall by April as demand on the market falls given the expected good harvest. From June to September, prices are likely to reduce to levels below the previous season’s level (but still slightly above the five-year average) as households’ stock reduce market demand and the low regional demand given the expected regional harvest prospects. This should improve food access for market dependent households. Generally, the acute food insecurity outcomes will be minimal for most parts of the country during the outlook period except for areas in the southwest and southeast, which will be Stressed (IPC Phase 2) up to March, but will improve to Minimal (IPC Phase 1) for the remainder of the outlook period.

**AREAS OF CONCERN**

**South Western Cereal, Livestock, and Timber Livelihood Zone (LZ ZM 2)**
(Mulobezi, Mwandi, Seseke, Sioma, Shangombo, and parts of Senanga and Kazungula districts)

**Current Situation**

Poor households are depending on market purchases for staple foods, with incomes from sale of small livestock, fish (despite the seasonal fish ban), milk, charcoal, petty trading, and agricultural labor. Some 10,400 people are receiving relief food with the most vulnerable (10%) households accessing the food through general distribution and the remainder through food for work. The relief comprises a basic staple of 50 kg of maize per household (6 persons)/month as
recommended by the VAC but due to poor targeting and irregular supply because of logistical problems the amounts received are much lower.

Maize and maize meal are readily available on the market. Maize meal is supplied from Livingstone and is selling at ZMW 89.00 and ZMW 25.00/25 kg for breakfast meal and roller meal respectively which is 15 percent above the 2016 January price, while maize grain is at ZMW 2.50/kg. In the outlying areas of the zone, prices are at 10 percent higher.

Most crop planting was done in early December and the crop is at grain filling stage. Seed and fertilizer from the Farmer input support program (FISP) was received and distributed in time for the better off farmers while the poor rely more on use of manure for Mwandi. In parts of Kazungula district, input distribution was late and in most cases, farmers procured own seed while some planted recycled seed. The area has received normal to above normal rainfall so far and the crop condition is good.

There have been some reports of armyworm/stalk borer infestation on maize affecting 19 ha of maize for 325 farmers (Mwandi District Agricultural Office reports). The damage was said to be minimal as control by chemical spraying was done/being done on the affected fields.

Livestock is in good condition with improved pasture and water availability and no reports/incidences of livestock diseases of economic importance. Livestock prices are high compared to November prices due to increased demand in view of the fish ban. Routine vaccinations against Foot and Mouth disease by the Ministry of Livestock are ongoing. There is also improved milk availability for both sale and consumption.

Generally, households are having minimal food consumption and accessing mainly maize meal from the market supplemented with relief food. In addition to consuming fish, milk and vegetables. Poor households not on relief are depending on purchased maize meal from incomes from sale of small livestock (chickens, goats, and charcoal). Middle-income households are depending on maize and maize meal purchases with incomes from sale of small livestock, milk and fish as well as petty trading.

Households are engaging in normal livelihood activities but have increased on charcoal sales, small livestock and also engaged in fishing illegally in order to raise incomes for food purchases. The acute food insecurity outcome for this area is Stressed (IPC Phase 2).

**Assumptions**

In addition to the national assumptions described above, the following assumptions have been made for this area of concern:

**Input availability situation:** Seed and fertilizer from the Farmer input support program (FISP) was received and distributed in time and most beneficiaries are the better off farmers while the poor rely more on use of manure. In other parts of the zone (Kazungula district), input distribution was late and distribution was ongoing in January, however some farmers procured own seed while a few others planted recycled seed so as be on time. Overall, late delivery will have minimal impact on expected production as land under maize has increased.

**On farm labor wages, demand and supply:** Agricultural labor opportunities will be readily available at normal levels for harvesting/threshing for the period April to July and wages are expected to be at normal levels. In February and March, demand for agricultural labor is minimal/not significant as most weeding is done in January.

**Off farm labor wages, demand and supply:** Non-agricultural labor (construction, and crafts) demand and supply during June to September is expected to be normal as better off households will have average incomes from sale of crops and wages are also expected to be at normal levels.

**Updated rainfall forecast:** Like most parts of Zambia for the period January February March (JFM), the zone is expected to receive normal to above normal rainfall, according to the updated (January) forecast by Zambia Meteorology Department. This suggests continued good crop condition generally.
Impact of pests: Stalk borer infestation has affected the maize crop and Government has provided some chemicals to help contain the problem. Maize crop damage due to stalk borer is likely to continue during the March period but at a reduced level as the crop advances into reproductive stage where damage is less. With estimated damage at 1 percent so far (District Agricultural Office reports), impact on crop performance will be minimal as chemicals for small fields are available from the District Agricultural Offices for farmers to access and control the pest.

Green harvest availability: Households will have access to a normal green harvest of maize, groundnuts, pumpkins, squashes, and cowpeas from end of February to March given the normal to above normal rainfall received so far and the normal to above normal rainfall forecast for the rest of the 2016/17 rainy season.

Cash crop availability: Better off farmers are likely to sell surplus food crops (June to August) such as maize, groundnuts, and cowpeas and given the good crop performance, they will receive average incomes. No non-food cash crops are grown in this zone.

Maize crop availability: Average harvest for maize, sorghum, millet, and cowpeas is expected in April/May and for the period June to September; maize will be readily available at household level and on the market. This is due to the normal to above normal rainfall performance and forecast for the 2016/17 season that prompted farmers to put more land to maize production (indicative trend as estimates were not available - key informants in Mwandi and Kazungula) compared to previous season.

Pre-and post-harvest maize stocks (local) and access household own produced stocks have depleted and households will continue to depend on the market during February/March period and maize meal is readily available on the market supplied from Livingstone though at high prices. In the outlying areas of the zone, prices are at 10 percent higher. From April to September average maize supplies will be available at the market and prices are expected to reduce in May to July and stabilize in August/September as households will access own produced maize including sorghum and millet.

Livestock condition and disease: Livestock is in good condition with improved pasture and water availability and subsequently, there is increased milk production. There are no reports/incidences of livestock diseases of economic importance. Routine vaccinations against Foot and Mouth disease by the Ministry of Livestock are ongoing. Given the current situation and the expected normal to above normal, livestock condition is expected to be good for the rest of the outlook period. Prices will follow a typical trend, as households will not be desperate to sale their livestock in the March to September period since they will have access to adequate own produced food stocks.

Fish availability: The annual fish ban that is in place will be lifted on February 28 and households will have normal access to fish for sale and consumption from March to September. Fish catches are expected to be at normal levels due to improved water levels in the Zambezi River and its tributaries because of the good rainfall.

Flooding and impact on crops: Given the normal to above normal rainfall forecast the area is likely to experience localized flooding in February which may lead to some crop damage and loss but the impact is likely to be minimal as most rivers had very low water levels in the previous two seasons.

Most Likely Food Security Outcomes

During the first half of the outlook, Southwestern areas, which have been experiencing Stressed (IPC Phase 2) food insecurity outcome since last season, will remain in that state up to March. The households will continue to depend on market purchases however, the situation should improve when they start accessing the green harvest from end February to March. By April dependency on the market will be minimal as they will have adequate food from own main harvest. No change in livelihoods is expected but they will expand on fishing (March), charcoal/firewood, and sale of livestock in February and March period.

In the June to September period, households will have adequate food stocks from the expected average production. They will be depending on their normal livelihoods, which include off farm work such as construction of houses for better off, sale of crafts and fishing. The food insecurity outcome for this area is expected to be Minimal (IPC Phase 1)
Zambezi Valley Agro Fisheries Livelihood Zone (LZ ZM 10)
(Luangwa, Siavonga, Gwembe, Sinazongwe, and parts of Kafue and Zimba districts)

Current Situation

Households currently depending on the market for staple food purchases with incomes from sale of livestock, fish, charcoal and wild foods and limited agriculture labor. Maize and maize meal readily available on the market. Maize prices at Choma reference market were at 58 percent above five-year average while maize meal was at 20 percent higher compared to same period last year.

The 2016 rainfall performance has been normal to above normal prompting farmers to put more land under cultivation. Crop condition is generally good but for the armyworm/stalk borer infestation on some 2,000 ha (about 15% of total ha under maize) and chemical (provided by government) spraying is ongoing with some farmers reporting improved condition of the affected maize.

Agricultural inputs (maize seed and fertilizer) under the Farmer Input Support program (FISP) were distributed in December, though slightly late were within the planting window. While groundnuts, sunflower, and soya beans were being redeemed in January. Other crops grown include sorghum, millets, and sweet potatoes. Cotton production by the better off farmers supported by NWK out grower scheme is performing well.

Ten percent of the households in Sinazongwe are accessing social cash transfer enabling them to purchase minimum staple food requirements while an estimate 19,000 are receiving relief food (as recommended by the Zambia Vulnerability Assessment Committee May 2016 assessment) for livelihoods protection.

Livestock condition is generally good, with the improved pasture and water availability, which has increased milk availability for both sale and consumption. There are no reports of disease outbreaks, and prices for cattle have increased due to increased demand and better quality.

Assumptions

In addition to the national assumptions described above, the following assumptions have been made for this area of concern:

Input availability situation: Agricultural inputs (maize seed and fertilizer) under the Farmer Input Support program (FISP) were distributed in December, though slightly late were within the planting window. While groundnuts, sunflower, and soya beans were being redeemed in January. Late distribution of groundnuts, will negatively affect production of groundnuts, as farmers were not willing to get the seed as it was beyond the recommended planting period. Although sunflower and soybean seed under FISP was equally late, it was within the planting window and given the good rainfall, crop performance is likely to be average.
On farm labor wages, demand and supply: Agricultural labor opportunities will be readily available at normal levels for harvesting/threshing for the period April to July as better off households will have average production of maize and some cotton.

Impact of pests: Army worm/Stalk borer infestation has affected maize and damage was being estimated at about 15% of total ha planted for Sinazongwe district and chemical (provided by government) spraying is ongoing with some farmers reporting improved condition of the affected maize. If the pest infestation is not adequately controlled during February/March period, it could lead to as much as 30 percent yield reduction for affected areas. However, government has provided some pesticides, which may possibly help, minimize the damage and subsequent crop losses.

Cash crop availability: The cotton crop grown by the better off farmers is expected to perform well given the favorable rainfall however incomes from sale of cotton are expected be below average due to unattractive prices in the previous season and subsequent less area under cultivation. Average production is expected from soybeans and sunflower based on current crop condition.

Pre and post-harvest maize stocks (local) and access: Maize meal supply from Lusaka and Choma (Figure 7) will continue to flow into the zone in order to satisfy demand until March. Given the current trend, maize and maize meal prices are likely to remain high until March as more households continue to depend on the market for staple foods. Households will have average own produced food stocks (maize and sorghum/millets) from April to September. During April to July period, prices are expected to typically reduce when demand is low as households depend more on own produced food stocks which is expected to be average. From August to September, prices are expected to stabilize.

Food availability- other: Wild fruits collection for consumption and sale will be at normal levels during April to September. Additionally, vegetable production for consumption and sale during July to September will be normal due to good rainfall and therefore adequate water in streams and wetlands.

Livestock condition and disease: Livestock (cattle and goats) condition will be good with abundant pasture and water availability for the whole outlook period due to the normal to above normal rainfall expected for the remainder of the rainy season. Prices will follow a typical trend, as households will have adequate food and incomes from crop production and livestock sale to pay for school fees and meet other non-food expenditure.

Flash floods and impact: Localized flash floods are likely to occur in February given the forecast of normal to above normal rainfall during this period. Flash floods are likely to wash away crops that are traditionally planted along riverbanks and low-lying areas and may lead to crop damage and loss and therefore reduced crop production for affected households estimated 10 percent of the population (Zambia 2016/17 contingency plan).

Fish availability: Fish catches from March to September are expected to be at normal levels due to improved water levels in the Lake and rivers given the good rainfall compared to the previous season.

Most Likely Food Security Outcomes

During the February and March period, poor households will have minimal staple food consumption, as they will mostly depend on the market and some relief food. However, they will be facing high prices during this period (peak price period). Given the expected good harvest, in April and May, they will have access to increased own food and variety which will be adequately available at household level. They will be consuming maize, sorghum, millet, sweet potatoes, pumpkins, groundnuts, meat, and fish including increasing their food diversity.

No livelihood changes are expected in the February to March period but there will be increased sale of small livestock and charcoal and most of the income will be spent on food purchases. Starting in April/May, households will engage in normal livelihood activities (brewing, wild foods, charcoal, and fishing). The area will remain Stressed (Phase 2) up to March and thereafter (April and May) area outcomes will improve to Minimal (IPC Phase 1).
In the second half of the outlook period (June to September), households will generally have adequate and diversified food consumption of maize, sorghum, millet, sweet potatoes, meat and fish including vegetables from own production. They will engage in normal livelihood activities including the sale of crops, agricultural labor, fishing, brewing, wild fruit gathering, and charcoal production. Minimal (IPC Phase 1) food insecurity outcomes are expected to continue during this period.

**EVENTS THAT MAY CHANGE THE OUTLOOK**

Table 1. Possible events over the next six months that could change the most-likely scenario.

<table>
<thead>
<tr>
<th>Area</th>
<th>Event</th>
<th>Impact on food security outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>LZ ZM 2 and LZ ZM 10</td>
<td>Early cessation of rainfall</td>
<td>If rainfall ends earlier in February as happened in 2014/15 then the projected crop production would be lower by up to 30 percent, which could shorten the length of time that households will not have to rely on food purchases during the 2016/17 consumption year.</td>
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**ABOUT SCENARIO DEVELOPMENT**

To project food security outcomes over a six-month period, FEWS NET develops a set of assumptions about likely events, their effects, and the probable responses of various actors. FEWS NET analyzes those assumptions in the context of current conditions and local livelihoods to develop scenarios estimating food security outcomes. Typically, FEWS NET reports the most likely scenario.