

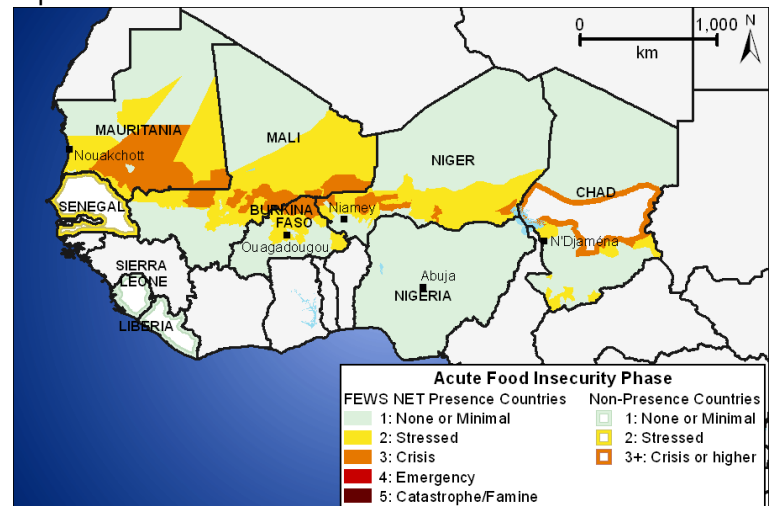
## WEST AFRICA Food Security Outlook

January to September 2012

### Key messages

- Due to localized below-average production and high cereal prices, FEWS NET expects Crisis-level acute food insecurity (IPC Phase 3) in a number of areas of the Sahel during 2012. This level of food insecurity will be most evident during the April-September period (Figure 1). Technically-appropriate and well-targeted emergency assistance is required in these areas to mitigate household food and income deficits and to prevent increases in acute malnutrition.
- Given good market functioning, some increases in wage rates, and strong coping capacity, the severity of acute food insecurity is not likely to surpass IPC Phase 3: Crisis. In Mali, widespread, early government assistance is also expected to mitigate some food access constraints. Government assistance in Mauritania has also been provided in urban and pastoral areas.

**Figure 1. Map of projected estimated food security outcomes, July-September 2012**

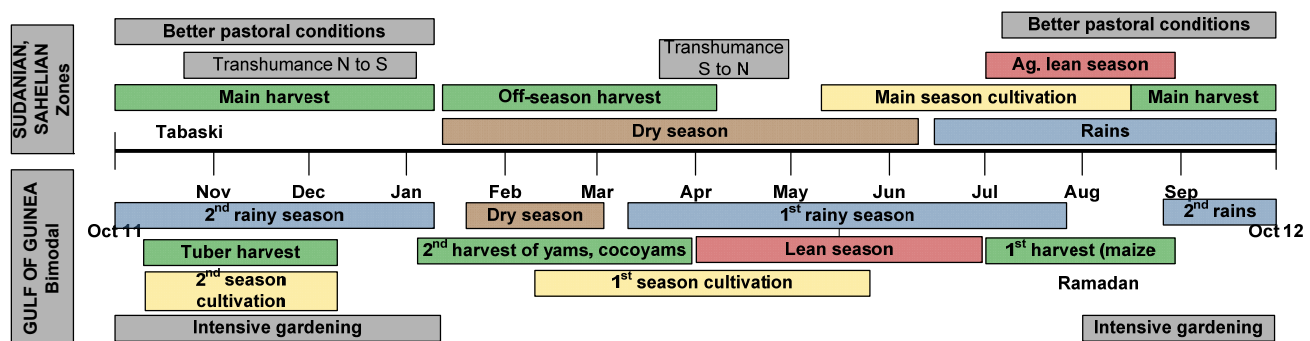


For more information on the IPC Acute Food Insecurity Reference Tables, please see: [www.fews.net/FoodInsecurityScale](http://www.fews.net/FoodInsecurityScale)

Source: FEWS NET

- FEWS NET expects the most severe food insecurity problem in agropastoral and rainfed farming areas of central and southern Mauritania. IPC Phase 3: Crisis outcomes are expected in these areas as early as January-March.
- Severe, chronic constraints on nutritional wellbeing mean that levels of acute malnutrition are likely to remain near or above 15 percent. Long term investment is needed to address underlying issues of health and child-caring practices.

### Typical seasonal calendar



Source: FEWS NET

## Setting the scene: evidence for current conditions

In general, 2011/12 regional cereal production was within five percent of the recent five-year average but significantly lower than production in 2010/11, a record year region-wide. At a national level, FEWS NET, CILSS, and national governments have estimated 2011/12 rainfed cereal harvests to be within 15 percent of the five-year average everywhere but in Mauritania (40% below average). This analysis excludes the additional mitigating factors of imported rice and wheat, tuber and other food production, and the above-average carry-over stocks from the 2010/11 bumper harvest. In short, food availability is not likely to be a problem in the region this year, provided markets function sufficiently.

However, between October and December 2011 (the harvest period), cereal prices throughout the region increased significantly instead of the declining as is typical for the season. Prices increased due to significant delays in marketing the 2011/12 harvest (due to late start of season), the high cost of production due to multiple sowings and increases in wage rates, and higher-than-usual stocking by both households in areas with access to remittances (notably in Kayes, Mali) and by traders who anticipated a high institutional demand.

Due to these unusual price trends, prices for preferred local cereal staples in December and January 2011 are 20-40 percent above average in Niger, Chad, and Mauritania and 60-80 percent (occasionally 100 percent) above average in parts of Burkina and Mali. However, while December/January price levels in Niger, Burkina Faso, Nigeria, and Chad, are above average, they fall within a relatively typical range for the post-2008 period in Niger and Chad. Price levels in Mali and Mauritania are of greater concern.

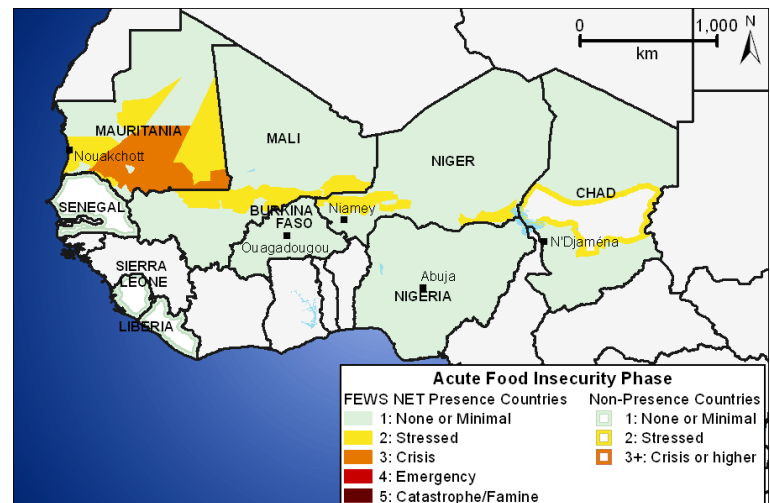
Markets in Niger, Nigeria, Burkina Faso, and Chad are functioning well with regular flows from surplus-producing to net-consuming areas with relatively typical supply-chain lengths and price differentials. Cross-border trade in Niger, Nigeria, Benin, and Burkina Faso is lower this year than during the 2009/10 food crisis. This reflects traders' expectations that cereal deficits in these countries are less significant than in 2009/10. Markets for local cereals in Mali and Mauritania are also functioning, though less well, with relatively longer supply chains and higher price differentials between surplus and deficit areas than usual. However, Mauritania and Mali's access to primary substitutes (imported wheat in Mauritania and imported rice in Mali) is better.

In general, FEWS NET's field visits in Mauritania, Mali, Niger, and Chad indicate that unskilled labor wages and the price of key income-generating commodities (e.g., hay and firewood) are 20-30 percent higher than last year. This was confirmed in Niger by the government's decision to increase cash-for-work wages from 1000 XOF/day to 1300 XOF/day. Increases in wages and in prices of several other key income-generating commodities such as hay, firewood, and cash crops will offset some of the household-level food deficits which are likely during the July-September lean season due to poor production and high cereal prices.

Based on assessments in November/December 2011, FEWS NET found pastoral conditions in Niger and Chad to be below average, but better than 2009/10. Conditions in Mauritania are more severe, but pastoralists there have already implemented coping (i.e., early, distant transhumance of 75 percent of herds, stockpiling of sorghum, wheat, and animal feed, in addition to government support) that is expected to offset household food deficits.

Based on these conclusions, FEWS NET estimates that during the January-March period, current levels of acute food insecurity are most severe in Mauritania in the north/central agropastoral areas and the rainfed cereals zone (Figure 2). IPC Phase 3: Crisis represents a severe problem that requires technically-appropriate and well-targeted

**Figure 2.** Map of estimated food security outcomes, January-March 2012



Source: FEWS NET

emergency assistance to mitigate household food and income deficits and to prevent increases in acute malnutrition.

### Most likely food security scenario for through September 2012

In order to project food security outcomes through the end of the consumption year, FEWS NET makes a number of most likely assumptions about key seasonal events important to sources of food and income in each country and livelihood zone of our areas of concern. We also make assumptions about other future events that could have a significant impact on food security in the region. These assumptions enable us to identify the direct and indirect effects leading to changes in household food and income sources and then food security outcomes over the course of the outlook period.

In general, though cereal prices are higher than anticipated in October, FEWS NET's assumptions made in October and November 2011 remain valid. FEWS NET has made some additional assumptions and some clarifications for this most likely scenario.

- In general, regional cereal trade flows from surplus- to deficit-producing areas continues to function; in the event of government intervention in cereal markets, no significant or prolonged restriction or price impacts take place.
- The cost of deregulation of fuel markets in Nigeria is already included in current prices; little additional increase in prices is anticipated due to events in Nigeria. No significant, additional, negative disruption to fuel markets occurs.
- Due to high carryover stocks from 2010/11, the supply of cereals in Chad is sufficient to meet demand without unusual recourse to imports.
- Given the above assumptions, FEWS NET assumes that, in general, prices for primary cereals will remain relatively stable at their high levels between January and March (as is seasonable) and then increase 0-5 percent/month between April and August/September, following the typical seasonal pattern. In the eastern market basin, FEWS NET expects that high prices already reflect most of the "Nigeria effect".
- Price of labor, many income generating activities remain 20-30 percent above last year.
- First-season harvests in the Gulf of Guinea are average, and the start and progress of 2012 rains are average.
- In rural areas facing IPC Phase 3: Crisis, Ramadan gifts (mid July-mid Aug) will have minimal impact on acute food insecurity.
- The current most likely scenario incorporates only emergency assistance that is inter-annual or ongoing, in keeping with compatibility with IPC 2.0 mapping protocols. No emergency assistance beyond the typical scale of nutritional support is included in this analysis.
- Based on demonstrations of political will to resolve the crisis and traders' expectations, the most likely scenario assumes improvements to civil security in northeast Nigeria by March/April with positive trade impacts, notably for eastern Niger and Sahelian Chad.
- The current scenario, developed based on evidence available at the end of January 2012, assumes no significant population displacement or market disruption due to military actions in Mali.

FEWS NET applied these assumptions to its analytical framework, including the knowledge base about the context of local livelihoods, historical data about prices and behavior, etc., and then classified outcomes in keeping with the IPC 2.0 acute food insecurity reference tables (see [www.fews.net/FoodInsecurityScale](http://www.fews.net/FoodInsecurityScale)). In general, the conclusions made in October and November 2011 about food security outcomes during the peak of the 2012 lean season also remain valid.

In general, between April-June, the key factor of change is cereal prices. High cereal prices are expected to drive a transition to IPC Phase 3: Crisis outcomes in the absence of assistance in western Niger (Figure 3). This is because household demand for cereals is larger than usual at this time of year due to significantly below-average production in localized areas, and, in general, increased incomes are not expected to sufficiently fill the gap. These areas also face rates of acute malnutrition that are chronically above 15 percent; without assistance, rates of acute malnutrition will likely be higher than usual and increasing.

July-September is the peak of the lean season for agriculturalists and agropastoralists, the majority of the population in the Sahel. At this time of year, cereal prices will be at their annual, seasonal peak, and likely higher than average based on current high levels. Competition for household labor for own production will limit households' ability to earn additional income to meet these needs. Rates of acute malnutrition tend to peak at this time of year (Figure 4). In Phase 3 areas, prevalence of GAM is expected to be greater than usual and increasing. Without technically-appropriate and well-targeted assistance, very poor and poor households in localized areas throughout the Sahel will face household-level food deficits. In addition, at least 20 percent of the population throughout most of the Sahel will face some degree of livelihood protection deficit at the peak of the lean season and may be unable to meet some non-food needs.

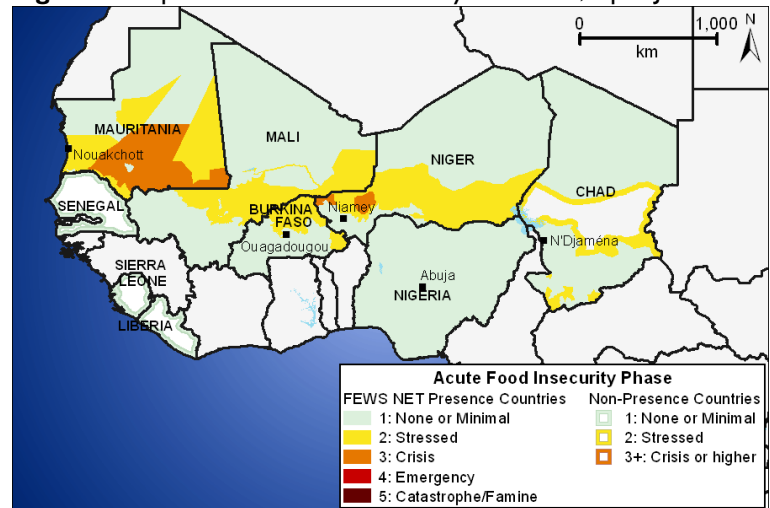
**A closer look at areas of concern**

FEWS NET conducted an in-depth analysis of the one area in each country where food security outcomes are expected to be most severe. This information and other analysis based on input from partners is included below.

FEWS NET is particularly concerned about the severity of acute food insecurity **north/central agropastoral and rainfed agricultural zones of Mauritania**. Coping strategies in these areas are limited primarily to destocking and intensifying labor migration to the Office du Niger or Nouakchott. Background rates of global acute malnutrition in these areas have been about 18-19 percent in July over the past three years, which have been relatively good. Also, households are highly dependent on imported cereals, particularly during the lean season. Prices of imported wheat, the primary substitute staple during the lean season, are 50 percent higher than last year due to 2011 price hikes on the international markets. Substitution to wheat is much more widespread than usual. There are also particular concerns about the ability of tertiary and some secondary markets, particularly in eastern Mauritania. Eastern Mauritania is heavily militarized this year, and the purchasing power of the local, sedentary population is relatively poor compared to the that of pastoralists further north and west.

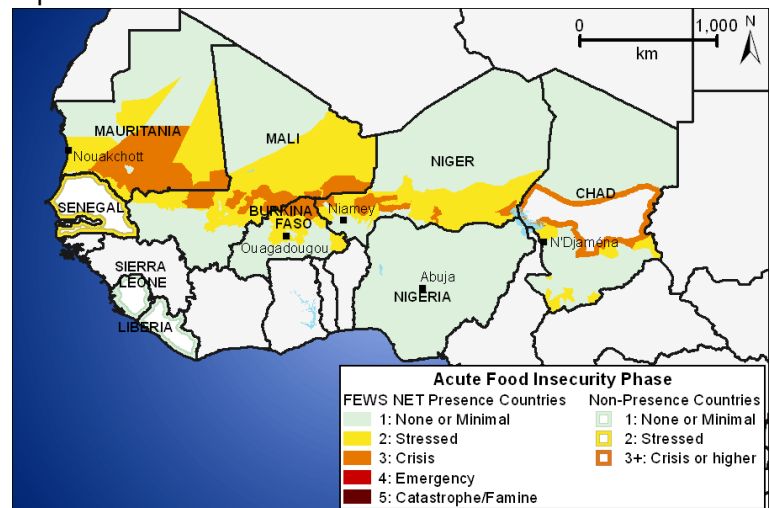
FEWS NET conducted a pastoral assessment in November/December in response to concerns about pastoral conditions in the northern transhumant pastoral and north/central agropastoral zones. These zones are of greatest concern because the populations rely mainly on cattle, which are most vulnerable to poor pasture or water conditions. In general, pasture and water availability in the agropastoral and transhumant pastoral zones is very poor. However, most pastoralists have already taken the precautions needed to protect their herds. FEWS NET learned that approximately 75 percent of Mauritania's livestock is currently in transhumance in Mali and Senegal. This transhumance began in September/October as opposed to December/January in a typical year. Animals remaining at homestead are generally destined for sale to purchase feed and cereals. This means that any informal constraints to new cross-border movement of livestock from Mauritania to Mali or Senegal during the outlook period—though still a concern—are unlikely to have a significant impact on household food security. Moreover, pastoralists have been stockpiling feed (including animal feed, sorghum, and wheat) from Mali between

**Figure 3. Map of estimated food security outcomes, April-June 2012**



Source: FEWS NET

**Figure 4. Map of projected estimated food security outcomes, July-September 2012**



Source: FEWS NET

October-December both for the animals remaining at homestead and for the returning transhumant animals in May/June/July, prior to regeneration of pastures. Finally, the government has implemented a pastoral support plan to provide animal feed that is already underway. Despite poor pasture conditions, pastoralists are not likely to face food deficits in 2011/12, even if livestock mortality is above average. Poor agropastoralists and agriculturalists, who have too few animals and too little labor to sell to compensate for their poor agricultural production, high cereal prices, and low livestock prices, will likely face IPC Phase 3: Crisis food security outcomes through the end of the lean season. At the end of January, military action in Mali resulted in some population and livestock displacement to southeastern Mauritania. If this trend continues or intensifies, the risk of more severe levels of acute food insecurity for both local and displaced populations will be increased. This issue will be monitored very closely in the coming weeks and months.

The risk of more severe food security outcomes is also great in **Sahelian Chad**, also in part to the structurally high rates of acute malnutrition (also well above 15 percent in Kanem and Bahr el Gazel regions). National cereal production was about 15 percent below average in 2011/12. More importantly, however, market functioning is complicated this year by below-average cereal flows from typical trading partners. Even if trade with Nigeria improves with more favorable civil security, it may not improve enough or soon enough to meet needs. Trade with Libya, though resumed since about July 2011, remains below pre-war levels. Sudan faces even larger cereal production deficits than Chad. Finally, there are concerns about the capacity of traders to respond to demand in Sahelian Chad with supplies from Cameroon, and the Central African Republic does not have significant marketable surpluses. Despite these potential, future supply risks, local labor wages are 20-30 percent above last year, and cereal prices in deficit areas of Chad are not as much above average as in Mali or parts of Burkina. Though pastoral conditions in the northern Sahel are below average, pastoralists informed FEWS NET during a recent assessment that they are significantly better than the most recent 2009/10 crisis. FEWS NET will be collecting more information about household coping, carryover stocks, market behavior, etc. over the next month to better assess the extent to which the observed price and market anomalies will impact household food and income sources over the remainder of the consumption year.

In general, **Burkina Faso** has neither produced typical national cereal surpluses available to the region, nor extreme national deficits to be filled by the region. Cross-border trade with Burkina is now and is expected to remain generally negligible. However, agricultural production in some localized areas of the North and East was below average. The government has estimated 1.1 million very poor and poor people will face livelihood and survival deficits between April and September. FEWS NET's analysis of **the North transhuman pastoralism and millet zone (zone 8)**, where food insecurity is expected to be most severe, indicated that pastoral conditions, though below average, are not cause for alarm. However, the agricultural production was approximately 50 percent below average, indicating an increase in reliance on purchases among poor households by 30 percent over the consumption year. Based on the most likely price assumptions, this means that food expenditures would need to increase by as much as 75 percent compared to last year, or 60,000-70,000 XOF per household over the consumption year. In the households' favor, wages from agricultural labor and prices for hay and firewood are 20-30 percent higher than last year, and households have also intensified labor migration and gold mining. These activities are likely to fill a significant part of the expenditure gap needed to meet food needs. Assuming no emergency assistance, FEWS NET expects that any remaining food deficits for very poor and poor households are likely to be slight to moderate and mainly felt during the July-September lean season. Parts of livelihood zone 7 and 5 are also affected by below-average production and high prices, but less severely so. Livelihood protection deficits in these areas are not expected to become survival deficits even without assistance.

**Mali's agropastoral belt** (livelihood zones 8, 4, 6 and 3) experienced the most widespread agricultural and pastoral production deficits in 2011/12. However, exposure to hazards alone is not sufficient to indicate risk of acute food insecurity. For example, FEWS NET does not include as an area of concern the North-west remittances, sorghum, and transhumant livestock rearing zone (zone 8), despite the fact that it is the epicenter of the production and price shocks. Remittances and community solidarity are very widespread in the zone and are expected to be sufficient to help very poor and poor households to meet at least the minimum essential food needs through September. FEWS NET's analysis also concludes that livelihoods in the Niger delta/lakes - rice and livestock rearing (agropastoral) area are relatively more diverse with greater coping capacity than in the Millet and transhumant livestock rearing zone, which is the area of greatest concern.

Initial findings of an assessment of dietary diversity by PRODEZEM in the Nara area found that the dietary diversity score in December 2011 was likely higher than in both April 2011 and June 2011, when no or minimal acute food insecurity was present. This supports a conclusion that there is no current acute food insecurity even in this most-at-risk area. An analysis

of the production and price shocks indicates that very poor and poor households will need to increase purchases by 12-15 percent compared to a typical year. However, given the most likely price projections this means an increase in household expenditures on food by about 80 percent (approximately 95,000-120,000 XOF/household). The greatest potential increase to household revenue is labor migration, which, if doubled (and assuming a supply-related decline in individual earnings of about 75 percent), could increase household revenues by about 40,000-50,000 XOF/household over the consumption year. This, other minor increases in income, combined with the October-December general food distributions from the government, is expected to be insufficient to fill household food deficits, which will be moderate between July-September at the peak of the lean season.

Though shocks to agricultural production were concentrated in western **Niger**, above-average prices that are higher than expected during the October 2011 Outlook are likely to stress livelihoods among some very poor and poor households in localized areas nationwide beginning in April. In general, very poor and poor households in western Niger are likely to require emergency food assistance to meet minimum food needs during the peak of the lean season due to the combined impacts of poor production and high cereal prices. However, Ouallam is different than the rest of western agropastoral Niger due to a relatively lower reliance on own-production for food and income and higher reliance on purchases financed by hay, firewood sales, and labor migration. In Ouallam, the updated January most likely price assumption corresponds with the worst-case price scenario elaborated in the executive brief of November/December (see [http://www.fews.net/docs/Publications/Niger\\_Ouallam\\_2011\\_12\\_en.pdf](http://www.fews.net/docs/Publications/Niger_Ouallam_2011_12_en.pdf)). This would result in a slight (4 percent) annual survival deficit between January-August, assuming no coping or assistance, and based on an assumption of wage rates of 1000 XOF/day. However, wage rates observed in the field since July 2011 are actually 1500 XOF/day, and intensive labor migration as a coping strategy has been observed in the area. Correcting wage rates and incorporating coping, particularly for labor migration as observed in the field, indicates that even very poor households in Ouallam are unlikely to face more than a livelihood deficit, and only during the July-August lean season, so long as prices of millet or substitute staples remain below an average of 338 XOF/kg between May and August. This means that prices may exceed the current most likely scenario assumption by 10 percent before households are likely to require emergency food assistance to meet minimum food needs in agropastoral Ouallam.

In Nigeria, conflict in the northeast is the primary cause of slow North-South and cross-border market activity. A dramatic spike in cowpea prices in December is expected to be the result of slowed flows due to changes in the transportation cost structure (deregulation of fuel) at the time of peak demand for the holidays. Though trade is below average, local production of cereals and off-season market gardening is sufficient to keep food prices low in the northeast, and minimal acute food insecurity is expected so long as trade resumes around April.

## Alternatives and events likely to change the most likely scenario

FEWS NET develops most likely scenarios to provide the highest-quality early warning about a narrow range of most likely outcomes the possible for decisionmakers. However, some assumptions underpinning the most likely scenario are more certain than others. As a part of its scenario development process and analytical framework, FEWS NET identifies these assumptions, their probable alternatives, and the potential changes to food security outcomes that could result from these alternatives.

For example, price behavior is a fundamental issue for household food access as the lean season approaches, particularly when price levels are above average as they are now. Uncertainty about this factor is high given the highly unusual price behavior at the beginning of the October-September marketing and consumption year. In the most likely scenario, FEWS NET made assumptions about the availability of supply and demand at regional and local levels and assumed seasonal price behavior between January/April-September as a result.

However, if the most likely scenario underestimates demand in the deficit-producing areas, price increases will be gradual and regular as demand increases compared to supply. The amplitude of price increases in this case would be larger than described in the most-likely scenario with monthly increases of 5-10 percent/month, particularly in deficit-area markets. In this case the geographic scope of acute food insecurity would increase. However, IPC Phase 4 food security outcomes would be unlikely outside of Mauritania or Chad.

If the most-likely scenario has only overestimated supply (and not underestimated demand), large price increases would be likely on the main supply markets due to intense competition. Beginning in April, we'd see price increases of 10 percent or more per month in supply markets, possibly even from one week to the next. These prices would then transfer to demand markets. This is a worst-case scenario. The geographic scope of acute food insecurity would expand further than in the assumption of underestimated supply. In terms of severity, areas currently projected as Phase 3 in the most likely scenario could see Phase 4, not just in Mauritania and Chad, but throughout the Sahel.

It is highly unlikely that there has been both an under estimate of demand and an under estimate of supply because markets are functioning normally, flows are moving all the way to tertiary markets, and there are no major population movements.

**Table I.** Possible events that would significantly change the most likely scenario

Geographic area	Potential events	Effects on food security conditions
Mali, Mauritania, Niger Burkina	Significant population/livestock displacement or market disruption due to military action in Mali	Population displacement from Mali is moving towards areas that are at risk of relatively more severe food security outcomes in the current most-likely scenario. The additional cereal demand and competition for labor and other income generating activities would likely increase the severity of acute food insecurity among both the displaced and the host populations.  Current perceptions indicate that this event is likely. However, FEWS NET does not have the expertise to project conflict trends and impacts at this early stage. FEWS NET will monitor this situation very closely and will update its analysis frequently as more information about impacts arises.
West Africa	Emergency assistance beyond typical scale of nutritional support	In a context in which cereals are or can be made available on markets by traders, emergency assistance to facilitate income generation may significantly improve food security outcomes in some areas.  In a context in which cereals are or can be made available on markets by traders, emergency assistance that emphasizes supply-side interventions exceeding the aggregate production deficit for a market basin will result in a disincentive for traders to continue supplying the market. Prices would be higher and food security outcomes possibly poorer than currently anticipated in the most likely scenario.  Emergency assistance should be technically appropriate and well targeted to be successful at improving food security outcomes.
West Africa	Poor December/January harvests of short season maize and/or a poor start of season in the Sahel	Traders would release less supply in June-August compared to the most likely scenario, leading to higher prices and poorer food access than currently anticipated.
Central market basin	Enactment of government price control measures with negative impact on trade flows and/or prices	The risk of this event is greatest between April-August. Informal barriers to cross-border trade would reduce flows from surplus to deficit areas. This would significantly increase price differentials between surplus areas and deficit countries, leading to higher retail prices and lower farm-gate prices than in the most-likely scenario. A worst-case example of these impacts was observed in Chad between November 2010 to March 2011 (see XXXdocument).
Eastern Niger, Sahelian Chad	No improvements to civil security in northeast Nigeria in March/April	The timing for improving civil security is important as April-June is the peak of the cereal trade season. If civil security does not improve, then traders will have to circumvent the area (and transit from Kano-Zinder-Moussoro), at a significantly higher cost, resulting in poorer food security outcomes in these areas than anticipated in the most likely scenario.
Sahel	Poor planning of institutional procurements (advertisin, scheduling) after March of 2012	Unusual competition in supply markets could have impacts similar to the scenario in which supply is overestimated.