

## AFGHANISTAN Food Security Alert

January 20, 2011

### Large rainfall deficits threaten 2011 wheat harvest in Afghanistan

Snow and rainfall have performed poorly in Afghanistan and Central Asia through the first three and half months of the main winter wet season and a below normal irrigated wheat harvest is possible. Though major food shortages will be avoided if regional trade flows function normally, increased food insecurity and above-average food assistance needs are likely, especially during late 2011 and early 2012.

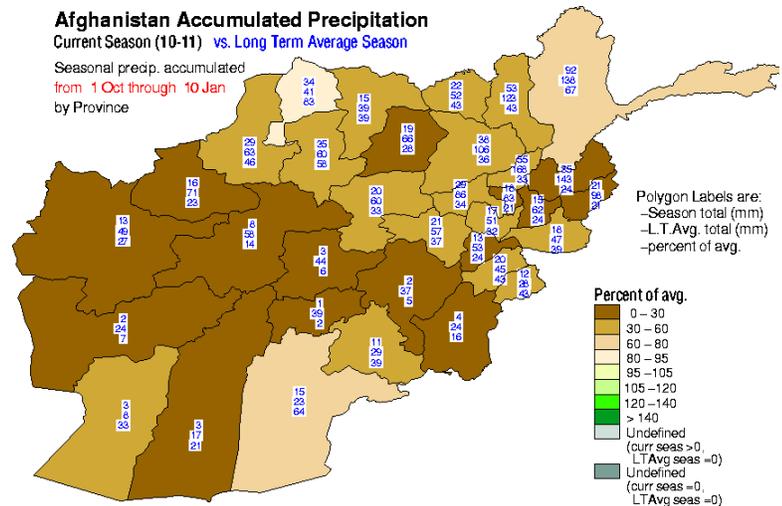
Typically, Afghan farmers use rain and glacier-melt runoff during October and November to prepare fields for winter wheat, the country's most productive and dependable cereal crop. Between December and March, snow accumulates in the central and northeastern mountains, and in the spring, crops are further irrigated as this snowpack melts. A much smaller proportion of national production comes from rain-fed spring wheat harvests which tend to be more variable.

In October and November of 2010 irrigation water availability was at its lowest recorded level, preventing downstream irrigated farms from sowing adequate winter wheat. This reduction in irrigation water availability was due to below normal temperatures that slowed glacier melt and poor early seasonal rains. As of the first dekad of January, there was little or no rain or snow in most areas and accumulated precipitation deficits in the central highlands of Afghanistan reached 50 to 100 mm, with accumulated precipitation totaling only 30 to 40 percent of the long-term average (Figure 1). Snow cover extent and snow pack volume are also anomalously low in most of the country for this time of year. Since mid-January, precipitation, including snowfall in the northeast mountains and central highlands, has reduced precipitation deficits. However, deficits persist and the upcoming irrigated wheat harvest remains at risk. Heavy snowfalls in February and March are possible, but medium range forecasts developed by the International Research Institute for Climate and Society suggest a slightly increased probability of below-normal precipitation in the region through May.

Though it is too early to definitively estimate the size of the 2011 wheat harvest, a below-average harvest is possible and would impact food security at both a national and sub-national level, both through impacts on household stocks and price effects. However, Afghanistan has had two consecutive years of above-average cereal production and neighboring Pakistan has recently lifted its wheat export ban. If wheat production in major wheat producing countries in the region is normal and trade remains open, any major shortfall in domestic wheat production is likely to be offset by imports, preventing a major crisis, though serious household level impacts would persist.

Areas most at risk of food insecurity due to poor production and possible high wheat prices will likely be in the central highlands, northeast mountains, and southern wheat-deficit provinces where households do not regularly cultivate wheat for their own production. Landless households and small farm holders in northern surplus-producing provinces are also at risk of food insecurity. In the event of a poor harvest, household food insecurity would likely emerge after April, and grow in severity and extent as the consumption year progresses. Lean seasons in affected areas would begin earlier than usual in late 2011. Continued monitoring of seasonal progress and crop conditions is needed as is contingency planning to address a likely increase in household food insecurity and assistance needs.

**Figure 1: Accumulated precipitation by province – Current vs. long-term average**



Source: FEWS NET/USGS