FAO GLOBAL INFORMATION AND EARLY WARNING SYSTEM ON FOOD AND AGRICULTURE (GIEWS)

SPECIAL ALERT

No. 330

COUNTRY: CHINA

DATE: 8 February 2011

A severe winter drought in the North China Plain may put wheat production at risk

Substantially below-normal rainfall since October 2010 (see Figure 1a) in the North China Plain, the country's main winter wheat producing area, puts at risk the winter wheat crop to be harvested later in the month of June. Low precipitation resulting in diminished snow cover (see Figure 1b) has reduced the protection of dormant wheat plants against frost kill temperatures (usually below -18°C) during winter months from December to February. Low precipitation and thin snow cover have also jeopardized the soil moisture availability for the post-dormant growing period; see crop calendar shown in Figure 3. Thus, the ongoing drought is potentially a serious problem.

Figure 1a: Cumulative rainfall¹

Figure 1b: Average snow depth²



Source: GIEWS analysis based on the JRC/MARSOP web Tool.

¹ Cumulative rainfall (1st dekad of October 2010 to 2nd dekad of January 2011) as a percent deviation from the long term average (LTA).

² Average snow depth (1st dekad of October 2010 to 2nd dekad of January 2011) as a percent deviation from LTA. Main agricultural area at risk circled.



FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS, ROME

The main affected provinces include Shandong, Jiangsu, Henan, Hebei and Shanxi, which together represent about 60 percent of the area planted and two-thirds of the national wheat production (See Table 1). According to official estimates some 5.16 million hectares out of the total of about 14 million hectares under winter wheat may have been affected in these provinces. The drought has reportedly affected some 2.57 million people and 2.79 million livestock due to the shortages of drinking water.

Province	2007	2008	2009
Shandong	18 898	19 956	20 342
Jiangsu	8 178	9 738	9 982
Henan	28 227	29 802	30 510
Hebei	11 495	11 937	12 219
Shanxi	2 526	2 202	2 530
Subtotal	69 324	73 635	75 583
Subtotal as % of China total	64%	67%	67%
China Total	108 466	109 298	112 464

Table 1: China wheat production in '000 tonnes

Source: National Statistical Bureau, China

So far there have been some positive developments, such as the relatively mild temperatures, particularly the absence of frost kill temperatures (see Figure 2a), and the lower than average sub-zero temperature days (Figure 2b). This combined with increased supplementary irrigation made available by the Government is likely to compensate to some extent the negative impact of low snow fall and low moisture availability. However, adverse weather, particularly extreme cold temperatures could still devastate yields. The Government has allocated some USD 15 billion to support farmers' incomes and subsidize the costs of diesel, fertilizer and pesticide.

Figure 2a: Relative temperature¹

Figure 2b: Relative number of days of freezing temperatures²



Source: GIEWS analysis based on the JRC/MARSOP web Tool. ¹ Sum of temperature from 1st dekad of October 2010 to 2nd dekad of January 2011, as percent deviation from LTA. ² Number of below 0 °C days from 1st dekad of October 2010 to 2nd dekad of January 2011, as percent deviation from LTA.

This drought in north China seems to be putting further pressure on wheat prices, which have been rising rapidly in the last few months (see Figure 4). In January 2011 the national average retail price of wheat flour rose by more than 8 percent compared to two months earlier and stood at 16 percent higher than a year earlier.



Figure 3: FAO/GIEWS crop calendar

Figure 4: National average retail price



Although the current winter drought has, so far, not affected winter wheat productivity, the situation could become critical if a spring drought follows the winter one and/or the temperatures in February fall below normal. FAO/GIEWS will continue monitoring closely the potential weather hazards and wheat crop development.

This report is prepared on the responsibility of the FAO Secretariat with information from official and unofficial sources. Since conditions may change rapidly, please contact EST-GIEWS, FAO, (Telex 610181 FAO I; Fax: 0039-06-5705-4495, E-Mail (INTERNET): GIEWS1@FAO.ORG) for further information if required.

Please note that this Special Report is available on the Internet as part of the FAO World Wide Web at the following URL address: <u>http://www.fao.org/giews/</u>.

The Special Alerts/Reports can also be received automatically by E-mail as soon as they are published, by subscribing to the GIEWS/Alerts report ListServ. To do so, please send an E-mail to the FAO-Mail-Server at the following address: **mailserv@mailserv.fao.org**, leaving the subject blank, with the following message:

subscribe GIEWSAlertsWorld-L

To be deleted from the list, send the message:

unsubscribe GIEWSAlertsWorld-L

Please note that it is now possible to subscribe to regional lists to only receive Special Reports/Alerts by region: Africa, Asia, Europe or Latin America (GIEWSAlertsAfrica-L, GIEWSAlertsAsia-L, GIEWSAlertsEurope-L and GIEWSAlertsLA-L). These lists can be subscribed to in the same way as the worldwide list.