Food Security Monitoring
November 2009 - January 2010

BOLIVIA

Updated January 2009

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1.0 SUMMARY AND HIGHLIGHTS

- At the end of 2009 El Chaco regions of the departments of Santa Cruz, Tarija and Chuquisaca experienced the peak of a large period of drought which started in 2008.

- After the drought period in the country, the rainy season started influenced by El Niño phenomenon causing floods, mainly in the lowlands. According to official reports, rains have continued to fall over the Chapare region (Cochabamba), where river flows have considerably increased, destroying some 5,000 hectares of crops. Minor livestock was also reported to have died. The Civil Defense estimates some 4,500 flood affected families in that region.

- In the department of Santa Cruz heavy rains are affecting soya and rice producers' agricultural calendar by provoking delays in the sowing season. The rainy season corresponds mainly to the phase of the crops' growing period, so that their development would be comprised in case the floods worsen.

- Forecasts by the Central Bank of Bolivia (BCB) estimate around 4% inflation for the period 2010-2011. At the same time the BCB foresees 2010 economic growth in between 4.5 and 5. 5% and the external remittances to be stable during the year. BCB reports a reduction of 6,8% in remittances received in 2009 compared to 2008.

- **Recommendations for action:** close monitoring of the rainy season, and initial assessments in flood-affected areas in coordination with Government and UN agencies.

2. ENVIRONMENTAL, ECONOMIC AND GOVERNANCE ISSUES

2.1 Environment

The region of El Chaco (located in the southeastern part of Bolivia covering important areas of the Departments of Santa Cruz, Tarija and Chuquisaca), had been declared in a drought emergency in November 2008 and conditions that significantly worsened during 2009. Water supply, crops and pasture conditions for livestock were severely affected. Although the region has experienced good rains during December 2009, which have somewhat alleviated the situation, there are still drought effects to be addressed.

Based on an EFSA conducted by WFP and other UN agencies in June/July 2009, food aid to a total of 5.566 families was distributed by the WFP and the Civil Defense in the Chaco regions of Tarija, Santa Cruz and Chuquisaca. However, evaluations carried out in November 2009 by Government and UN showed the need of increase the assistance to 11,000 families.

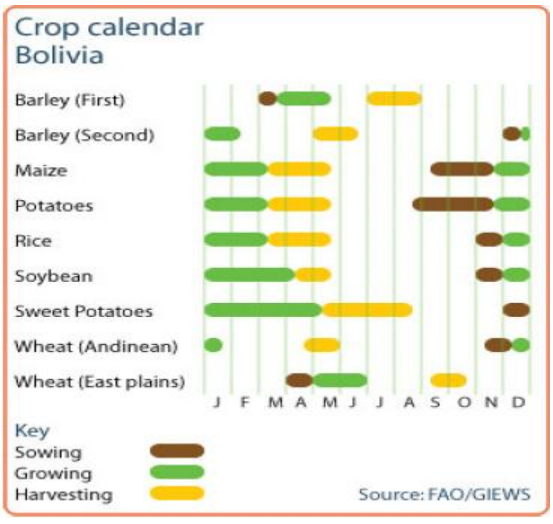
Between June and November 2009, the National Service of Meteorology and Hydrology (SENAMHI) reported a reduction in the rain levels compared to averages of previous years. The rainy season started in December affected by El Niño phenomenon causing floods in the departments of Cochabamba, Santa Cruz, Beni and La Paz. According to official reports, rains have continued to fall over the Chapare region (Cochabamba), where river flows have considerably increased, destroying harvests of rice, yucca, bananas and citric fruits in rural communities, where some 5,000 hectares of crops may have been lost. Minor livestock was also reported to have died. The Civil Defense estimates some 4,500 flood affected families in that region.

In rural La Paz, valleys have also registered damages produced by river overflows. Civil Defense will support the affected families with food aid. Data collection on the number of affected families was in progress at the time of report writing. The Vice minister of Civil Defense requested WFP food aid to support some 2,000 familias in Chapare region.

Seasonal Perspectives for Crop and Livestock Production:

After low rainfall in the first months of the rainy season through end November 2009, many reports emphasized delays in the sowing season and in the preparation of the land due to the lack of rain in highlands (La Paz, Potosí y Oruro) and Valley (Cochabamba y Chuquisaca) regions.

In the department of Santa Cruz heavy rains are affecting soya and rice producers' agricultural calendar by provoking delays in the closure of the sowing season, normally due in December. The Association of Oilseed and Wheat Producers as well as the National Federation of Rice Cooperatives stated that due to heavy rains in the north and drought in the east of Santa Cruz Department, they are experiencing a 20% fall in the sowing.



The rainy season extends from December till February/March. As shown in the crop calendar, apart from some areas with wheat and barley, all crops are normally sown during September-November. Hence, both low and excessive rainfall, the latter causing flooding in low-lying areas, will affect

sowing, while continuing excessive rainfall tends to affect crops of the low-lying areas, which are oilseed, wheat and rice.

Risk Analysis:

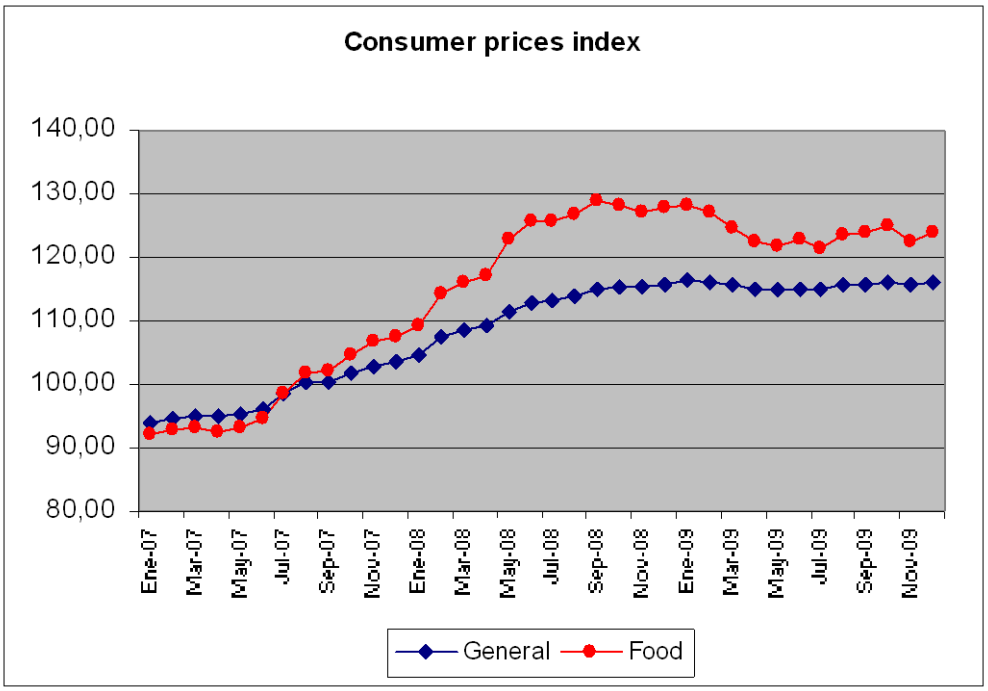
In the recent years, the recurrence of El Niño/La Niña events has significantly increased. On the other hand, VAM figures show that 70 per cent of households in food-insecure municipalities of Bolivia have very low capacity to respond to disasters and emergencies. This combination of a high frequency of climatic events and the vulnerability of its population makes of Bolivia a country with a high risk of natural disasters.

Between 2006 an 2008, three consecutive years of major natural disasters devastated the livelihoods of thousands of families in a large part of the Bolivian territory. Floods, mudslides, landslides, and droughts have caused loss of lives, injury and displacements, as well as damage to housing, infrastructure and agriculture. Rain deficits we reported in El Chaco region since the second half of 2008 resulting in the government's emergency declaratory in November 2008. In 2009, El Chaco and the highlands were affected by low rainfall during the first months of the rainy season (December/08 to march/09) till end November 2009. During the last semester of 2009, according to SENAMHI, El Niño phenomenon aggravated the rain deficit and wide areas of the country were affected by drought especially in the Chaco.

At the beginning of 2010, the country is experiencing again heavy rains influenced by El Niño that indicate the high risk of the recurrence of massive floods in the first quarter of the year. The zones that are more prone to this kind of phenomenon are low lands (Santa Cruz, Beni, Pando and the eastern area of Cochabamba). According to past EFSAs in these zones, an estimated of 30.000 families will be in food insecurity situation due to floods. The most vulnerable victims are likely to be subsistence farmers and indigenous people, who are already poor, and were affected by previous disasters.

2.2 Economic Conditions

During the global crisis of food prices, the Food Consumer Price index for Bolivia has increased in 37 points between January 2007 and September 2008, and remained high up to the present. During the last months of 2008 and till end 2009 prices on most commodities have fallen slightly.



Source: VAM Bolivia, based on figures from the National Institute of Statistics

Regarding the effects of the financial crisis, compared with previous year, remittances are down by 7.5% but the level has stabilized and remained quite high during July-October 2009.

Forecasts by the Central Bank of Bolivia (BCB) estimate around 4% inflation for the period 2010-2011. At the same time the BCB foresees 2010 economic growth in between 4,5 and 5,5% and the external remittances income to be stable along the year. BCB reports a reduction of 6,8% (equivalent to 68,5 million dollars) in remittances received in 2009 compared to 2008.

Risk Analysis:

Due to effects of the Niño phenomenon on the agricultural harvests, it is expected a reduction of food availability in markets because of the loss of production and damages to roads, resulting in a food price increase during the first part of 2010.

2.3 Governance

Government Actions:

Since 2008, the Evo Morales's Government undertook a comprehensive set of actions to respond to the global crisis in food price increase; the aim of these actions was to increase the supply in local markets as well as stimulate local production.

At the end of 2007 the Government established the Empresa de Apoyo a la Producción de Alimentos (EMAPA), an enterprise to support food production, with the aim of supplying internal markets under the principle of fair price. It works with subventions not only for production, but also for the sale of food to consumers. EMAPA sells mainly oil, rice, wheat flour and sugar, but also provided soy (as chicken food) to producers.

In March 2008, export of vegetable oil, rice, and sugar was restricted in order to prioritize supply to the internal market. Afterwards, restrictions to exportation were made more flexible, although the prioritization of the internal market was maintained. In December 2009, a supreme decree authorized the exportation of 30,000 tonnes of rice.

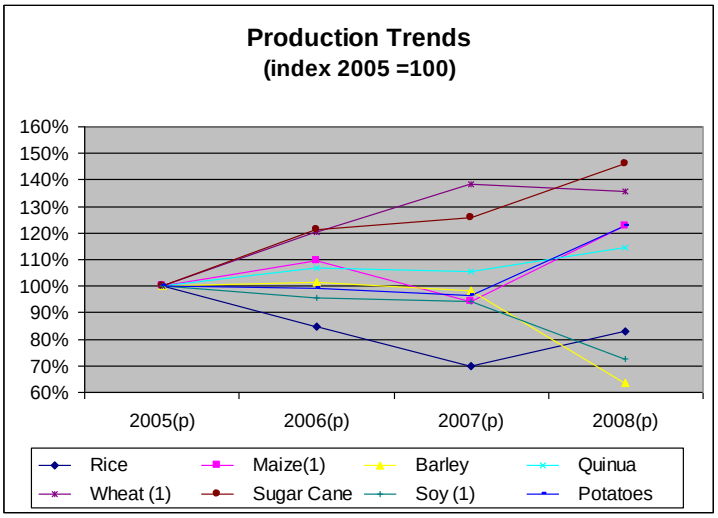
Risk Analysis:

Evo Morales won the presidential elections on Sunday December 6th with at least 61% of the vote. His party, the Movement toward Socialism (MAS) also won two-thirds of the seats in Bolivia's congress. As Bolivia's first leader to win consecutive re-election since 1964, Morales said he will use his five-year term to expand state control over the country's natural resources and distribute revenue from state-controlled businesses to the poor. No governability risks are foreseen for his government in the short term.

3. FOOD AVAILABILITY

Supply/Demand:

Bolivia continues to face significant deficits in national cereal production: it imports 60 percent of the wheat consumed, which is a basic commodity in the food basket. In 2003, the Food and Agriculture Organization of the United Nations (FAO) graduated Bolivia from the low-income, food-deficit country category, mainly because agro-industry in the eastern lowlands exports significant volumes of soybeans as animal feed. To reduce dependency on imports, the Government is supporting small farmers, encouraging them to grow local foods.



Source: VAM Bolivia, based on figures from the National Institute of Statistics

Production of wheat and sugar has increased in response to high import and export prices, respectively. Also, these crops, which are primarily grown in the eastern lowlands, have not been affected by flooding.

BOLIVIA: ANNUAL AGRICULTURAL PRODUCTION (metric tones)				
DESCRIPCION	**2005(p)**	**2006(p)**	**2007(p)**	**2008(p)**
Rice	526.836	446.462	369.141	435.960
Maize	816.736	894.436	770.365	1.000.385
Barley	73.996	75.226	72.589	46.936
Quinoa	25.201	26.873	26.601	28.809
Wheat	119.227	143.677	165.165	161.553
Sugar Cane	5.112.222	6.201.125	6.419.313	7.458.808
Soya Beans	1.693.087	1.618.966	1.595.947	1.225.885
Potatoes	761.891	754.807	735.254	935.862
Source: National Institute of Statistics				
(p): Preliminary data				

4. FOOD ACCESS

Access is the main cause of food insecurity in Bolivia. The income of 38 percent of the total population (59 percent of the rural population) is not sufficient to meet basic food needs. According to VAM, extreme poverty reaches 72 percent of households in the most food insecure municipalities.

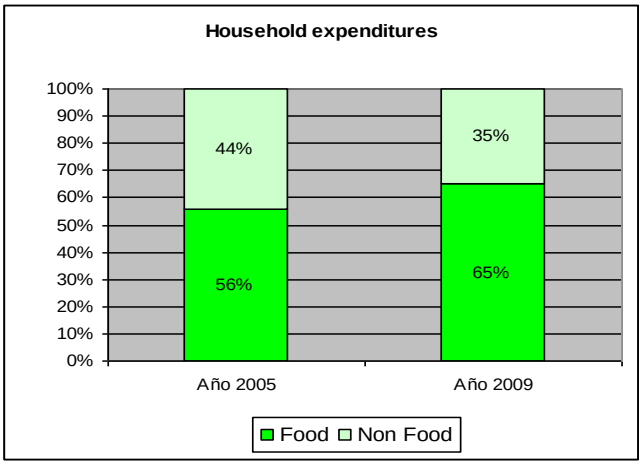
The 2009 WFP Food Security and Nutrition Survey, aimed at investigating the changes suffered by most vulnerable municipalities as a consequence of the last global crisis, established that 6 out of 10 households were covering less then the 90% of the recommended energy level intake. Regarding micronutrients, Vitamin A and Calcium for example, the report found the situation to be very critical, where more than 80% of the population living in high vulnerable municipalities were consuming less than 70% of the recommended rations.

Recent crises had a strong impact on households' strategies, showing important signs of adaptation but also tension or stress. In most vulnerable municipalities, the proportion of households that recognizes agricultural and livestock activities as their main source of income is reducing, as these activities are highly exposed to climate risks.

At the same time, wage labour decreased, generally associated to a more stable source of income, while self employment (a less stable source of income) increased its importance in rural zones.

In vulnerable rural municipalities, households declared that 77% of food consumed was purchased rather than produced, an increase from 65% in the 2005 survey. This confirms a trend of less reliance on own production in food consumption, which probably dates back to the 1980s

The most sensitive indicator for appreciating the effects of price increases is the structure of expenditure, because it reveals important changes in comparison with 2005; in fact the proportion of expenses for food increased from 56 to 65% in the last 4 years, which discloses the fact that households had to reduce the part of expenses destined to health and other expenses.



Source: WFP VAM Bolivia

5. Malnutrition & diseases

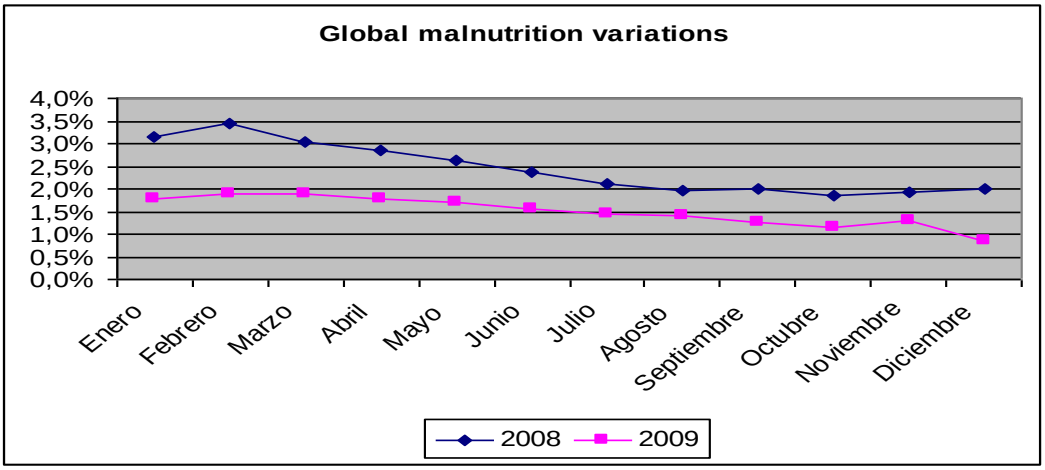
Over the last ten years, according the National Health and Nutrition Survey (ENDSA, 2003), stunting in children under 5 has remained stagnant at around 32 percent nationally. According to the WFP's CFSVA 2009, stunting prevalence is higher r than 47 percent in the most food insecure municipalities. Between 2005 and 2009, prevalence of chronic hunger remained at 47%.

Vulnerability municipalities: malnutrition in children under 5

Malnutrition	2005	2009
Stunting	47.9	47.4
Global	9.0	11.0
Acute	2.1	1.6

Source: WFP VAM Bolivia

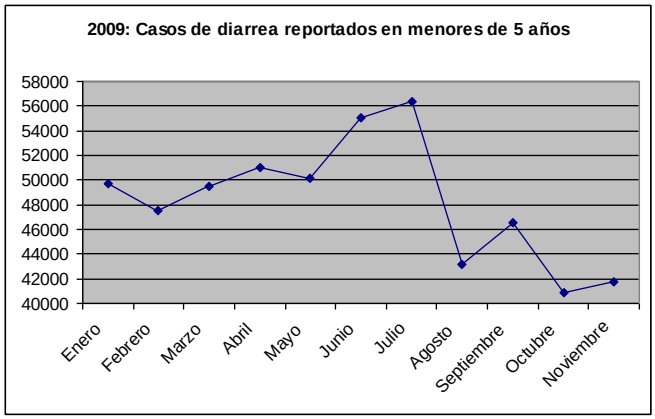
The Government through its National Health Information System (SNIS) monitors the prevalence of global hunger in the health centers all along the country. Even if data only come from health visits attended, it can give an idea of the evolution of the malnutrition along the year in children under 5.

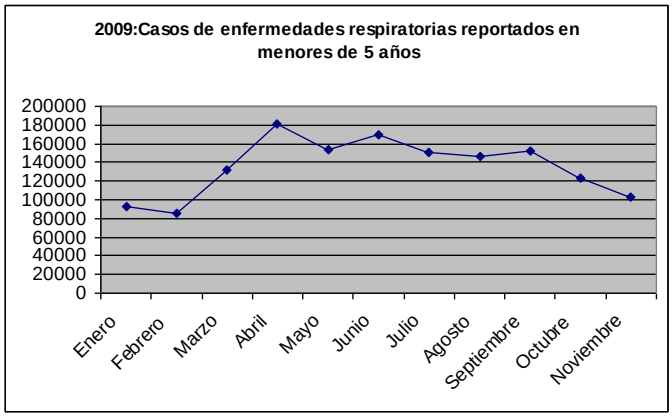


Source: SNIS

It is notable that in the last 2 years the behavior of malnutrition is in some way linked to the rainy season. In 2008, Bolivia suffered massive floods in big part of the country, which also makes the information about malnutrition higher than the 2009, especially in the first 2 months of the year.

In the same way, in the first 4 months of the year, other factors that influence malnutrition, such as diarrhea and respiratory diseases, starts to increase.

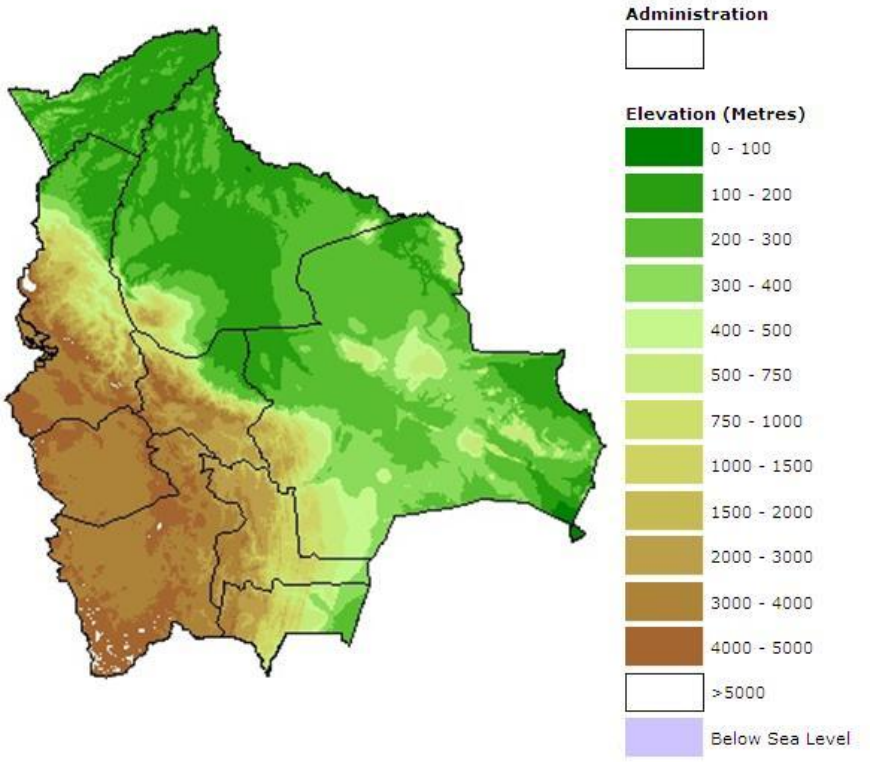




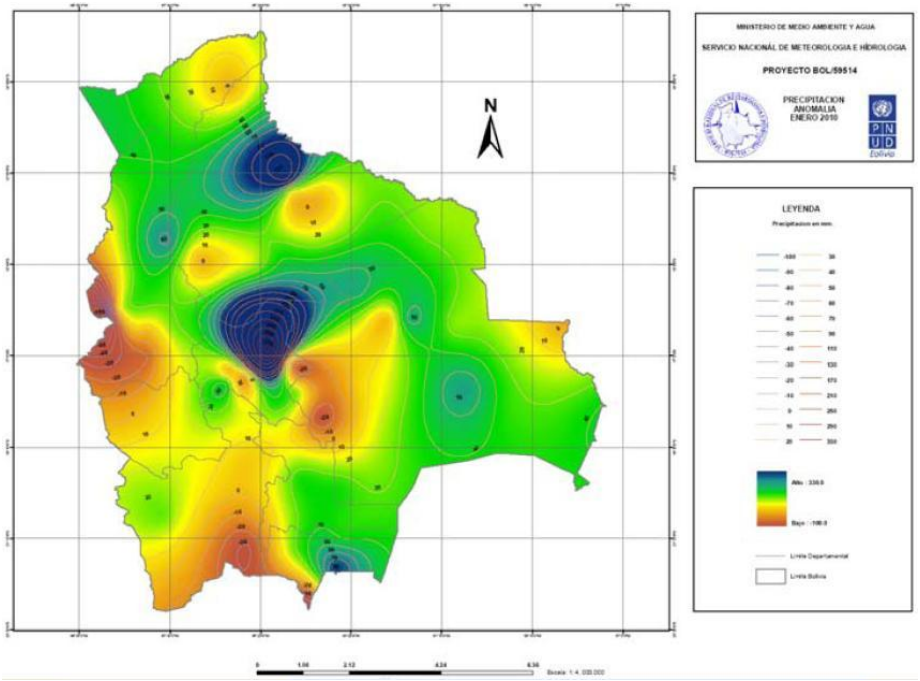
Source: SNIS

ANNEXES

Annex 1 – Elevation & Rain forecast January 2010

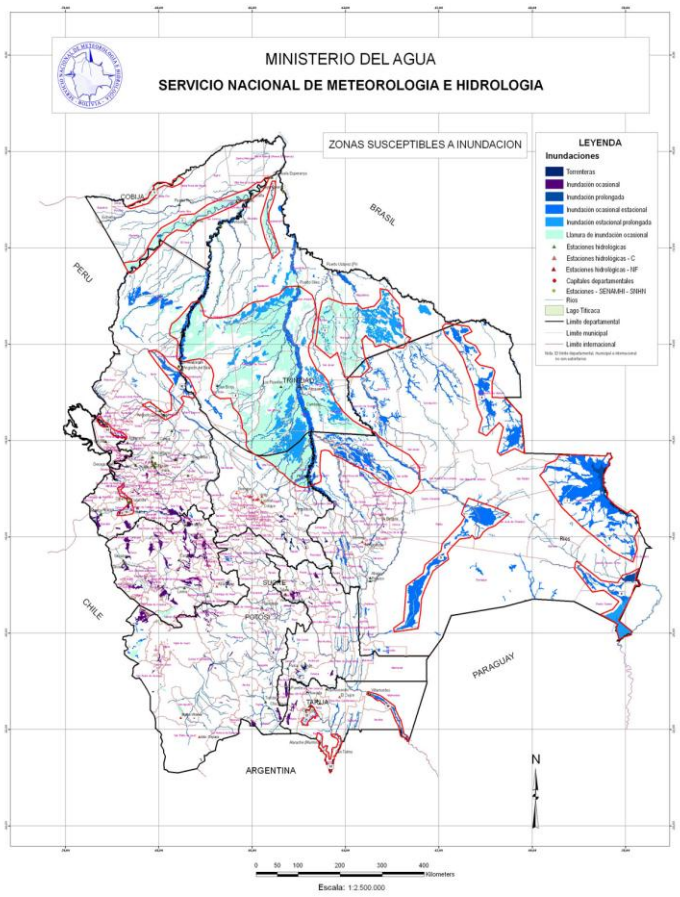


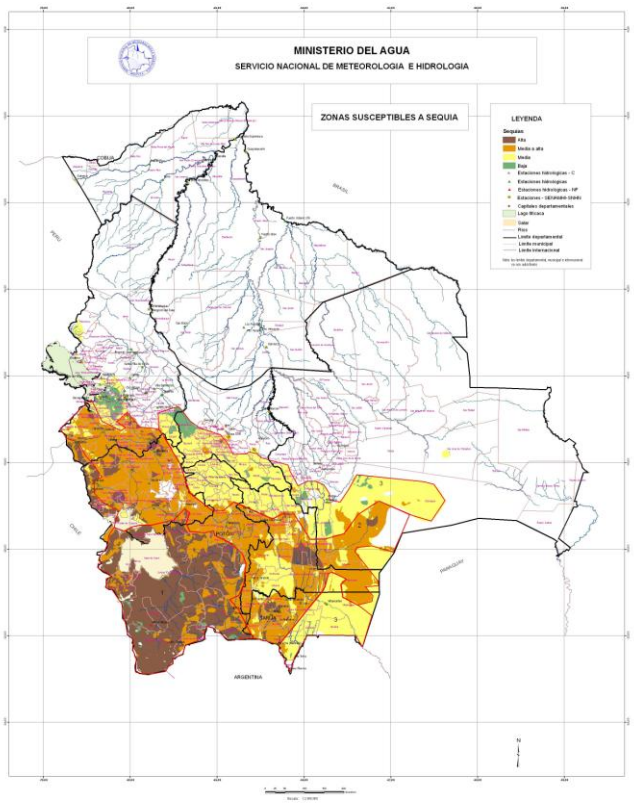
Source: FAO



Source: SENAMHI

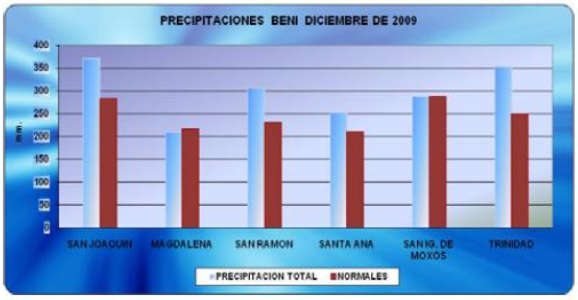
Annex 2 – Flood & Drought prone areas

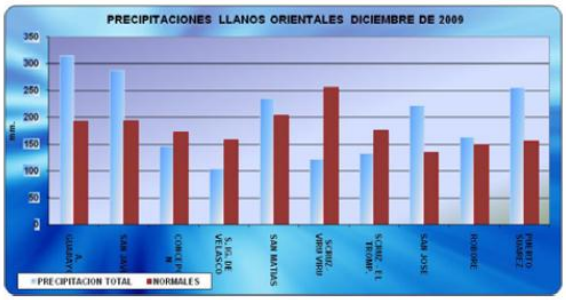




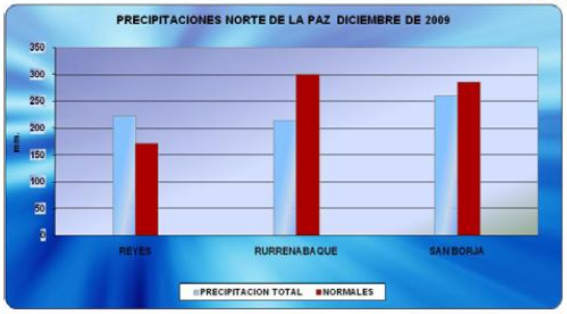
Annex 3 – December 2009: Rainfall statistics

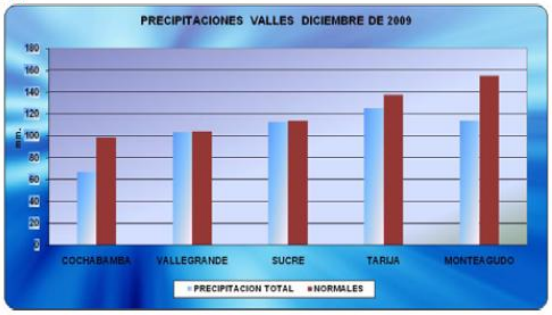
Muestra de Regiones con excesos de precipitaciones durante diciembre de 2009





Muestra de Regiones con déficit y cercanos a sus promedios de precipitaciones durante diciembre de 2009





Source: SENAMHI