

Crop Situation Update



United Nations World Food Programme
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Crop Situation Update
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Highlights

- According to a rapid WFP survey, more than 70% of surveyed 247 farmers in 20 districts expect a poor to very poor winter crop production due to lack of rainfall.
- In 2008, the paddy production was at a record level with an estimated output of 4.5 million metric tons. However, this figure was only 1.5% above the paddy production registered in 2003, indicating a very low long-term productivity growth.
- Paddy production increased by 5.2%, maize by 2.8% and millet by 0.5% compared to last year. The overall cereal output (2008 summer crops only) increased by an estimated 4.3%.
- Despite good national figures, production was not uniform in the country. Excessive rainfall, pests, strong winds, floods and landslides during July-September resulted in moderate to very poor production in the Mountains and Hills of the Mid- and Far-Western regions.
- The outlook for the winter crop production is worrisome. This, combined with other factors effecting food security (incl. remoteness, high food prices and limited income opportunities), poses a high risk of increased food insecurity beginning in April. Increased food security will become particularly critical from June onwards as Nepal moves into its traditional lean season. Areas of high concern are those where both the summer crop production was impaired and the prospect for the winter crop production is poor.

Winter Crops - Outlook 2009

EARLY PROSPECTS FOR NEPAL

Wheat is the main winter crop, followed by barley. Wheat is cultivated across the country while the production of barley is mainly concentrated in the Hill and Mountain areas. Wheat is generally planted in November in the lower belt of the Hills and in the Terai, whereas planting continues until the end of December in the northern belt of the Hills and in the Mountains.

Meteorological data from October to date from the Department of Hydrology and Meteorology and reports from the Nepal Food Security Monitoring and Analysis System (FSMAS) indicate that the country remained drier and warmer than normal. Many parts of the country have not received any rainfall at all (Maps 1 and 2).

Given the worrying prospect of heavy crop losses due to lack of rainfall, the field surveillance team of the Nepal FSMAS undertook a rapid survey among 247 farmers in 20 districts¹.

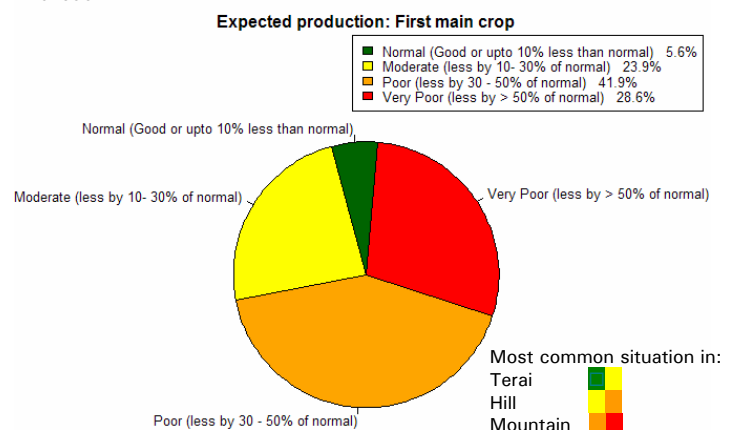
Almost all farmers reported that planting of winter crops was on time as a result of the extended monsoon in most areas. However, 46% of farmers reported that seed germination was not good. This was particularly the case in rain-fed areas in the Far- and Mid-Western Hills and Mountains due to insufficient moisture in the soil.

Wheat and barley are currently in the growing stage and will be harvested, depending on the agro-ecological belt, from the end of March to the end of June.

Graph 1 shows the expected crop production of the farmer's main crop (wheat or barley). Less than 6% of farmers expect a normal to good wheat harvest. Most of these farmers live in the Terai where the crop outlook is more optimistic because of

better soil moisture conditions. Almost 70% of farmers expect a poor to very poor winter crop production with anticipated crop losses ranging between 30 to 50% or more; lack of rain being the main cause².

Due to a continuing absence of winter rains, the outlook for the winter crop production in the rain-fed areas of the Far- and Mid-Western Hills and Mountains and in some districts of the Central Hills is -all in all- bleak. The FSMAS is closely monitoring the likely impact on food security in the most drought-affected areas.



Graph 1 – Expected winter crop production

EARLY PROSPECTS IN THE REGION

Regional winter crop production is expected to be mixed. China has declared a drought emergency, with 50% of wheat under threat. However, following late rainfalls in India and Pakistan, wheat crops in these two countries are expected to be generally strong, and comparable to last year's strong harvests.

¹ Kanchanpur, Kailali, Bajhang, Doti, Bajura, Darchula, Achham, Kalikot, Mugu, Jumla, Dolpa, Jajarkot, Rolpa, Salyan, Banke, Dolakha, Kavre, Sindhuli, Mahottari, Siraha.

² Precipitation occurred in the Mid- and Far- West on 10-11 and 24-25 February with some rain in the hills and snow in higher elevations after a long dry spell. However, the impact of these rains are said to be limited.



Source: Nepal Food Security Monitoring and Analysis

Summer Crops - 2008

OVERVIEW

During the summer period, paddy, maize, and millet are the main cereal crops cultivated in the country. Paddy is grown predominantly in the Terai, while maize and millet are cultivated mostly in the Hill and Mountain areas.

This year's national production was above last year's. The preliminary estimate of the Ministry of Agriculture and Cooperatives (MoAC) suggests that the production of paddy, maize, and millet has increased by 5.22%, 2.77%, and 0.54% respectively, as compared to last year (Table-1).

Table 1 - MoAC Preliminary Estimate of Summer Crop Production in 2008/09 as compared to 2007/08

Crops	Fiscal Year 2065/066 2008 / '09			Fiscal Year 2064/065 2007 / '08		
	Area Ha.	Prod ⁿ MT.	Yield MT./Ha	Area Ha.	Prod ⁿ MT.	Yield MT./Ha
Paddy	1,555,940 (0.43)	4,523,693 (5.22)	2,907 (4.77)	1,549,262 (7.62)	4,299,246 (16.8)	2,775 (8.53)
Maize	875,428 (0.6)	1,930,669 (2.77)	2,205 (2.15)	870,166 (-0.03)	1,878,648 (3.23)	2,159 (3.25)
Millet	265,889 (0.15)	292,683 (0.54)	1,101 (0.4)	265,496 (0.13)	291,098 (2.21)	1,096 (2.08)

Note: Figures in parenthesis indicate percentage increase, or decrease compared to previous year

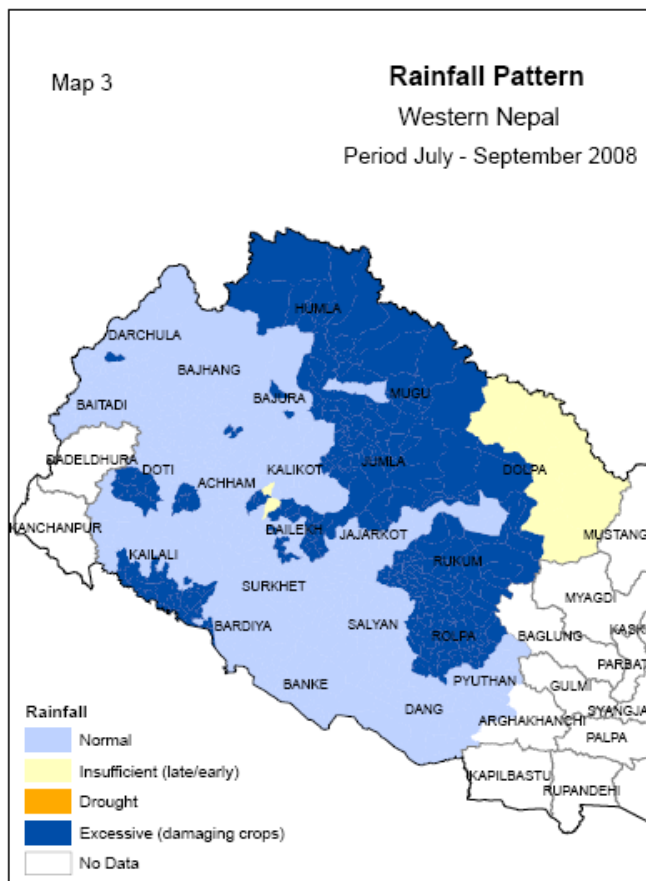
The increase in yield is attributed to a good monsoon during the period June—September 2008 (the official recorded precipitation was higher than normal). This allowed farmers to plant crops on time and to extend cultivation to non-irrigated upland areas.

Despite the overall good monsoon precipitation, excessive rainfall was reported in some parts of the country, causing heavy flooding in several districts in the Eastern and Western Terai thereby damaging farm properties and crops (Sunsari, Kanchanpur, Kailali and Bardiya).

Excessive rainfall as well as local disasters including landslides, flooding, strong winds and pests affected the summer crop production in certain parts of the country. In particular, the Nepal FSMAS revealed that the production of paddy, maize and millet declined between 10-50% in parts of the districts located in the Far- and Mid-Western Hills and Mountains mainly due to excessive rainfall which damaged crops (see Maps 3 and 4).

The summer crop production was good in the majority of the Central and Eastern districts that are covered by the FSMAS, with exception of some areas in Kavre and Ramechhap where crops were affected by irregular and insufficient rainfall.

Box 1 on the next page provides details on crop losses in affected districts.



Box 1 – Details on districts with areas of reduced paddy production

Jumla — The production decreased by 10-30% in the VDCs at the periphery of the district headquarters and by more than 30-50% in eastern, northern, and western belts of the district, including Sinja valley (Mahabe, Kalikakhetu, Badki, Dhapa, Narakot, Sanigaun, Bumramadi Chaur, Kanaka Sundari, Malikabota, Birat, and Pandab Gupha VDCs), which is famous for paddy production in the district.

Mugu — The north-western VDCs (Ruga, Photu, Jima, Natharpu, Bhie, and Hyanglu) saw a decrease in production by 30-50%; likewise Gumtha and Seri VDCs lost 10-30% due to excessive rainfall and landslides.

Humla — There was no paddy cultivation in Limi, Muchu, Khagalgaun, Hepka, Bargaun, and Simkot VDCs. Production decreased in all paddy cultivated areas: by 10-30% in Rodikot, by more than 50% in Dandafaya VDC and by 30-50% in the southern and eastern belts.

Bajura — The production decreased by 30-50% in some parts of Kolti, Kotila, Jagannath, Jugada, Brahmatala, Kailashmandu, Kuldeumandu and Gudukhati VDCs. Similarly, 10-30% of losses occurred in Sappata, Gotri, Bichhiya, Rugin, Dahakot, Manakot, Chhatara and Dogadi VDCs.

Dailekh — Most of the VDCs had a normal production. However some VDCs in the north, east, and south saw losses by 30-50% due to excessive rainfall, floods, strong winds and blast disease.

Kavre — 15 VDCs in the east of Dhulikhel and Panauti municipalities had production decrease by 30-50% due to late and insufficient rainfall; more than 500 hectares of land remained uncultivated. Similarly, 13 VDCs in the northern and eastern periphery of the same areas experienced crop losses in the range of 10-30%. The other areas registered normal production.

Sunsari, Bardiya, Kailali, and Kanchanpur — The eastern belt of Sunsari, western belt of Bardiya, southern belt of Kailali, and most of the areas in Kanchanpur saw 60-100% losses of paddy crop due to severe flooding in August and September.

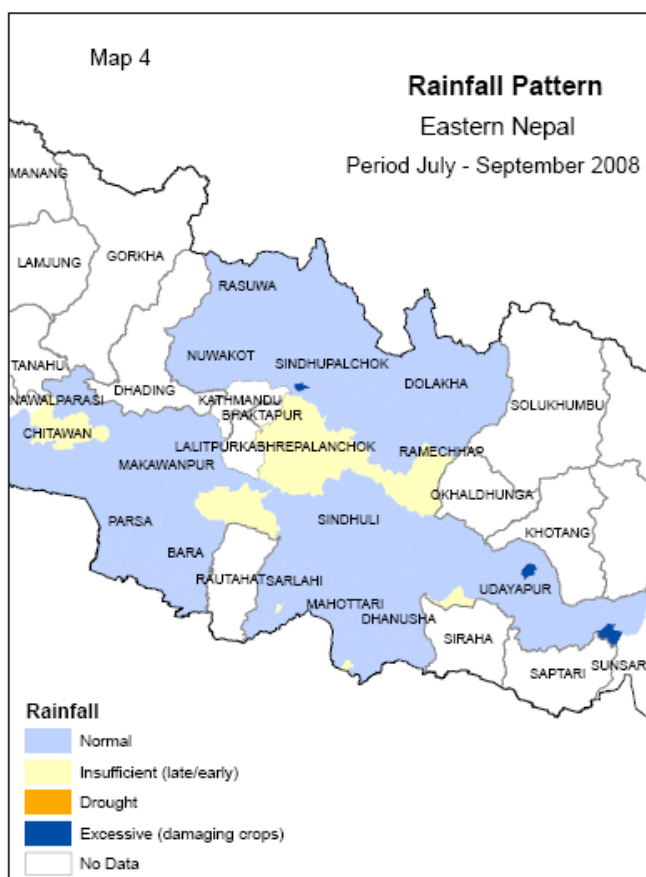


Photo 1 – Farmer in a paddy field in Dhanusha.

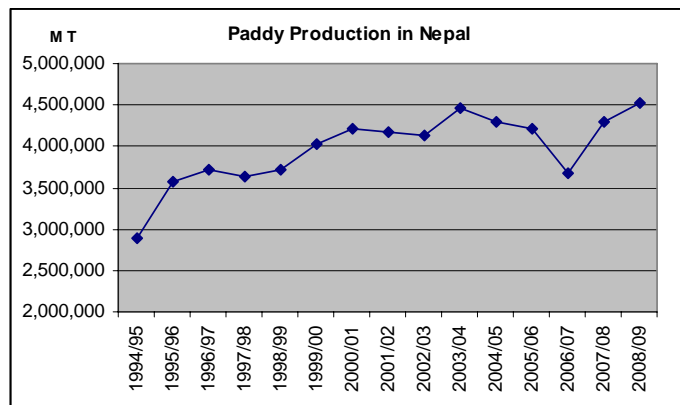
Source: Nepal Food Security Monitoring and Analysis



PADDY PRODUCTION AT RECORD LEVEL

Paddy is the most important cereal crop in Nepal. It makes up more than 50% of total national cereal crop production. According to the Ministry of Agriculture and Cooperatives (MoAC), paddy production increased by more than 224,000 mt compared to last year's production.

National output was at record levels of approximately 4.5 million mt, which is the highest it has been during the past 60 years³. However, this figure is only 1.5% higher than the production registered in 2003/04 (4.45 million mt) (Graph 2). The projected population of Nepal is estimated to have increased by 11% since then. Paddy production has therefore not kept pace with population growth.



Graph 2 - Paddy production in Nepal from 1994 to date.

Despite increased production figures at the national level, the Nepal FSMAS revealed very poor to moderate production in some areas of the Far- and Mid-Western Mountains and Hills and in a few VDCs of Kavre in the Central Region. In these areas, the paddy was highly affected by excessive rainfall, floods, landslides, strong winds, and pest diseases this year (see Maps 5 and 6).

MAIZE PRODUCTION

Maize is the second most important cereal crop in Nepal, contributing to approximately 29% of total national cereal production. It is cultivated mostly in the Hills and lower belts of the Mountain districts. This year the national production of maize is estimated to have increased by 2.77% compared to last year (Table 1).

Production was good in many districts of the Mountains and Hills in the Central and Eastern Regions. Exceptions are some VDCs of Kavre, Ramechhap and Udayapur where irregular rainfall, particularly during June-July, and pests caused a decline in maize production.

In the Far- and Mid-West the situation was more mixed with good maize production in Baitadi, Pyuthan, most of Achham and Darchula, the central and southern belts of Bajura, south Kalikot and Jajarkot, but there were considerable losses in maize production in other areas, including the Karnali and the Far Western Mountains. More specifically, excessive rainfall combined with pests and strong winds caused moderate to very poor maize production in south-west Dolpa, Jumla, north Kalikot, Rukum, Rolpa, Dailekh, north Jajarkot, Surket, Salyan, parts of

Bajura and Bajhang. In some VDCs of Achham and Bajura heavy rain caused landslides and floods destroying 40-50% of maize crops (see Maps 7 and 8).

PRODUCTION OF MILLET AND OTHER LOCAL CROPS

Millet (finger millet) is a minor cereal, contributing approximately 4.3% to the national cereal production. However, together with *Chinu* (*Panicum miliacum*), millet represents an important staple food for several Hill and Mountain districts. In particular, *Chinu*, represents the exclusive staple food for people living in parts of Mugu, Dolpa, Jumla, Humla in the Karnali for some period of the year.

Preliminary estimates for millet production from the MoAC indicate a slight increase in the total area cultivated and in national production compared to last year (0.15% and 0.54% respectively – Table 1). The crop, however, was affected by pests, late and excessive rainfall (especially during July - September) in Humla, Jumla, Dolpa, parts of Mugu, Bajura and Doti where production was moderate to very poor.

Naffal, an important local crop in Limi and Muchu VDCs of Humla, has been reported to have a very poor production this year due to excessive rainfall and early snowfall.



Photo 2 – Irrigated wheat production, Shreenagar, Humla

SUB-REGIONAL PRELIMINARY ESTIMATES

Table 2 on the following page shows the preliminary estimates provided by the MoAC for the summer cereal production by sub-region and zone. Overall summer cereal production is up by an estimated 4.3% with the highest increases recorded in the Terai (4.8%), followed by Hills (3.8%) and Mountains (3.0%). Estimated production increases were particularly high in the Western Region where an increase of more than 10% was recorded compared to last year.

³ Preliminary Estimate of main cereal crops—Paddy, Maize, and Millet, Ministry of Agriculture and Cooperatives, (January 2009)



PRELIMINARY ESTIMATE OF PADDY, MAIZE AND MILLET CROPS (2008)

REGION/ZONE	PADDY			MAIZE			MILLET			Total	Change
	Area (ha)	Prod (tonnes)	Yield (kg/ha)	Area (ha)	Prod (tonnes)	Yield (kg/ha)	Area (ha)	Prod (tonnes)	Yield (kg/ha)	Prod (tonnes)	(last year) %
E.MOUNTAIN	26335	47641	1809	40809	85804	2103	15079	16089	1067	149534	0.00
E.HILLS	91205	223978	2456	142599	301542	2115	49379	53775	1089	579295	3.64
E.TERAI	375208	1081588	2883	51170	122540	2395	5865	6148	1048	1210276	2.04
E.REGION	492748	1353207	2746	234578	509886	2174	70323	76012	1081	1939105	2.35
C.MOUNTAIN	18370	46057	2507	29635	66790	2254	23920	25805	1079	138652	7.27
C.HILLS	91568	292642	3196	137897	305986	2219	37154	40393	1087	639021	1.21
C.TERAI	315090	991820	3148	42779	109218	2553	2900	3040	1048	1104078	2.95
C.REGION	425028	1330519	3130	210311	481994	2292	63974	69238	1082	1881751	2.66
W.MOUNTAIN	0	0	0	703	1160	1650	7	7	1000	1167	-0.26
W.HILLS	136769	370072	2706	209388	515201	2461	95929	108980	1136	994253	6.59
W.TERAI	188950	609525	3226	12190	31143	2555	740	740	1000	641408	16.25
W.REGION	325719	979597	3007	222281	547504	2463	96676	109727	1135	1636828	10.18
MW.MOUNTAIN	6945	12624	1818	9809	16184	1650	8501	8785	1033	37593	4.09
MW.HILLS	46536	121566	2612	103829	193176	1861	12147	14823	1220	329565	1.06
MW.TERAI	112458	358077	3184	39900	80920	2028	170	160	941	439157	5.78
MW.REGION	165939	492267	2967	153538	290280	1891	20818	23768	1142	806314	3.72
FW.MOUNTAIN	13265	22783	1718	10540	18890	1792	5920	5820	983	47493	0.02
FW.HILLS	26586	60620	2280	21130	37303	1765	7808	7768	995	105691	4.77
FW.TERAI	106655	284700	2669	23050	44813	1944	370	350	946	329863	-0.03
FW.REGION	146506	368103	2513	54720	101006	1846	14098	13938	989	483047	0.99
MOUNTAINS	64915	129105	7851	91496	188828	9448	53427	56506	5162	374439	2.99
HILLS	392664	1068878	13250	614843	1353208	10420	202417	225739	5527	2647824	3.83
TERAI	1098361	3325710	15110	169089	388634	11475	10045	10438	4984	3724782	4.76
NEPAL	1555940	4523693	2907	875428	1930669	2205	265889	292683	1101	6747045	4.30

Table 2

CONCLUSION

Summer crops production was reported to be good at the national level, with increases of 5.2% for paddy, 2.8% for maize and 0.5% for millet compared to last year. The overall increase in cereal output (summer crops only) is estimated at 4.3%

Despite good national figures, production was not uniform in the country. Heavy rainfall in August and September caused incidents of severe flooding in East and West Terai (Sunsari, Kanchanpur, Kailali, Bardya) resulting in heavy crop losses in these areas. In addition, excessive rainfall, pest diseases, strong winds, localized floods/landslides during July-September resulted in moderate to very poor production in several areas of the Mountains and Hills of the Far- and Mid-Western Regions.

Moreover, due to almost complete absence of rainfall during the winter season, the outlook for the wheat and barley harvest is bleak, particularly in the rain fed areas of the Far- and Mid-West and in several districts of the Central Hills. The Nepal FSMAS is closely following the impact this may have on the food security status of the population.

The Nepal Food Security Monitoring and Analysis System (FSMAS) is continuously surveying 47 of Nepal's districts to provide up-to-date information on the crop situation, rainfall patterns, market developments, disaster incidences, peace situation and food security status.

The Crop Situation Update No.9 summarizes findings for the summer crop production and provides an outlook for the winter crop production. The data is based on interviews with the District Agriculture Development Offices (DADO), discussions with farmers, other key informants and observations by the WFP field monitors. The information is verified in district based food security information forums (Food Security Networks or District Agriculture Development Committees). Maps 5 to 10 show the situation of paddy, maize, millet and other local crops covered by the WFP FSMAS.

Crop Situation Updates are produced by WFP Nepal as part of the Nepal Food Security Monitoring and Analysis System. The FSMAS is currently funded from a DFID contribution in support of WFP's operations in Nepal.

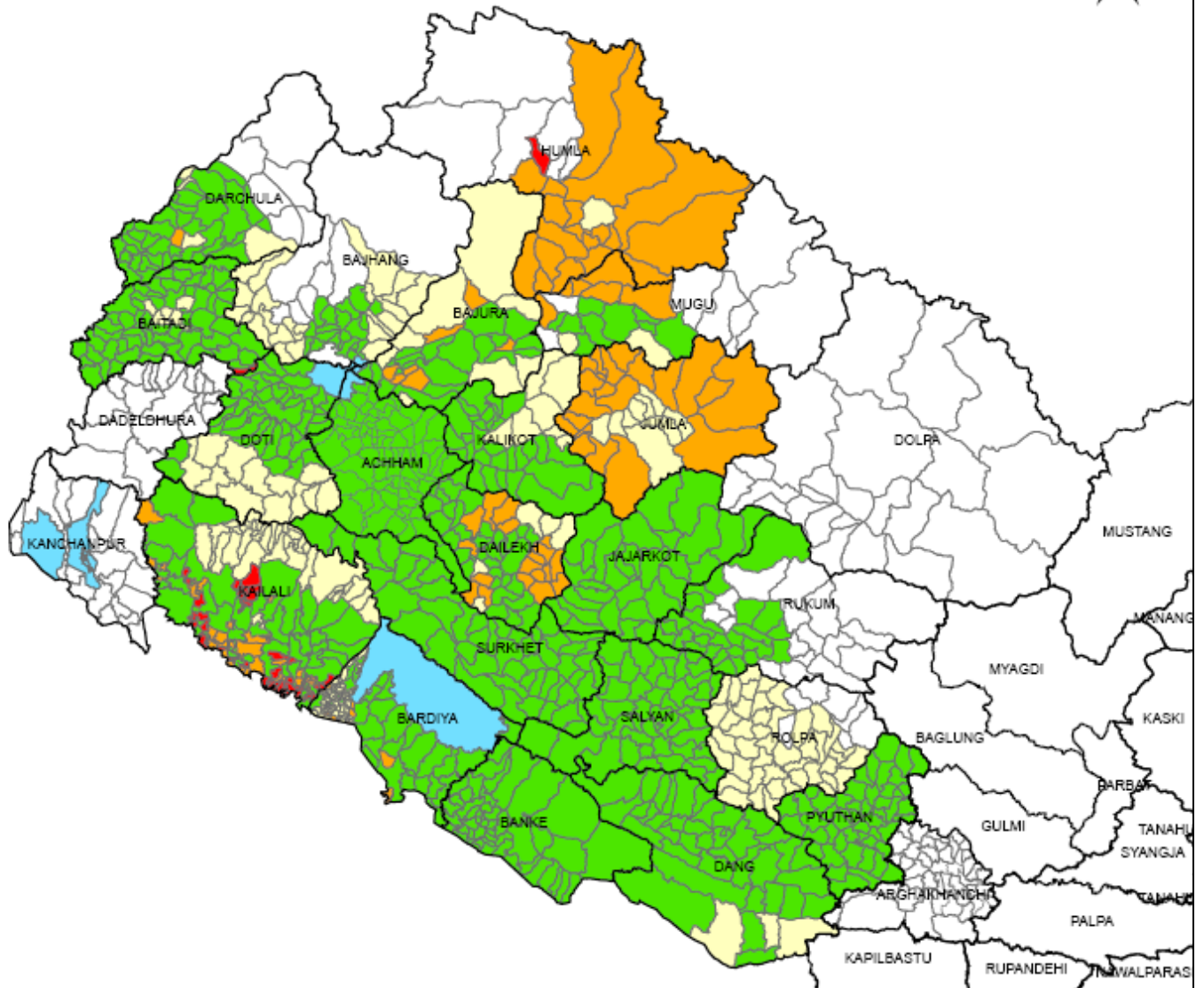
All information products produced by the Food Security Monitoring and Analysis System are available on the UN Nepal Information platform (www.un.org.np) or on the WFP website: www.wfp.org

For more information please contact the Food Security Monitoring and Analysis Unit, World Food Programme
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Paddy Crop Production

December 2008

Western Nepal



Legend

Administrative Boundaries

District

VDC

Crop Condition

1 Normal or Good (MHI: up to 10% less than normal)

(T: 10 - 20% less than normal)

2 Moderate (MHI: 10 - 30% less than normal)

(T: 20 - 40% less than normal)

3 Poor (MHI: 30 - 50% less than normal)

(T: 40 - 60% less than normal)

4 Very Poor (MHI: 50 - 70% less than normal)

(T: 60 - 80% less than normal)

5 Extremely poor/failure (MHI: > 70% less than normal)

(T: > 80% less than normal)

Not Applicable

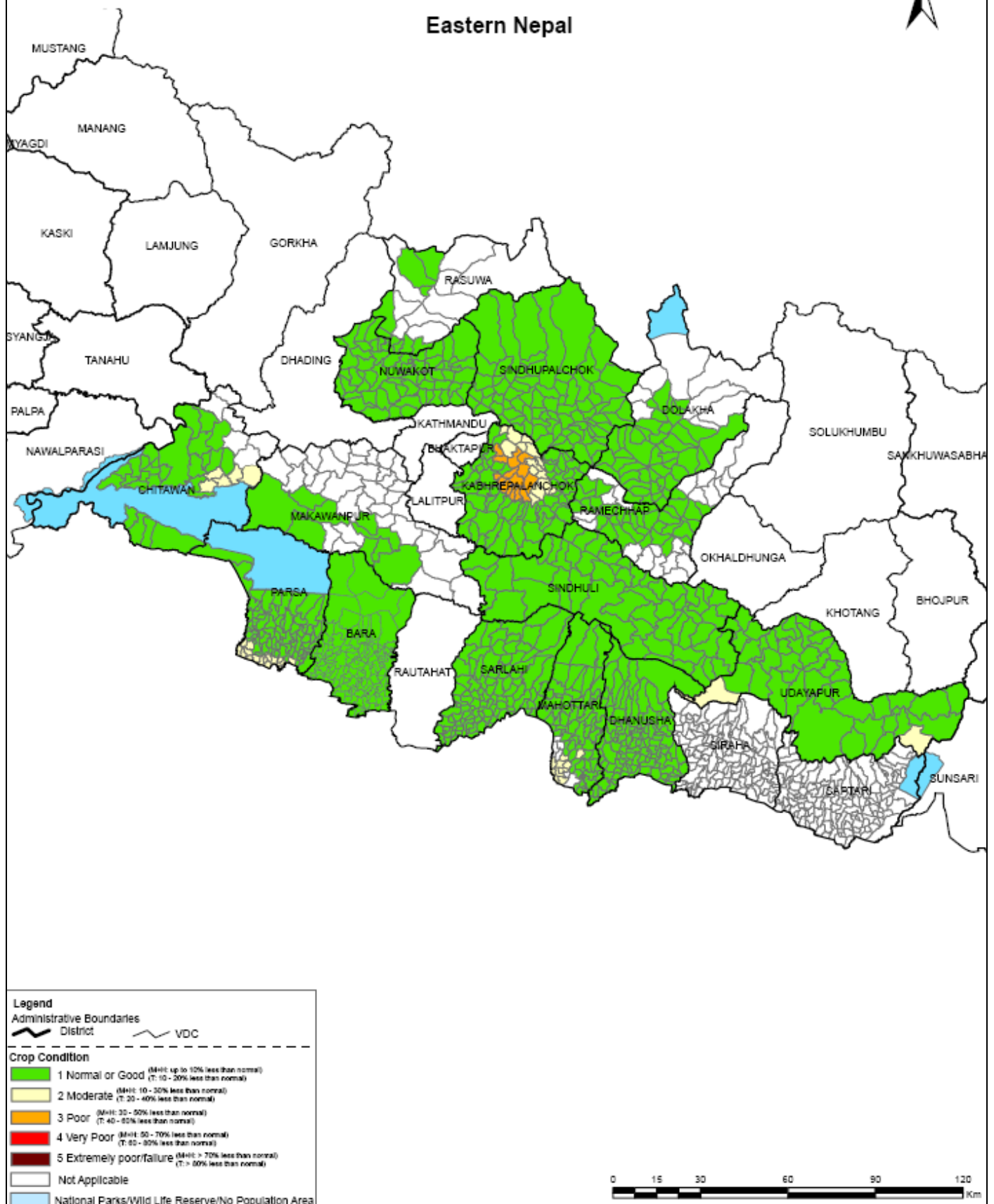
National Parks/Wild Life Reserve/No Population Area

0 15 30 60 90 120 km

Paddy Crop Production

December 2008

Eastern Nepal

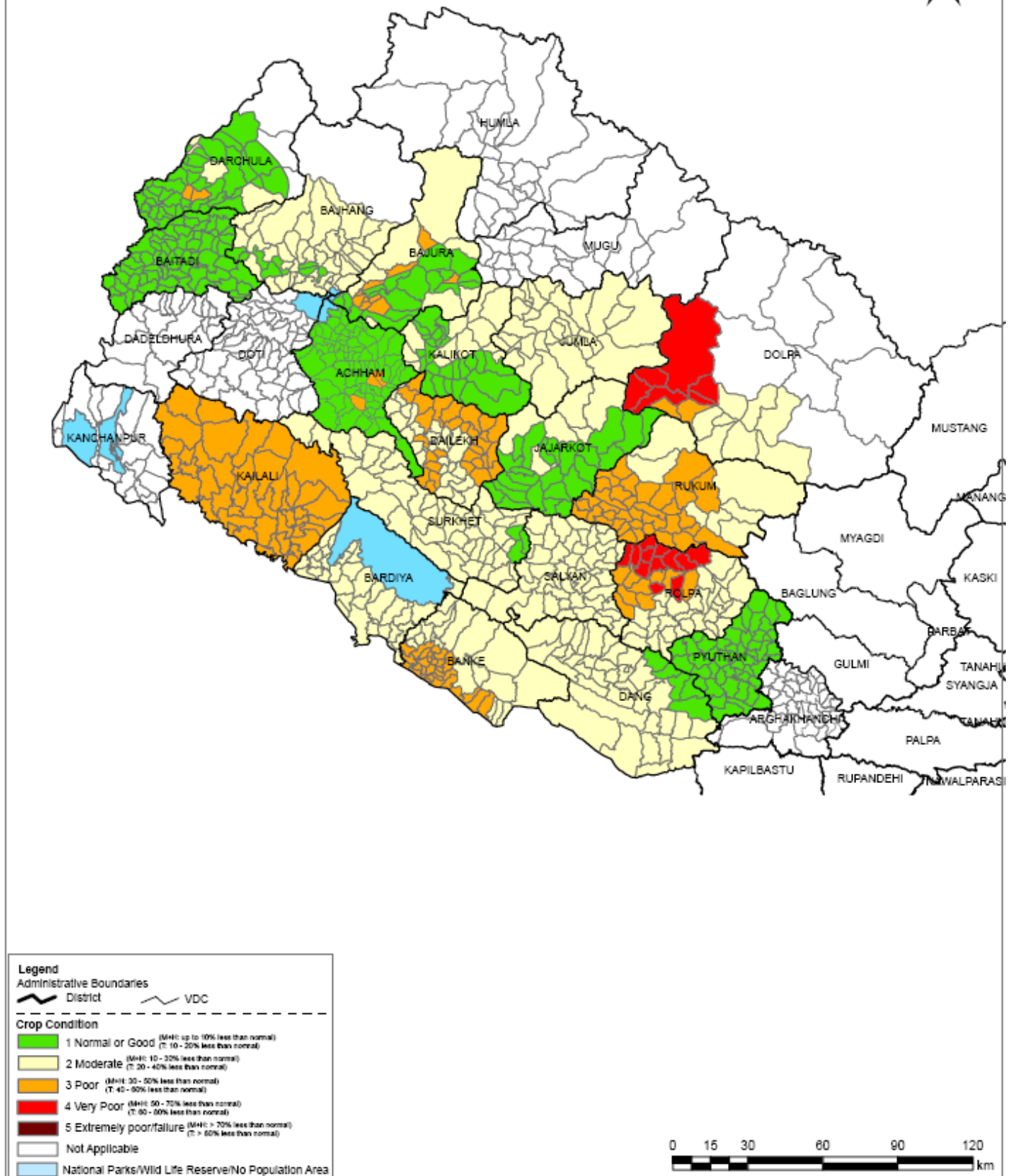


Map 6

Maize Crop Production

August/September 2008

Western Nepal

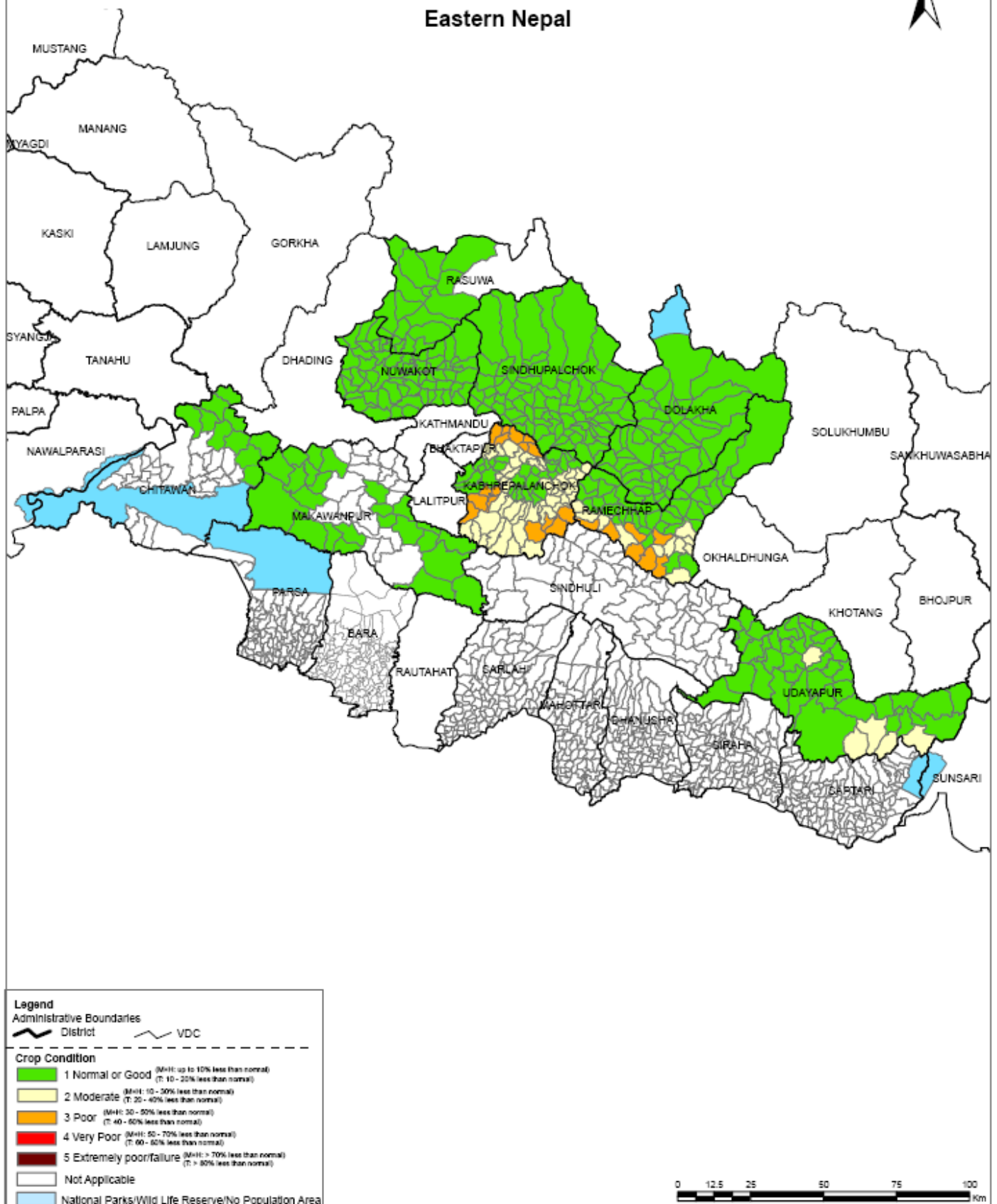


Map 7

Maize Crop Production

August/September 2008

Eastern Nepal

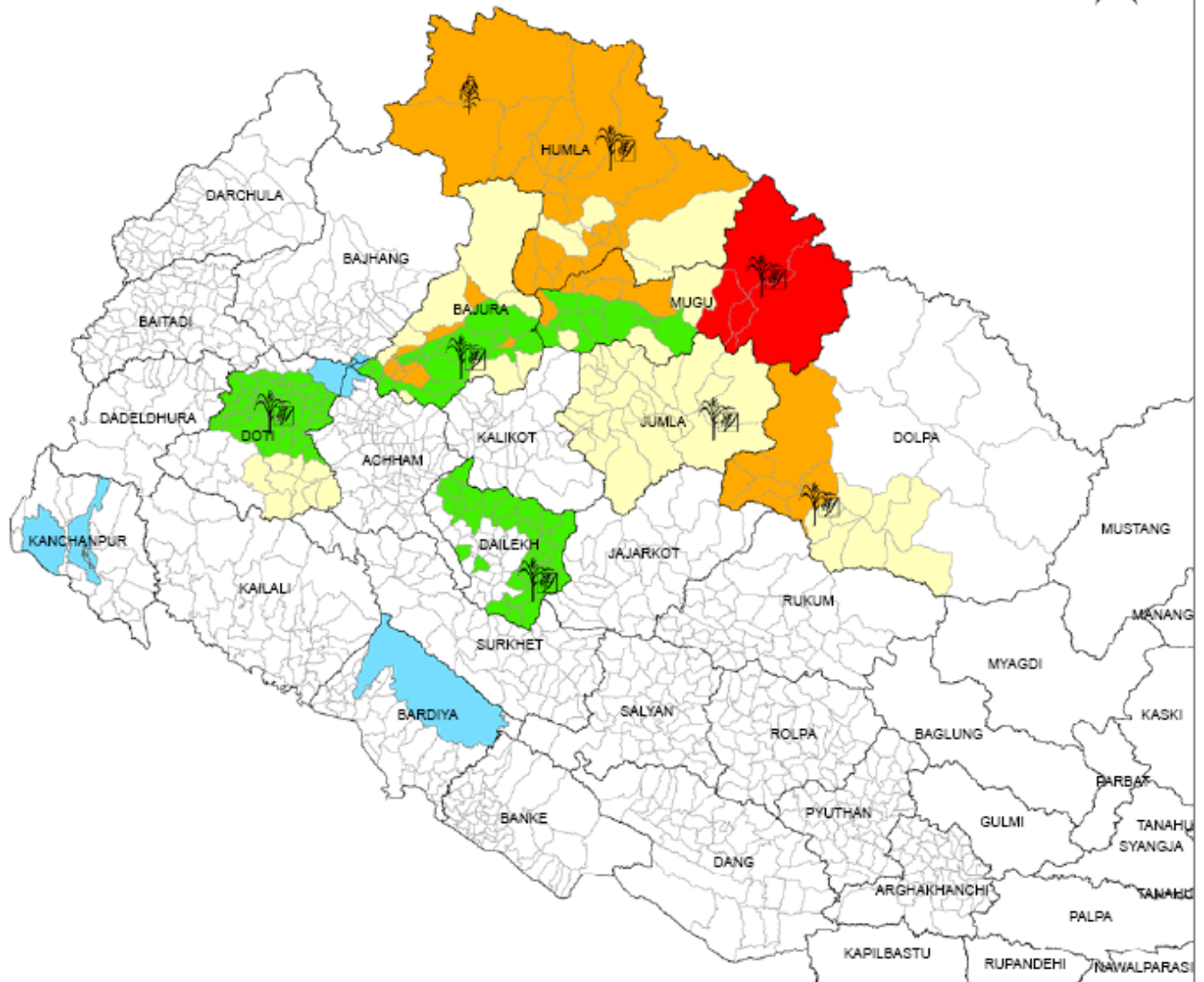


Map 8

Millet & Barley Crop Production

August/September 2008

Western Nepal



Legend

Administrative Boundaries

District

VDC

Crop Types



Barley



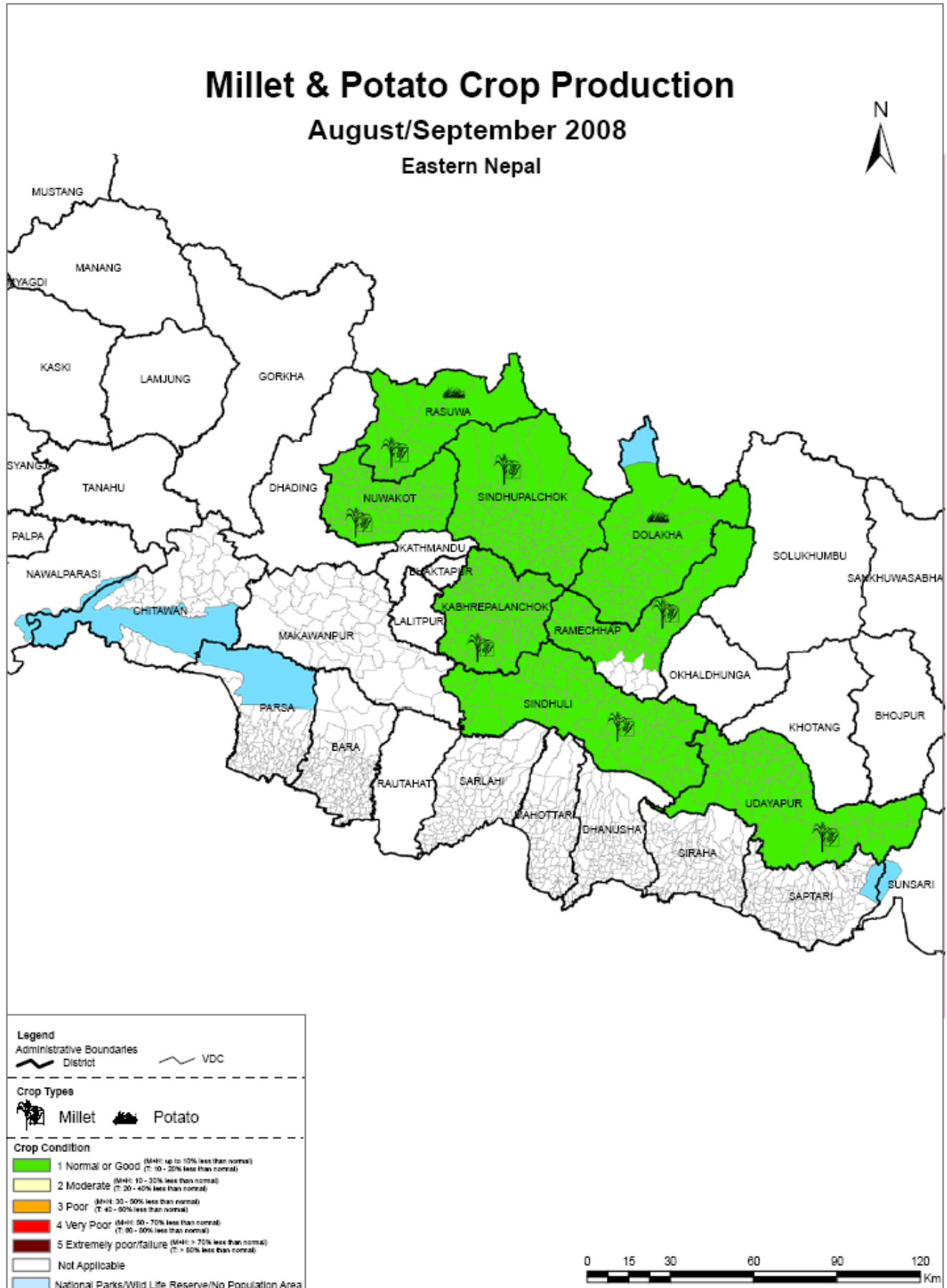
Millet

Crop Condition

- 1 Normal or Good (MHI: up to 10% less than normal)
(T: 10 - 20% less than normal)
- 2 Moderate (MHI: 10 - 20% less than normal)
(T: 20 - 40% less than normal)
- 3 Poor (MHI: 20 - 40% less than normal)
(T: 40 - 60% less than normal)
- 4 Very Poor (MHI: 40 - 60% less than normal)
(T: 60 - 80% less than normal)
- 5 Extremely poor/failure (MHI: > 60% less than normal)
(T: > 80% less than normal)
- Not Applicable
- National Parks/Wild Life Reserve/No Population Area

0 15 30 60 90 120 km

Map 9



Map 10