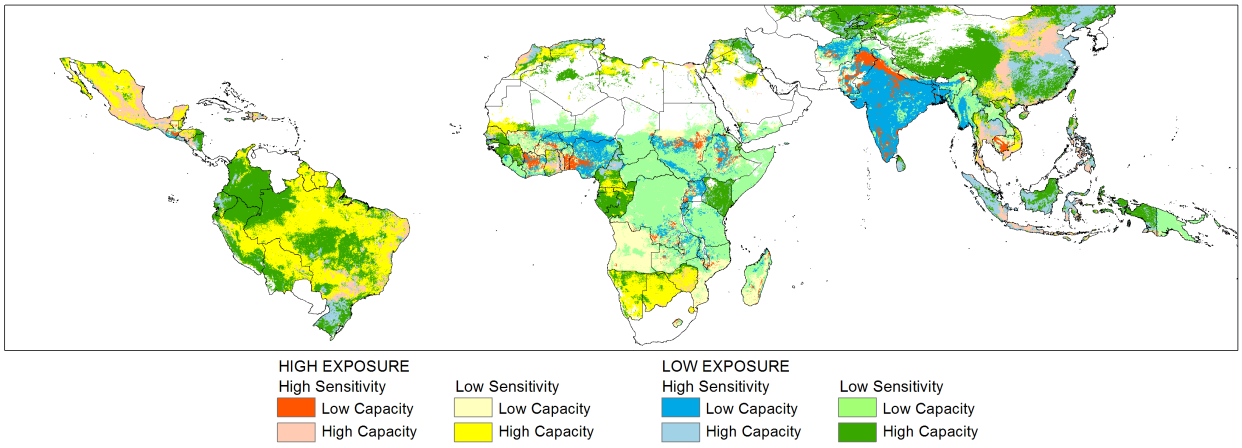
7 July 2011

ERRATUM to

> Ericksen P, Thornton P, Notenbaert A, Cramer L, Jones P, Herrero M. 2011. *Mapping hotspots of climate change and food insecurity in the global tropics. CCAFS Report no. 5 (Advance Copy May 2011).* CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS). Copenhagen, Denmark. www.ccafs.cgiar.org

The population numbers in the maps 4.4 through 4.12 are underestimated by a factor of about three. *Map 4.4 LGP changes by more than 5 %* is FURTHER incorrect because the High and Low exposure categories were reversed.

Map 4.4: Exposure 1: Areas where there is greater than 5% change in LGP



This exposure threshold includes significant portions of the global tropics. Quite large parts of Latin America, Southern and West Africa, eastern China, SouthEast Asia, and the northern part of South Asia fall into the high exposure categories. The number of people in the most vulnerable category (HHL) is 266 million and the area is about 1.4 million Km^2.

Domain	Area (000 Km^2)	Population (millions)
LLL	10,506	320.3
LLH	15,725	467.3
LHL	5,173	1,151.9
LHH	5,076	875.5
HLL	3,652	111.7
HLH	10,577	289.5
HHL	1,412	265.7
HHH	3,322	734.1

Map 4.5. Exposure 2: LGP flips from more than 120 days to less than 120 days.

This is a more restrictive exposure threshold, with only a few areas in south Asia in the HHL category, parts of Mexico in the HHH category, and areas of Africa in the HLL category. The population in the HHL (most vulnerable) category is 25 million, covering an area of only 81,000 km2.

Domain	Area (000 Km^2)	Population (millions)
LLL	13,951	428.2
LLH	26,018	745.8
LHL	6,504	1,392.6
LHH	8,248	1,594.6
HLL	206	3.8
HLH	284	11.0
HHL	81	25.0
HHH	150	15.0

Map 4.6. Exposure 3: RCGDs flip from more than 90 days to less than 90 days (threshold 2).

This exposure threshold includes a larger area, with more of each continent appearing in the high exposure category. However most of these areas are in the low sensitivity category, meaning less than 16% of the area is cropped. The population in the HHL category is 38.8 million.

Domain	Area (000 Km^2)	Population (millions)
LLL	13,745	422.0
LLH	25,625	730.1
LHL	6,424	1,378.8
LHH	8,129	1,569.4
HLL	412	10.0
HLH	677	26.8
HHL	161	38.8
HHH	269	40.2

Map 4.7. Exposure 4: Maximum daily temperature flips from < 30°C to > 30°C (threshold 4)
This is a more inclusive exposure threshold, with more of the tropics appearing in the high exposure category, especially in Africa. Interestingly, most of India is not highly exposed under this threshold, although part of the Indo-Gangetic Plains is in the HHL category. The population in the HHL category is 136.2 million.

Domain	Area (000 Km^2)	Population (millions)
LLL	10,782	361.7
LLH	22,165	694.8
LHL	5,952	1,281.4
LHH	7,440	1,519.1
HLL	3,375	70.3
HLH	4,137	62.1
HHL	633	136.2
HHH	957	90.5

Map 4.8. Exposure 5: Maximum daily temperature during the growing season flips from < 30°C to > 30°C (threshold 5).

This category is obviously more restrictive than the previous thresholds. However new areas in India and China and West Africa, appear in the HHL or HHH categories, as well as Central America. The population in the HHL category is 170.5 million.

Domain	Area (000 Km^2)	Population (millions)

LLL	12,531	388.2
LLH	24,704	717.2
LHL	5,697	1,247.1
LHH	7,873	1,492.6
HLL	1,626	43.8
HLH	1,598	39.7
HHL	888	170.5
HHH	525	117.0

Map 4.9. Exposure 6: Rain per rainy day decreases by more than 10% (threshold 6).

This threshold is also quite restrictive in terms of land area, but it is interesting to note the areas in Nigeria and India that fall into the HHL category. The other highly exposed areas are largely in the low sensitivity domain, as not much is cropped. The population in the HHL category is 85 million.

Domain	Area (000 Km^2)	Population (millions)
LLL	13,749	417.7
LLH	25,073	730.2
LHL	6,296	1,332.6
LHH	8,097	1,556.3
HLL	408	14.3
HLH	1,229	26.7
HHL	289	85.0
HHH	301	53.3

Map 4.10. Exposure 7: Rain per rainy day increases by more than 10% (threshold 7).

This exposure includes a number of more densely populated areas with low coping capacity, again in West and Southern Africa, and south and Southeast Asia. The vulnerable population is 138.4 million.

Domain	Area (000 Km^2)	Population (millions)
LLL	11,709	373.1
LLH	24,473	693.0
LHL	5,679	1,279.2
LHH	7,911	1,518.7
HLL	2,449	58.9
HLH	1,828	63.8
HHL	906	138.4
HHH	486	91.0

Map 4.11. Exposure 8: CV rainfall currently greater than 21%.

This is a very inclusive exposure threshold, with most of Africa and south and east Asia included in the high exposure category. The population in the HHL category increases to 842.3 million.

Domain	Area (000 Km^2)	Population (millions)
LLL	7,298	237.0
LLH	13,337	442.6
LHL	2,614	575.3

LHH	4,519	871.6
HLL	6,859	195.1
HLH	12,965	314.2
HHL	3,971	842.3
HHH	3,878	738.0

Map 4.12. Exposure 9: Mean annual temperature flips from < 8°C to > 8°C.

This is a different type of exposure from the other eight, as these areas represent a lifting of current temperature constraints (average temperature too low), and so cropping potential may increase. Thus the domains to focus on are HLH or HHH, on the map indicated by "positive change". The combined population in these two is 6 million and concentrated in the Andes and central China.

Domain	Area (000 Km^2)	Population (millions)
LLL	14,124	430.4
LLH	26,119	751.7
LHL	6,573	1,417.2
LHH	8,380	1,608.8
HLL	33	1.6
HLH	183	5.2
HHL	12	0.4
HHH	17	0.8