

# Sommaire

<b>Introduction</b> .....	9
<i>B. Sultan, R. Lalou, A. Oumarou, M. Amadou Sanni, M. A. Soumaré</i>	
<b>Part I</b>	
<b>Recent and future climate change in West Africa. Obvious features, uncertainties and perceptions</b> .....	17
<b>Introduction</b> .....	19
<i>T. Vischel</i>	
<b>Chapter 1</b>	
<b>Climate warming observed in the Sahel since 1950</b> .....	23
<i>F. Guichard, L. Kergoat, F. Hourdin, C. Léauthaud, J. Barbier, E. Mougín, B. Diarra</i>	
<b>Chapter 2</b>	
<b>The return of a wet period in the Sahel? Observations and prospects</b> .....	43
<i>T. Vischel, T. Lebel, G. Panthou, G. Quantin, A. Rossi, M. Martinet</i>	
<b>Chapter 3</b>	
<b>Climate projections in West Africa: the obvious and the uncertain</b> .....	61
<i>A. Deme, A. T. Gaye, F. Hourdin</i>	
<b>Chapter 4</b>	
<b>Contrasting perceptions with climate change. Scientific observations in three West African contexts</b> .....	87
<i>F. Kosmowski, R. Lalou, B. Sultan, O. Ndiaye, B. Muller, S. Galle, L. Seguis</i>	
<b>Chapter 5</b>	
<b>When nature talks to us. Comparative analysis of representations of climatic and environmental changes</b> .....	109
<i>A. Attané, A. Oumarou, M. A. Soumaré</i>	

<b>Part II</b>	
<b>Impacts of the climate and environmental changes</b>	125
<b>Introduction</b>	127
<i>L. Kergoat</i>	
<b>Chapter 6</b>	
<b>Between desertification and greening of the Sahel. What is really happening?</b>	129
<i>C. Dardel, L. Kergoat, P. Hiernaux, M. Grippa, E. Mougin</i>	
<b>Chapter 7</b>	
<b>Anthropic and environmental factors involved in the increase in flooding in the Sahel</b>	145
<i>L. Descroix, G. Mahé, J.-C. Olivry, J. Albergel, B. Tanimoun, I. Amadou, B. Coulibaly, I. Bouzou Moussa, O. Faran Maiga, M. Malam Abdou, K. Souley Yéro, I. Mamadou, J.-P. Vandervaere, E. Gautier, A. Diongue-Niang, H. Dacosta, A. Diedhiou</i>	
<b>Chapter 8</b>	
<b>The forage constraint in pastoral and agropastoral livestock farming in the Sahel. Adaptation and prospects</b>	163
<i>P. Hiernaux, M. O. Diawara, L. Kergoat, E. Mougin</i>	
<b>Chapter 9</b>	
<b>Paradoxical pond changes in the non-cultivated Sahel. Diagnostis, causes and consequences</b>	185
<i>L. Kergoat, M. Grippa, P. Hiernaux, J. Ramarohetra, J. Gardelle, C. Dardel, F. Gangneron, L. Gal, L. Descroix</i>	
<b>Chapter 10</b>	
<b>The impacts of climate change on crop yields in West Africa</b>	199
<i>B. Sultan, P. Roudier, S. Traoré</i>	
<b>Part III</b>	
<b>Social changes in rural populations</b>	215
<b>Introduction</b>	217
<i>B. Gastineau</i>	
<b>Chapter 11</b>	
<b>Rural populations faced with environmental hazards. African experiences</b>	221
<i>B. Gastineau, M. Gibigaye, F. Kosmowski, A. Adjamagbo, T. Houngbégnon</i>	
<b>Chapter 12</b>	
<b>Land rights and fertility management. Two different perspectives: Djougou (Benin) and Niakhar (Senegal)</b>	235
<i>F. Gangneron, E. Robert</i>	
<b>Chapter 13</b>	
<b>The role of seasonal and pluri-annual migration in reducing vulnerability. Hombori and Djougou districts</b>	253
<i>A. Bonnassieux, F. Gangneron</i>	

<b>Chapter 14</b>	
<b>Seasonal migration and climate change in rural Senegal. A form of adaptation or failure to adapt?</b> .....	269
<i>R. Lalou, V. Delaunay</i>	
<b>Chapter 15</b>	
<b>Female migration, a non-farming strategy for adaptation to climatic and environmental changes in the Imanan (Niger)</b> .....	295
<i>A. Oumarou</i>	
<b>Chapter 16</b>	
<b>Political changes, landholding dynamics and socio-economic reconstruction. Imanan administrative district (Niger)</b> .....	313
<i>A. Mohamadou, H. Abdoutan</i>	
<b>Part IV</b>	
<b>Adaptation of farming systems, innovations</b> .....	325
<b>Introduction</b> .....	327
<i>R. Lalou</i>	
<b>Chapter 17</b>	
<b>Innovation in rural West Africa. What changes in farming practices?</b> .....	335
<i>F. Kosmowski, M. Gibigaye, B. Muller, R. Lalou</i>	
<b>Chapter 18</b>	
<b>The return of Sanio millet in thee Sine. Rational adaptation to climate evolution</b> .....	351
<i>B. Muller, R. Lalou, P. Kouakou, M. A. Soumaré, J. Bourgoïn, S. Dorégo, B. Sine</i>	
<b>Chapter 19</b>	
<b>Reintroducing livestock to increase the sustainability of village landscapes in West Africa The case of the groundnut basin in Senegal</b> .....	375
<i>E. Audouin, J. Vayssières, M. Odru, D. Masse, G. S. Dorégo, V. Delaunay, P. Lecomte</i>	
<b>Chapter 20</b>	
<b>An example of adaptive strategy in the face of food insecurity. Potato growing in the Imanan (Niger-republic)</b> .....	399
<i>R. Hassane</i>	
<b>Conclusion</b> .....	417
<i>B. Sultan, R. Lalou, M. Amadou Sanni, A. Oumarou, M. A. Soumaré</i>	
<b>List of contributors</b> .....	427