

Editorial

# Ecoregional and Archetypical Considerations for National Responses to Food Security under Climate Change

Yu-Pin Lin <sup>1,\*</sup> , Josef Settele <sup>2</sup> and Joy R. Petway <sup>1</sup>

<sup>1</sup> Department of Bioenvironmental Systems Engineering, National Taiwan University, No. 1, Sec. 4, Roosevelt Rd., Taipei 10617, Taiwan; d05622007@ntu.edu.tw

<sup>2</sup> Department of Community Ecology, Helmholtz-Centre for Environmental Research—UFZ Theodor-Lieser-Str. 4, 06120 Halle, Germany; josef.settele@ufz.de

\* Correspondence: yplin@ntu.edu.tw; Tel.: +886-2-33663467

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Determining national responsibility for ecological sustainability based on resource use within an ‘ecoregion’ (defined by World Wildlife Fund) or ‘archetype’ [1] may provide needed insight into global food security issues since conservation can increase food security and maintain global biodiversity [2]. While climate change causes ecoregions to shift [3] and creates variation among biodiversity quality and ecosystem health within ecoregions, developed countries intensively import food from lesser-developed countries [4] further diminishing the ecoregional environmental health of those countries. Moreover, climate variability and change from either natural causes or human activities may impact agricultural products at ecoregional and international levels [5] by stressing terrestrial ecosystems and affecting atmospheric composition so that agricultural productivity in different ecoregions vary [5,6]. Yet, even though countries fall within a geographically distinct ecoregion or archetype with specific production capacities, and while the complexity of economic interdependencies has further redefined the limits of a country’s borders, food security issues are typically only addressed at the local or country-level rather than at the ecoregional or archetype level. Understanding a country’s potential to exhaust an ecoregion’s or archetype’s resource-specific ecosystem functions will help in effective management and governance to sustain these functions, which also requires maintaining biodiversity quality and ecosystem health. Insights derived from these kinds of ecological considerations’ national responses under climate change can influence the way we approach global food production and global food security.

**Conflicts of Interest:** The authors declare no conflict of interest.

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