

Dominant Land Uses, 1992

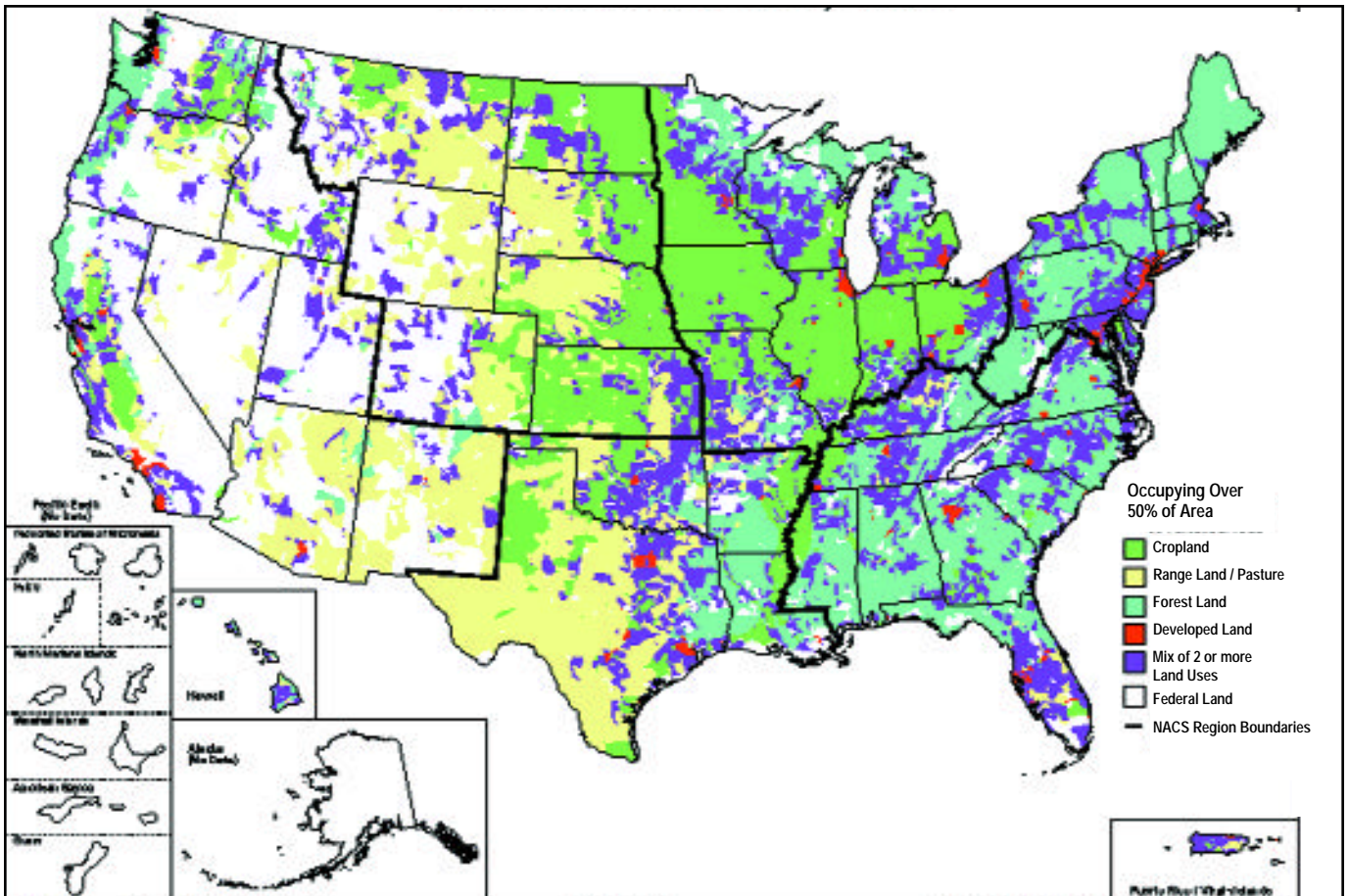
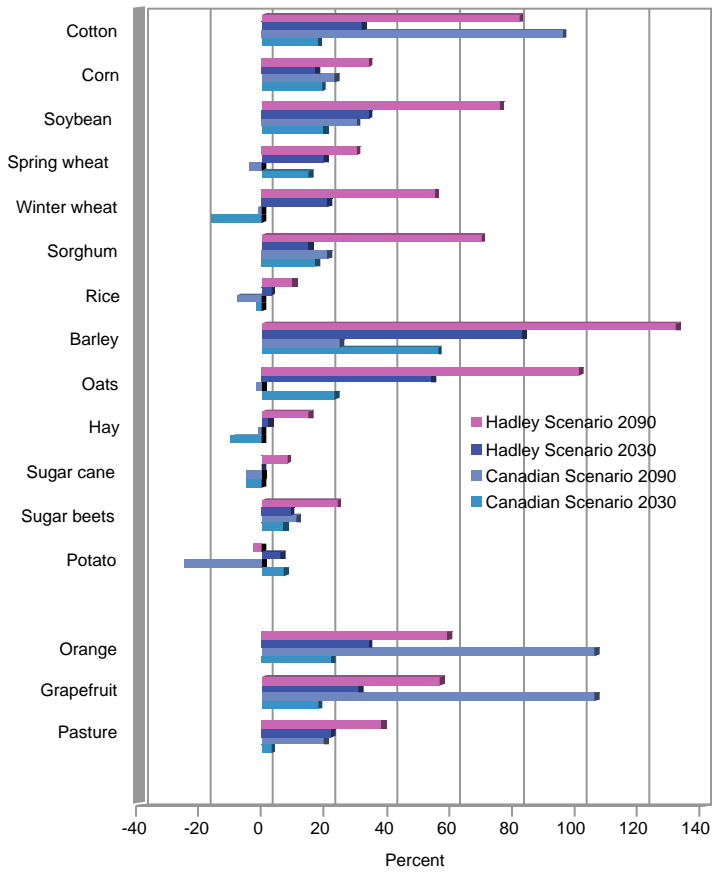


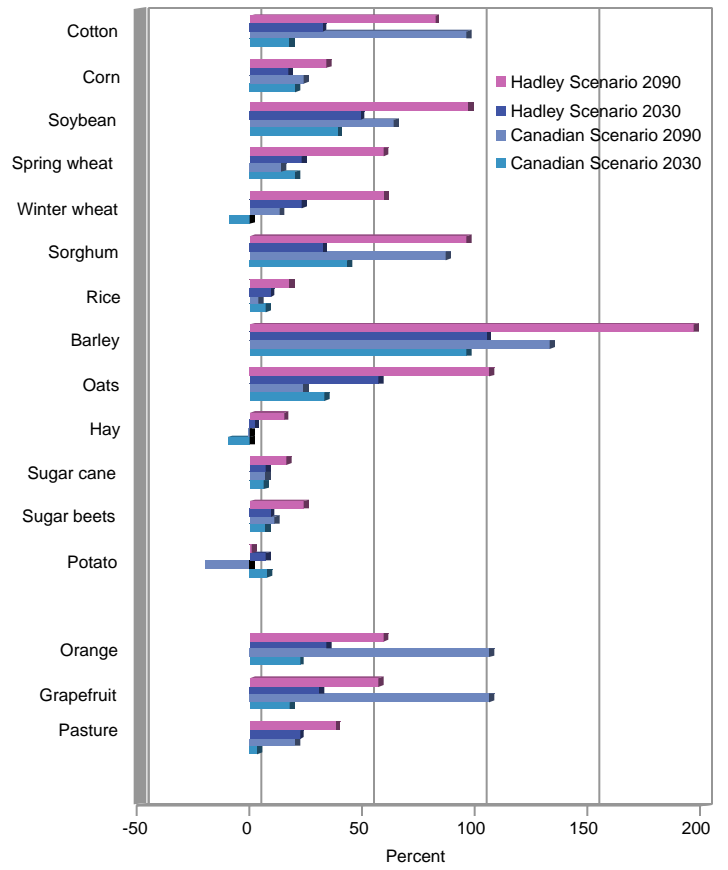
Figure 2. Agriculture Sector Model (ASM) Regions with USDA Regions Overlaid. (ASM regions follow state boundaries except where further disaggregated). The economic analysis in the Assessment is summarized for the 10 USDA regions outlined in the map. Source: USDA, 1997.

Figure 1a-d. Relative changes (% change relative to present) in crop yield for two time periods, 2030s and 2090s, under the Canadian and Hadley Scenarios. 0 = no change. Under the two climate scenarios, most crops showed substantial yield increase, even without adaptation, under dryland conditions. Irrigated yields increased less or decreased. Source: Changing Climate and Changing Agriculture: Report of the Agricultural Sector Assessment Team, 2000.

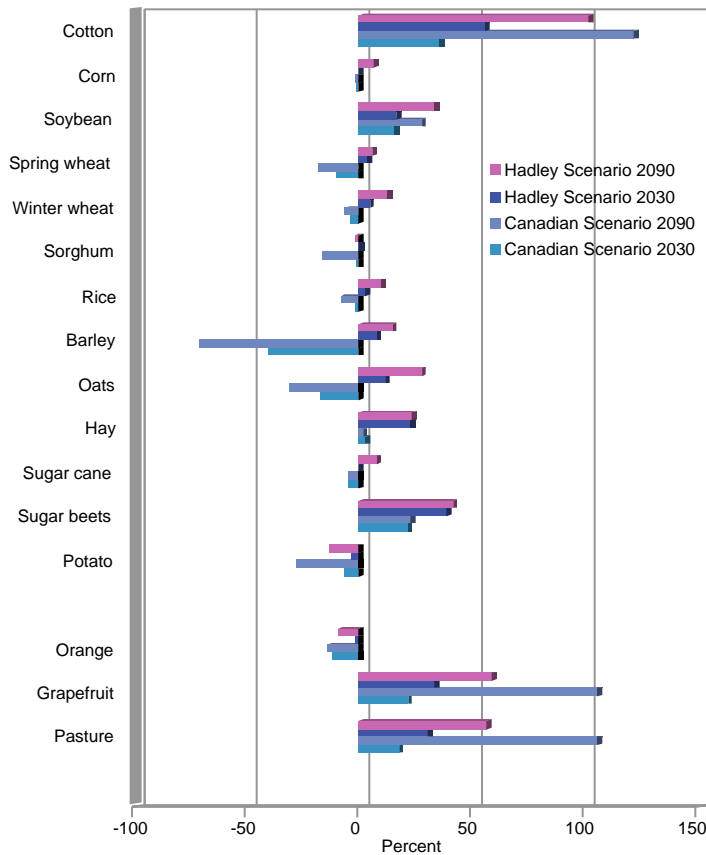
**Figure 1a - Dryland Yields Without Adaptation**



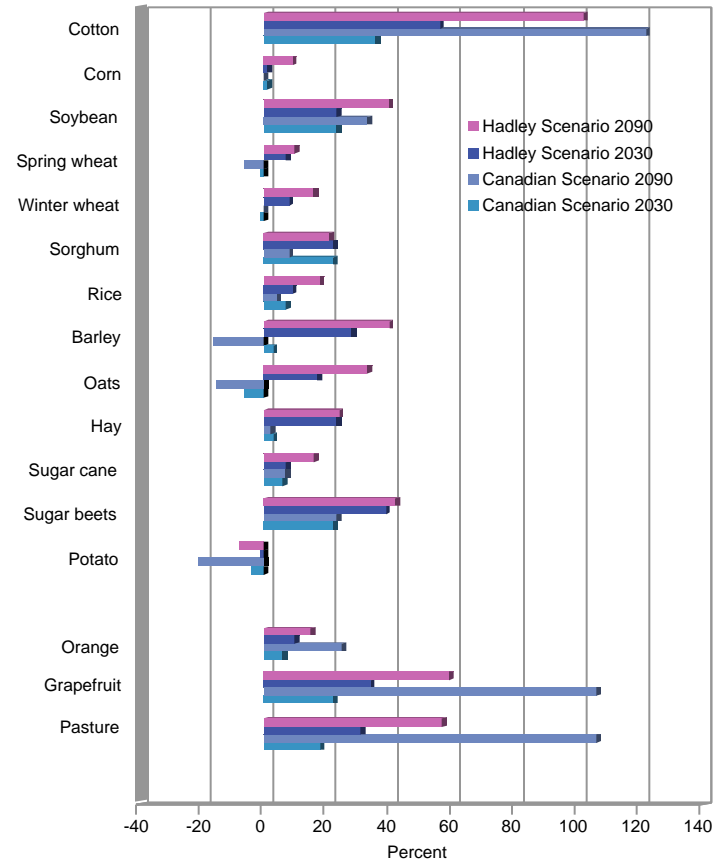
**Figure 1b - Dryland Yields With Adaptation**



**Figure 1c - Irrigated Yields Without Adaptation**



**Figure 1d - Irrigated Yields With Adaptation**



### Economic Impacts of Climate Change on US Agriculture

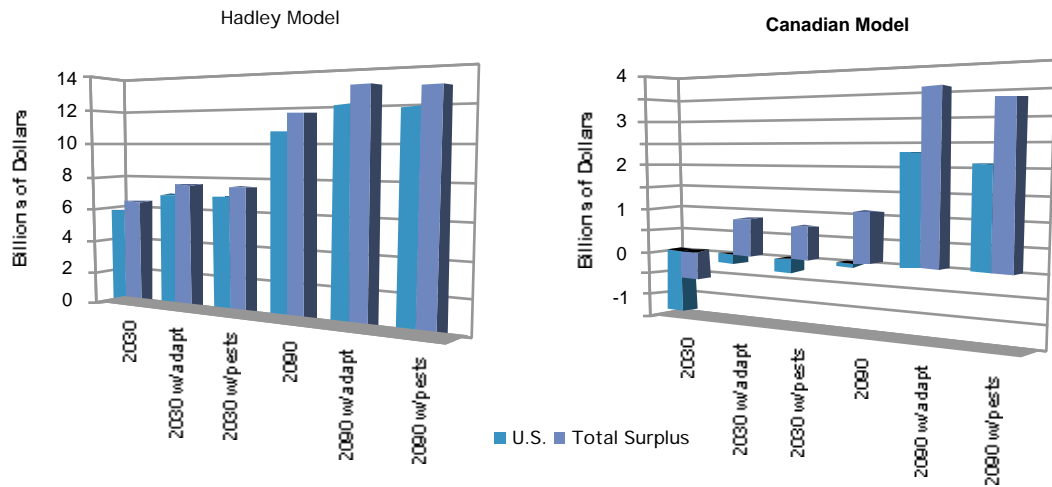


Figure 3a and b. The economic index is change in welfare expressed as the sum of producer and consumer surplus in billions of dollars. There were net economic benefits for the US under most of the scenarios examined in the Assessment. Foreign consumers also gained from lower commodity prices on international markets. Source: Changing Climate and Changing Agriculture: Report of the Agricultural Sector Assessment Team, 2000.

### Producer versus Consumer Impacts of Climate Change

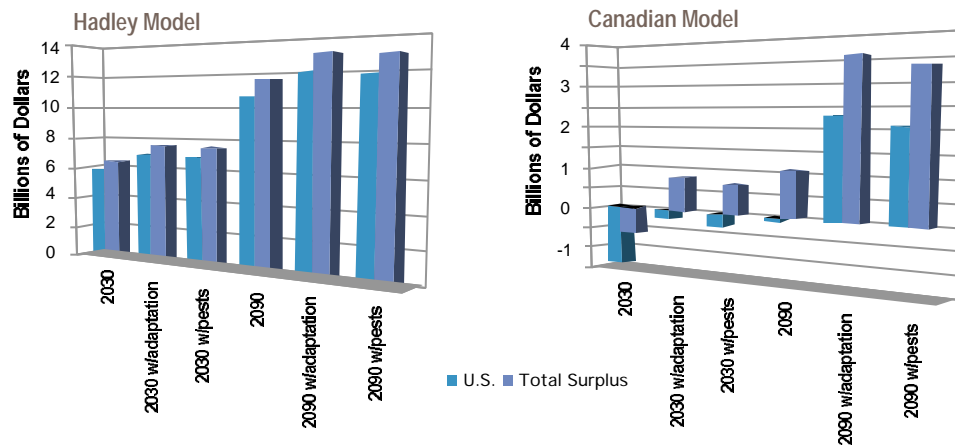


Figure 4a and b. In the model simulations consumers generally benefited from climate change while producers experienced lower income due to lower prices for commodities resulting from increased yields and supply. Source: Changing Climate and Changing Agriculture: Report of the Agricultural Sector Assessment Team, 2000.

### Regional Production Changes Relative to Current Production

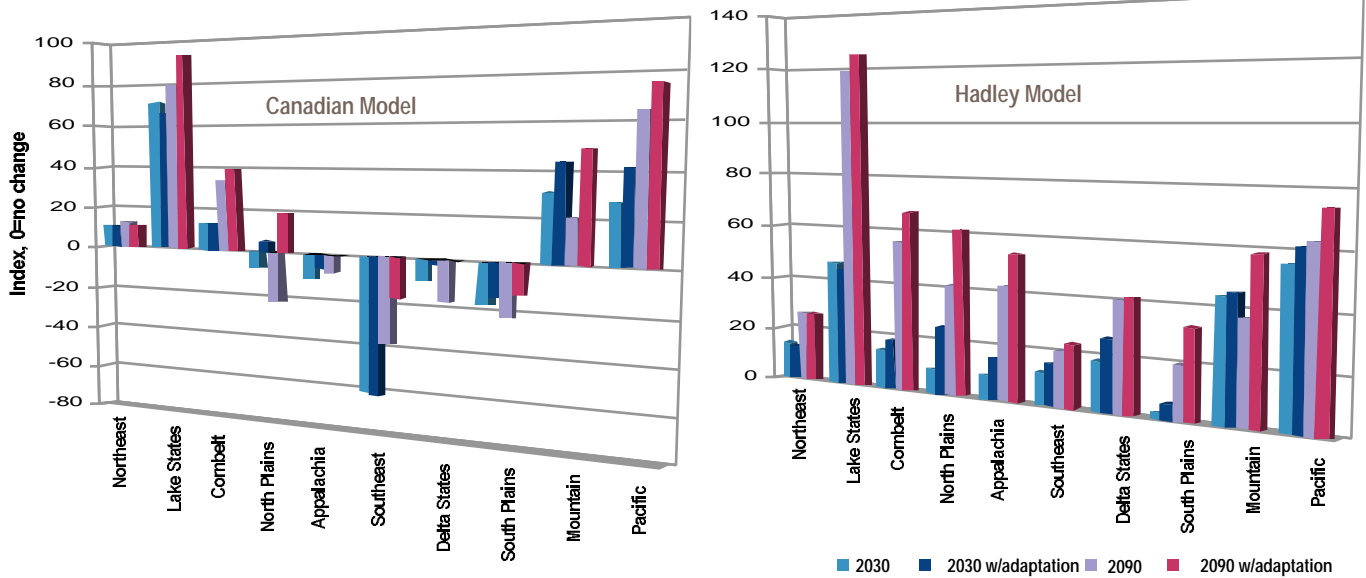


Figure 5a and b. In the model simulations, production increased in northern regions as a result of longer growing seasons, and in western regions due to increased precipitation. Higher temperatures and increased drought conditions contributed to production declines or smaller increases in southern and plains regions. Source: Changing Climate and Changing Agriculture: Report of the Agricultural Sector Assessment Team, 2000.

### Changes in Resource Use

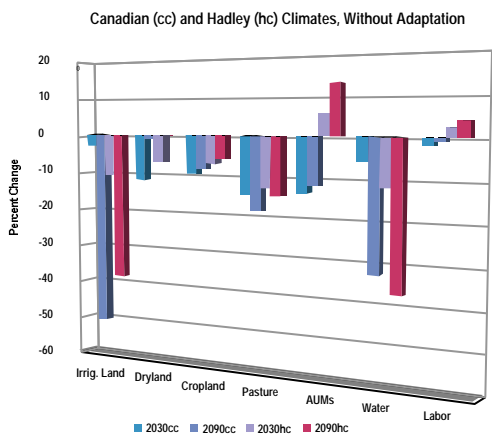


Figure 6. In the simulations, resource use generally declined as less crop and grazing land was needed. Use of water and irrigated crop land declined the most because the two climate scenarios used favored dryland over irrigated crops(cc-Canadian, hc=Hadley). Source: Changing Climate and Changing Agriculture: Report of the Agricultural Sector Assessment Team, 2000.