#### Reviews

to much the same set of issues examined in this set of papers in The Lexus and the Olive Tree (Farrar, Strauss, Giroux 2000). While I freely admit to preferring an evolutionary approach, à la Friedman, to addressing the principal problem behind the concerns of the authors in this book – that today's democratic processes are woefully too slow in recognizing and dealing with the socio-economic and other "injustices" prevailing in a "globalizing" market economy – I don't insist upon being gratified on this point. Still it seems that those persuaded that only revolutionary approaches will do the trick, might do well to set a conscientious effort such as Friedman" as their counterfactual, rather than the caricatures they habitually use as, apparently in this case.

People and Forests: Communities, Institutions, and Governance, edited by Clark C. Gibson, Margaret A. McKean, and Elinor Ostrom. Cambridge, MA: MIT Press (2000), xxiv, 274 pp.

## Reviewed by Stacy Rosenberg, Environmental Science, Studies, and Policy Program/ Department of Geography, University of Oregon.

This edited volume investigates the significant relationship between forest users, local institutions, and forest conditions. The International Forestry Resources and Institutions (IFRI) research program provides the framework for the empirical studies included in this volume, and the systematic and micro-level analysis utilized by the IFRI protocol produces valuable comparative data on the important role that local-level institutions play in forest use and condition. Each chapter draws on the principles and interdisciplinary approach of the IFRI program, and uses case studies from India, Uganda, Nepal, Ecuador, and Bolivia. The integration of social and biophysical science research methods is an effective approach to understanding the complex relationship between forest users, local institutions, and forest conditions. Each chapter is well written and provides a thorough description of institutional, socioeconomic and biophysical factors that influence human incentives and behavior that have consequential impact on local forest conditions. This volume provides a sophisticated overview of the successful attributes of common property regimes, with a focus on local-level forest management. It summarizes and further expands earlier common property research efforts, and contributes significantly to the common property literature.

In Chapter One, Clark C. Gibson, Margaret A. McKean, and Elinor Ostrom emphasize the critical role that local communities play in forest management. Case studies are highlighted and the benefits of micro-level, comparative analyses are discussed. Margaret A. McKean in Chapter Two defines relevant terms utilized in common property literature in a very concise and clear manner. Her description of common pool resources, common property regimes, and the distinction between goods, rights, and owners is a valuable contribution to this volume. The overview of common property regimes and the attributes of successful regimes are comprehensive and provide a strong foundation for the case studies that follow this chapter.

Arun Agrawal argues in Chapter Three that forest council size is an important factor in determining the success of collective action to protect forest resources. His study of nine forest councils in Kumaon Himalaya, India shows that very small councils were disadvantaged due to limited resources, while moderate-sized councils had greater resources that enabled them to better protect forest areas through effective monitoring and enforcement activities. In Chapter Four, Abwoli Y. Banana and William Gombya-Ssembajjwe compare five forests in Uganda and find that security of tenure and the level of rule enforcement for each forest accounted for variation of forest conditions. High levels of illegal consumptive activities occurred in three forest reserves, while limited illegal activities were found in the other two forests. Secure tenure regimes and effective rule enforcement were determined to be significant factors in preventing forest degradation.

In Chapter Five, Charles M. Schweik analyzes the spatial variation of the Sal tree in southern Nepal and findss that optimal foraging patterns are impacted by institutional and social factors. The importance of integrating social and biophysical research methods was a critical element in this study, and human behavior, slope steepness, elevation, and east-west location of forest plots were significant factors in determining the geographic variation of forest conditions. In Chapter Six, Clark C. Gibson and C. Dustin Becker demonstrate that comuna members in western Ecuador utilized different parts of a forest depending on property rights. The portion of the comuna forest not allocated to individuals had been seriously degraded, while allocated plots have had less exploitation. While variation did exist in the allocated plots, overall this part of the forest is in much better condition than the unallocated portion.

#### Reviews

In Chapter Seven, C. Dustin Becker and Rosario León investigate forest conditions of three Yuracaré settlements along the Chapare River in Bolivia. Forest condition variations were found to be the result of predictable factors such as moisture gradient, distance to market, and population pressure, and other activities, such as management practices undertaken to increase the number of game animals.

George Varughese argues in Chapter Eight that population pressure does not appear to be the main driver of deforestation in the Middle Hills of Nepal. He studied eighteen cases and found that areas of high population had forests in both good and poor condition, and that communities with strong institutional arrangements were associated with forests in better condition than those lacking effective institutions.

Chapter Nine summarizes the significant findings of the previous chapters, and Clark C. Gibson, Elinor Ostrom, and Margaret A. McKean provide theoretical insights into why some local communities are more effective at developing and implementing institutional arrangements that protect forest resources than other communities. The description of resource and user attributes that contribute to forest protection is a useful addition to the discussion of benefits and costs of collective action.

Overall, this volume is effective at persuading policymakers and scholars of the significance of studying the complex interrelationship between forest users, local institutions, and forest conditions. The integration of social and biophysical variables provides sophisticated analyses that expand the scope of explanatory factors affecting deforestation. The IFRI protocols provide a method for measuring social and biophysical variables that are important in understanding the interaction of communities and their forest resources. The systematic and interdisciplinary approach utilized by the IFRI research program promotes an effective research methodology that allows for the study of locally significant factors within a comparative framework. An appendix on the IFRI research strategy further describes the characteristics of this research project.

In conclusion, this volume is a valuable addition to the common property literature, and provides insightful contributions to the study of local communities and forest conditions. It demonstrates that local communities are capable of successfully managing common property regimes and delineates the institutional characteristics that promote sustainable forestry practices.

# Fluid Arguments: Five Centuries of Western Water Conflict, Char Miller, editor. Tucson: University of Arizona Press (2001), xxix, 354 pp.

## Reviewed by Staci J. Pratt, Shook, Hardy & Bacon.

Fluid Arguments: Five Centuries of Western Water Conflict, as edited by Trinity history professor Char Miller, presents a tapestry of stories woven around water usage in the arid Western regions of the United States. The volume opens with Mark Twain's observation that "Whiskey's for drinking; water's for fighting," and proceeds to examine the conflicts that have arisen as a result of various claims to this limited life-giving resource. Miller explains that contentiousness "has been woven into the history of water in the American West. This rich, sustained, and combative historical context is the focus of Fluid Arguments. Through the interdisciplinary insights of ethnography, geography, history, political science, law and urban studies, this book reveals ". . . the impact water and aridity have had on human cultures and ecosystems."

Fluid Arguments covers a broad chronological perspective and geographic range, employing individual cases studies and different disciplines to amplify the role played by water in the American West. The volume is divided into five parts, by topics: (i) Land and Water on New Spain's Frontier; (ii) The Native American Struggle for Water; (iii) Agricultural Conundrums; (iv) Dam those Waters! and (v) The Coming Fight. What emerges from this book is an understanding of water as the conduit through which individual social systems may arise, develop, deteriorate, or collapse.

In a chapter devoted to Native American story telling, Kansas State University Professor Bonnie Lynn-Sherow provides a Saynday story illustrating a Kiowa perspective on the nature of water. Saynday is "a skinny, egotistical, and irreverent culture hero," who one day interrupts a group of field mice holding a ceremonial dance inside a bison skull. "He is so enthralled that he gets right down on the ground to watch and, before he realizes it,