

# Some Thoughts on Human Dimensions of an Integrated Research Agenda for La Plata Basin

SEAN R. WILLARD

NOAA/Office of Global Programs  
Washington, D.C.

## ABSTRACT

Research into the “human dimensions” (HD) of climate change science provides some of the societal context, especially at the regional and local scales, to afford that climate forecasts be produced and disseminated with an orientation to users’ frames of reference and needs. Such context most often amounts to understanding the institutions (market systems, legal regimes, organizational/political structures, and cultural relations) in a region. Addressing broadly the conditioning factors and driving forces that influence human activities and their environmental consequences, HD researchers for example look at demographic trends and technological changes, economic structures and market forces, political-social institutions and societal values, and how these are effected by, and affect, climate. At its core, HD research is an investigation into resource utilization (NOAA-CIRES CDC 1997).

This talk highlights the benefits of focusing on political-social institutions in HD research. One viewpoint of such an institutional focus is the historical, which can help us to understand long-term social, economic, and political trends that increase vulnerability, or potentially resilience, to climate variability. The historical view can also frame, even identify, political or economic crises that can provide an opportunity to introduce innovations in impacts mitigation that are entirely contextual to a region. An historical/political approach can thus further a human dimensions agenda that includes a focus on “institutional transition” at the regional scale.

This talk provides some context for climate change research by focusing on the political history, and current *regionalization*, occurring in southeast South America. The Basin Treaty of 1969 is to this day the only agreement to legitimize a regional management organization in the form of the Intergovernmental Coordinating Committee (CIC). Most recently ‘transition’ has culminated in the establishment in 1991 of the Mercado Comun del Sur (common market of the South, or Mercosur). Mercosur is the latest distillation of several decades of regional institutional integration, or regionalization, that incorporates La Plata Basin and its riparian community under a single institutional umbrella. No new entities have been designed for Mercosur. Yet, this new form of regionalization will not only further the cause of economic integration; now is also an opportune time to explore related possibilities for the integration of governance, water resources management, and the possible design of an integrated climate information system for the region. Governance, basin-wide integrated water management, and climate services – these are three interrelated trends that may be effected by the regionalization that Mercosur embodies. Understanding this context, and how these three trends may be effected, could ultimately bolster the Mercosur/Plata Basin region’s chances for economic, demographic, and environmental sustainability.

This talk thus goes beyond simple description to argue that regionalization in southeast South America can bolster sustainable governance, water resources management, and climate services. As such, the current Basin system should be strengthened in its capacity to build a common environmental assessment policy for the basin states, including identifying an “ecosystem baseline”. The Basin Treaty system is the regional compact of standing; absent a new basin compact that provides new organizational authority, ad-hoc governance and water management in the Basin will likely continue. For the third possibility, establishment of a climate information system, however, a new compact may not be necessary. Mercosur affords possibly a *sufficient* context for implementation of a climate information system for La Plata Basin countries. Perhaps a pilot regional climate information system (CIS) can mature as a core element of Mercosur environmental activities and regional services.

But whether or not a CIS evolves *because* of Mercosur, it seems clear that concurrent integration of governance, basin-wide water management, and climate services will bring manifold benefits to the people and ecosystems of the region. We should consider feedback effects among these three possibilities, and in terms of how they may be bolstered by the process of regionalization. Changes in governance, natural resource management, and decentralization of government services, also lead us to consider how comprehensive a Plata Basin integrated research agenda would need to be to address the larger context of national and international activities already underway or planned for La Plata Basin.

Southeast South America should be a showcase for the evolution of international environmental assessment and climate information system design in the Americas. All the pieces are there: a strong ENSO signal, ongoing economic and political integration, decentralization of services, and a growing climate research interest and capacity both regionally and internationally. But it will also be useful to do some comparative analysis with other regions of the world, particularly from regions in North America, in terms of how socio-economic and political context influences patterns of river basin management and environmental assessment. Regional governance and river basin institutions will make environmental assessment and climate service design particular to each region. The Mercosur region would do well to have decision-makers and scientists working with the same contextual understanding of how to meet human and environmental needs. An integrated research agenda that includes human dimensions will be a positive contribution to this effort.