

Downstream Benefits of GSDI: Practical Demonstrations from Brazil

Sue Nichols
University of New Brunswick
Canada
nichols@unb.ca

Nilo Silva
Instituto Brasileiro de Geografia e Estatística
Brazil
nilo@ibge.gov.br

Carneiro Andrea
Universidade Federal de Pernambuco
Brazil
aftc@ufpe.br

Anna Freitas
Instituto Brasileiro de Geografia e Estatística
Brazil
annafreitas@inge.gov.br

Paixao Silvane
University of New Brunswick
Canada
silvane.paixao@unb.ca

Hazel Onsrud
University of New Brunswick
Canada
hazel.onsrud@unb.ca

Abstract

One of the largest challenges for implementers of GSDIs is to communicate to policy makers and potential users what the future benefits will be. Many of the benefits are long term goals and many are only intuitive. Short term impacts, such as improved mapping, rarely capture the attention of potential financiers or the public. There is a need to be able to tie the technical world of GSDI to the real world of improving people's lives. This paper, which describes a GSDI project in Brazil, discusses how the project was created to demonstrate real benefits in terms of equitable access to land and information about land.

Different agencies in Brazil have used local and regional geodetic systems for mapping, causing numerous problems. Brazil, with assistance from Canada, is therefore implementing a geocentric datum to standardize mapping and maximize the efficiency of using GPS. IBGE is responsible for the national geospatial reference system. Part of the criteria were that the project must

demonstrate that it will improve a) gender equity; b) equitable access to land (e.g., indigenous and ethnic groups, women, and the poor) c) environmental management; d) access to information.

This paper briefly describes the technical project and its role in GSDI. The major focus, however, will be on the ways in which the project is related to land and information issues in Brazil's land reform programs. Practical examples from demonstration projects show the effect of the new reference system on allocating, formalizing, and recording land rights.