

081-17



Environmental and Sustainability Indicators for Latin America and the Caribbean

Objective

Ensure better access to information on sustainable development by devising relevant indicators for simplifying, quantifying and analysing technical information and communicating it to various groups of users. GIS is a tool for integrating economic, social and environmental indicators in a spatial framework which allows for more powerful analyses than conventional non-spatial methods. This way the cause-effect relationships alluded to in indicator models and frameworks, such as the Pressure-State-Impact-Response model, may be identified and analysed more accurately and realistically. Besides spatial analysis, GIS provide a mean for organising large datasets: the UNEP-CIAT Indicators Project has over 100 indicators stored in its GIS database.

Method

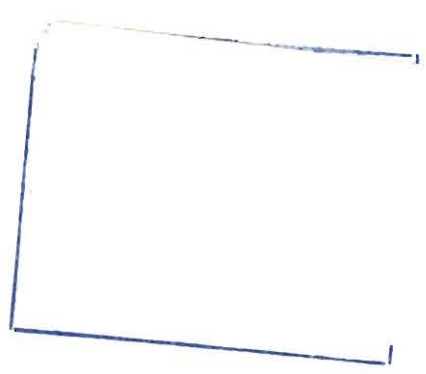
Comprehensive data search and data validation is required to ensure reliable and up-to-date sources. The datasets not yet available in spatial format have to be related to spatial datasets or have a spatial element introduced so that they can be visualised in the GIS. The software has to be customised to enable users with little or no computer experience to get the most from the indicator datasets. Finally, land use models have to be incorporated to allow users to develop 'What if?'-scenarios. This extends the applicability of the product from a visualisation tool to a spatial decision support system.

Result

CD-Rom containing database and the GI visualise and analys



Above:
 Pressure: deforestation
 State: urban population
 Response: protected

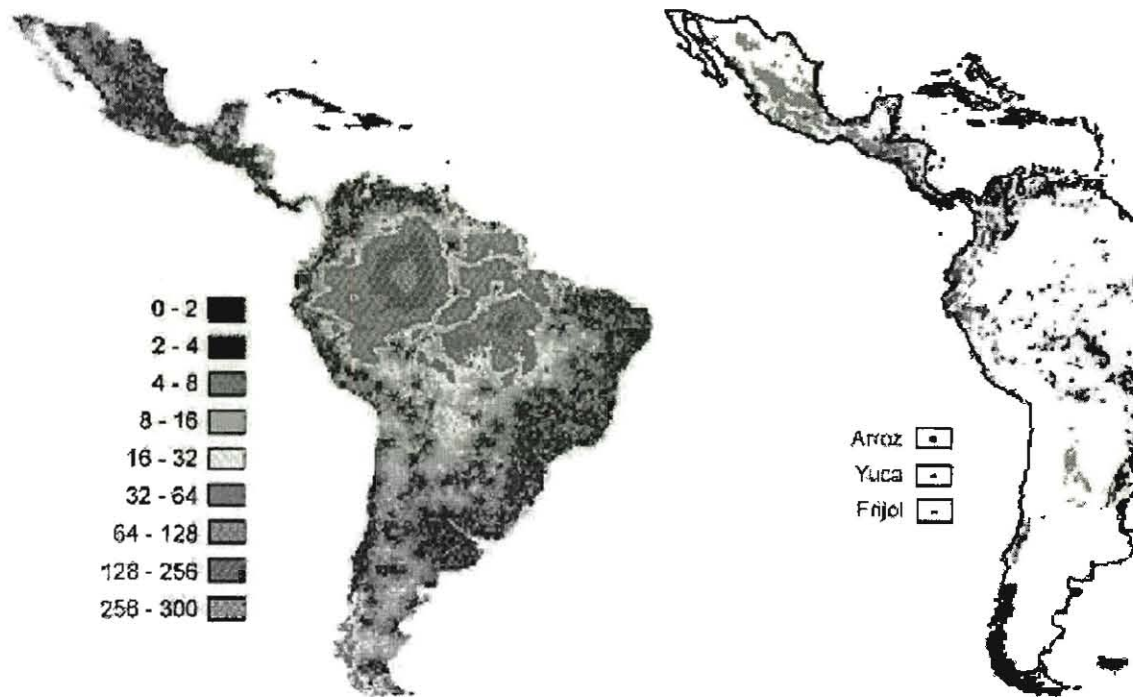


AREA DE INFORMACION Y DOCUMENTACION

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12 MAR. 1998

Left:
Pressure
(accessibility,
hours) and
Right:
state (centres
of crop
production)
indicators in a
spatial
framework.



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