

Priority areas for forest conservation and GHG mitigation

Ben H.J. de Jong¹, Gabriela Guerrero², Marcela Olguín¹, Omar Masera.²

1: El Colegio de la Frontera Sur, Villahermosa, Tabasco

2: Centro de Investigaciones en Ecosistemas, UNAM, Morelia, Michoacán

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Outline of the presentation:

- Objectives
- Data used
- Criteria and indicators
- Vulnerability of remaining forests
- How to use the results



The Mexican government is currently developing a market mechanism to pay for environmental services. In 2003, CONAFOR started with a program to conserve water through forest conservation projects and in 2004 with a program for biodiversity conservation and carbon sequestration. The latter includes a point system for a number of local sustainability and conservation indicators.

Objective:

- To delineate priority areas for forest conservation and GHG mitigation

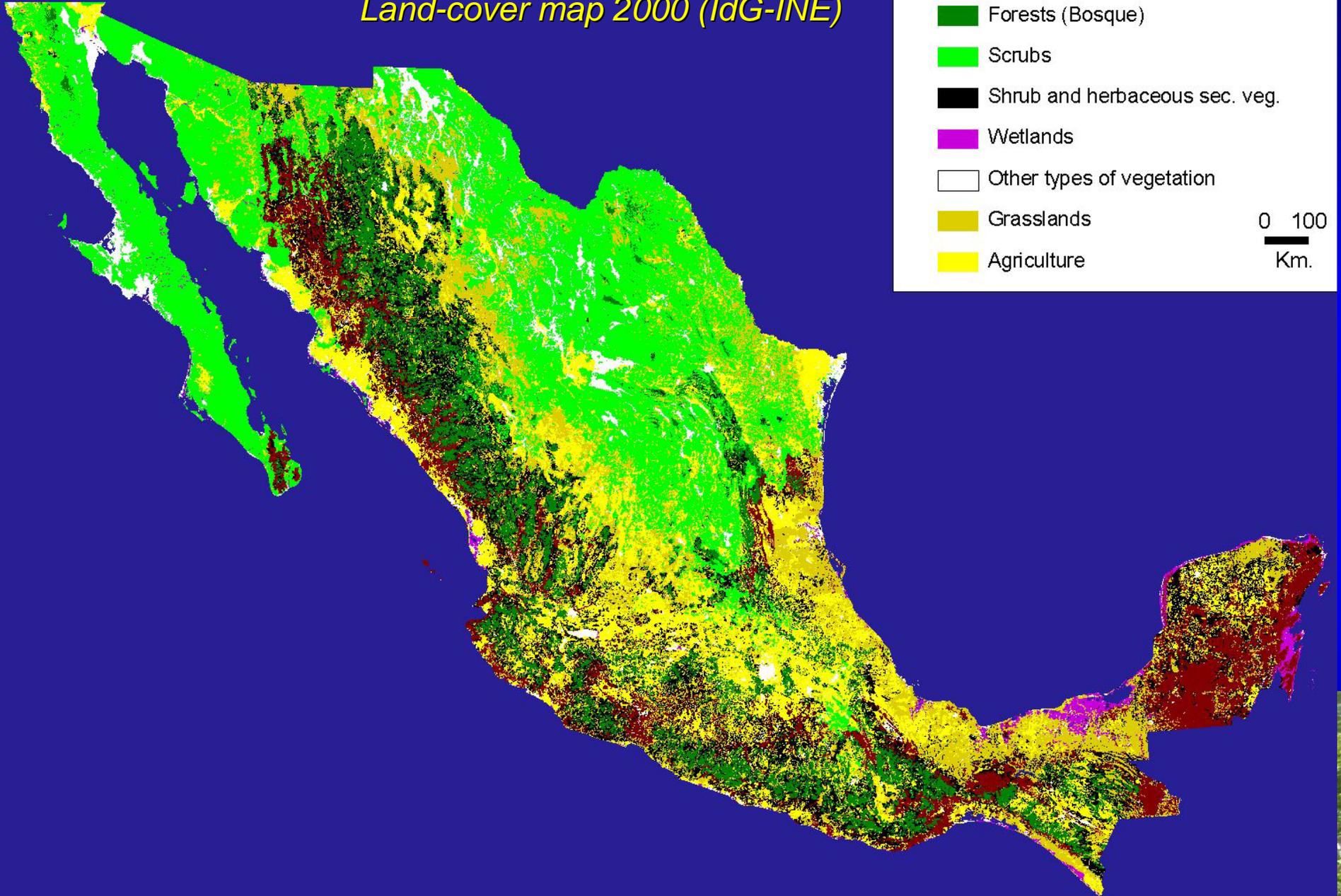


Databases used for the analysis

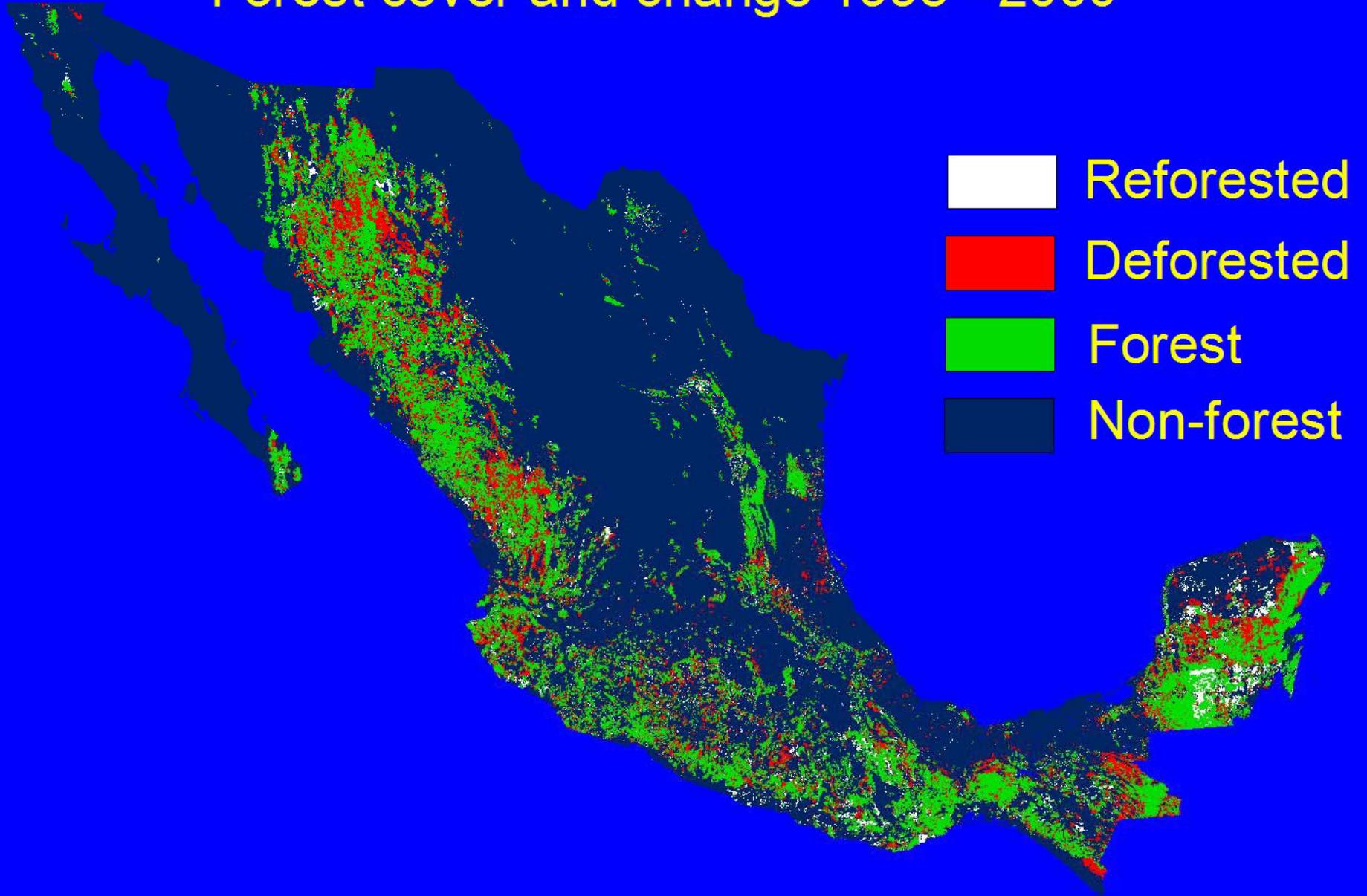
- 2000- Population census of 84,432 geo-referenced settlements (INEGI)
- Land-cover maps of 1993 and 2000 (1:250,000; IdG, UNAM, INE-Semarnat)
- Digitized map of national protected areas (CONANP)
- Digitized map of conservation priority areas (CONABIO)



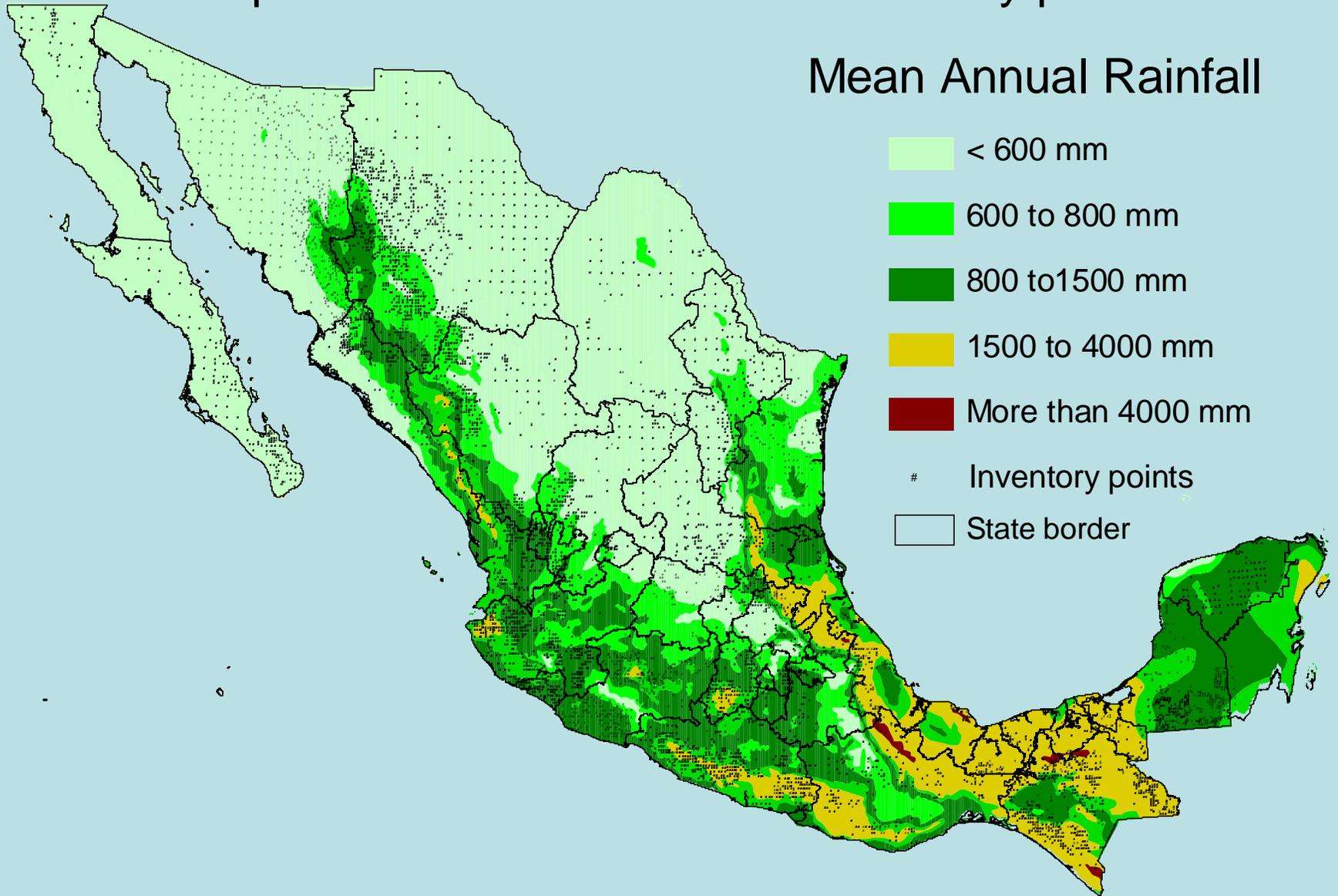
Land-cover map 2000 (IdG-INE)



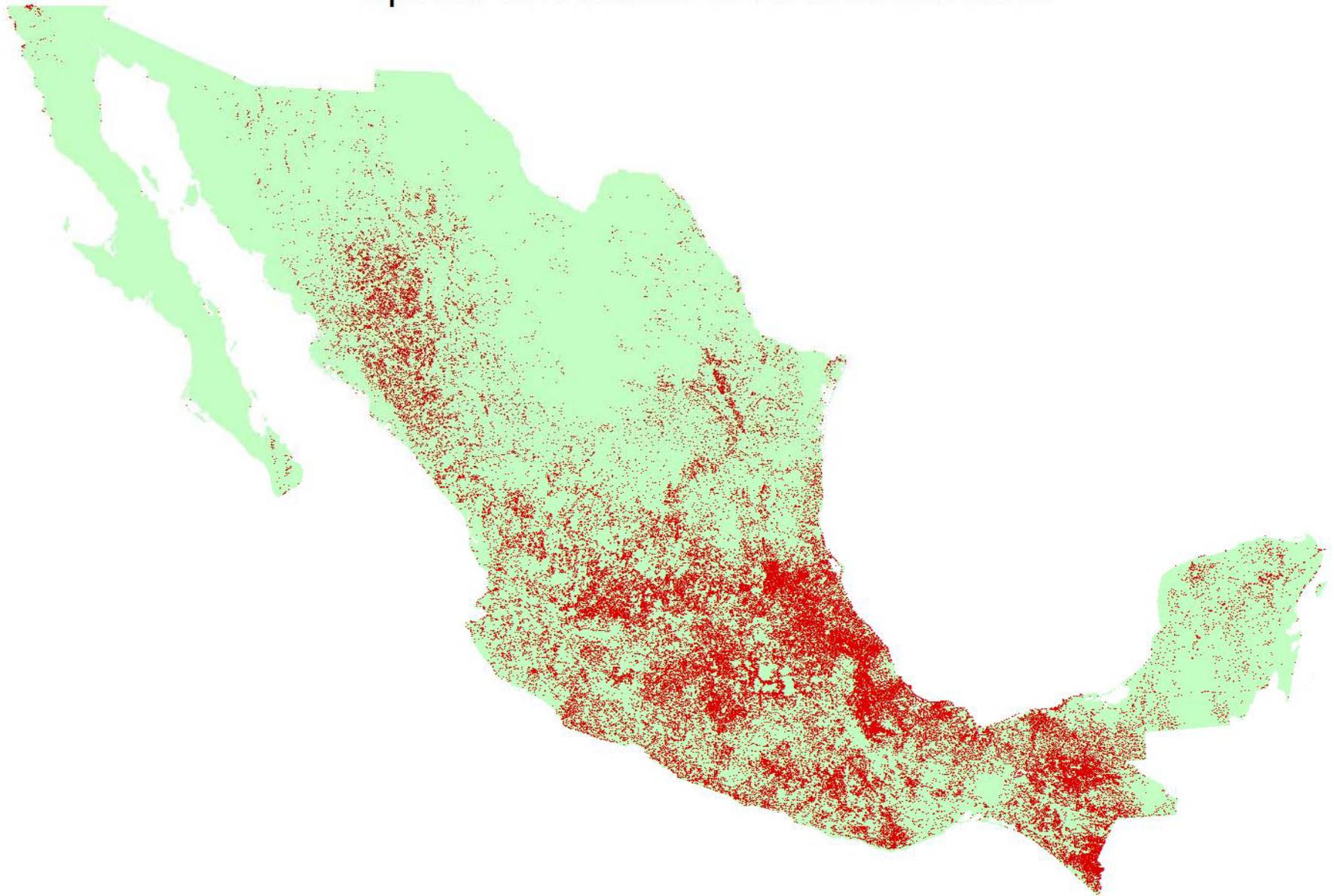
Forest cover and change 1993 - 2000



Spatial distribution of forest inventory plots



Spatial distribution of rural settlements



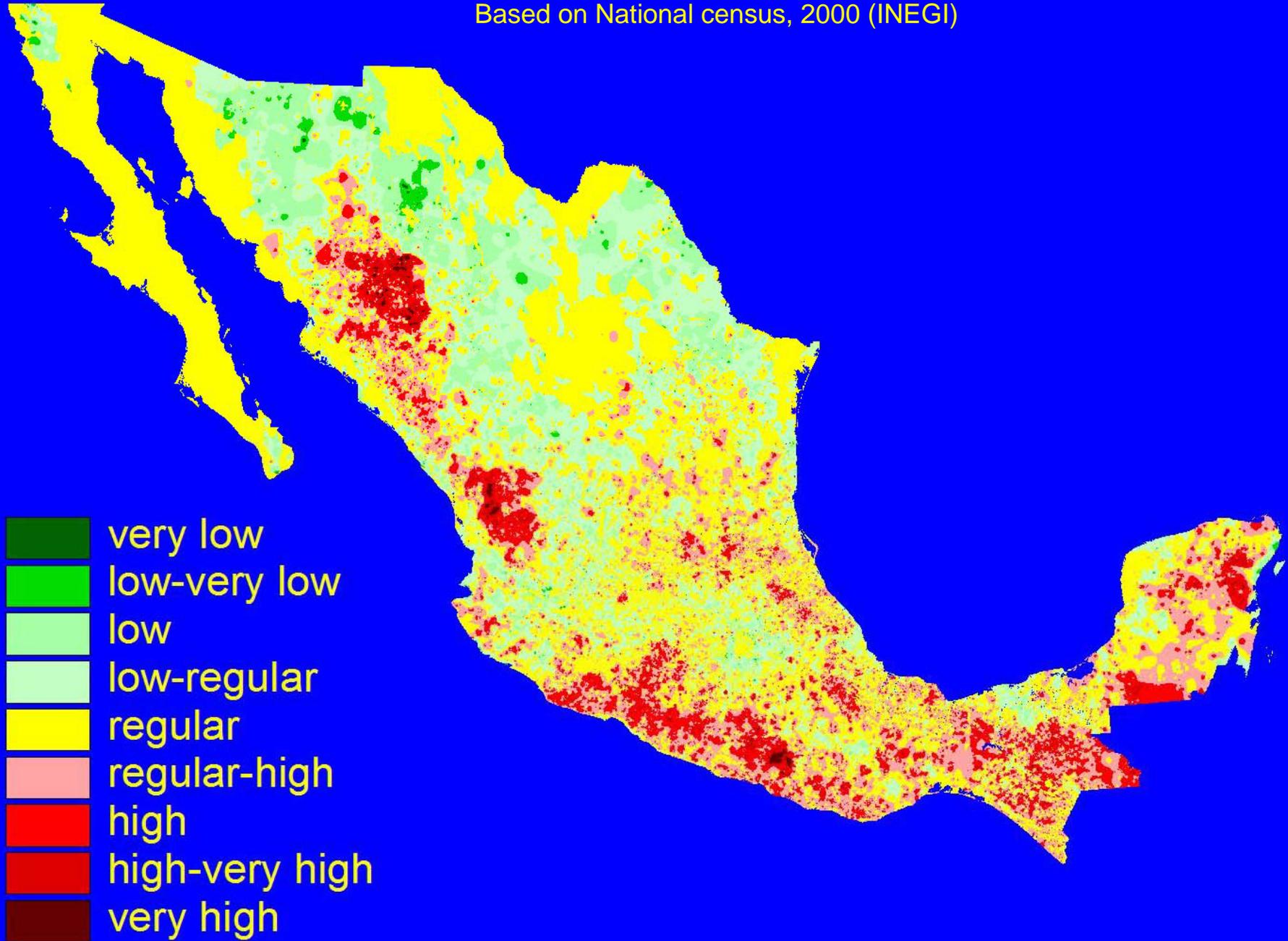
Criteria and indicators :

Type of project	Criteria	Indicators
Avoiding deforestation	<ul style="list-style-type: none"> • Socio-economic • Vulnerability • Conservation 	<ul style="list-style-type: none"> • Marginality index of settlements • Local employment (total, primary sector) • Importance of indigenous groups • Rural population density • Distance to settlements and roads <p>Within or close to:</p> <ul style="list-style-type: none"> • Conabio priority areas for conservation • National parks and reserves



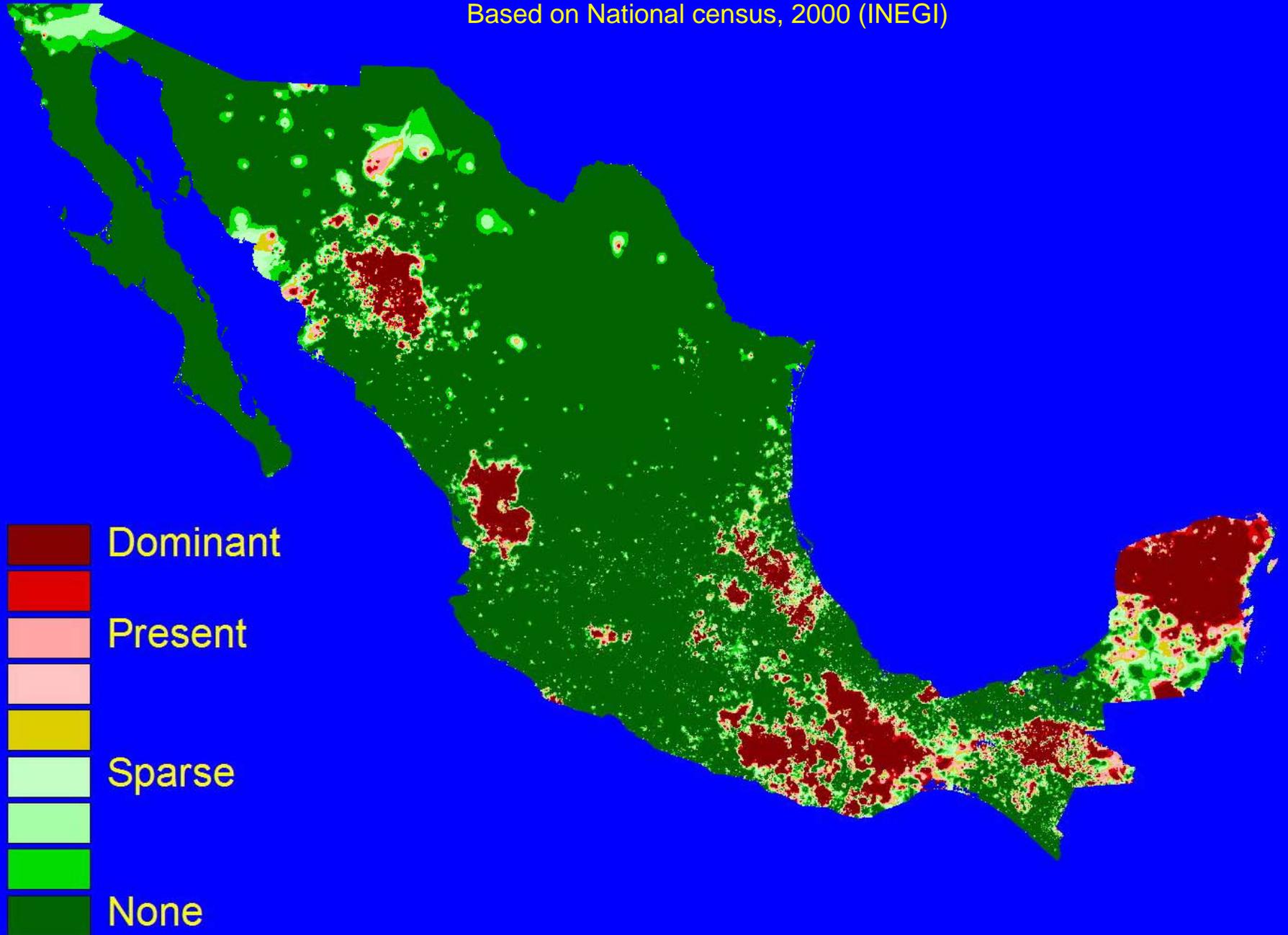
Spatial variation of marginality index of rural communities

Based on National census, 2000 (INEGI)

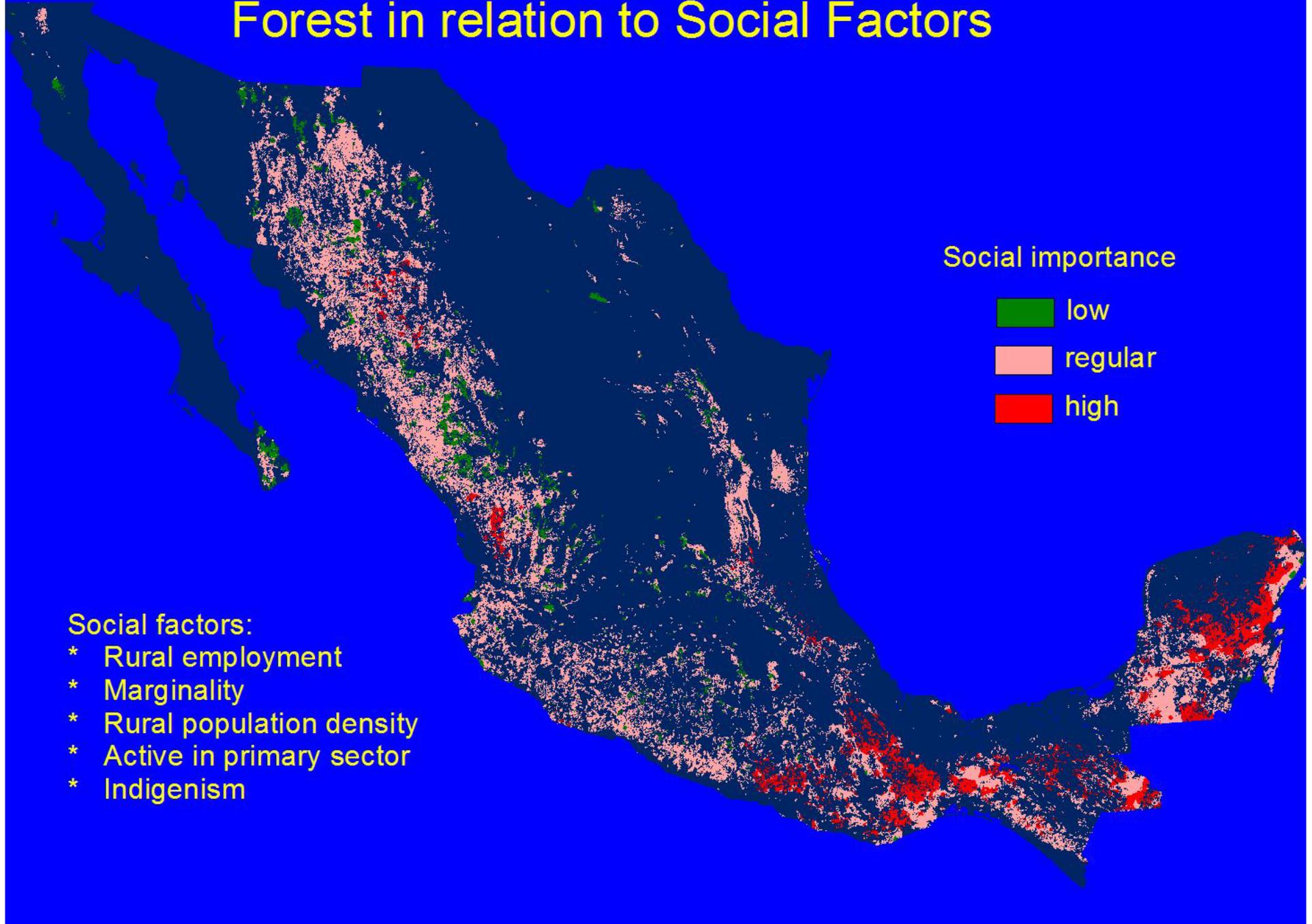


Spatial variation of presence of indigenous groups

Based on National census, 2000 (INEGI)



Forest in relation to Social Factors



Social importance

low

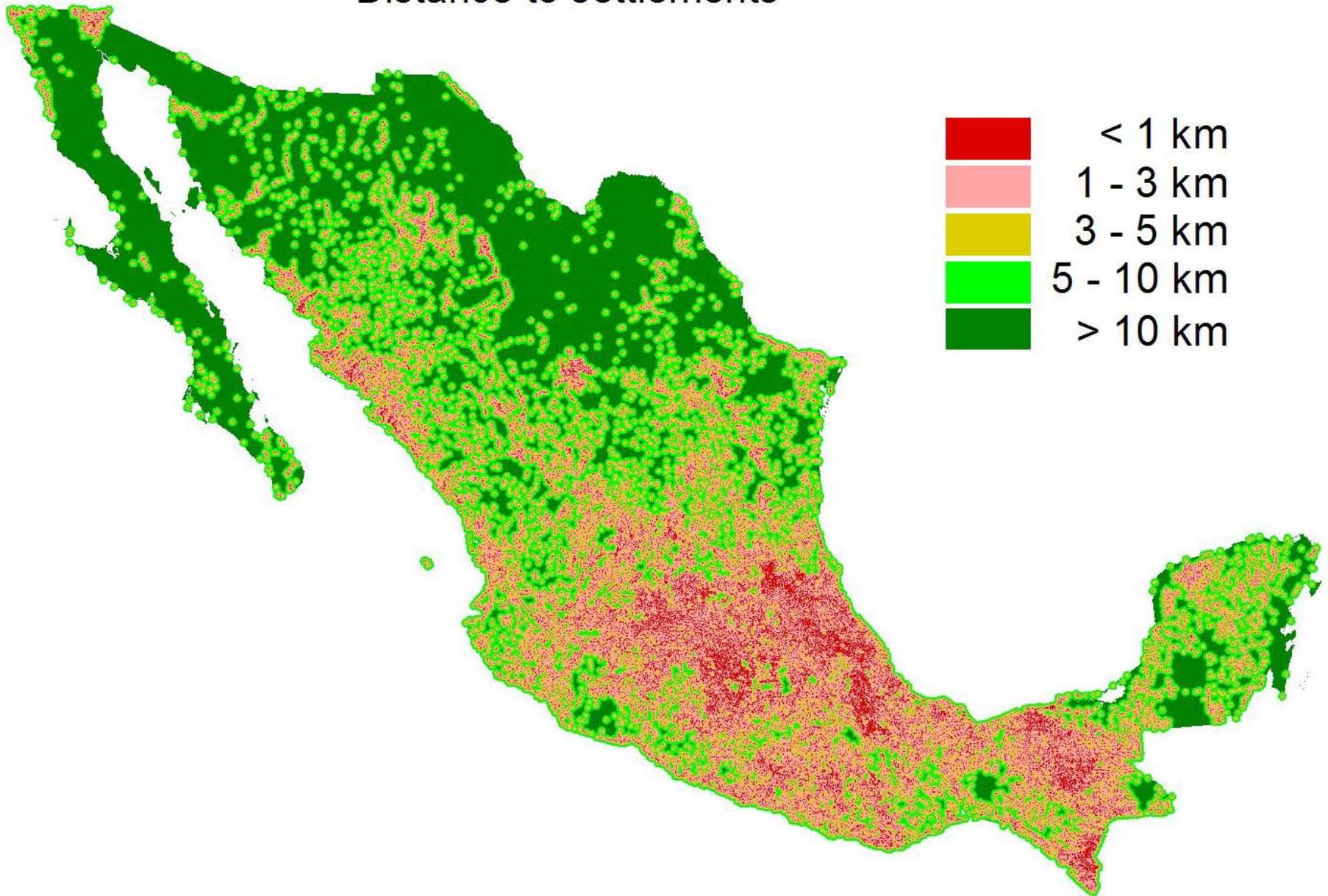
regular

high

Social factors:

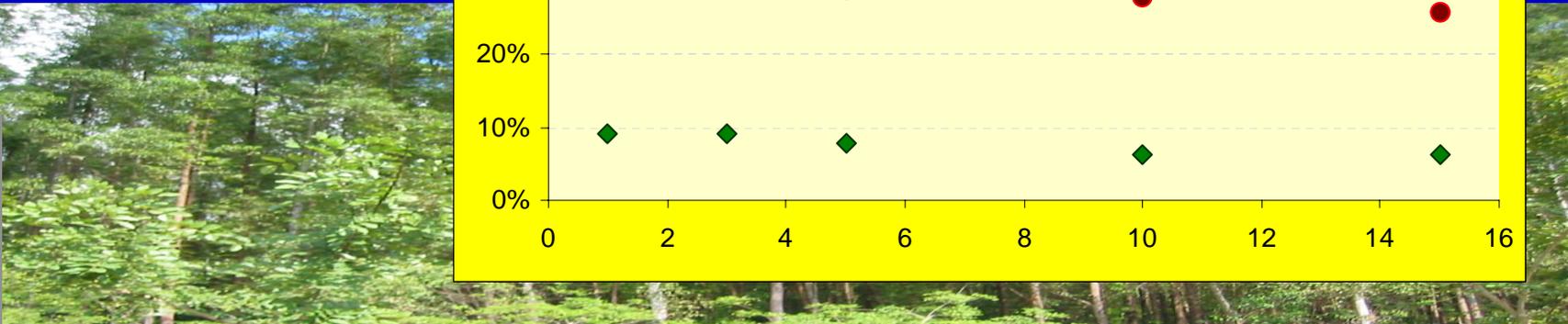
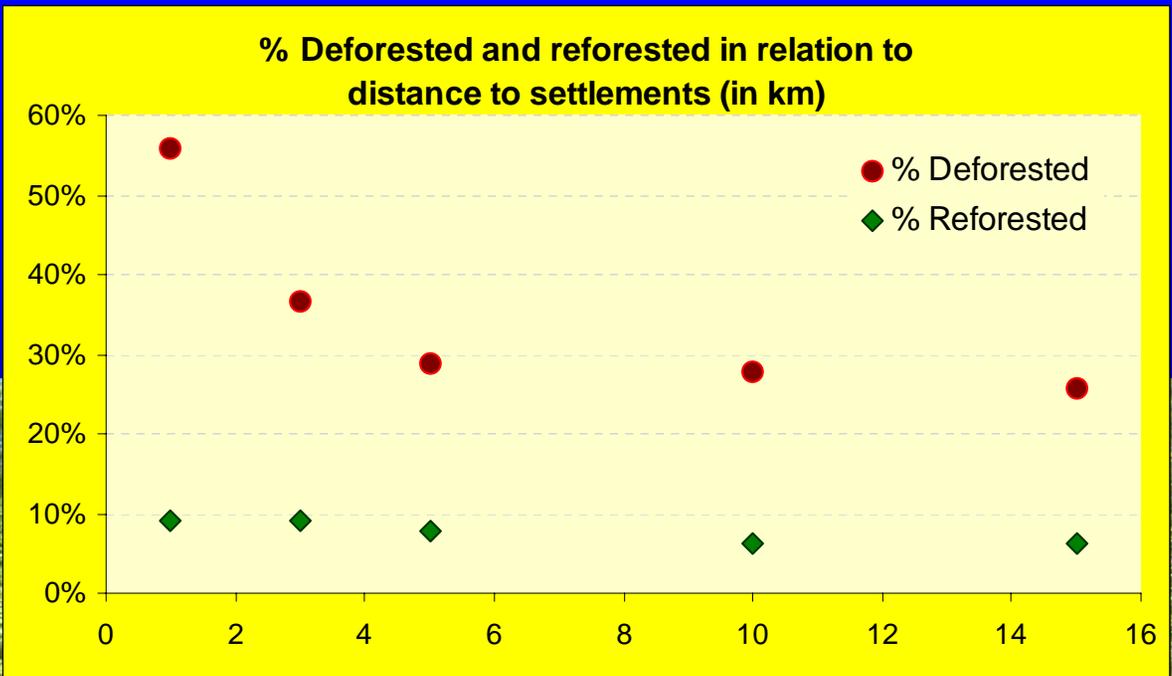
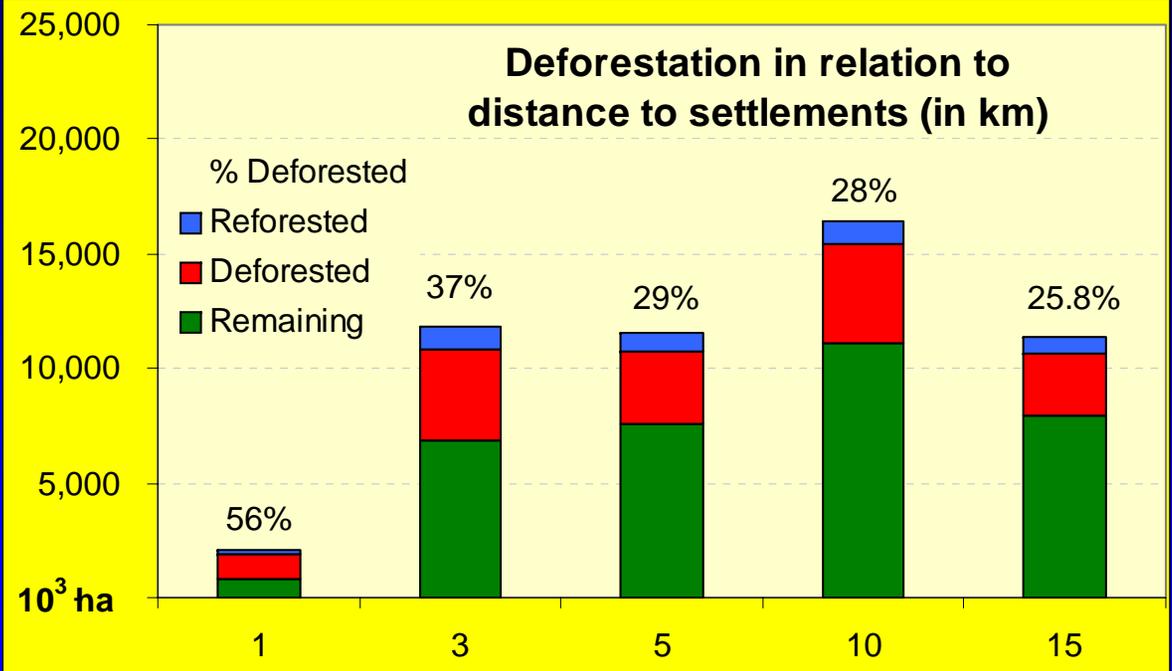
- * Rural employment
- * Marginality
- * Rural population density
- * Active in primary sector
- * Indigenism

Distance to settlements

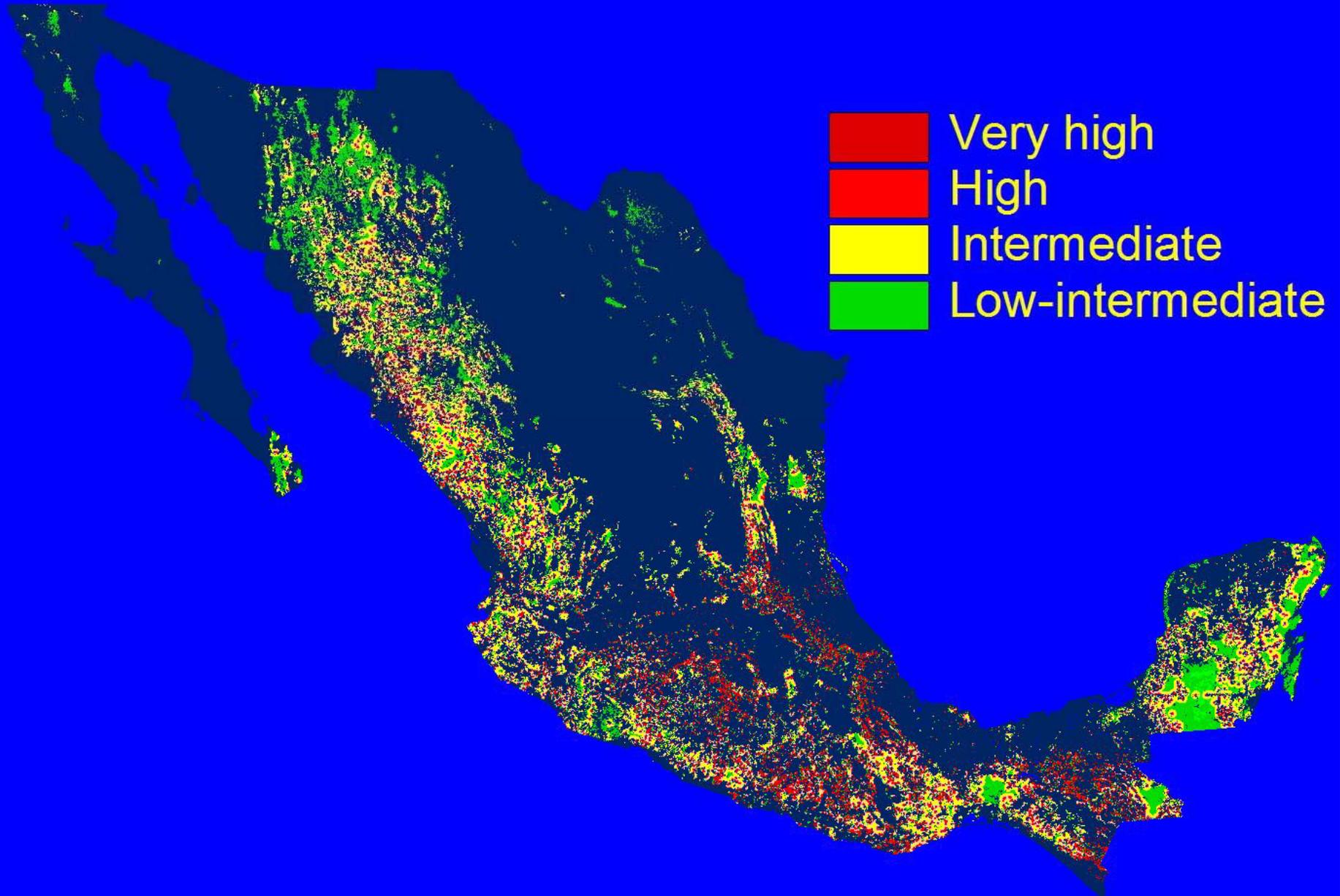


Indicator of vulnerability.

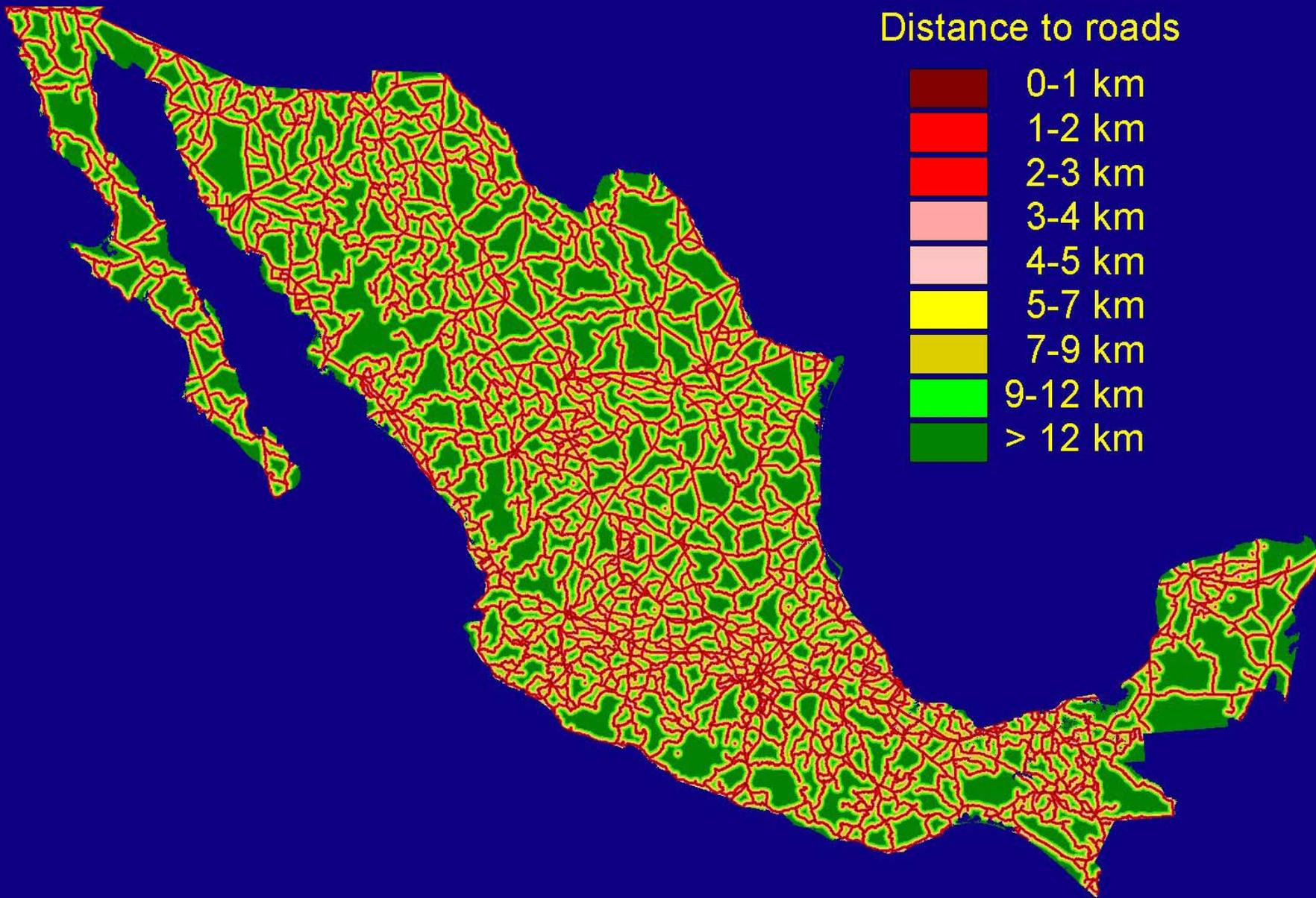
Forest close to settlements are more susceptible to be deforested.

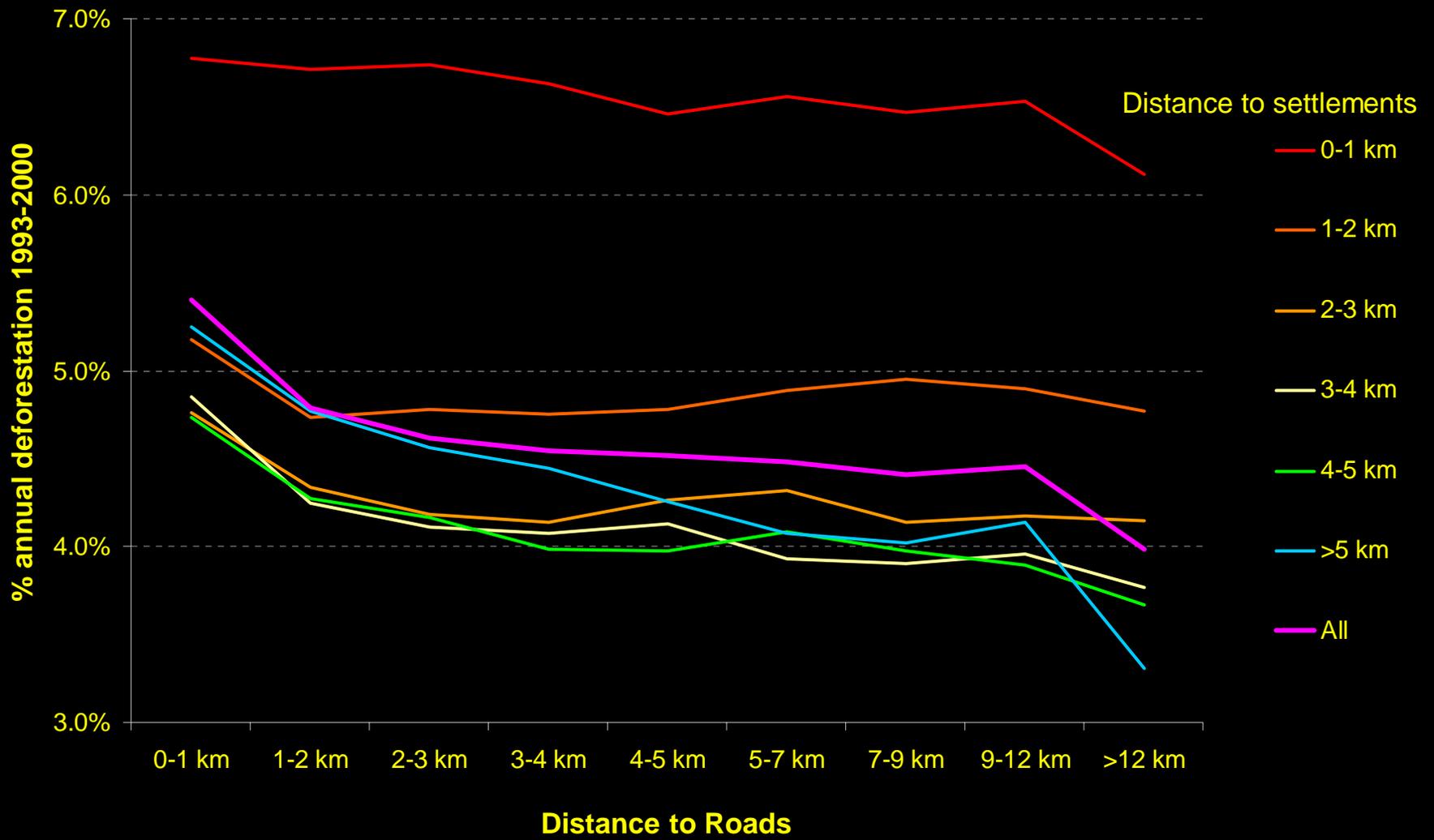


Forests' susceptibility to deforestation according to distance to settlements

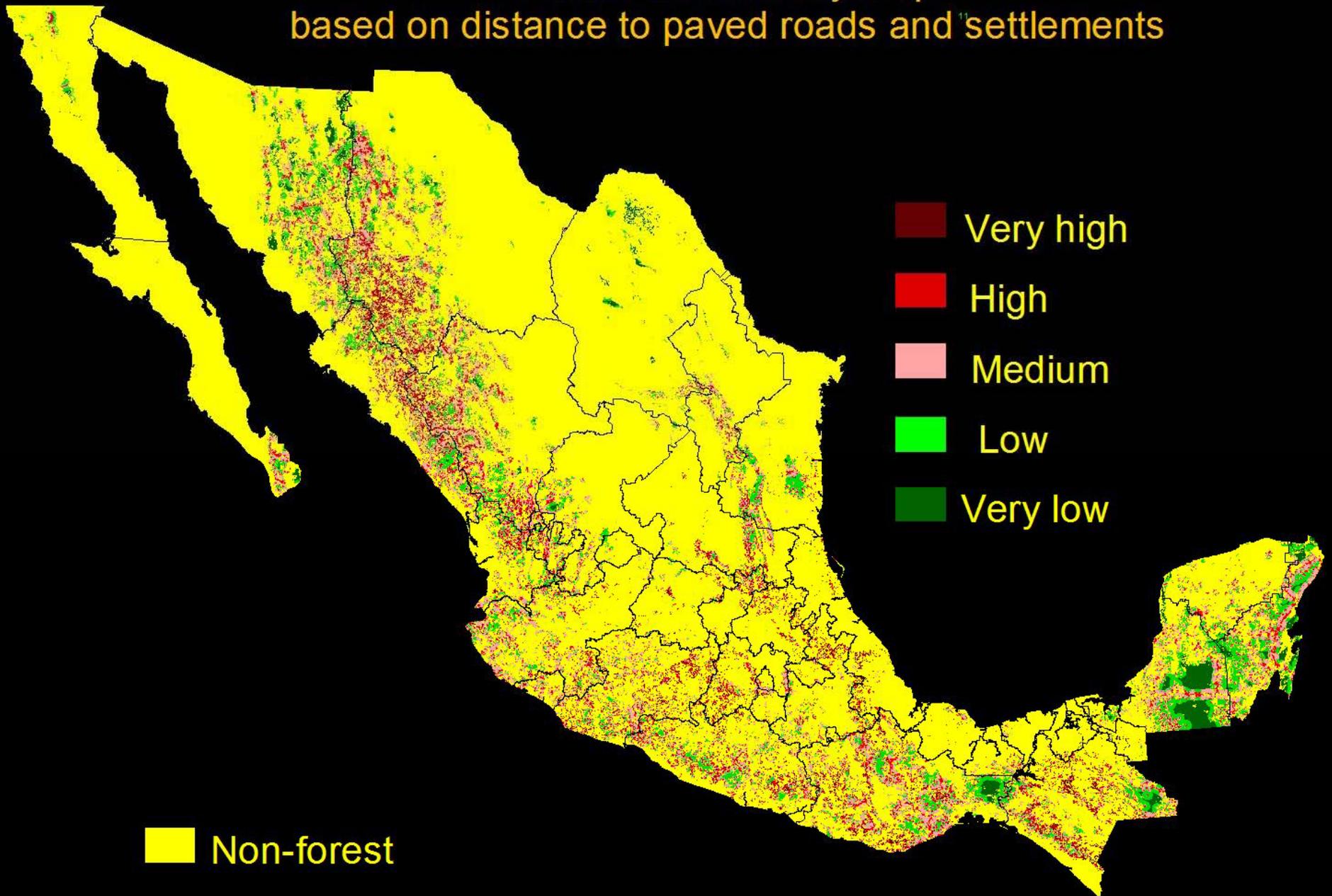


Distance to roads



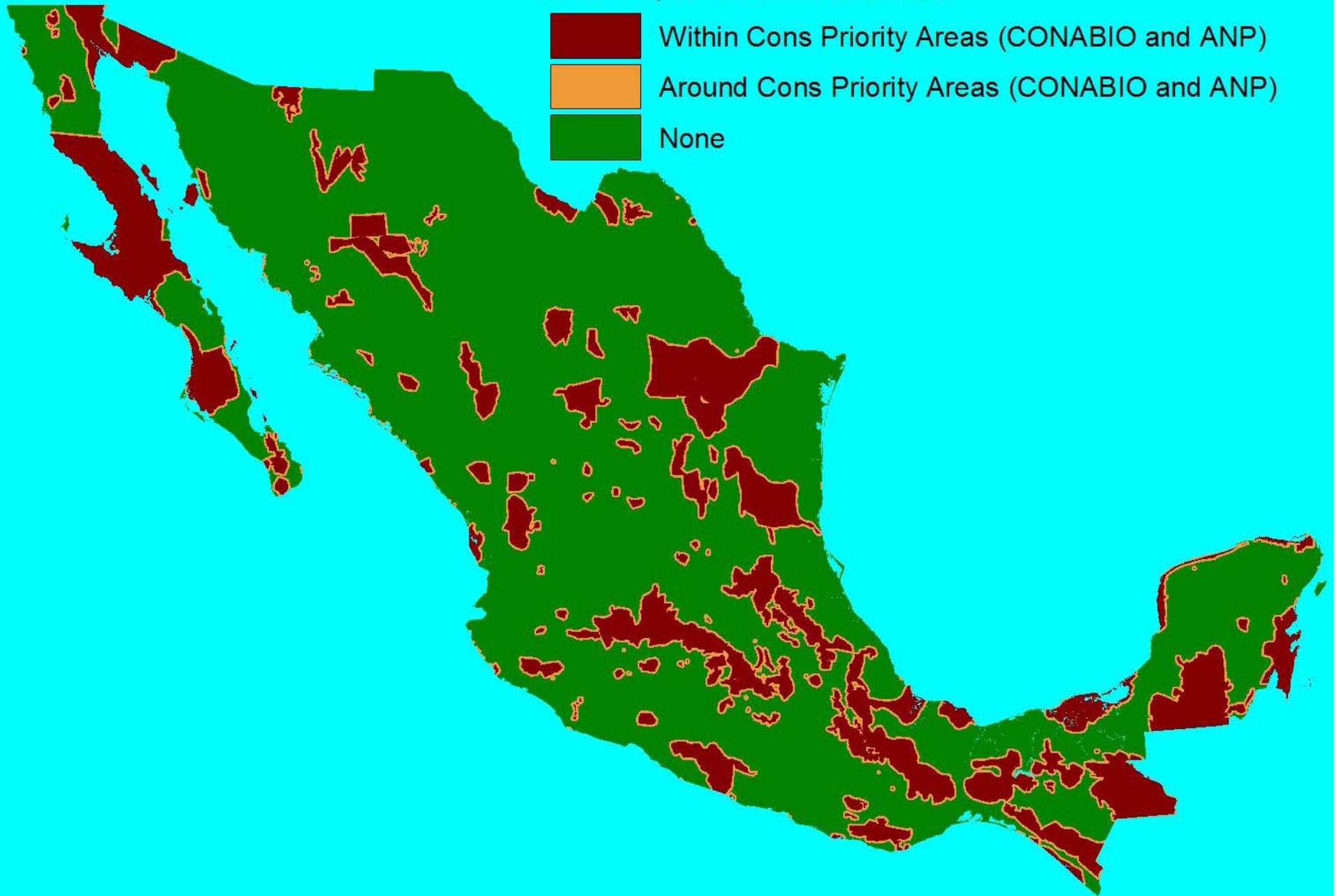


Forest vulnerability map based on distance to paved roads and settlements

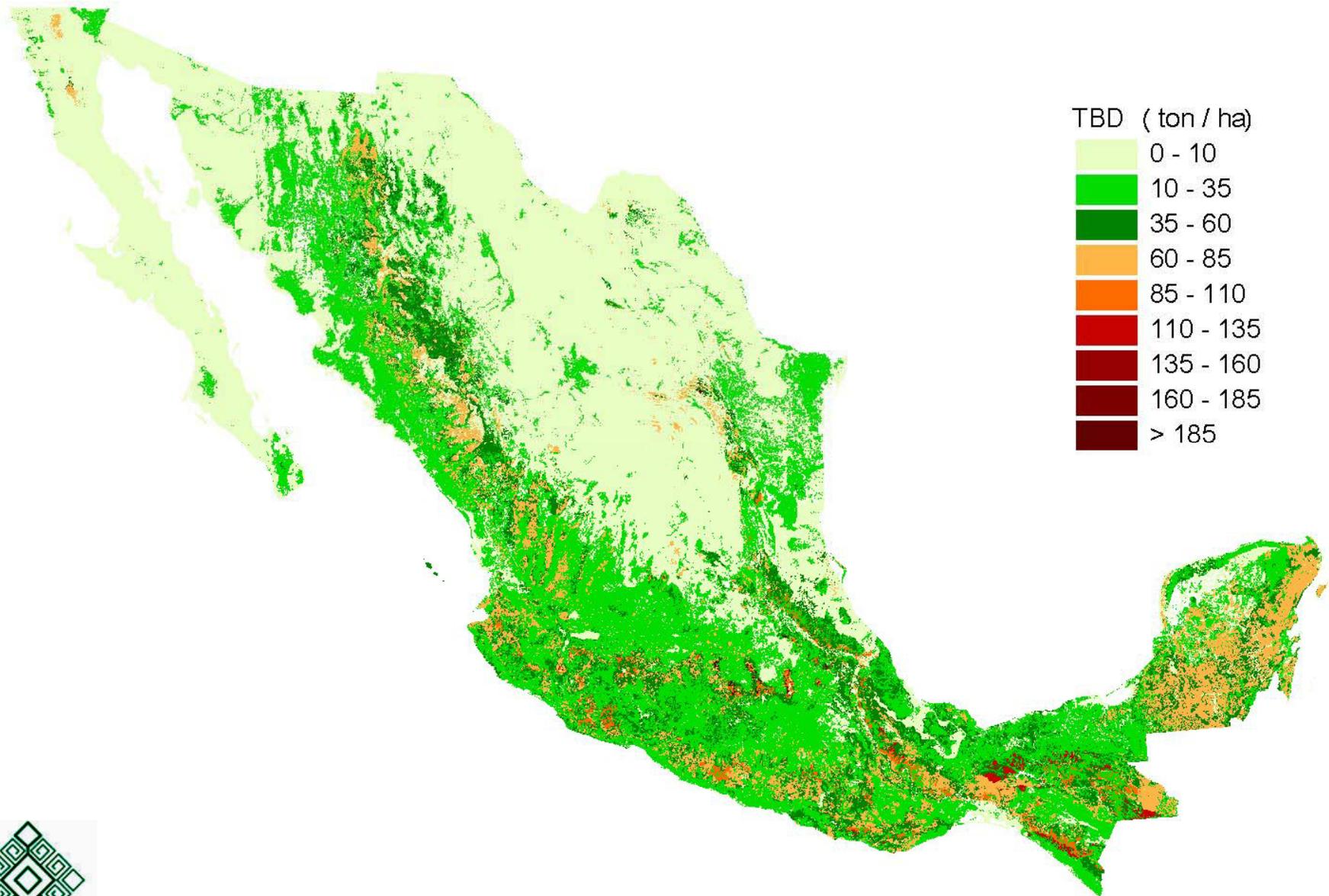


Areas important for conservation

-  Within Cons Priority Areas (CONABIO and ANP)
-  Around Cons Priority Areas (CONABIO and ANP)
-  None



Tree Biomass Density (2000, based on 1993 inventory plots)



Priority = f(quantity of carbon, social and conservation importance, vulnerability)

With or without weights on certain criteria or indicators

Can be used either.

- To pay extra for sustainability and/or conservation
- As a selection criteria



Thank you

E-mail: bjong@vhs.ecosur.mx

