



School of Natural Resources  
and the Environment

Seminar Series: Spring 2023

**THE INTEGRATION OF ECOSYSTEM SERVICES IN LAND-USE PLANNING  
IN MULTIFUNCTIONAL LANDSCAPES OF DEVELOPING COUNTRIES:  
THE CASE OF PARAGUAY**

**SPEAKER:** Sonia Delphin Perez, UA SNRE

**DATE:** Wednesday, April 26th

**TIME:** 3:00-4:00 pm

**LOCATION:** ENR2 S210 & [Zoom](#)

**ABSTRACT:**

Anthropogenic activities cause pressure on natural resources worldwide, leading to the loss of ecosystem services (ES) that are critical for human well-being and livelihoods. This pressure is particularly challenging in developing countries that are home to some of the most biodiverse ecoregions in the world.

Land-use planning, which aims to allocate different land uses considering environmental, social, and economic dimensions, arises as an alternative to balance the conservation of natural resources, human well-being, and economic development and prevent further degradation of ecosystems. However, significant challenges remain in developing countries to successfully build and implement an integrated land-use planning framework, provide practical applications, and include stakeholders' interests. This talk will discuss the integration of ES in land-use planning to engage with stakeholders and promote a participatory bottom-up framework for multifunctional landscapes of developing countries. Here, I explore the perspectives of experts, stakeholders, and decision-makers on ES and land-use planning policies using the Pantanal and Chaco ecoregions of Paraguay as illustrative cases. Mixed-method participatory research approaches were used including surveys, focus groups, and interviews. First, I will discuss the challenges to develop and implement land-use plans in developing countries. Second, I will assess the importance of forest ES for different stakeholders to identify synergies and tradeoffs. Third, I will present the proposed land-use planning framework to promote a more sustainable, equitable, and inclusive land-use planning process.

