Ecological restoration of farmland:
progress, prospects, and impacts

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Universidade Federal de Pernambuco

Universidade Federal de Santa Maria

Embrapa Solos

Technische Universität Braunschweig

International Network on Sustainable Water Management in Developing Countries

PUC Rio

Universidad Nacional de Colombia

UFSCar

Instituto de Ingeniería UNAM

Event Schedule

Time (GMT)	Topic	Presenter
12:00 – 12:15	Welcome address	Prof Andreas Haarstrick Technical University of Braunschweig
12:15 – 13:00	Strategies for sustainable management and restoration of soil resources in agricultural areas	Mr Ronald Vargas UN-FAO
13:00 – 13:45	Restoration of degraded pasture in the Brazilian Atlantic Forest	Dr José Araruna Jr. Pontifical Catholic University of Rio de Janeiro
13:45 – 15:00	Debate	Dr Margareth Simões Embrapa Soils

Strategies for sustainable management and restoration of soil resources in agricultural areas

Land resources planning should help producers, policy makers and other stakeholders select the most appropriate land uses for a given area. It should also help create conditions that allow for the adoption of sustainable soil and land management practices that promote the conservation of soil and land in healthy landscapes and ecosystems, and restore degraded land. Ronald Vargas will look in his talk at the use of systematic assessments of land potential as a means of identifying optimal land uses suitable for a specific set of economic and social conditions that can contribute to climate change adaptation and mitigation. He will also present databases of practices that have been identified for major land-use systems that can help agricultural producers and other land users select adapted management practices for particular environmental conditions and problems that can enhance agricultural resilience and support climate-smart agriculture. These tools can also provide guidance to decision-makers who are looking to ensure that the use of land resources is based on its natural potential, avoids overexploitation and prevents any further degradation.

Restoration of degraded pasture in the Brazilian Atlantic Forest

It is a well-known fact that Brazil is struggling to reconcile economic development and forest preservation. The trade-off between conservation and improvements in human well-being, could be achieved by compensatory conservation mechanisms that aim to protect natural resources, biodiversity, ecological functions, ecosystem services and other kinds of ecological values. The use compensatory conservation mechanisms would enable the actions of active forest restoration to be more feasible and increases the likelihood of successful projects by large and small farmers.

Compensatory measures from changes in land use, such those derived from infrastructure projects, could be an alternative to promote environmental conservation aiming on the improvement of the original quality of the degraded pastures in the Atlantic Forest. In this sense, compensatory measures could be designed, chosen or selected in a way to cover the costs associated to active forest restoration strategies. In this talk José Araruna Jr. will present a case study performed at the State of Rio de Janeiro, Brazil, where compensatory measures from the construction of a gas pipeline were used to restore a large gully on a degraded pasture belonging to a small cattle rancher.



Panelist

Ronald Vargas

is a soil scientist with over 15 years of working experience in natural resources management with a focus on sustainable soil management for food security and ecosystem services.

He joined FAO in 2011 as a Land and Water Officer and is the Secretary of the Global Soil Partnership (GSP) since its establishment in 2012. He has supervised the implementation of the GSP, its regional soil partnerships and the institution of the Intergovernmental Technical Panel on Soils. He leads the technical and scientific cooperation within and among regions, coordinates and facilitates the establishment of joint actions between governments, research institutions and NGOs for the achievement of soil-related SDGs. He promoted the International Year of Soils, the revised World Soil Charter, the Status of the World's Soil Resources Report, the Voluntary Guidelines for Sustainable Soil Management, the International Code of Conduct for the sustainable use and management of fertilizers and the preparation of audience-specific technical and communication material for the World Soil Day campaigns.

Panelist

José Araruna Jr.

is a full time adjunct professor at PUC-Rio, involved with teaching and research.

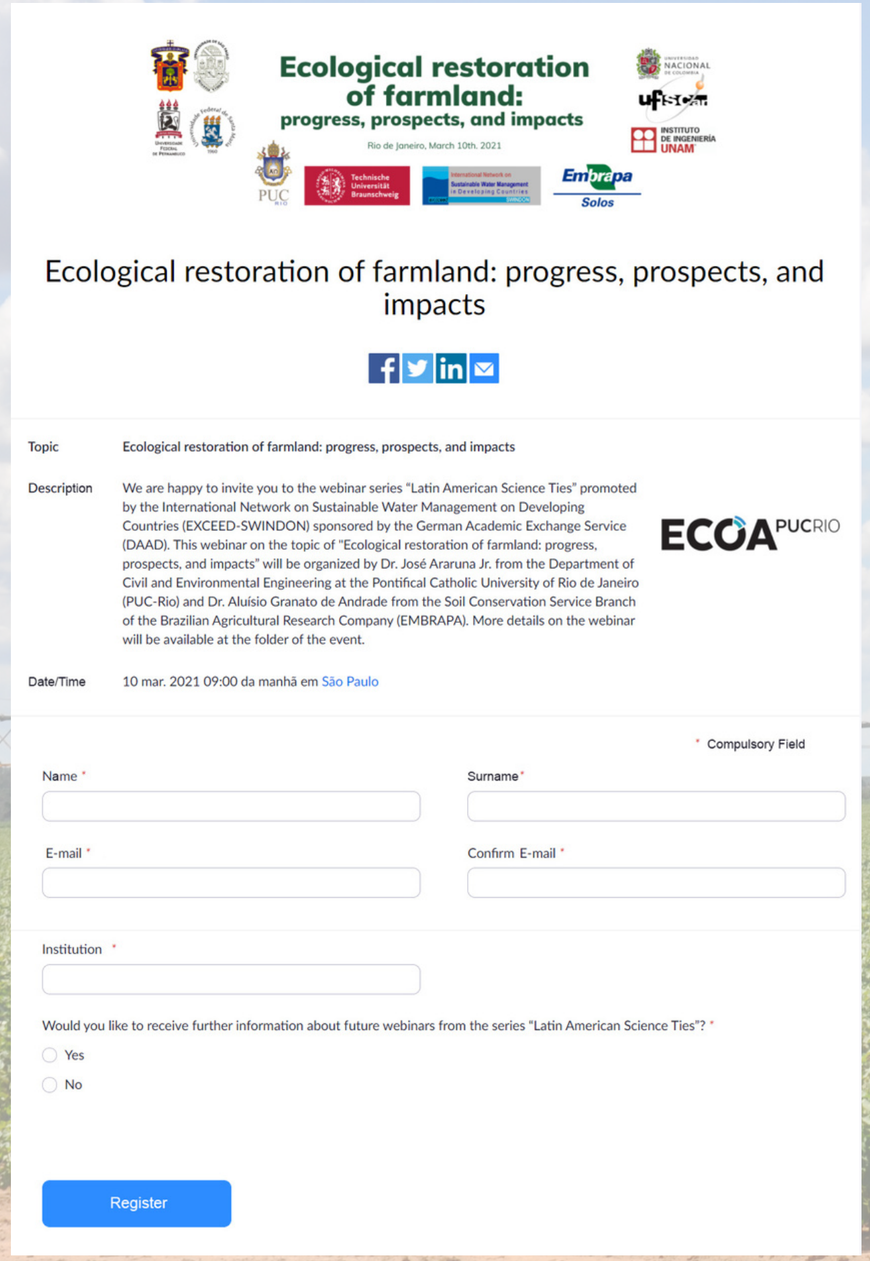
His academic duties include the Coordination of the Environmental Engineering Program and teaching courses at undergraduate and graduate levels. His research interests include solid waste treatment and disposal, environmental site investigation and site remediation. As a consultant, Dr. Araruna has a wide experience on waste management, environmental impact assessment, site assessment and environmental monitoring.

Moderator

Margareth Simões

is a researcher at the Brazilian Agricultural Research Corporation where is responsible for several Projects on Geomatics for Environmental and Agriculture Planning.

From 2011-2012 she was a researcher at Embrapa LabEx Europe Program, where was responsible for the research area of Agriculture Sustainability and Natural Resources, coordinating projects and international articulations. By that time, she was an associated researcher at la Maison de la Télédétection (UMR TETIS Territoires, Environnement, Télédétection et Information Spatiale) – UMR TETIS (Cirad/IRD/AgroParisTech).



Registration

https://puc-rio.zoom.us/webinar/register/WN_clmvkmngSRi-3Fm0-VTltg

Hosts

EXCEED SWINDON – Dr. Elvis Carissimi & Dr. Rodolfo Silva

ECOA PUC-Rio – Ms. Carla Fernandes & Mr. Juan Dias

EMBRAPA Soils – Dr. Aluísio Granato