

### Aspects of communication in rural communities / Aspectos comunicacionais em comunidades rurais

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Conhecer os principais fluxos de comunicação existentes nos territórios da cidadania do Vale do Juruá, de Capixaba e do Alto Acre, no estado do Acre, Brasil, foi o objetivo da pesquisa realizada em dezembro de 2018, no âmbito do projeto “Interação, intercâmbio e construção do conhecimento e comunicação nos projetos do Fundo Amazônia – Amazocom”, que busca articular ações com foco nas estratégias de comunicação, transferência de tecnologia, intercâmbio e construção de conhecimentos para atendimento de ações de outros projetos Integrados da Amazônia. Mesmo com as facilidades de comunicação oferecidas pelas tecnologias digitais que proporcionam amplo acesso à informação, é fundamental investigar como ocorre a troca de informações, conhecimentos e tecnologias na interação entre agricultores e extrativistas da região Amazônica e profissionais de diversas instituições que atuam no universo da extensão rural, ensino e pesquisa. O resultado das 39 entrevistas com informantes de sete municípios do Acre revelou uma diversidade de aspectos comunicacionais nesses territórios amazônicos. Há quem viva em total isolamento, distante dos centros urbanos, e o rádio ainda é o protagonista. Em outras localidades, há moradores que possuem televisão e utilizam dispositivos móveis com frequência para estabelecer uma comunicação. A pesquisa também revelou grande potencial de jovens agricultores e extrativistas no processo de comunicação. Eles dominam a tecnologia móvel no espaço da família, mesmo em localidades onde o uso do equipamento é restrito devido à falta de acesso à internet, como, por exemplo, em boa parte das comunidades que vivem na floresta amazônica.

## INNOVATION AND EXCELLENCE IN EMERGING RESEARCH: IUFRO STUDENT AWARDS

### S1a INNOVATION AND EXCELLENCE IN EMERGING RESEARCH: IUFRO STUDENT AWARDS

#### Recovery of a tropical rain forest over 30 years following silvicultural interventions

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Tropical rain forests are highly biodiverse and provide globally important ecosystem services. In the face of increasing dominance of human-modified landscapes in tropical regions, managing these forests sustainably may contribute to maintain ecosystem integrity while fulfilling society's demand for forest goods. Nonetheless, little knowledge is available regarding tropical forest responses to silvicultural interventions, especially in the medium to long-term. Here, we investigated how silvicultural intervention intensity and type (harvesting and thinning) influenced the recovery of important forest attributes and functions related to biodiversity conservation, carbon sequestration and timber provision. Furthermore, the effect of post-logging (remaining) biological legacies (basal area and species diversity) on above ground biomass recovery was also investigated. We analysed data from a unique long-term experiment located in the Tapajós National Forest, Pará, Brazil, where trees  $\geq 5$  cm DBH were measured on 8 occasions in 41 permanent sample plots including unlogged forest. Management intensities comprised logging (1982) with associated damage and follow-up thinning (1993-1994). Tree species diversity was not impaired by silvicultural interventions, but basal area reduction above 20% impaired recovery of composition, biomass and timber stocks over 30 years after initial logging. Additionally, stand-level aboveground biomass recovery rates were largely determined by basal area remaining and less by post-disturbance composition. These results indicate that the resilience of these forests of the Eastern Amazon depends primarily on harvesting and thinning intensity and, therefore, silvicultural interventions must be carefully controlled for the ecosystem to be able to recover rapidly.

#### International forest policy by International and Transnational Organizations: case studies of the World Bank and forest certification organizations in Argentina and Armenia

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In recent decades, globalization and internationalization led to an increase in the number of international regimes attempting to influence national behaviour over many different issues. By using the case of the international forest regime the thesis sought to answer how do international and transnational organizations influence domestic forest policies? The cases of Argentina and Armenia were selected as examples of developing countries open to international influences with weak forest sectors that went through an administrative restructuring. The results show that: First, which issues from the International Forest Regime become relevant in different countries depends on the domestic actors and their interests. Second, by means of funding and capacity building, the World Bank, as an international organization, assisted the coalition of agricultural bureaucracies and landowner associations that emerged after the economic crisis in Argentina at the beginning of the 1990s. Third, the influence of the World Bank in Argentina and Armenia through direct access pushed the forest sector towards deregulation. Fourth, state bureaucracies play an important role in the implementation of transnational regimes at the national level. In forest certification processes international actors seek coalitions with different state bureaucracies. However, in situations where new promising venues for political influence open, private actors prefer ad hoc coalitions with weaker bureaucracies with less technical knowledge. Fifth, the political system of federal countries provides multiple institutional access points for policy change that international and transnational regimes try to use in order to influence the domestic level, consequently changing the power balance of domestic networks.

#### Influence of pruning on development of even-aged *Pinus radiata* D. Don and *Pinus pinaster* Aiton stands in SW Europe

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Demand for wood products is one of the main drivers of investment in forest management. Additionally, a major challenge being faced by forest managers is related to wood quality, particularly on timber species where forests productivity is higher. Silvicultural treatments allow to obtain higher quality of wood and increase the value of forests. However, optimal interventions and better understanding of the variation of wood quality in response to silviculture is still unclear in the main timber species. The influence of silviculture on fuel management and wildfire mitigation is also a key research question. The objective of this study is