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## A multistakeholder process to validate ecosystem service indicators

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Developing interactive research and learning networks provides substantial benefits for the progress of individual scientific disciplines. The interaction among scientists can enhance research within traditional disciplines, and then examine how interdisciplinary research programs can help scientists engage with the full complexity of the problems facing ecosystem services (Barlow et al., 2011). Concerning ecosystem service indicators, for its effective application, users need to be involved in their selection. Thus, it was organized a workshop with more than 40 stakeholders (representing national and state government institutions, universities, research institutions, NGOs, private sector and others) to discuss, propose and rank ecosystem service indicators to compose a methodology for monitoring the impacts of PSE programs in rural areas. The first step was to organize the indicators that are in use by some PSE projects in Brazil and in Latin America and select the ES that would be considered at this study – water supply, food provision, erosion control, soil quality, refuge and cultural (Costanza et al., 1997).

The preview list of indicators related to each selected ecosystem service was previously prepared. To facilitate it, the framework proposed by Haines–Young; Potschin (2010) and Martin–Lopez et al. (2013) were modified with the aim to guide the selection and ranking the indicators. The intention of using this framework was to analyze each of the selected ecosystem services concerning its structure, function and benefits/impacts. To evaluate the indicators related to structure and function, the workshop participants group was shared in five smaller groups associated to each ecosystem services considered at this study. As a second action, they rank the indicators. At the end, a list of indicators for each ecosystem service, in accordance with the framework was generated, showing those indicators that are more appropriate for monitoring PES projects.

### *References*

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