

## The neglected couple: ecosystems services and capabilities.

Llopis, Jorge C., Centre for Development and Environment and Institute of Geography, University of Bern, Switzerland.

Diebold, Clara, Centre for Development and Environment and Institute of Geography, University of Bern, Switzerland.

Schneider, Flurina, Centre for Development and Environment, University of Bern, Switzerland.

Zaehringer, Julie G., Centre for Development and Environment, University of Bern, Switzerland.

Corresponding author: Jorge C. Llopis, Centre for Development and Environment and Institute of Geography, Mittelstr. 43 and Hallerstr. 12, 3012 Bern, email: [jorge.llopis@cde.unibe.ch](mailto:jorge.llopis@cde.unibe.ch)

### Abstract text

Even in spite the Millennium Ecosystem Assessment's (MEA) understanding of human wellbeing as supported by ecosystem services supposedly was inspired to some extent by the capabilities approach to human development and wellbeing, up to date this connection has been rarely explored, although remarkable exceptions do exist.

In this study we draw on the capabilities approach to explore the changes induced on human wellbeing by two major factors external to the local context in four research sites in the biodiversity hotspot of north-eastern Madagascar. On the one hand, we look at how price fluctuations, including an on-going boom, for the two main cash crops produced here, vanilla and clove, is influencing the wellbeing of local communities. On the other hand, we look at how the establishment of terrestrial protected areas with biodiversity conservation and carbon sequestration objectives impacts these dynamics.

Analysis on the data generated through focus groups discussions and structured interviews in our four villages revealed the following. First, that beyond the most obvious contributions of the main wellbeing components found to be necessary to have a 'good life' in our villages to local capabilities, many of these components are appreciated by their relational value. Second, that different wellbeing dimensions present a bundled nature, where changes in one capability might trigger changes in a whole set of them. And third, that the two globally-driven processes

explored have contradictory implications for local human wellbeing, suggesting the existence of trade-offs between capabilities.

These findings are key to understand how global change processes reaching out to local contexts affects already complex local wellbeing dynamics. These insights should also help to inform better biodiversity conservation practice and development initiatives to support local communities under multiple pressures.

### **Keywords**

Capabilities approach, disaggregated wellbeing, relational values,