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Assessing the socio-cultural impacts of biodiversity cooperation networks of the METSO programme

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To safeguard overall sustainability in forest conservation it is necessary to consider ecological, economic, social, and cultural viewpoints simultaneously. However, particularly the socio-cultural aspects are difficult to measure and thus often poorly considered. Furthermore, practical decision-making requires that sustainability assessments are as easy and simple as possible. This study sought to develop and test a practically feasible procedure for measuring and monitoring the socio-cultural impacts of the biodiversity cooperation networks within the Forest Biodiversity Programme METSO. Fundamentally, the procedure falls within a multi-criteria decision support (MCDS) framework. First, a literature review helped to select and operationalize a set of 10 criteria and 25 indicators. Second, empirical data for the indicators were gathered from seven cooperation networks in November 2010 and January 2012 with email questionnaires. Applying the indicator data to an additive utility model yielded cumulative utility scores for all networks and for both operational years. According to the results, improvements from 2010 to 2011 took place particularly within the indicator “*Achievement of innovation and new operation models*”. Generally, the best performances appeared under the criterion “*Acceptability*”. The high (positive) total socio-cultural impacts can be achieved through different strategies: by gathering sub-utility from all criteria with rather equal weights or by concentrating on a few locally important criteria with higher weights. The presented procedure enables longitudinal monitoring of socio-cultural sustainability, which is beneficial, because some outcomes of actions appear with a delay. The method may help to compare the networks’ sub-utility distributions, i.e., performance profiles, which provides valuable information for policy-makers. However, it is noteworthy that some indicators rely on subjective expert judgements, which is why direct comparisons between networks should be done with caution. Following task is to link or merge the monitoring of socio-cultural impacts with other dimensions of sustainability.

Keywords: additive utility model, expert judgements, sustainability impact assessment