

Helping Nepal to deliver on its conservation targets

Title

Policy makers are paying increasing attention to ecosystem services (the benefits that nature provides, such as clean water and crop pollination), given the importance to peoples' lives. In order to support evidence-based decision making, scientists are developing ways to measure these effectively, in a way that can be replicated from site to site and provide local and national decision makers with the information that they need to help them to manage these services and help achieve their conservation targets.

A new approach by BirdLife scientists carried out in Nepal has shown a way to do just this.

The study shows that Nepal's **Important Bird and Biodiversity Areas** - known as IBAs for short - currently provide a wide range of benefits to people at a local, national and global level, in addition to supporting important species. However, the results of this study suggest that many of these services will decline over the next decade if current pressures on them continue. This happens because the same land-use changes that affect species and habitats also result in changes to the ecosystem services these sites provide.

The approach used experts from across the country's IBA network, integrating local and scientific knowledge to develop an understanding of the impact of current land use change pressures on services.

Wild harvested foods, medicine and raw materials were considered important at many sites as well as benefits from tourism/recreation and from forests that regulate the climate.

Unsurprisingly, water provision was ranked as important at almost all sites. Changing climatic conditions exacerbated by land use change means that river flows are likely to be affected, as up to 50% of the average annual flows in Nepal's rivers are reliant on snow and glacial melting.

All these services were reported as being under threat, with the anticipated decline in these services across a significant number of sites having local, national and global level impacts. This study showed that overall, local people that rely on these IBAs end up the biggest losers from these changes.

'This study is the first demonstration of the utility of the newly developed tool **TESSA** for presenting the overall picture of how the balance of services is affected and how this affects different groups of people in different ways', commented Dr Stuart Butchart, Head of Science at BirdLife.

“Our new methodology means that the assessment of multiple sites can be done quickly and at relatively low cost by engaging with key local people. This approach reflects the increasingly participatory methods being used to produce meaningful results as well as developing the awareness and capacity of local people involved”, said Jenny Birch, BirdLife’s Ecosystem Services Officer.

Data from this study enabled Bird Conservation Nepal (BirdLife Partner) to engage in early discussions about the revised National Biodiversity Strategy and Action Plan and actively contribute towards Nepal’s commitment to improving the status of biodiversity by 2020.

Read the full paper here: <http://journals.cambridge.org/orx/nepal>

The Toolkit for Ecosystem Service Site-based Assessment is available here: <http://www.birdlife.org/datazone/info/estoolkit>