Selected tools and methodologies applied within IUCN for understanding forest dependence
(Supplementary reference material only)

By George Akwah Neba, Richard Aishton

As IUCN’s work on forest dependence is being undertaken as part of programmatic efforts to support sustainable and locally-appropriate forest policy measures, it places a strong emphasis on responding to the information needs of national and local government policy-makers in the countries concerned. Thus the methodologies relate not only to research but also to communication and engagement with policy-makers. Below is a list of some of the methodologies and tools used to understand forest dependence.

**Qualitative method: the Forest-Poverty Toolkit**
Based, in part, on participatory rural appraisal techniques, the Forest-Poverty Toolkit focusses systematically on forest and natural resource issues, and uses a simple and rapid way of capturing qualitative and quantifiable information on non-cash as well as cash incomes. Its central tool analyses total annual household income, split by income source, from: agriculture, livestock, forests, other environmental income, employment, trading, etc. Cash and non-cash (subsistence) income from each of the first four categories are captured by gender and wealth level.

**A Restoration Opportunities Assessment Methodology (ROAM)**
ROAM is a flexible and cost-effective analytic process for identifying restoration opportunities at national levels, as well as describing how those opportunities relate to food, water, and energy security. The application of ROAM generates context-specific knowledge relevant to understanding and addressing forest and land use planning and management. Particularly it helps to: (i) identify priority areas for restoration; (ii) prioritise relevant and feasible restoration intervention types across the assessment area; (iii) quantify costs and benefits of each intervention type; (iv) analyse the finance and investment options for restoration in the assessment area; (v) estimate the values of additional carbon sequestered by these intervention types; and (vi) come up with a diagnostic of ‘restoration readiness’ and strategies for addressing major policy and institutional bottlenecks.

**Forest restoration prioritization tool (ROOT)**
IUCN is working with the Natural Capital Project to develop a tool to identify forest restoration activities that minimise costs and maximize benefits (i.e. enhancement of biodiversity, local livelihoods, water supply and other natural goods and services).

**The Land Degradation Surveillance Framework (LDSF)**
This framework is applied to assess opportunities for restoration of farm fallows and pastures. IUCN is pilot-testing the LDSF tool in Uganda and Peru with ICRAF to know when and where farmland can be restored to increase agricultural productivity and maintain related natural services. LDSF uses novel data collection methods to produce a suite of spatially-specific and continuous soil and vegetation indicators to allow cost effective assessments and monitoring across any surveyed landscape.
Household surveys
The household survey methodology developed for the 2014 study on forest dependence in Eastern Europe and Russia uses elements of the World Bank Living Standards Measurement Survey and the CIFOR Poverty Environment Network methodology. It systematically accounts for all household income (cash and non-cash) for the preceding 12-month period including income from forests, agriculture, livestock, wage labour, commercial business activities and any other sources.

The Forest Community Fingerprint (FCF)
The FCF is a novel approach to more accurately estimate the human-nature dependency structure in boreal and temperate forest ecosystems, and to document drivers of sustainability and efficiency of interactions between communities and their surrounding forest ecosystem resources. The FCF concept utilises specific data gathered during targeted household surveys as well as information derived via remote sensing techniques. The FCF concept also has a flexible nature and can potentially be adjusted to measure the overall levels of community poverty and forest productivity. Each parameter is calculated based on a set of weighed input variables, which can be adapted and changed to reflect the local conditions of the region of interest. Furthermore, additional information can be used to complement the analysis and to provide an even more detailed assessment of the six FCF parameters (e.g. greenhouse gas emissions or gross domestic product).