



# The value of investing in locally-controlled forestry

The economic impacts of scaling up LLS experiences in Africa, Asia & Latin America



## Why under-valuation is a problem

Forests are a good investment option. In the words of one of the world's leading international news and business weeklies:

*"A growing number of rich individuals, endowments and pension funds are including timber as a "hard asset" in portfolios. No wonder. Average annual returns on timber – meaning managed preserves that are eventually harvested – have outstripped those from leading global stock indices, property, oil and gold for the past decade. Worldwide, timber has attracted more than \$20 billion of investment from institutional investors<sup>1</sup>."*

Since the 1980s the forest sector has outperformed the stock market - a diversified timber portfolio would have returned 13.3% annually compared with 11.6% for the S&P 500<sup>2</sup>. However, while banks and financial institutions have been eager to tap into the market opportunities that managed forestry affords, public sector investors have proved to be much less responsive to the potential of sustainable forest management to contribute towards economic growth. The benefits have tended to be massively under-valued by governments and development assistance donors.

This seeming myopia is particularly apparent in relation to locally-controlled forest management. As defined by the Growing Forest Partnerships, locally-controlled forest management is: "the local right for forest owner families and communities to make decisions on commercial forest management and land use, with secure tenure rights, freedom of association and access to markets and technology"<sup>3</sup>. It is estimated that approximately US\$10 billion of government budgets<sup>4</sup> and US\$2 billion of development assistance are allocated to the forestry sector each year – but only a tiny fraction of this is spent on locally-controlled forestry. Public funding also remains overshadowed by the estimated US\$150 billion which is currently injected into the commercial forest sector as part of private funding and mainstream institutional investment<sup>5</sup>.

This omission affects a huge human population, and substantial areas of forests. Much of the world's forest lies outside formally gazetted or commercially-run areas. It is managed by the people who live in and around it, many of them rural communities in developing countries. Locally-controlled forestry does not only provide an important and cost-effective tool in the global fight against deforestation and forest degradation, but it can also act as a powerful engine for pro-poor economic growth.

Over the past 5 years, IUCN's Livelihoods and Landscapes Strategy (LLS) has been demonstrating how management approaches that strengthen community rights and control over forests can leverage real and meaningful improvements in the livelihoods of the rural poor, enhance biodiversity conservation, and ensure the sustainable supply of forest goods and services. While LLS's successes have mainly been achieved in individual landscapes where key legal, policy and governance barriers have been identified and removed, they have much broader applicability. Many other parts of the world face similar opportunities for catalysing economic growth through the identification and removal of barriers to locally-controlled forestry.

The aim of this paper is to show what might be the economic impacts, were this to happen. Specifically, it reviews existing forest use and management data in order to calculate the value of breaking down barriers to locally-controlled forestry in tropical and developing countries. Examples are provided from the landscapes and countries in which LLS has been working, and these figures are scaled up to provide estimates of the kinds of values that could potentially be generated should such an approach be applied more widely.

It is worth noting that the quality and accuracy of available data on forest areas, dependency and values vary widely – unfortunately, and as has been pointed out by various other authors, it is a characteristic of many of the global and regional estimates currently in circulation that data sources are not provided, or, where sources are shown they are 'guesstimates' or 'back-of-the envelope' calculations<sup>6</sup>. As interesting (and hopefully useful) as these aggregate numbers are, the reader must always bear in mind that such figures will inevitably mask some important elements of forest values, and over-simplify the complex relationships at play when looking at people's livelihoods in relation to their access, rights and control over forests<sup>7</sup>. The figures presented in this paper must be understood subject to these caveats and limitations.

The data present a clear message. Locally-controlled forest management is a highly profitable public investment and development assistance option, as it can secure values that are essential to more equitable and sustained economic growth at local, national and even global levels. In contrast, failing to do so may ultimately undermine many of the goals that so many public funds, efforts and time are being channelled into: reducing poverty, and providing cost-effective, equitable and sustainable development for all.

## Who and what is affected?

A first important set of questions to ask is: what area of forest is (or could be) under locally-controlled forest management, how much is being affected by legal, policy and governance barriers, and how many people are involved?

Last year's Global Forest Resources Assessment indicated that ownership and management of forests by communities, individuals and private companies is on the rise<sup>8</sup>. More than 400 million hectares of forest and woodland in the developing world<sup>9</sup> is now believed to be owned, administered or actively managed by communities<sup>10</sup>, comprising around 25% of total forestland in those countries. Progress in transferring these rights is however slow. Only about 47% of the legal rights over forests that are owned by or reserved for communities and indigenous groups have been transferred and formally placed under their management<sup>11</sup>.

It is also important to note that this figure undoubtedly under-estimates greatly the amount of forest land which, actually or potentially, could be under locally-controlled management. There are large areas of land which are recorded as being under state jurisdiction or as leased to the private sector for which customary property rights have not actually been formally extinguished, or where customary rights have not been recognised<sup>12</sup>. It is suggested that a more realistic figure for the maximum global extent of communal forestry and woodland assets may be something in the region of 3.3 billion hectares<sup>13</sup>. Not all of these "commons", are, however, community-owned.

In addition, there are vast areas of currently deforested or degraded landscapes which offer opportunities for forest landscape restoration. Many of these are hindered by a lack of investment funds or by unclear rights for local land and resource users to benefit. Of a total of 1.5 billion hectares of potentially

restorable forest landscapes, almost 90% or 1.35 billion hectares comprise areas which also include other land uses such as agriculture, and are considered suitable for mosaic restoration, potentially by local communities and landowners<sup>14</sup>. The value of these lands for climate change adaptation and mitigation cannot be understated.

A very large human population relies on forest goods and services for their livelihoods, and yet lacks adequate access, rights and control over the forests that are local to them<sup>15</sup>. The most comprehensive and widely-accepted estimates suggest that in total more than 1.6 billion people depend in some way on forests for their livelihoods<sup>16</sup>.

The majority of forest-dependent people live in the developing world, including 1.4 billion poor (of whom almost 1 billion who live in extreme poverty<sup>17</sup>), between 60-100 million members of indigenous groups who are almost wholly reliant on forests<sup>18</sup>, up to 500 million rural villagers who live within or adjacent to forests and have a high degree of dependence on them<sup>19</sup>, and more than 1 billion people who utilise agroforestry farming systems or remnant forests to contribute towards their subsistence and income needs<sup>20</sup>.

Clearly, a considerable area of forest and a significant human population stand to be affected by investments which overcome the barriers to locally-controlled forest management. According to the figures cited above, more than **400 million hectares of existing forests** and at least **1.5 billion people** are already impacted in some way. Investing in the restoration of **1.35 billion hectares of landscapes that are currently deforested and degraded** could more than quadruple this area, and increase still further the number of people who benefit directly from locally-controlled forest management.

## What does this contribute to poor people's livelihoods?

Next, it is useful to consider what kinds of livelihood gains can be generated for the people who are involved in locally-controlled forest management.

These are typically substantial. For example, in the Congo Basin (one of the landscapes that LLS has

been working in) up to 80% of the animal protein consumed each year comes from wild bushmeat<sup>21</sup> and in the Democratic Republic of Congo forest foods comprise around one third of household production<sup>22</sup>; around 80% of Cameroonians use wild medicinal plants to cater to all or part of their healthcare needs

and more than 90% in the Democratic Republic of Congo<sup>23</sup>.

Forest-based sources of income and subsistence tend to be particularly important for the poor and vulnerable. In Lao PDR (also a LLS site), not only do more than 80% of the population depend on forests for their daily food, fuel, medicines and construction materials, but the relative contribution of forest products to livelihoods is almost one and a half times higher for poor households as compared to others<sup>24</sup>. In Mtanza Msona village in Tanzania (another LLS landscape), woodland products are worth almost eight times as much as all other sources of farm and off-farm production for the poorest households: the value of plant-based medicines is almost 15 times as high as that of purchased drugs, and the wild foods harvested are worth more than 14 times as much as annual expenditures on food from the market<sup>25</sup>.

Scaling up these kinds of figures indicates that the livelihood values generated by locally-controlled

forestry are immense. In total, more than one billion people in developing countries are thought to generate income or other sources of livelihood from non-timber forest products<sup>26</sup>, and about the same number depend on forests for their fuel<sup>27</sup> and medicinal<sup>28</sup> needs. On average this contributes around a quarter<sup>29</sup> - and in many cases far more - of income for forest-adjacent communities.

Mean household-level "environmental income" (value-added through the consumption, barter or sale of forest goods) has been found to be almost US \$700 a year<sup>30</sup>. While the monetary values are lower for poor and very poor households, the relative contribution to household subsistence and livelihoods tends to be far higher than for other members of the community. Applying these values to the households in developing countries who depend on forests in some way suggests that locally-controlled forestry provides them with **livelihood benefits worth some US \$130 billion a year**.

## What are the broader economic gains?

Following on from this, it is also important to understand which kinds of economic benefits locally-controlled forestry generates for other sectors and at broader levels of scale.

Locally-controlled forestry has an economic footprint which extend far beyond the livelihoods of adjacent communities. It secures flows of income, products and services for many other sectors and populations. Recent, global-level, estimates suggest that the monetary value of the products and raw materials that are harvested from tropical forests is something between US\$26 and US\$9,400/hectare/year<sup>31</sup>. Forest-based employment is thought to account for something between 40 million<sup>32</sup> and 80 million<sup>33</sup> full-time job equivalents<sup>34</sup>, including approximately 160 million people who work in small and medium-scale enterprises<sup>35</sup>.

These values are, in turn, manifested in the indicators that are used to gauge economic performance and growth. Unfortunately, official statistics rarely reflect the value of locally-controlled forestry, because so many of the goods and services it provides never enter into formal markets.

In Lao PDR, for example, the value-added from household-level non-timber forest product collection is thought to be almost four times as high as the recorded gross revenues from commercial round log harvesting. Overall, forest goods and services have been shown to contribute three quarters of per capita GDP, more than 90% of employment, almost 60% of exports and foreign exchange earnings, just under a third of government revenues, nearly half of foreign direct investment inflows and around two thirds of donor assistance<sup>36</sup>. Similarly, official data show that forests contribute only 1% to 2% of GDP in Indonesia (also a LLS country), whereas the World Bank estimates that their potential value to the economy is closer to 15% or 20%<sup>37</sup>.

Locally-controlled forestry also adds other values to national and global economies. The forests of China's Miyun watershed (another LLS pilot site), for example, generate water benefits worth just under US\$ 2 billion a year for city-dwellers in downstream Beijing<sup>38</sup>. Meanwhile, the global value of the carbon stock sequestered in the Amazon rainforests (where LLS is also working) is estimated at between \$1.5-3 trillion<sup>39</sup>.

The costs of losing these valuable ecosystem services is almost unthinkable: if current trends of tropical natural forest degradation and deforestation continue, the global welfare losses from now until 2050 have been projected to average over US\$ 100 billion a year<sup>40</sup>. Recent estimates indicate that the regulating services provided by tropical forests can be worth anything between US\$ 60 and US\$ 7000/hectare/year, habitat services between US\$ 5 and US\$ 5000, and cultural services between US\$ 2 and US\$1400<sup>41</sup>. Averaged across all tropical

forest countries, a meta-analysis of available data proposes that the total annual values generated from tropical forests is as high as US\$ 2000 per hectare or US\$ 3.8 trillion in total<sup>42</sup>.

Extrapolating these data suggests that the 400 million or so hectares of tropical forest under local management may, in addition to the livelihood values described in the previous section, generate services to a value of almost **US\$ 720 billion a year for national and global economies**.

## So what is the value of investing in locally-controlled forestry?

This paper set out to show the economic impacts of breaking down barriers to locally-controlled forestry in tropical and developing countries.

Even the rudimentary analysis that has been carried out yields some quite staggering figures. At a very conservative estimate, at least 400 million hectares of forest landscapes and 1.5 billion people are involved. To put these figures in context, locally-controlled forest management already involves an area which is at a minimum roughly the same size as the European

Union, and a human population that is larger than that of China.

This generates direct livelihood values worth an estimated US\$ 130 billion a year (worth more than France's and Switzerland's gold reserves combined). The value of ecosystem services which accrue more broadly, to national and even global economies, is in excess of US\$ 720 billion a year (only a little less than the GDP of the Netherlands).

## What needs to change if we are to secure these economic gains?

However high the value of locally-controlled forestry is demonstrated to be in theory, this has little meaning unless it actually translates into changes in real-world policy and practice. This means taking action to dismantle the barriers that currently exist to locally-controlled forest management, and to these values being realised.

One set of barriers concerns the unsupportive or weakly enforced legal, administrative and governance conditions that persist in many countries, and which prevent local communities from taking control both of the forests that surround them, and the benefits that these yield. Another key constraint is the currently low investment that is being made in locally-controlled forestry, and in overcoming these barriers.

As the experiences of LLS have shown, a relatively small investment in breaking down a barrier to locally-controlled forest management often acts as a catalyst for capturing a much greater economic contribution from forest resources, across many different sectors and levels of scale. There is much that can be done now to foster the better application of policies,

markets and administrative arrangements that are currently acting as barriers to locally-controlled forest management.

Perhaps foremost among these is investing sufficient public resources in supporting locally-controlled forest management processes. This does not just involve "hard" cash injections. It also includes "soft" forms of investment, such as building capacity, developing business skills and supporting the securing of tenure rights over forest land and resources<sup>43</sup>.

There are clearly substantial payoffs to breaking down these barriers. Given the local, national and even global economic values that are generated and economic costs that are saved through locally-controlled forest management, it is time to consider whether, in fact, governments and development donors can afford not to invest in it. Failing to do so may, ultimately, undermine many of the goals that so many public funds, efforts and time are being channelled into: reducing poverty, and providing cost-effective, equitable and sustainable development for all.

## Notes and references

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