



Understanding forest dependency for REDD+:

Adapting the Forests-Poverty Toolkit to new purposes

Briefing paper

June 2011



FOREST CONSERVATION PROGRAMME

1. Forests, livelihoods and REDD+

The development of REDD+ as a climate mitigation strategy is creating an opportunity to reduce tropical deforestation while protecting and promoting forests' crucial social and ecosystem functions. REDD+ has the potential to contribute significantly to benefits for people and nature, but if badly designed could inadvertently harm people. Forests play important roles in livelihood resilience and poverty reduction for many hundreds of millions of people. The total value of cash and non-cash forest income to forest dependent rural households in the developing world was recently reliably estimated at 130 billion dollars using 2004 figures¹. It is certainly worth more today. REDD+ activities will be identified as part of the building of national REDD+ strategies; but for wise choices to be made, we have to understand the role that forests already play in people's livelihoods. Only then can REDD+ ensure that it supports the continued realisation of forest benefits.

Decades of research and practical experience with community forest management and conservation have yielded insights into the role that forests play in the livelihoods of the world's rural poor. But knowledge has not always been collated and re-packaged for decision makers. Furthermore, data-gathering concentrated for a long while on the income gained from *selling* forest products, and since such income were generally very modest, it was sometimes argued that forests fulfilled no more than a safety-net function. More recently, the full extent of the direct, non-cash contribution of forests to livelihoods has received more attention, and it has suddenly become apparent that if food security, medicine, fuel, house-building materials and household equipment (rope, mats, baskets and tools) are taken into account, forest products are 3-4 times more valuable for non-cash purposes than for cash.

The use of forest through time is also as yet poorly understood at official levels: poor people often have a two-generation strategy in which the parental generation relies heavily on forest, while helping their children to escape chronic poverty through education and labour migration. This role that forests play in supporting families depleted of their young people may well be invisible for REDD+ policy makers and needs clearer articulation.

REDD+ can strengthen the crucial role that forests play in the livelihoods of the rural poor but can equally easily undermine this role if poorly understood. This document illustrates specific methodologies that can improve understanding of the links between forests, livelihoods and poverty at the local level, and how they can be employed for REDD+ to inform policymaking at other scales. The Forests-Poverty Toolkit provides information useful for the identification of REDD activities as part of the building of REDD+ strategies and frameworks for the distribution of benefits. The toolkit is being shaped for these ends as part of the implementation of IUCN's pro-poor REDD+ project, which is helping to design and promote such approaches in REDD+ readiness processes in five countries. The project is implemented with support from the Danish International Development Agency (DANIDA) in Guatemala, Ghana, Cameroon, Uganda and in Papua Province in Indonesia.

2. The pro-poor REDD+ approach

Pro-poor REDD+ is built on the idea that the implementation of REDD+ should not create additional burdens for local communities and the rural poor. A pro-poor approach instead aims to bolster livelihoods, protect people's rights and assure that the ecological and social functions of forests are strengthened. Meaningful participation of actors at the grassroots can ensure that their interests are taken into account. Indigenous Peoples and local forest communities have a right to be informed and consulted. Their participation in decision-making processes can build the ownership needed for the implementation of REDD+. Strategies that make use of traditional knowledge systems and customary forest management practices can help create more effective REDD+ interventions because they build on the intricate interrelationships between forests and forest-reliant communities.

¹ Data drawn from Vedeld A. et al, (2004) and used in Emerton (2011), p.4. Vedeld cites a figure of \$700 per household per year from forest cash and non-cash sources for forest-adjacent households in 2004. Emerton calculates how many households this applies to in developing countries, to arrive at the figure she cites.

Elements of a pro-poor REDD+ approach

The pro-poor REDD+ project is in the process of building an understanding of what the pro-poor approach might look like. It will be an ongoing process through continued interaction with civil society and government organisations at various levels to fully establish and fine-tune the different elements. The following key nine principles for the pro-poor REDD+ approach are recognised:

1. **Understand the nature and scope of forest dependency**
2. **Identification and participation of vulnerable* groups**
3. **Clarity of rights, benefits and responsibilities of vulnerable groups**
4. **Equitable sharing of benefits and responsibilities as defined by an appropriate process**
5. **Investment in resilience of vulnerable livelihoods (links to adaptation)**
6. **Safeguards for biodiversity and livelihoods**
7. **Links between local and national processes to address needs of the poor**
8. **Customary norms and values (building on existing local institutions)**
9. **Transparency**

*vulnerable is for this purpose understood as groups that have limited access to information, that have not been included in formal decision making processes and whose needs have not been understood in terms of the impact that REDD activities can have in their livelihoods.

The Forests-Poverty Toolkit provides a framework, fieldwork methods and analytic tools for understanding and communicating the contribution of forests to the incomes of rural households. It helps governments and civil society organisations gain otherwise hard-to-obtain information on variations in forest dependency between men and women and wealthier and poorer villagers. The toolkit collects qualitative and quantitative data on forest dependency and undertakes wealth ranking based on locally identified indicators. It looks at forest dependency across landscapes and time through the disaggregation of forest communities and also collects some information on forest governance issues. Figure 1 and 2 illustrate how the primary tools of the poverty toolkit can provide detailed information about forest dependency, disaggregated according to gender and cash and non-cash forest produce and other sources of income.

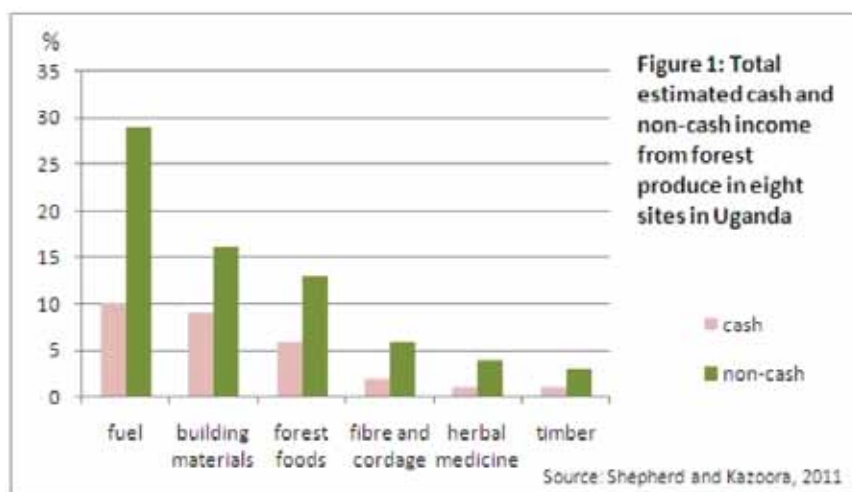


Figure 1. A comparative analysis of cash and non-cash income from forest produce across all eight sites where the Forest-Poverty Toolkit was applied in Uganda shows that non-cash forest income is more important than cash forest income in every category. It is often three to four times more important and always at least twice as important.

The Forests-Poverty Toolkit is being further developed to provide REDD+ policy makers with information that can improve the design and implementation of REDD+ activities and strategies and incorporate a fuller understanding of the ways in which rural communities depend on forests. REDD+ deals with land-based measures that affect forest communities and various other groups. More specifically, learning from the toolkit can help in the identification of REDD+ activities that will be eligible under REDD+ strategies and that will involve the creation of mechanisms that provide funding or create incentives.

The following section presents examples from countries where the pro-poor project is implemented that indicate how the poverty toolkit can inform the building of national REDD+ strategies. The values of forest services such as water, soil fertility, carbon storage and air quality are not captured by the toolkit because they require different measurement methods. They are however important, and villagers often comment on issues such as declining soil fertility or deteriorating water quality when discussing current problems.

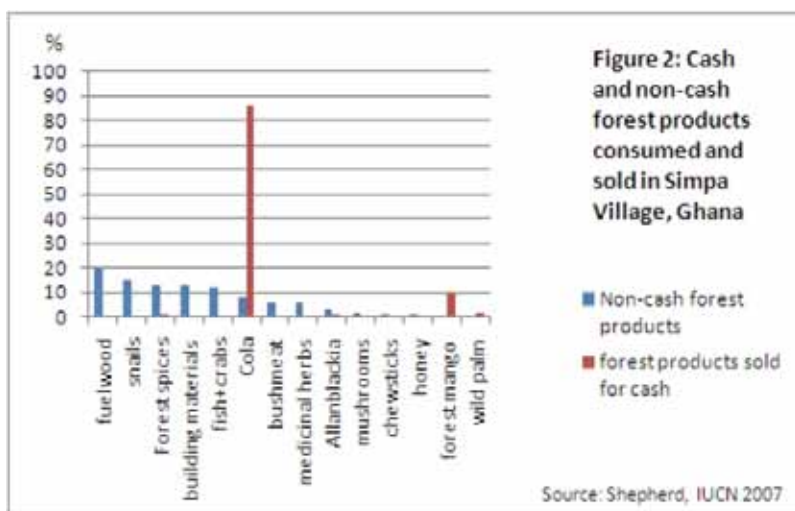


Figure 2: As part of the application of the toolkit in Simpa village in Ghana an assessment was made of products that people consume. A wide range of non-cash forest products (blue bars) is used for consumption in this village, which is far away from market. A much narrower range of forest products of high value is sold for cash (red bars).

4. Using the Forests-Povety Toolkit in Ghana

The poverty toolkit was applied in Ghana in 2007, 2008 and 2009 as part of IUCN’s Livelihoods and Landscape Strategy (LLS). A method was developed to analyse differences in accessibility to markets of villages across the landscape in the Wasa Amenfi West (WAW) landscape. Zones were identified based on distance to major weekly markets. Distance was also weighted according to road condition, availability of public transport and consequent travel time. The toolkit was applied in villages in each of the zones thus created. Resulting information on proportional income was turned into numbers using regional government per capita income data. Even a rough method for assigning cash values to the forest component of annual incomes can make a striking demonstration of its importance.

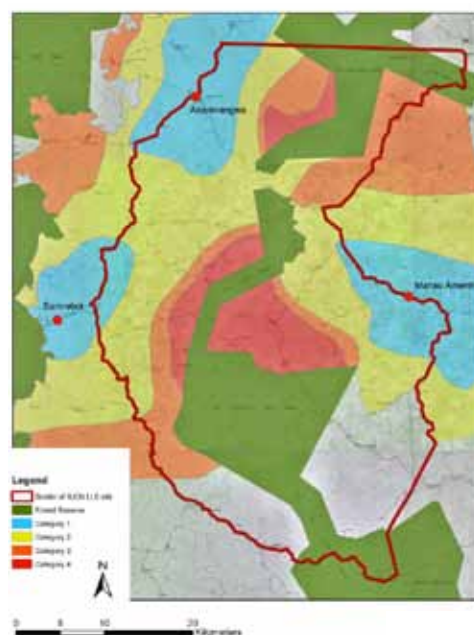


Figure 3. Wasa Amenfi West District Source: Shepherd and Förster, 2009.

Results of the application of the toolkit in Ghana

Outcomes of the assessment of communities according to market accessibility included:

- The 33% cash and subsistence income from forests equals USD 250 per head per year. This is high in comparison to government expenditure on education or health.
- Disadvantaged areas (orange and red in the map) tend to be far from main roads and close to forest reserves and protected areas (green). Poverty rapidly increases with distance from market towns.
- Women close to markets often sell more household agricultural produce than they consume. In remoter areas, dependence on forest foods and produce for home consumption is the highest.
- Availability of high value products such as cola nuts and bush meat particularly encourages men to invest labour in forests. Men draw 41% of income from forests against 33% for women.



Farm family in Wasa Amenfi West Landscape in Ghana © Johannes Förster

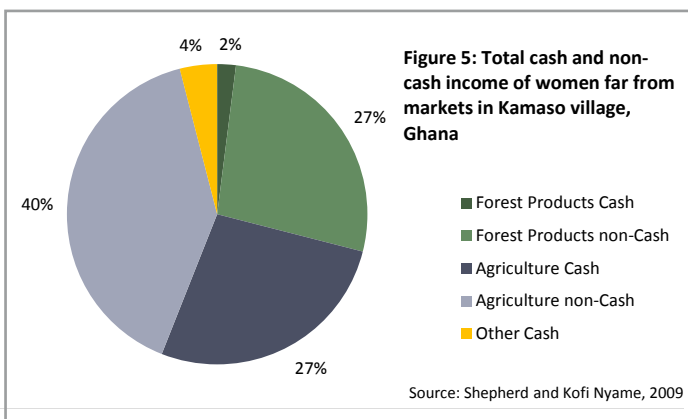
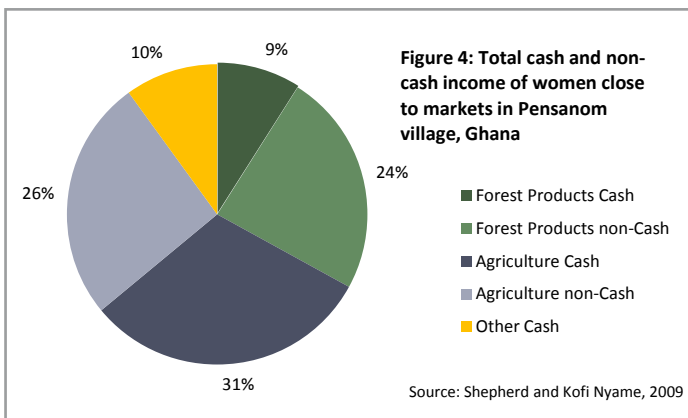
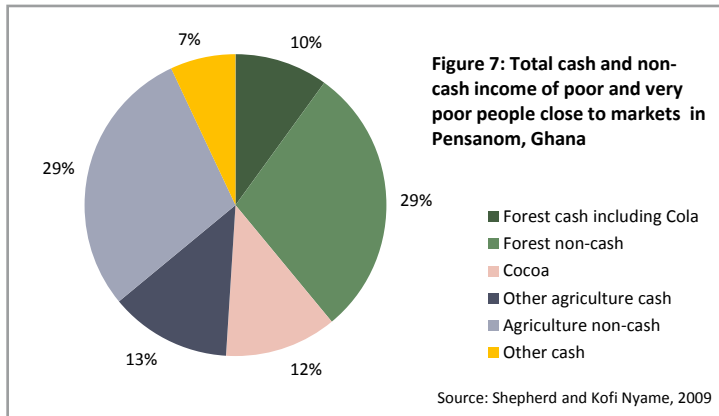
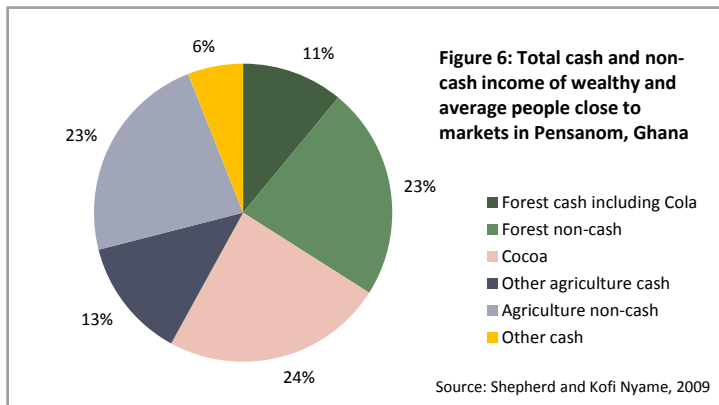
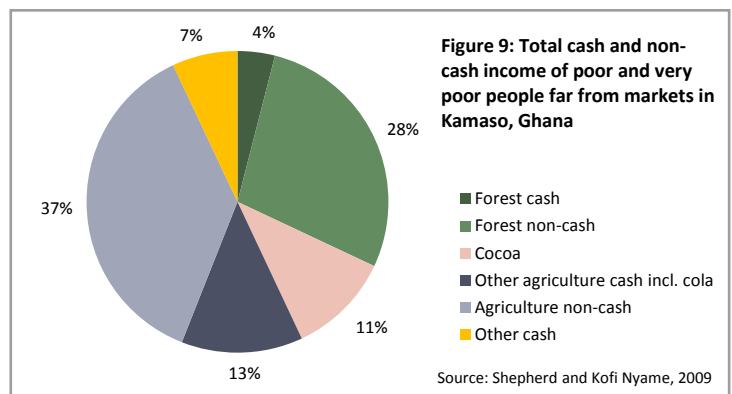
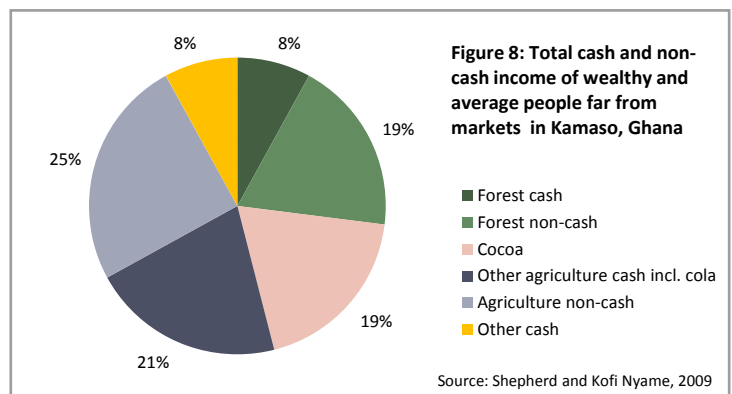


Figure 4 and 5 show the difference in cash and non-cash income among women from forests, agriculture and other sources of income in two villages in Ghana. Pensanom (Figure 4) is in Zone-1 (blue) close to a market, and people can easily transport produce to sell. Figure 5 on the other hand shows the situation in Kamaso, in Zone 3 (orange) that is far away from the nearest market. It becomes clear that women here sell less of the household's agricultural produce than is consumed.



Figures 6 and 7: Cash and non-cash income from forests among wealthy and poorer households in Pensanom is compared. This is a town close to a market and the data is not differentiated according to gender. Wealthy and poorer people earn 34% and 39% of cash and non-cash income from forests respectively and cola is a main source. Wealthy and middling families invest more in cocoa but even then it is only a quarter of all income, and 50% of cash income. For the poor, cocoa is an eighth of total income and a third of cash income.



Figures 8 and 9 show the same for Kamaso, a village further away from a market town. Here, most households gain less cash and non-cash income from forests, mainly because cola is planted here on-farm and appears as agricultural cash income. Wealthy and middling households spread on-farm cash investment almost equally between cocoa and cola, and so, on a smaller scale, do the poor. The poor, because of the village's location, use sixty per cent of their food crop production for home consumption and sell little of it.

Timeline and Trends

The following table illustrates the information that was generated in Ghana by undertaking a comparative 'timeline and trends' analysis. The time periods were chosen by participants in the first village, and the trend topics were suggested by the facilitators and the villagers. The same time periods and trend topics were then used in the subsequent villages visited. To strengthen the team's capacity to understand difference over space as well as time, villages of varying distances to market were chosen. Akyekyere was 11 km from a market; Dwiregum was 21 km from a market over mixed roads; and Forest Ano was 30 km from a market, in part over poor roads and tracks. The results are shown for the following issues: forests, land tenure, cocoa, tree crops, soil fertility and food land shortage. The analysis included similar data sets covering food crops and tree planting that are not presented here. Colours of rows denote remoteness.

FOREST-POVERTY TOOLKIT TOOL 3: TIMELINE AND TRENDS– KEY TIMELINE PERIODS - 3 villages January 2009				
TRENDS	Independence to the Rawlings military coup 1957 - 1979	Rawlings period until free elections reinstated 1980 - 1992	Democratic elections 1992-2000	Last Presidential period until 2009 election 2000 - 2009
FOREST				
Akyekyere	Forest was dense inside and outside reserves. No entry to reserves for hunting, gathering or timber.	Forest became open access. Eventually the military stopped illegal use, and degradation slowed.	Bush fires first appeared. Illegal chain saws heard in secondary forest. Forest conversion continued.	More illegal chain-sawing. More forest depletion.
Dwiregum	In-migration in 1950s. Dense forest. Lots of wildlife on- and off-reserve.	In and off-reserve logging contractors start work. Herbal medicines still available.	People could no longer find forest herbal medicines. Streams running dry.	Nearly all primary forest gone outside reserve. Only 10 acres left in this village.
Forest Ano	Migrants arrive in 1950s. Thick forest, large trees. Many animals to hunt that today you must buy.	Lot of primary forest left but decreasing due to farming. No permits to enter government forest.	Depleted, degraded forest. Little primary forest left but reserve OK. Secondary forest under cocoa.	Tiny patches of primary forest. Streams now running dry part-way through the year.
LAND TENURE				
Akyekyere	Primary forest is chief's; farmed secondary growth is yours. Share-cropping: 1/3: owner: 2/3: cropper.	Plots distributed were getting smaller.	The share-cropping share changed to 50:50 for cocoa. Plots distributed getting smaller.	Some other tree-crops introduced, these share-cropped on the old 1/3: 2/3 basis. Plots getting smaller.
Dwiregum	All lands belonged to stool. Land not sold, but use agreed after drinks given.	They have always done 50:50 sharecropping here.	Leaseholds: pay rent yearly. If land uncleared for 7 years, reverts to chief	Chief cannot ask you to go. You can lend land to others but not sell.
Forest Ano	The original split was 1/3 for owner and 2/3 for cropper. Post-1972 migrants paid chief £85+drinks for land.	Newer immigrants bought land outright. All land around the reserve now owned by settlers.	Plot sizes stay same - one acre. You can plant anything without chief's permission – cocoa, other.	Only 18 acres of primary forest is left in the whole village land area.
COCOA				
Akyekyere	First cleared plots for cocoa were small. Limited market contacts. Hybrid cocoa first in 1972-1973	More Cocoa lands, more labour available, need for cash. More hybrid cocoa, few chemicals available.	More cocoa land. Intense competition, good prices. Only hybrid cocoa grown. Chemicals, insecticides	Cocoa lands increased further. Intense competition from buyers: some buy standing crop before harvest.
Dwiregum	Limited labour, no market. They had just started planting and used traditional cocoa.	Expanded with more labour. Cocoa price not good. Amazonia planted.	Good prices; availability of pesticides/ fertilizers lead expansion; more Hi-Tech.	All Hi-Tec cocoa.
Forest Ano	Small scale local farms. Traditional cocoa. Few households, cocoa price low, labour limited.	Expansion in 1980s. More available labour. First traditional, then 'Amazonia'. No cash for chemicals.	'Hi-Tec' hybrid. Good prices, many buyers, short gestation, fertilizer and pesticides.	All Hi Tec More than one harvest a year, (one better than the other) if you apply fertilizer.
TREE CROPS				
Akyekyere		Oil palm from 1980.	Small areas rubber. Domestication of cola instead of gathering	Very small quantities of Allanblackia grown
Dwiregum			Little tree planting– not sure of value. Some oil palm post '97. No cola	Have very recently introduced rubber: two years ago.
Forest Ano	Oil palm and domesticated cola nuts from 1976.	Oil palm increasing.	Oil palm increasing; not cola. Some Raffia palm. Quite a lot of tree planting.	
SOIL FERTILITY				
Akyekyere	Cassava plantations used to continue for 4 years. Plantain for 3 years.		Now you can only harvest cassava + plantain for 6-12 months, grow for one season. Food is a major problem	
Dwiregum	One cassava plant would have enough rhizomes for whole household.			Now both cassava and plantain yield at much lower levels.
Forest Ano			No problem mentioned.	No problem mentioned.
FOOD LAND SHORTAGE				
Akyekyere			A family of 5 needs circa 2 acres for food crops. If a poor farmer plants all his land with cocoa, he will try to share-crop 50:50 with a neighbour with more land. Experimentation with putting cocoa, food and vegetables on the same plot.	
Dwiregum			The poor landless ask to plant food on a plot and intercrop cocoa for the owner without pay. Settlement as a whole still has some land surplus since some are growing food crops for sale.	
Forest Ano	No shortage.	No shortage.	No shortage.	No problem mentioned.

Source: Gill Shepherd and Samuel Kofi Nyame, 2010

Possible use for REDD+ of information captured by application of the toolkit in Ghana

- The toolkit's 'Timeline and Trends' exercise shows that both areas closer to Wasa Amenfi West's main towns and areas further out have been largely converted to cocoa. There is now little land left for further conversion.
- Time line analysis shows how land use has gradually intensified; earlier in more accessible areas and later in remoter areas. This process continues until there is virtually no land left for further expansion outside forest reserves. Plots 'lent' by owners get smaller in more intensively farmed areas, and soil fertility goes down, so that fertiliser and pesticide become more and more essential.
- Cocoa trees are planted in relays in different plots, maintained for 20-25 years and then slowly replaced. If Cocoa plantations were chosen as a REDD+ activity, the calculation of carbon stocks would be complex, though not impossible. Another complication is the fact that cocoa farmers often don't own the larger forest trees that provide shade for the cocoa, but their real owners may fell these at any time, paying only modest compensation for damaged cocoa. Aligning land tenure and tree tenure would go a long way towards enhancing the potential success of REDD+ interventions. MRV systems will have to consider these dynamics for future estimations.
- Cash and subsistence from forests (estimated at USD 250) form a very major part of rural peoples' income and REDD+ activities under a pro-poor approach would need to acknowledge and promote these benefits.

5. Using the Forests-Povety Toolkit in Guatemala

In November 2010 the Forests Poverty toolkit was applied in two villages in the Lachua Ecoregion in the north of Guatemala. Wealth ranking was carried out according to local criteria and four focus groups were selected in each village to include poorer and wealthier male and female groups of villagers. An assessment was made of changes in forests and forest use over time, the situation regarding land-rights and the development of community organizations. The exercise provided interesting insights into changes in forest cover and forest use over time in relation to institutional change and forest ownership issues.

Results

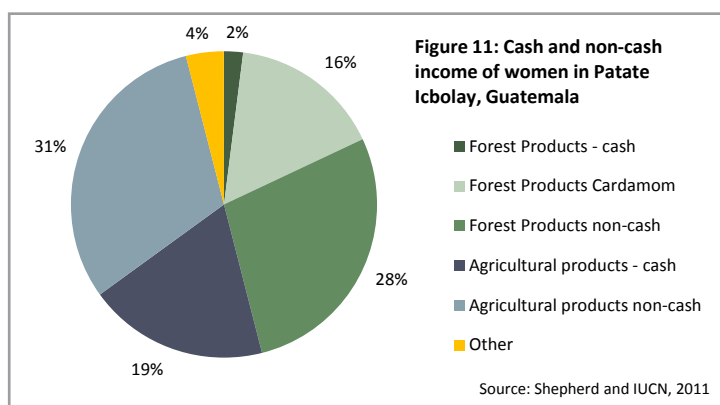
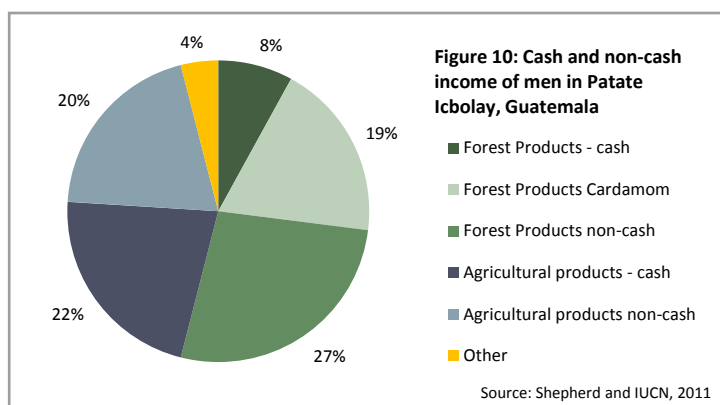


Figure 10 and 11: In Patate Icbolay, both men and women derive an unusually large proportion of their cash income from forests, because they grow cardamom under forest shade. In addition, both sexes sell some non-timber forest products and men sell timber. The overall picture gives men a cash income from forests of around 27% of all income, while the figure is 18% for women. Non-cash use is almost identical - 27% for men and 28% for women. Income from forest overall is thus really high with men gaining over 50% of their income from that source, while women gain 46%. Women are more heavily involved in subsistence agriculture than men and are slightly less involved in agricultural sales. Neither sex has much access to off-farm cash income - 4% in both cases.

The outcomes of the application suggest the following trends:

- Both communities close and further away from markets showed high non-cash forest dependency and high reliance on food crops for home consumption.
- Closer to markets, job opportunities led villagers to sell their land titles to people from outside the village who typically use the land for cattle grazing. Forest remnants here are insufficient to ensure the basic needs of families that continue to rely on them. This translates into a realization among villagers of the need to plant trees. They identify solutions and institutions that can help fight (illegal) logging and encourage tree planting, fire management and rules on the sale of land.
- Further away from the market, forests remain but will come under pressure as plots are divided for children. Villagers emphasise the importance of access to forest products, reforestation for high value timber and community agreements on the collection and sale of non-timber forest products (NTFP) and forestry incentives programs.
- Cardamom, raised by most farmers in Patate Icbolay, is a crop which needs shade, and is therefore planted under the forest canopy. Such crops encourage the retention of forest and give it additional value.



Figure 12

Photo: Women of Patate Icbolay village, Guatemala, inputting toolkit data with the help of a facilitator (photo Gill Shepherd)

Figure 12: This drawing from one group in Patate Icbolay village illustrates the land distribution typical for both Patate Icbolay and San Benito villages. Plots titled to villagers are narrow, since everybody wanted a house-frontage on the road, and run away back for a km or more. The ends of the plots near homes are cultivated, and in Patate the far end is still mostly forest. In San Benito forest at the far end of the plot has sometimes been sold off to non-residents.



Possible use for REDD+ of information captured by the toolkit in Guatemala

- Comparison between the two villages could provide insights into possible future scenarios for more remote communities if their accessibility to roads and markets increases and if policies are not changed. The village that is closer to the market has already reached a point where villagers do not have enough forest left for their needs. It contributes to a realization that restoration of forests is needed as well as investment in economic activities outside forests.
- Sale of forest land in villages like San Benito directly relate to the existence of individual plot titles. Such rights, without incentives to keep forests, and without a clear understanding of what else would be lost if forest disappeared, can lead to rapid deforestation.
- In villages like Patate Icbolay, further away from the market, REDD+ could focus on helping communities to maintain their income from forests, but encourage the potential for conservation and restoration.

6. Using the Forests-Povety Toolkit in Cameroon

IUCN undertook a Livelihood and Forest Dependency Analysis of Bantu and Baka (Pygmy) communities in the Cameroonian segment of the Tri-National Park (TNS) landscape in 2011. The results of this analysis will contribute to better understanding and better consideration of the need for environmental and social safeguards, in the process of identifying activities for the development of a REDD strategy for Cameroon.

The team worked in Mambele, a village with no market and very near to the TNS protected area, and in Salapoumbe, which is larger and has a market. This community is not immediately adjacent to the protected area, but to a logging concession. The application of the toolkit showed that Baka (pygmies) in both villages depend more on the forest and less on agriculture than the Bantu.

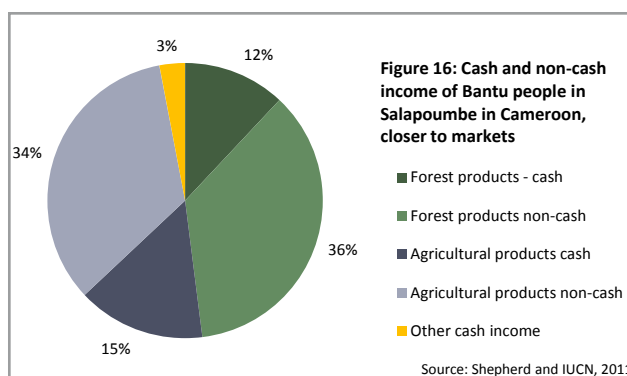
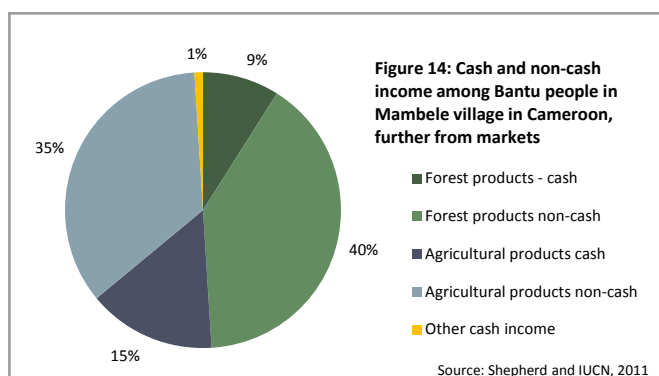
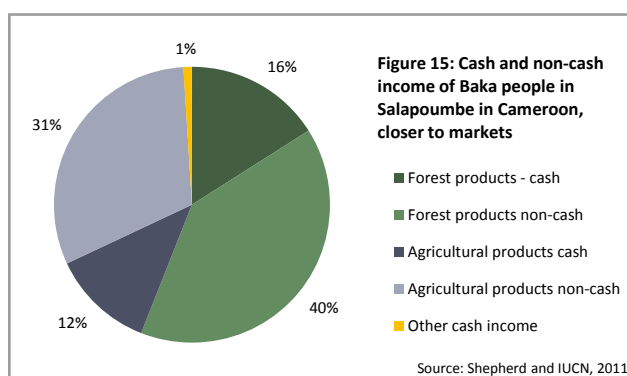
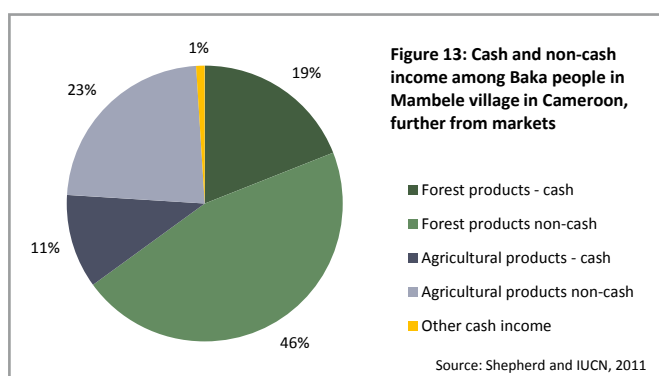


Figure 13-16. These charts show cash and non-cash income of Baka and Bantu villages. Note that both close to and further from markets there are clear differences in forest dependency between the two groups. The main difference between the Mambele Baka and the Salapoumbe Baka is that they have exchanged a degree of non-cash forest dependence for non-cash agricultural dependence. The Bantu on the other hand have used their residence in Salapoumbe both to increase sales of forest products and to gain a slightly stronger toe-hold in wage employment.

The Baka depend on forest for 65% of all income in Mambele, and on agriculture for only a third of income. In Salapoumbe, where they have lived for longer, and have been taught agriculture by missionaries, the share from forest has gone down to 56%, and the share from agriculture is up to 43%. The Bantu have similar forest dependence (of just under 50%) in both villages, and a similar dependence on agriculture.

A couple of potential new tools for REDD+ were tested in Cameroon. The first tool invited thoughts about the anticipated evolution of forests and livelihoods over the next 5-10 years, and the implications of change for their children. All groups stressed the importance of getting children into school and trying to find the money to keep them there. Young Baka adults, however, also mourned the loss of the deep forest knowledge their parents had had, which could no longer be passed on.



Sorting kola nuts in Kamaso village in south-west Ghana © IUCN/ Samuel Kofi Nyame

The second tool asked villagers from both ethnic backgrounds which were the most important institutions locally. The result was a long list of institutions including local government, the local Chief's office, international conservation organisations, various logging companies, a variety of NGOs and Community Based Organisations, and local churches both Catholic and Protestant. Villagers were then asked how far these institutions represented local interests and whether villagers felt they could be trusted to look after, or share out, money fairly. Some very local NGOs were felt to represent local interests, but many were important because they impinged negatively on local people, and there was a resounding 'thumbs down' for almost all institutions on questions about trust with money, except for local churches and tiny rotating savings groups. This information is important for the identification of institutions that could play a role in the development of mechanisms for benefit sharing.

7. Using the Forests-Povety Toolkit in West Papua, Indonesia

The application of the poverty toolkit in Kaimana District in West Papua Province in Indonesia focused on future scenarios for livelihood development for the entire community. When the district authorities saw the results from toolkit applications in three villages in Kaimana District, and a more general analysis based on that data, they began to change their minds about the wisdom of the conversion of forest land to palm oil in the area. The government could see that keeping existing logged-over forest in place had a value not previously calculated. This was partly because the direct livelihood value of the forest was much higher than they had realised, and partly because existing riverine and mangrove tidal forest was a nursery for young sea-fish which would be lost if the area were converted to oil-palm. Plans for conversion were shelved, at least for the time being.

Results:

The application of the toolkit in Kaimana District led to the following insights:

- By taking into account local capacity for community-based forest management and other forest use, and by making use of future population projections, predictions were made about the amount of forest land that local communities would need for the next 30 years.
- A calculation was made of the territorial needs of communities across the area and over time, for key cash and non-cash livelihood generation: fishing, timber, agricultural produce, forest produce and NTFP.
- This exercise, along with participatory mapping and demarcation provided communities with a tool to successfully articulate their interests to the local government.

Possible use for REDD+ of information captured by the the toolkit in Papua Province

- Insights were provided into the additional economic, social and environmental costs that the expansion of oil palm could bring to the area.
- An assessment was made of the potential for community-based forest management. This could be compared with existing cost estimates of SFM operations practices per hectare, and possible carbon payments for SFM based on estimates of how much carbon is sequestered under differing SFM practices.
- The application of the toolkit indicated that careful conservative use of the riverine areas, and avoidance of the massive pollution caused by oil palm production, will protect river and sea fisheries, a vital source of cash and protein. These are among the most valuable fishing areas in Papua and deserve protection.

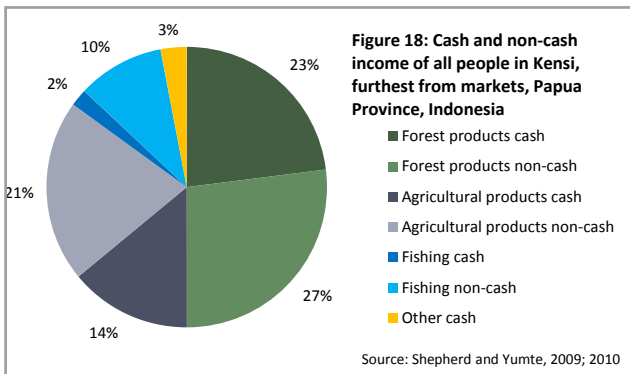
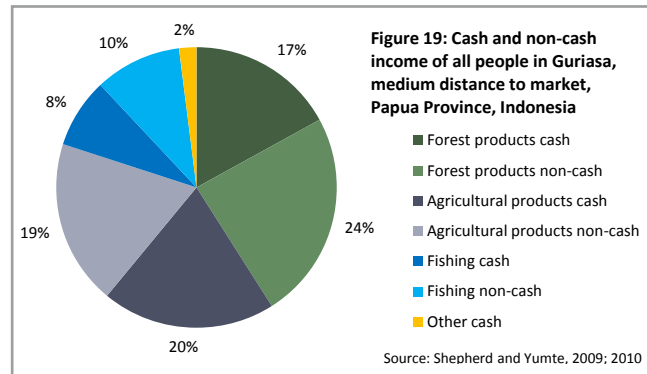
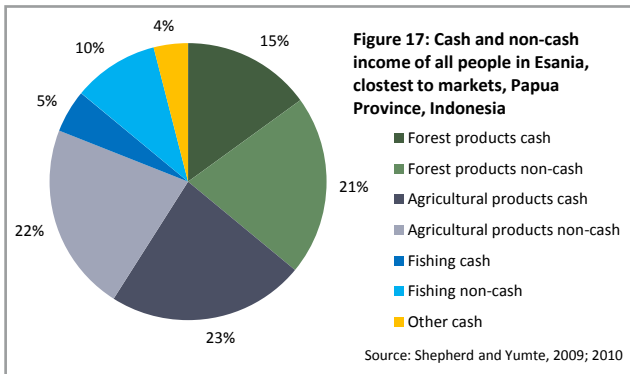


Figure 17-19. The application of the toolkit in Papua in 2009 shows a clear correlation between access to markets and relative cash income from agricultural and forest produce. Of the three villages surveyed, Esania is nearest to the market and Kensi furthest. Not only cash income from agriculture is higher closer to markets, but also note that not just forest products but also income from fishing is a perceived result of the presence of the forest. Ultimately agriculture is as well, which depends for fertility on forest fallows. It can therefore be argued that 96-98% of all income depends on the presence of forests.

The application of the toolkit in Kaimana in West Papua in villages with more and less access to markets provided information for the following analysis, which suggested how government might diversify its support to the district's villages. In case of less accessible villages there is a need for the protection of livelihood resilience while for more accessible villages it is diversification of livelihoods that is perceived as a priority:

THE FUTURE IN SOUTH WEST PAPUA	
<p>LESS ACCESSIBLE VILLAGES - CURRENT SITUATION</p> <ul style="list-style-type: none"> • Nearer to forest – more forest products, hunting, and logging • In theory, payments from logging companies for access to forest • Less chance of keeping teachers in the village – less literacy • No health services • Major livelihood threats from over-extensive oil-palm plantations 	<p>MORE ACCESSIBLE VILLAGES - CURRENT SITUATION</p> <ul style="list-style-type: none"> • Nearer the sea – more fishing, more trade with market town • Better schools, teachers who stay in post, some chance of leaving • Access to health services • Some access to employment
<p>LESS ACCESSIBLE VILLAGES - THE FUTURE Protection of livelihood resilience:</p> <ul style="list-style-type: none"> • Low risk livelihoods where people can use garden plots and the forest for daily needs, and get cash from timber and high value items such as nutmeg • Self sufficiency in food, and secure tenure essential for years to come • People in these areas need the assurance that their livelihoods will not be swept away to make room for external investors 	<p>MORE ACCESSIBLE VILLAGES - THE FUTURE Livelihood diversification:</p> <ul style="list-style-type: none"> • Diversification of crops to grow and sell • Higher rate of investment in agroforestry, especially fruit trees • Better access to employment

Towards an adaptation of the forests-poverty toolkit for informing REDD+ strategies

One of the greatest contributions of the poverty toolkit is the way it gives vulnerable, forest-reliant people a voice. The Forests-Poverty Toolkit sets itself apart from other participatory methods because:

1. It focusses on forests (in the context of all other livelihoods), whereas most participatory rural appraisal (PRA) is weak on forests.
2. It is unique among participatory tools in the way it sets out to capture non-cash as well as cash income. And no other PRA tool has devised a method of getting participants to indicate the relative importance of non-cash and cash income in their livelihoods.
3. It uses 'timeline and trends' exercises very deliberately to uncover drivers of deforestation, by including change over time in forest, agriculture, infrastructure and population.
4. It works by comparing several villages spatially, rather than treating each village as a unique entity. Many of its most important findings have come from such comparisons.

While other intermediaries (facilitators and data-analysts) are inevitably involved in ensuring that villagers' voices are heard at higher levels, a broad spectrum of local opinion is brought together by the toolkit process. The selection of small focus groups by gender and wealth/poverty level, and the fact that most of the tools elicit a response from each individual in each focus group, means that a much better picture can be put together of local opinion than would be the case from a village plenary where only wealthy male village leaders would normally speak.

The application of the toolkit makes it clear what local people think are their rights with regard to forest, forest products, and land ownership. Their views may not be the views formally held at higher levels, but it is important to know the basis on which local people think they have rights.

The toolkit's analyses of timeline and trends are valuable for understanding the drivers of deforestation. The pattern of forest change, agricultural change, population change etc. provides rich raw material for further follow-up in the form of investigation of these drivers, and verification that REDD activities will accurately identify and tackle the drivers of deforestation.

The toolkit does not lead directly to the development of mechanisms for the equitable sharing of benefits and responsibilities, but it contributes to the enquiry which must precede such development. For instance one of the new tools helps local people to screen important local institutions, and to assess how well each represents local people's interests and how far it can be trusted to manage money on behalf of local people.

Another of these new tools encourages participants to look into the immediate future and think about the changes they expect to see in the forest; the hopes and fears they have for their children and for future education and employment opportunities. This can inform Business As Usual baselines.

Of course the toolkit always needs to be complemented with such other information as exists for the areas concerned. This might include census data, surveys conducted by others, Forestry Department data, Agricultural Department data and so on. Unfortunately, remote forest areas often suffer from real limitations on the types of data which exist on local populations.

8. Overall for REDD+ relevant findings from the application of the Forests-Poverty Toolkit in several local-level sites

The following are findings based on experiences with the application of the toolkit over recent years. They provide important lessons for the current design of a REDD+ extension of the Forests-Poverty Toolkit.

1. Income from forests is a very major contributor to rural livelihoods. However, it is often underrated because while forest products are 3-4 times more important in the subsistence economy than in the cash economy, only the cash component of this income is readily visible. The reality needs to be understood when designing REDD+ activities so that subsistence as well as cash forest incomes can be maintained.
2. REDD+ can contribute to reductions in cash poverty in forest areas within reach of markets, by supporting the appropriate intensification of landscape futures through better rights, and also through enhanced forests protection, management and restoration practices that generate income in addition to REDD+ benefit distribution.
3. The situation in remote areas is more complex. The following dynamics are recognised:
 - **REDD+ could promote** livelihood resilience by supporting improved access rights.
 - **REDD+ should be built on** local livelihoods and their fragile nature, and must at all cost ensure that livelihood vulnerability is not increased intentionally or unintentionally through interventions which take no account of the extent of forest dependence.
 - **REDD+ interventions should take into account** the fact that many remote dwellers manage a poverty exit strategy that stretches over more than one generation, through migrant labouring and the schooling of children. The vital support role that forests play for families left at home as part of this overall strategy is easily threatened and is often overlooked.
4. People value the ecological functions of forests as well as forest products, in particular good quality water that flows all year and the contribution to agriculture of the forest's soil fertility.
5. The four groups surveyed (poorer women, wealthier women, wealthier men and poorer men) tend to rely on different balances of forest products as their main source of cash or non-cash income. Often the poorest people use the widest range of forest products. A strategy that focuses on the compensation of lost income could benefit wealthier men more because they tend to have more access to products that generate most cash income: in such cases, it will be very important to strengthen the compensation of non-cash income as well as cash income.
6. The main forest problems that people identify vary widely among sites, but in all cases include both
 - **institutional factors** (governance and tenurial problems)
 - and **technical factors** (including dwindling soil fertility or forest loss).
 - Proposed solutions therefore are **multi-scale**, combining local action and hoped-for action by forestry authorities and other agencies.
7. Finally, each site worked at shows signs of tremendous flux and change over, say, a 10-20 year period: land-use intensification, changes in the roles forests play, changing inhabitants. The challenge for REDD+ is to handle this dynamic when deciding REDD+ activities in specific landscapes.



Photo: Sago preparation in Guriasa village, in Papua Province, Indonesia © Yunus Yumte, 2009

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Baka woman and her house in Cameroon © Dominique Endamana 2008
Photo cover: Villagers and facilitators in community forest in Kensi, Papua © Soilihin, PERDU, Papua

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