

A method to my madness



R&D frameworks for markets and conservation

**Unpublished papers and presentations
2001-2005**

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Introduction

This collection contains a number of different types of documents: concept notes, strategies, almost-finished papers and notes for presentations. It reveals the range of activities I was involved in over my four years at the World Agroforestry Centre, first as leader of Programme 4: Advancing Innovation and Impact, and then as co-leader of Trees & Markets theme. I omitted writings that were published elsewhere, even informally, such as the Kisumu market workshop report, the African Grassroots Innovations for Livelihood and Environment (AGILE) strategy and reports, the environmental anthropology workshop papers, the Agroforestry in Landscape Mosaics (ALAM) strategy and papers and presentations for Trees & Markets that may be found in archives of Programme Committee or other meetings. Some of the papers here may be published in conference proceedings but ICRAF staff would not have easy access to these proceedings. Others are project papers that require permission from the lead institutions to reproduce.

These papers built on fieldwork, project experiences and previous publications, including a collection of papers from my year at the Yale School of Forestry & Environmental Studies, which I entitled *A year in the grove*, and my book, *Groundwork for community-based conservation* among other publications.

They reveal four major passions: market and rural development, socially-sound conservation, anthropological methods and the Congo Basin. I hope that readers will grasp the links among these passions: a preoccupation with the struggles of people trying to earn a living in the harshest environments, ways to capture the reality and richness of people's lives through ethnographic and historical research, bringing together our concerns about livelihoods, equity and the resource base upon which we all depend.

My guiding concepts come from economic history and agrarian studies: the study of how people live and work on the land, relations of power and control over resources, commodities, species and meanings. Yes meanings are terribly important: the way we define things shapes what can be done and even what can be thought about. We struggled with meanings every day in ICRAF: were we doing research *in* development, *for* development, *and* development, *or* development? These nuances somehow meant that some things or people were in and some other things were out but I was never sure quite what. Fuzzy meanings have their utility!

I define development in the end as the long fight to forge a sustainable middle class: to encourage ways for people to retain assets, to transfer them across generations, to build businesses and invest productively in their own families, communities and countries. I am not adverse to a little banditry; after all, most of the activities our farmers and traders do may be technically "illegal." But let's let them keep some of the money and reinvest it!

If people cannot make productive investments, it is not just economies that suffer. Conservation cannot succeed either. Even with major influxes of donor funds and the keen interest of external "stakeholders," conservation strategies that are not grounded in a sound rural development framework and robust civil society will founder. Conservation works when people have a stake in their land, in their future.

Over the years I tried to articulate and operationalize these concepts and approaches but they do not lend themselves well to projectization. Research projects that address history, culture, power relations or meaning do not seem to interest many people in the CGIAR unless they could be broken down into variables for a software program or fit nicely into a logframe ☺.

The messy realities of institution- and asset-building require adaptive management, flexibility, strategic thinking; development is more artform than science I think.

My disagreements with “micro-solutions” and insistence on understanding the dynamics of agrarian change became well-known in ICRAF. Projectization, fragmentation, failure to see the “big picture” frustrated me. One day, someone said in a public meeting “Diane you have been saying these things for years but no one is listening.” It became time to move on. But I do not move on with bitterness, anger or regret. Not at all. Ideas have a tendency to percolate and I took care to weave mine into concept notes, presentations and strategies. I treasure all that I learned and experienced, especially the friendships.

Now if someone would actually READ something I wrote I would be truly happy!

This one is dedicated to Stella Muasya and Tony Simons, partners in crime, Zac Tchoundjeu and all the wonderful team in AHT, Steve Franzel and Ann Stroud, for the great dialogues and support, and Jan Laarman and Mohamed Bakarr whom I hope in their own very different ways will transform modes of working and thinking in ICRAF.

I did find one other soul who loved poetry: thanks Ogi for that companionship!

Yaoundé, Cameroon
May 9, 2005

Attacking structural constraints with a social systems approach

Presentation for AHI Regional Conference, 2004

Introduction

This is a talk that comes from my own life experience as well as study of how to do effective research and development. 30 years ago, I started my professional life as a community organizer helping women, drug addicts and suicidal people who had nowhere to go. I thought I could make a difference and in a very small way I did. But I did not understand at all how the serious problems in our town were linked to the wider economic and political manipulations of the day: especially the manufactured “oil crisis” of the early 1970s that led to governments cutting funds for poor and disabled people, and misguided “decentralization” of services to communities that were totally unprepared to deal with growing serious social problems. Sound familiar? I gave up then when I lost my job and eventually I entered graduate school.

When I got to Congo, the ex-Zaire, as a doctoral student, I had read all the stories about the food crisis in Africa and I believed along with virtually all Americans that poverty was causing starvation. I wanted to help. I went to a region that had been a net exporter of food until the 1970s to find out why this region was reportedly not even able to feed its own people by the mid 1980s. I found dynamic traders, hard-working farmers and consumers scrambling to find high quality food. How could this system not work to feed people? As I went out into the countryside, I found the roadblocks, I found the soldiers, I found the party officials that took young women from the villages to dance and serve them, I found roads and bridges deteriorating at the same time as palaces were being built for individuals...and I found subsidized US rice pouring in at a lower price than the local rice. A couple of years later, I entered the corridors of power at USAID. I reported on all I had learned with the righteous indignation of my student and activist years. I sat through meetings where reports of money stolen for development projects were treated with a sigh and shake of the head. Nothing changed because the government was on “our side” in the cold war. Diamonds were flowing through Mbuji Mayi to Amsterdam and into the coffers of folks like Maurice Templesman, consort to Jackie Kennedy. Grain imports from the US were making some Kinshasa-based elites rich. US contractors were paid exorbitantly while the country went into debt \$6b to pay for Mobutu’s white elephants.

I thought about giving up. What can one do in the face of such powers? But by then I had family in Zaire and I cared too much to leave it alone. In 1999, I went back with a new boss at USAID who was committed to helping civil society. I had a small pot of money at my disposal (\$1m for USAID is small). I tried to use it well, employing all my knowledge of the country and what needed to be done to bring about deep reform within the very strict confines of project funding. The cold war was over and the “war on terror” had not yet begun.

I started to think and write about how to systematically link micro projects that donors were going to fund for their own reasons to wider reforms, attacking the structural constraints. I realized that my training as an anthropologist helped because I tended to see problems holistically rather than through a narrow technical lens. I had been trained by historians of Africa as well who clearly saw how the tentacles of colonialism continued to reach out and strangle present generations. I updated tools of the trade including regional analysis and multi-site ethnography and I learned new ones: community mapping, community monitoring, coalition building, negotiation support, stakeholder analysis, policy analysis, use of GIS and remote sensing to track changes.

I present some of these ideas to you today in the spirit of hope. Wangari Maathai has won the Nobel Peace Prize! People all over Africa are fighting for effective economies and governments. There is a lot of money in Africa, and not just in the pockets of donors. Why are we not using it effectively? Why does there continue to be a patchwork quilt of projects around the continent that reflect the concerns and perhaps guilt of the West rather than the needs of Africans? How can we knit diverse endeavors into a tapestry of success? How can we employ the lessons learned of positive development trajectories that overcome structural constraints to bring entire populations out of poverty?

What are structural constraints?

- **Macro economic and political power structures that create and perpetuate deep inequalities and inhibit equitable growth**
- **Deep rooted problems that require large-scale and long-term collective action**

This is my definition; others may have a different definition

The point of identifying structural constraints is to get beyond band-aids

Beyond band-aids are models of sustained economic growth that we can learn from

Such as?

- **Tariffs and trade policies that obstruct smallholders from competing in markets**
- **Inequitable and/or uncertain land and resource use and ownership policies**
- **World commodity markets controlled by monopolies, cartels, large countries that subsidize farmers**
- **Weak investment in infrastructure benefiting smallholders**
- **Over-reliance on aid, “projectization”**

Trade policies affecting Africa are certainly among the root causes of poverty; these are both external trade and internal trade that results from the vast majority of decision makers being urban elites

Often uncertainty about rights also created and creates inability to invest productively: can I harvest that tree? Can I go into that forest? Can I organize that group in a certain way? Do I have the right to market that product? In some countries, people may even ask, can I leave my village?

Rural dwellers find themselves forced to pay for their own infrastructure where urban dwellers would never stand for it: schools, irrigation schemes, even roads

Over-reliance on aid instead of trade is bad for Africa; it is naïve to think that donor countries solely want to help Africans even as individuals may dearly wish to; their own constituencies demand that the “aid” be above all beneficial to their own countries; changes in governments provoke shifts in aid that can be destabilizing (e.g., family planning in the US is highly politicized; development fads are pushed by powerful “experts” in Washington).

National level is being neglected: In Asia countries are more and more relying on local financing including local philanthropy, targeted government investment and internal growth of middle class

Structural constraints affect the ability of our target populations to

- **Make productive investments**
- **Earn a living from the land and their labor**
- **Be secure in their homes**
- **Keep their families healthy**

How do they work?

- **Have roots in domination and settlement**
- **Hide as generalized problems (e.g., “poverty,” “environmental degradation”)**
- **Blame the victim (“culture of poverty”)**
- **Divide and rule (urban vs rural poor)**
- **Weakening of national level at expense of “global” and local**

Have roots in domination and settlement: the way that land and resources were expropriated and/or used for commodity production privileged certain people, certain groups
Laws and regulation about expropriation and commodity production → who could do it, who could not do it, who had rights to land, who did not, commodity prices, forced cooperatization, etc. and also high prices of goods and services sold back to rural dwellers created negative **terms of trade**.

The trajectory of transformation

- **Political will and stability**
- **Support for local industry**
- **Increased demand, consumer power**
- **Farmers demand technologies**
- **Investment in rural infrastructure**
- **Technologies developed in response to market → enhanced productivity**

We usually focus on the final stage!

Nations do not develop through expanding agriculture but by diminishing the role of agriculture in the economy, small inefficient farms are bought out

Industry has to draw what has been called “surplus labor” from the countryside and turn it into the backbone of an urban middle class, consumer class that demands goods and services in increasing quality and quantity

In Africa, rural restrictions created mass migration to cities but cities did not industrialize thus creating jobs for these masses, increasing consumer power and thus farmgate prices → demand for improved technologies

Why did cities not industrialize? Economies controlled by west and merchants who wanted quick returns (political instability also fueled this)

What can we do about it? See my last slide

It can work!

- **Love Canal → EPA (US)**
- **Ending apartheid in South Africa**
- **(Re)claiming indigenous lands (Americas)**
- **Community forestry → Federation of Community Forest User Groups (Nepal)**
- **Cheap(er) AIDS drugs (Africa)**

Structural constraints can be overcome through dedicated collective action, leadership and foresight.

The Love Canal was a highly polluted river in upstate New York. One “uneducated” woman led the campaign to clean it up that eventually resulted in the creation of the Environmental Protection Agency and hence a whole structure to protect the US’s resources

Why do we need to care?

Structural constraints deeply affect the profitability of agriculture hence the future of NRM and sustainable land use

- Commodity prices
- Structure of markets
- Investment in extension & research
- Land use policies
- Infrastructure

We can work around the margins or work toward lasting solutions to problems
We can link whatever we are doing to the creation of lasting solutions...or not!

A social systems approach

- Addresses the why and who questions
- Systems are defined heuristically (Vayda)
- Some systems well defined, others not
- Getting to the why through the where

Most scientific research we engage in seeks to answer what, when and where questions:
What are farmers doing to improve soil fertility?
When and where should farmers apply fertilizer?

Prof Pete Vayda reminded us in a recent email that systems are defined in relation to a problem; they do not really exist “in nature”; we create them by defining units of analysis, boundaries and pathways to answer “why and who questions” such as

Why is the farmgate price for maize lower this year?

Why are certain areas being degraded more than others?

In some cases, the units and pathways are well identified:

Sub-sector analysis identifies market chains and market actors

In other cases, they are not:

What are nested units of management and influences (people, institutions) over management in a given spatial area?

Social systems can be traced spatially (where) but this should not be the end product of the analysis: it can only show what is on the land but not why it got there, forces that create the observed patterns

Social systems

- Political and legal systems
- Cultural identity and authority systems
- Knowledge systems
- Agroecosystems
- Market systems

Market systems can be defined in different ways

- Spatial definition (physical markets)
- Description of market arrays in area
- Sub-sector or product market chains
- Spatial definition+ products (marketshed)
- Market actor definition
- **Wider system including policies (e.g., food imports, subsidies, price controls)**

These are some examples of systems identified by social and biophysical scientists

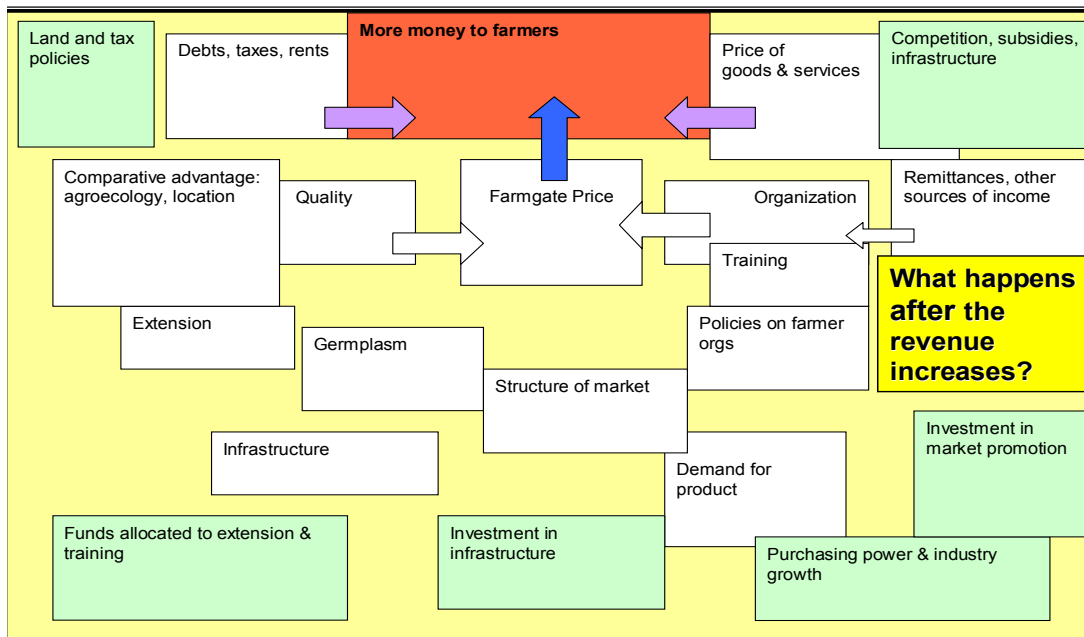
But there is deep inter-connection among these systems; for example, agroecosystems and cultural/knowledge systems

Defining the system relates to the question

Steps to system analysis

- Research question—ask the why questions
- Defining units of analysis
- Postulating connections among units (hypotheses through conceptual models)
- Monitoring trajectories of change through indicators
- Feedback through action research

Modeling agricultural development

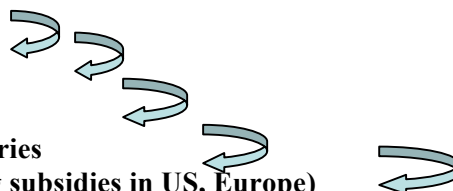


Conceptual models

- Select desired result—vision
- Identify
 - Immediate (proximate) factors affecting result (units of analysis)
 - More distant factors (units)
 - Links between proximate and distant factors (pathways, connections) structure → behavior
- Create and monitor trajectories of change through indicators

Indicators

- Farmgate price
- Terms of trade to producers
- Extent and condition of roads
- Measures of transaction costs
- Number and size of rural industries
- Cost of perverse policies (e.g., ag subsidies in US, Europe)



Link micro to macro

Indicators of the micro and the macro that can show links (for example farmgate price → terms of trade → policies affecting trade)

Indicators are only as good as their usefulness for learning

Grassroots indicators are powerful tool for collective action

Local people trained to measure indicators that feed into regional or even national analyses (case of Fiji and Belgrade Lakes)

Indicators can be used to build a corpus that informs decision makers, ex of sustainability indicators used now in many communities

Mapping social relations

- **Power flows**
 - **patron-client relations (across space)**
 - **social stratification (across time)**
 - **gender and generational relations (within societies)**
 - **elite capture (within communities)**
 - **urban bias & marginalization of rural communities (within regions & countries)**
- **Money flows: debt, investment, savings**
- **Technology flows, intensification patterns**

Indicators can show trajectory of change but you also need to know why these changes are happening: what are the specific behaviors that are creating changes and how are they influenced

Methods and approaches

- **Regional analysis**
- **Multi-site ethnography**
- **GIS + ethnography**
- **Stakeholder fora, e.g., AGILE planning workshops**
- **Community mapping and monitoring**
- **Mapping poverty traps**
- **Joint policy analysis (e.g., working groups)**

Brent Swallow and colleagues has been using what I would call a systems methodology to map poverty traps in W Kenya—this is dynamic, multifactor analysis that links perceived behaviors with root causes. Get beyond PRAs and surveys! Use conceptual models first to craft hypotheses, bring in outside information; creatively use action research and science together.

Crafting strategies

- **Projects work within strategies**
- **Partnerships have clear strategies with targets and indicators**
- **Targeting and nesting collective action**
- **Moving upstream can zig and zag**

Projects need to work within **strategies** that result from this analysis of trajectories of development

Partnerships develop together clear strategies with targets and indicators

Targeting and nesting collective action within strategies

Moving upstream from micro to macro

Way forward

Have a vision of vibrant local and national economies using local expertise to create locally-valued products

- **Use analytic tools, theory and lessons of history to get a head start**
- **Expand our networks to include private sector actors and industry**
- **Work with local governments to enhance rural revitalization**

- **Rely less on donors and more on generating internal wealth**
- **Remember that if you feel powerless you are powerless**

This kind of analysis is an overlay on everything we do including technology development. Need to consider how particular technologies fit into systems: not just the technologies but who will use them, how they will be disseminated, how they compete with other ways of doing things, how knowledge will spread.

We need to get our heads out of the sand. We can continue to try and improve soil fertility in areas that have never been appropriate for agriculture and seek the Cinderella tree (big bamboo, apples, mangoes, moringa, neem or that new germplasm from India) or we can look at the larger issues of why people are on poor lands and remain poor. Where we really need world-class science is to hone in on structural constraints and devise strategies to overcome them. I fear we are going backwards in ICRAF in favor of household level approaches that can never in their ensemble build institutions and wealth for sustained growth.

Africa has been portrayed as a basket case but every day people are making investments in their communities and practicing self-development. This happens without logframes and spreadsheets and workshops...but it cannot happen without love.

Research on scaling up agricultural technology development

**Presentation for the research for development workshop
Nairobi April 2005**

A historical perspective

Did “take off” take off?

1960s was an era of optimism in development → the path to agricultural development was clear (the “take off model” espoused by anthropologist Clifford Geertz in his first writings) Colored by emerging cold war and conflict in many regions (Geertz gives up after the killings in Indonesia and gets religion)

Take off model does take off but later and driven by industrialization (internal Asian demand & demand in US, Canada, Europe) (H&K). Can it be replicated? Lots of discussion of how Africa can learn from Asia.

Agricultural sector shrinks quickly, farmers highly subsidized in US and Europe

Did “take off” in one or many regions open or close opportunities in other regions?

Green revolution and its aftermath

Technology-first paradigm but also “supply driven” (over-supply of fertilizer in the US)

Heavy investment in infrastructure

High demand for commodity

High political profile and large farmers can pull in smallholders

Research on the socioeconomic and later on ecological impact—political dimensions

Now we are working with technologies in much more complex systems (ecologically marginal) with much less investment

Idea that donors should support large percentage of agricultural R&D promotes weak internal investment, structural weaknesses in systems

Structural adjustment

Can macroeconomic adjustments realign developing country economies?

Addressed problems of market boards, parastatals, import substitution → tried to improve terms of trade to farmers BUT

Neglected role of consumers and middle class, impact of devaluation

Lessons from the “food security and structural adjustment” panel showed that impact of SAPS was varied and depended on commodity, location.

Post-structural adjustment

Overall most African countries did not improve under SAPS. Why?

Some countries improved? Why? One hypothesis is relatively strong internal consumer base

Will writing off the debt stimulate investment in agriculture?

HIV/AIDS—what is the way forward? Donors prefer investing in it over agriculture because progress is “measurable” Yet without rising rural incomes the population has little ability to address health problems in the long term

Trade not aid?

Gulf between agribusinesses and micro-businesses—where are the intermediaries essential to rural development? New WB initiative on small and medium scale enterprises. How can the CGIAR contribute?

Poorest of poor and “direct aid” paradigm

The charity approach to development: can it “lift people out of poverty?” Has it ever?
Direct aid (money to poor people and the “millennium village” approach) shows little understanding of the structural reasons for poverty and how wealth is created in nations: poverty does not come because a country or people are poor but because they cannot invest productively and grow their assets; need for rule of law and sound institutions
Poverty at village level is reflection of lack of these not because of poor soil fertility
What is alternative? Aid linked to activism around the structural relations of poverty: access, ownership, control of resources, barriers to investment
Need much better understanding of how poor and better-off are linked both positively and negatively (within families, urban-rural linkages, issues of credit & debt, sharecropping/absentee landlordism and wage labor)
Why do the poor stay poor? Poverty traps research (Brent)
Why and where is agriculture unremunerative? Can this be “solved” with technologies—doubtful because it has to do with price setting and low consumer purchasing power
Poor people live in cities too
Research on pathways out of poverty—need for much more study of entrepreneurialism

Trends in developing countries

Urbanization (joblessness but relative freedom and opportunities continues to attract people)
Absentee landlordism and its impacts
Rural poverty linked to land and labor issues, infrastructure, cartels, barriers to trade
Micro-enterprises + agribusiness poor linkages
Supermarketization
Donors and “projects”: helping or hindering? The danger of fad and micro approaches

Environment for scaling up

Institutional impoverishment
Lack of infrastructure investment
Other barriers to government investment
Obstacles to private sector investment
Poor environment for contract farming
Steep competition among small poor countries

Gender analysis

Women do much of agricultural labor but often have weak ownership and control over key assets (land, trees, technologies)
Women strongly involved in development, trading & enterprise but often not involved in higher level management decisions
Female vs male investments—myth vs reality
Technologies have very important gender differences (e.g., labor saving vs. profit maximizing)
Extension still very male-biased and focused
Should we go back to Women in Development approach of direct empowerment of women?
Has “gender studies” emasculated women’s studies? ☺

Meeting market demand

Investment in a technology implies a market for that technology (ex: domestication)
Start with the consumer: what does that mean?
Farmers are consumers
Traders have to understand consumer preferences to survive unless in monopsony situation (cartels, cooperatives)

Need for more consumers with a wider range of tastes to develop niche markets (smallholder advantage)

“Marketing” is legitimate but requires private sector, need clear feasibility analyses (not just hit or miss)

How much in touch are we with the private sector? What does that mean? How important is this in scaling up?

Policy reform

Liberalization, decentralization, deconcentration are not new and it is proven that they cannot work without strong national institutions

Reforming tariffs and cross-border trade is still controversial and mired in conflicting and contradictory efforts

Budgetary reform → why is agricultural research under-funded? Is it a good idea for donor funds to fill the gaps; this may undermine the national systems in the long run

Attacking corruption

Forest policies related to AF adoption

Barriers to markets

Tenure reform?

How do we deal with power & authority issues in relation to technology at all levels?

From top-down cooperatives → strong farmer associations

Developed country policy reforms (AGOA, debt relief, lessen agricultural subsidies)

Trends in methodology

Expensive formal surveys (e.g., Cameroon NRM)

D&D/sondeo

RRA

PRA—use and misuse

Formal analyses (cost-benefit)

Process documentation

Evaluation methodologies (formal economic, case study)

Multidisciplinarity remains problematic but is essential because of economic and non-economic, technology factors, lack of good databases for macro-analyses

Non-economic factors in technology development

We need a "checklist" for scaling up and technologies as we have for project development (see some key questions below). Let us not forget that there is a lot of stuff out there already. Everyone wants to invent, to be the new father of the green revolution. As Dave Gibson said to me a couple of years ago "you folks in ICRAF continue to do so much research, why not make more of an effort to disseminate what you know already and have done in a form that farmers, extensionists and other practitioners can use?"

What insights can be obtained into scaling up from finer-grained ethnographic-type research?

1. It will widen the frame of reference to include larger processes that bear upon adoption and scaling up:

- The structure of markets that determine what and how people sell products and hence their benefit/risk frameworks
- Cultural preferences for food, technology, ways of working
- Socio-political systems that may structure labor recruitment and use, investment options, land use and inheritance
- Communication pathways and barriers to communication--what are the best ways to get messages across?

2. It will add “non-formal” but rigorous methods to the toolkit that are often the most appropriate to obtain sensitive or indeed accurate information
- Key informant interviews
 - Participant observation and semi-structured interviews related to technologies, division of labor, communication systems, knowledge systems
 - Triangulation (using 2+ sources to verify information and observing the status and role of the informant to evaluate the information)
 - Focus group interview of informants in same category (lessen confounding effects of group interviews such as peer pressure)

3. Lessons from experience

Major errors in technology development relate to poor understanding of the ensemble and timing of livelihood strategies, alternatives, power relations, resource constraints and risk-aversion strategies. Often farmers do not want to continue being farmers; they want to move out of agriculture, they want quick returns and not "better NRM" (we always act as if this is a taboo subject!)

Poor analysis of different socioeconomic characteristics of areas and “households”: one village, 10 approaches is possible because of large number of livelihood and coping strategies people deploy and have to deploy given uncertain environments

Some key questions to ask:

Who decided that there was a problem and that a new technology or particular kind of technology could solve the problem? Who was consulted? (ex of IITA in the past that was solving problems that farmers did not perceive as problems and ignoring problems that farmers felt were priorities; examples of neglect to consult women: cassava varieties being developed for market with big tubers that could not be stored and ground and which neglected leaves.)

What have farmers tried already?

What are the most effective dissemination & communication pathways?

If it's so good why don't they scale it up themselves? What are the technologies that have “taken off” and why?

How much “better” does a technology have to be and how visible does this improvement have to be? To whom does the improvement have to be visible?

Facilitating internal investment

If economies don't grow then agriculture does not grow: let us be clear that agriculture alone is not the driver but it starts as key sector

Growth in industrial and service economies produces more consumers with more refined tastes; social consciousness, philanthropy

Increases demand for products and range of products: we need forecasting of future demand and scale up accordingly

Increased investment in production and productivity can lead to improved conservation & NRM if investors get good returns

Promotion of entrepreneurialism in agriculture, agroforestry and forestry—particularly mid-scale enterprises—will address key constraints & opportunities

Working at scale

Start with scale (existing large scale institutions & commodities)

Place activities within robust rural development framework
Carry out rigorous feasibility analyses
Work on higher level constraints and opportunities
Plan and manage large scale rural development projects

Some resources

Development experience system (www.dec.org)
IFPRI publications on market reform in Africa
DFID, IDS, IIED Web sites
World Bank publications and evaluations
Boston University African Studies center library (www.bu.edu/asc) and other African studies centers & libraries (U Florida, Yale, Wisconsin, SOAS, UCLA, Michigan State)
Yale program on agrarian studies

Markets aren't just about economics! Markets, trade and enterprise in social and cultural perspective

Presentation by Diane Russell to RELMA workshop on markets in ECA region, Nairobi Safari Club, January 2002

Market liberalization, decentralization, restructuring, reforming cooperatives...these are not new trends. Indeed, agricultural policy reform in Africa has been on the agenda for decades. Let's look at the historical and social roots for some of the problems, as I believe that if we don't do this we are doomed to make the same mistakes as in the past.

What we will discuss

- **Market spaces**
- **History**
- **Culture**
- **Role of the state and other actors**
- **New models**

I want to talk in particular about some of the non economic aspects of markets that shed light on how they are structured:

Market spaces: the physical infrastructure and networks

Culture: how it plays a role in entrepreneurship including gender relations

The role of the state and other actors in shaping market structures including cooperatives

New models that address some of these structural issues

Why are non-economic dimensions important?

- **Markets and enterprises are part of society**
- **They have a history**
- **They have a cultural context**
- **It is not all about money**

I am an anthropologist who has studied markets and trade. I started working at ICRAF a few months ago. My job is to help scale up agroforestry. One of the key elements of scaling up, or getting technologies, varieties, species to a large number of people, is markets. Farmers will adopt new technology, try new varieties and species when there are commercial opportunities; they seek markets for their existing products and for new products introduced by extension and research (say, improved fruit trees). But the markets for many agroforestry products that could be grown by smallholder farmers are weak because of policy constraints (charcoal policy), lack of appropriate variety and market connections (mangoes, avocados), lack of germplasm (another market constraint). We are trying to unravel these problems (Fridah Mugo has been very active in this effort with respect to the charcoal market. KEFRI and other groups are also doing much market research.) To help our efforts at ICRAF and here at this conference, I want to go back to some work I did many years ago to illustrate why improving markets is not just a matter of economics, or even of better information. Markets are embedded in history, society and culture.

Many years ago I wrote my PhD thesis on the history and social organization of the rice trade around Kisangani, DRC during a time of market liberalization (after market boards for cereals were abolished). The puzzle I had to unravel was why rice supply was declining; the region used to export rice but as of the 1980s it was reported that the supply could no longer feed the people of the region; consumer demand for rice was high, farmers wanted to grow it and

traders wanted to trade it. Why was the supply shrinking? Was liberalization having a positive effect?

In the process of finding out, I discovered that markets are cultural and social artifacts because they are about people, how people relate to one another including relations of kinship, friendship, patronage power and control. Markets are “inefficient” because of these things but sometimes they work surprisingly well under very serious constraints—for example the rice trade around Kisangani still functioned despite almost no transportation system.

Market spaces

Markets spaces are shaped by various factors

Let’s talk first about the physical set up of markets in space. What explains the size and form of markets, market density, variety of goods, competition?

Existing markets—some market spaces are very ancient (the souks of the Middle East). These physical structures have long histories. Sometimes these are bypassed by new infrastructure (roads or buildings) in favor of a new class of traders

Chance—someone sets up a market stall and others follow; this seems to be happening with nurseries in some areas set up along the road; water supply is key

Population centers: economic geography/central place theory predicts that population density and resulting consumer demand will shape the structure of markets (size, number of goods).

But in some parts of Africa, you can often travel a long distance and find very few markets even in areas with relatively high population density. What explains these weak rural markets?

Market networks

Export commodities shape transport and bulking networks

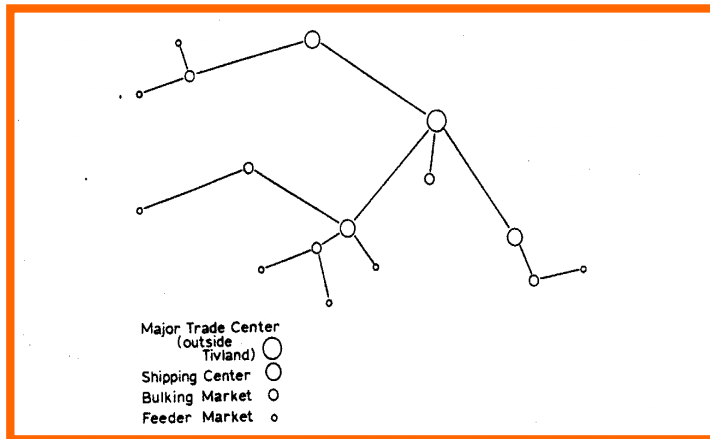
The major commodities often shape the structure of trading networks. This figure is an example of a rural market network with satellite markets and a bulking centre

There are few or no connections between the smaller markets; they are not shaped by consumer demand as predicted by central place theory (which was formulated in Europe); they are shaped by commodity exports: it could be coffee, timber, tea or other major export commodity. The major suppliers will dictate the *terms of trade* and thereby control the regional economy.

Producers for the export trade cannot specialize in local demand—hence arises what economic anthropologists call dendritic (non-competitive) market development (see illustration).

According to this theory, virtually all accumulation takes place in the **core area** of the region, the area close to the expanding urban markets supported by profits from external trade, through the efforts of merchants who dominate the markets in the periphery as well as the core. Low wage rates and market prices given to residents of the periphery will restrict the regional market, lowering core area profits, and the consequent low rate of capitalization for core area firms prevents them from competing with heavily capitalized industries of the developed countries (hence the nation loses out)

Dendritic” market system from Smith 1976



Trade in the dendritic marketing system carries off the local surpluses that might otherwise be used to support internal market diversification

Retail trade is also distorted: kiosks are an example of local trade that does little to build the local economy and pushes imported or high priced, low value goods (crisps, sodas, cigarettes)

In Cameroon when cocoa collapsed in the early 1990s, it brought down other markets too.

Trade without market spaces

Other markets do not have a physical space

In fact, some markets are hidden

Some markets do not have a physical market space or structure: for example, some medicinal plants are traded in informal networks without passing through marketplaces.

Some markets are hidden. This picture depicts the timber trade: despite bans on cutting trees, trees get cut down for timber even in protected areas, because there is a high demand for timber, charcoal and fuelwood. These bans do not stop the trade; they drive it underground and make it difficult for smallholder farmers to take part

You are all familiar with the concept of the *underground economy*

This means that a market exists but it is not out in the open; these trades tend to be highly lucrative, high-value items. In Congo where I worked in the 1980s, 80% of the economy was “underground.” This happens because government or society deems certain markets illegal or wants to control them heavily (in Cameroon you could not sell homemade whisky but you could buy whisky imported from Europe!)

A lot of cross border trade is not visible because of steep *transaction costs*: these are the costs of doing business—regulations, permits, waiting time, bribes, fees and fines for infractions. When markets are not visible they have less social usefulness: the revenue is not taxed in such a way that the tax can be used by society; individuals benefit but not society.

History of trade

Do certain groups have historical advantages or disadvantages in trade and enterprise?

History and culture have placed certain groups in priority positions for trade and market access. People who live near the coast and near borders have more trading opportunities. The Lokele who are the people of the Congo River around Kisangani, where I lived in the 1980s,

reside near or on the river; they fish and they trade. When the Swahili-speaking “Arabs” came to their area, and then later the Europeans, they were in a good position to dominate the native trade. But even their advantage did not give them access to trade dominated by Europeans: export trade, plantations, anything really valuable. The retail trade was left to Greeks, Portuguese, Indians, Pakistanis and other “middlemen” who set up cantines throughout the countryside. This colonial system left out the Africans; most particularly farmers. The repercussions are still being felt because the rural markets were so poorly developed they contributed little to the nation’s economy and very little to its political future. There was a steep divide between the “modern” systems and the “native” systems. Nationalization only drove the non-Africans away; it did not improve the system.

Culture and trade

Are some cultures and groups more “entrepreneurial” than others?

Because of history or cultural “traits” we hear this claim that some groups are more entrepreneurial than others. In Cameroon, the Bamiléké are seen to be the entrepreneurs; in Congo, the Lokele or the Nande or the Luba have that reputation. I have heard that the Kikuyu are thought to be the entrepreneurial ones here in Kenya. Why is this so? What makes some cultures more entrepreneurial, and can people of other cultures learn these traits?

- Children are given financial responsibility at an early age
- Financial mismanagement is punished, and wise management is highly praised
- It is not shameful in the culture to make money, though sharing and investing in social goods is still expected to take place

Money is handled by the family in family businesses where everyone gets involved. People learn to look over the long term and how to invest: my Lokele friend in Kisangani started with 2 meters of cloth and when I met him many years later he had a Mercedes, several clubs, stores, children studying in Europe.

It is harder to be entrepreneurial in rural areas where *social control* mechanisms are strong: there will be a lot of pressure to redistribute what you have, or hide it (thereby it is hard to invest it), or to move away.

Promoting the growth of rural towns is an important way to allow all groups to become entrepreneurs: small manufacturing, processing, service industries, retail stores, can provide niches for people to grow businesses. This adds value to what farmers are doing but keeps it closer to home.

Market, enterprise & gender

What are the gender dynamics of trade and enterprise?

Gender plays a role in markets and enterprises. See this woman juggling all her roles. If she is a trader, she is usually also a mother and a wife and she had better do all of those things well. She may face restrictions on opening bank accounts or owning land. It is unlikely that she will drive her own truck. If she is a farmer, she may not be allowed to sell certain farm goods that are the province of men. Yet she may have advantages over men in that she was raised to carefully manage finances, to be attentive to family (customers) and to be alert to all opportunities for advancement. Hausa women in Niger run huge enterprises from their homes, even as they live in *purdah*. A woman was just elected head of the Chamber of Commerce in Kampala. Women dominate in some trades, such as staple foods in some countries. Men have tended to dominate in export and high value crops, however, such as coffee, cocoa, livestock. These gender dynamics are changing with education and opportunity. How will policies affect these dynamics?

Power relations in trade

Traders and farmers are often pitted against each other...is this inevitable?

The way that trade and enterprise evolved in many parts of Africa, and other countries, led to deep cultural divides between traders and farmers. Sometimes this is due to ethnic or cultural differences; or differences in mobility and education. Farmers universally believe that traders and middlemen cheat them; while traders look down on farmers. Some farmers do become good traders but it is not common. When I worked on the rice trade, I saw traders cheating farmers using scales that gave lower weights for a sack of rice. Farmers retaliated by putting chaff in the sacks of rice to make them bulkier. Is this mistrust inevitable? Extension materials have to teach farmers about market chains, prices, profit margins, risk and uncertainty in trade, trade networks and options: this information has to be integrated into extension materials and into training. When farmers have knowledge and options their bargaining power increases. **This is where market information systems have to concentrate their efforts.**

“Cooperatives” have not been cooperative

How do people organize for production and trade? Many countries in the world were very keen on farmer cooperatives to facilitate marketing goods and getting access to production inputs. It made a lot of sense: small farmers alone have little clout in the market. Yet the way cooperatives were organized made them centers of corruption and mismanagement. Most were not organized by farmers but by the state or even by the private sector; they did not necessarily serve the farmers' interests because they were designed to manage prices and production primarily for the benefit of urban consumers. They were de facto *monopsonies*: one buyer (the cooperative), many sellers. Enterprise management skill was lacking.

Farmers need to bulk their production for better prices and market access and need to have buying power in getting access to inputs. How to do this in a different way?

The role of the State

The state enters into the equation:

- **Nurturing**
- **Regulation**
- **Transaction costs**
- **Investment decisions & strategies**

Why did the rice trade around Kisangani decline even though consumers, traders and farmers wanted it to grow? The answer is: over-regulation and under-investment by the government. On the one hand, the rice mills in town had 22 taxes placed on them because they had to use imported equipment, were visible (not hidden) enterprises and were employing people. On the other hand, there was no road maintenance, no fair and accessible credit facility, very little support to agricultural research to improve rice varieties. The trade continued to function because of the Lokele, mainly using their boats to transport goods. This is an extreme example but it serves to illustrate the point that markets and trade need nurturing and support to thrive; regulation is necessary but should serve to strengthen the market rather than drive it underground through excessive transaction costs. Liberalization does not stop regulation; it can drive it underground where it is actually harder to control. The cost of a rice trading permit increased 1,333% two years **after** liberalization!

New models encourage productive investment

So markets and enterprises are embedded in society and culture, they need to benefit from society and benefit society.

My work has convinced me that markets and enterprises need a “golden triangle” structure; when any one angle of the triangle is weak, the whole triangle is weakened:

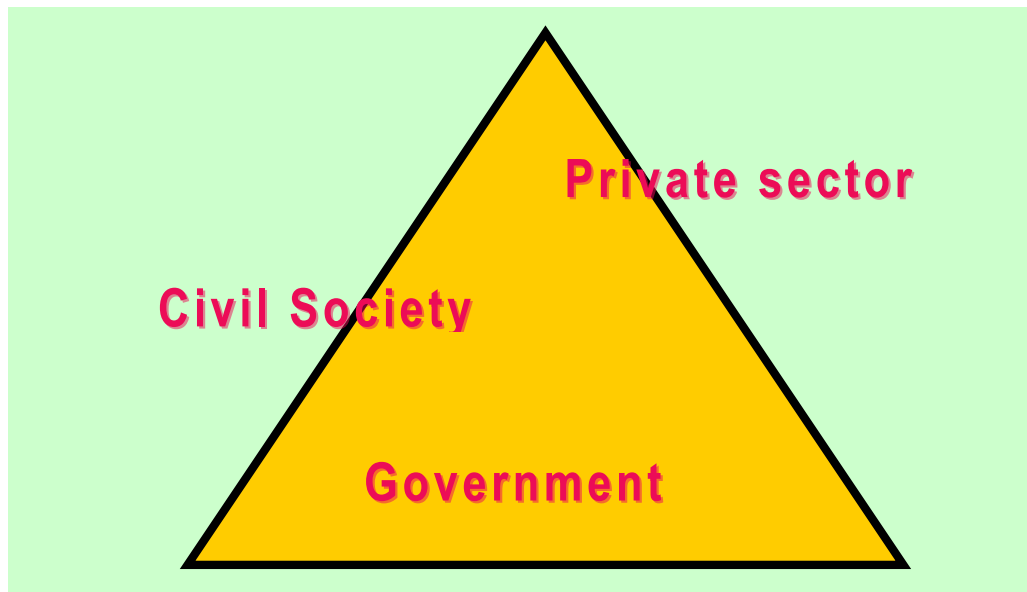
1) A strong private sector: encouragement of entrepreneurship in schools, at home and on the farm; particularly strengthening and diversifying rural and town market centers

2) A strong voice from consumers (civil society) to assure quality, quantity, diversity, competition, and reliability of goods

3) A strong public sector (government) to make investment in infrastructure, nurture markets and enterprises (especially rural ones and new **niche markets**), assure security of financial institutions, credit availability, appropriate labor laws, rule of law and legal system for contracts between farmers and private sector; research that is oriented to a diversity of commercial opportunities, not just for export but to build internal markets

New models to encourage *productive investment* (investment that builds long-term social as well as economic value) include:

- Shareholder models: shareholders are owners and individual entrepreneurs within a modern enterprise structure
- Densification and diversification of rural markets through promoting local trade and local products
- Involvement of stakeholders: do not adopt the model of “if we build it they will come” with respect to market spaces (big markets in the wrong place, no one uses them): involve consumers, producers, traders in dialogue about products, market spaces, market services, tariffs



- Breaking historical and cultural bottlenecks in markets and enterprise through education that encourages commerce, support to family enterprises, capital formation in rural areas, dialogue across boundaries rather than suspicion and blaming

Trees and Markets Draft Strategy

With Tony Simons

Vision

The widespread cultivation of trees supplying equitable and thriving tree product markets

Mission

To help meet the needs of farmers and consumers for agroforestry tree products (AFTPs) while sustaining the natural resource base.

Problem analysis

Trees contribute substantially to rural livelihoods and national economies, yet their current and potential contributions are not adequately quantified or developed. Tree products such as timber, fruits and medicines can be destructively or non-destructively harvested from trees, yet most policies for tree product harvesting and sale are framed to control destructive harvesting from trees in natural forest. With less than half a hectare of natural forest remaining per person in the tropics, trees on farms are often more important for tree product supply than trees in forests. This is true for both home and commercial purposes, yet obsolete policy objectives act as barriers to greater investment by farmers and entrepreneurs.

Even where extraction gives way to cultivation, small-scale farmers are mostly ill-equipped to diversify and add value to their tree production. National planners are also ill-equipped since few analyses have been carried out to identify the investments needed to promote cultivation and commercialisation of tree products. In many regions the enabling policies, species choice, tree husbandry skills, germplasm quality and tree improvement lag behind the overall demand for tree planting. Furthermore, markets for tree products are generally poorly organised and perform sub-optimally in turn leading to lost income for producers, spoilage of perishable tree products and restricted choice for consumers. Lack of market price transparency and subsequent low prices to producers as well as the absence of processing technologies to add value tree products further disadvantage the rural poor.

Enhancing tree-based farming systems and improving tree product marketing have the potential to address key development challenges such as:

- rural poverty
- child malnutrition
- poor access to and high cost of conventional health care
- national tree product deficits (especially timber)
- inequitable returns to small-scale farmers (especially women) from tree product marketing
- lack of enterprise opportunities on small-scale farms
- homogenization of tree species composition in agricultural landscapes

Building on lessons

Agroforestry systems (AFS) include some of the most valuable products in the tropical world such as high quality coffee, oil palm, gums, resins and natural rubber, as well as many valuable timber and non-timber forest products (NTFPs). In Trees & Markets (T&M) we believe that AFS have to bring tangible benefits to smallholder farmers or they will not endure; this includes both higher returns to labor and saleable products. If a tree and its products are economically valuable, people will have an incentive to plant it, nurture and manage it appropriately but they may need capacity building in appropriate management and

marketing. We can see this clearly from work in the smallholder timber sector in Kenya and Southeast Asia (Holding-Anyonge and Roshetko 2003).

Agroforestry should promote a range of products to farmers and local consumers that meet shorter and longer term cash and resource needs. Agroforestry tree products (AFTPs), which group all the products from AFS, are valued from farm to global level; indeed there can be multiple value chains for a given tree or product. There are important niches for smallholders in high value tree products for export but risks involve the investment needed to meet export quality and the fact that international market tastes and standards change rapidly and farmers have virtually no control over these. Fair trade, organic certification and value addition schemes are appealing but typically can reach a very small proportion of poor farmers because of the costs of implementation. Most farmers' benefit will come from supplying local markets. The strongest product is one with local demand and international appeal (such as shea/karite).

The sustainability of the resource comes into question when demand is high and land resources are dwindling or degrading. Additionally, landscapes can be impoverished by dependence on a few species. Managing intra-species and inter-species tree diversity involves scientific mapping as well as local knowledge of trees and terrains. In some areas, markets are weak and so household consumption may take precedence; however farmers are not likely to increase labor or capital investments in AFS unless there is cash benefit involved. Food security is as much or more about access to fungible cash than home production. Wild forest and tree resources, however, can play a big role in food security particularly in times of insecurity and drought. Similarly wild and cultivated tree products to treat illnesses are extremely important to many poor and even not so poor people. As wild resources dwindle, domestication becomes necessary. Cultivation changes the plant and thus the products, hence research with traditional healers and consumers needs to go into this process.

Market analysis is essential for AFTP promotion. Prioritization of products and zones of action requires analysis of key market factors such as consumer demand, market chains, infrastructure, competition and investment channels. Sound analysis of benefits and risks to different categories of people (genders, poorer, chronically ill, marginalized, youth) is necessary to target market interventions. Analysis of land and resource use and tenure systems (de facto and de jure) is also essential to understand how benefits to individuals and groups relate to land management. Analysis should link agroecological, political, social and marketshed mapping of pressures and potential.

But we also need to see how AFTPs contribute to rural development as a whole. Rural development is a long-term multi-factor process of enabling productive investment through economic and policy "enabling environments." Benefit from trees and technologies at farm level is thus strongly linked to consumer demand within overall economic growth and the "policy environment" affecting smallholders; as a result, improving the ability of farmers to understand and influence market and policy reforms is central to the T&M strategy. A study of the "policy terrain" for agroforestry around protected areas in three countries showed some significant blockages to farmers benefiting from tree crops in these areas as well as in the national domain, particularly continuing control over indigenous species by forest departments (Ashley 2004). Support to farmer associations, extensionists and NGOs is critical in the process of scaling up. Research and development partners need capacity building in farm and community level research emphasizing systematic and rigorous participatory research linked to M&E and action planning. Additions to the toolkit will include market and policy analysis tools.

Without strong market linkages, AFTP enterprises will fail (FAO and ICRAF 2003). The lessons of many enterprise initiatives show that the private sector—from small-scale

entrepreneurs to large corporations—has to be involved in planning of market and enterprise initiatives. Farm-level AFTP enterprise models have to be in line with market realities, in other words, they must deliver quality products in a timely fashion and provide benefits to individual farmers over time. Farmer interface with the market can be improved at both the community and industry levels through interventions such as improved enterprise models, farm-business linkages, market information systems, policy advocacy and effective farmer associations.

ICRAF has new links with the private sector in Western Kenya (through COSAFAP consortium), southern Africa (several partners involved in NTFP and AFTP marketing and promotion), the dairy industry in fodder tree promotion, Unilever in research on *Allanblackia*. New projects in AHT and Sahel will forge new links with private sector actors in subsectors such as shea and traditional African foods (*irvingia*, *ricinodendron*, *cola*). Gums and resins are on the priority list for ECA and Sahel and contact has been made with the NGARA.

Sustainable germplasm systems are an essential component of AFS but their implementation has been hampered by many factors. Nursery businesses and sustainable germplasm supply are hindered by subsidies, handouts and perverse policy incentives focusing on control rather than support. We believe that nursery entrepreneurs can facilitate diversification and quality improvement when trained, affiliated and encouraged. Some germplasm supply may have to be subsidized but capacity building has to be included so that eventually trained people may become small-scale entrepreneurs. Domestication technologies at farm level enable spread of high quality germplasm cost-effectively and also encourage small-scale businesses.

Increasing scarcity of tree products from natural forests provides opportunities for smallholders; these need to be encouraged with policy and market incentives. However, degradation of the gene pools of valuable trees is a worry if farmers do not manage intra-specific diversity.

Natural forest management has to be linked to agroforestry through conservation, silvicultural practices, domestication and landscape level management. Kindt and colleagues have mapped on-farm diversity and are providing tools to help researchers and farmers map and manage these resources.

Strategy continues with description of T&M MTP...

African Tree Product Resource Centre

Why the ATPRC?

Agroforestry systems (AFS) include some of the most valuable products in the tropical world such as high quality coffee, oil palm, gums, resins and natural rubber, as well as many valuable timber and non-timber forest products (NTFPs). AFS bring other tangible benefits to smallholder farmers such as wind, soil and water management technologies to increase productivity and minimize environmental damage. When AFS include high value trees, they have more potential to attract farmers. If a tree and its products are economically valuable, people will have an incentive to plant it, nurture and manage it appropriately. In turn, increased returns from high value products encourage investment in better resource management. It is increasingly clear from our work at the World Agroforestry Centre that to foster profitable and effective AFS, much greater emphasis needs to be put on marketing of high value Agroforestry Tree Products (AFTPs), along with quality germplasm and capacity building on tree management and ecology.

A major goal of agroforestry research and development in Africa is poverty reduction. In some regions of severe degradation, market marginalization and malnutrition, this means first an emphasis on planting woody biomass that increases the potential for small farms to produce more staple food; however it almost always means also boosting revenues through a range of saleable products that can be produced in AFS. Food security is not just about home production but the ability of a household to secure food, resources and income from a range of sources.

In a recent communication, the CGIAR Science Council suggests that ICRAF needs to look at the low profitability of AFS. In part this means studying low returns to labor for agriculture in general but a key element of the equation is markets for products grown in AFS. For AFS to be sustained, the commodities within them have to be profitable. These can be variously defined and categorized, as discussed below, but markets for many of them share similar bottlenecks and constraints: dearth of market information, few fora for exchange of information between farmers and merchants within the subsector, forestry policies that inhibit the production and transport of products, long production cycles and dispersed production (bulking problems), lack and poor quality of germplasm. Investment has been low because of dispersed and low production and lack of revenue opportunities for government (taxation) and larger private sector investors.

These bottlenecks do not mean that these products lack market potential: ICRAF, CIFOR and others have shown conclusively that AF products such as local fruits, barks, leaves and resins used as foods, medicines and for other purposes can be more profitable than staple crops. Traditional tree crops such as coffee and cocoa have been the most profitable agricultural ventures for many African smallholders. However market instabilities of these tree crops can create severe cash flow problems of smallholders; indeed can destroy these small family businesses. Diversification with other trees is one option to stabilize income, and it is a better option environmentally than cutting down plantations to grow staple crops. Certification that brings higher returns often involves the use of environmentally friendly options.

Some large-scale private sector investors are promoting AFTPs in Africa. Unilever is sponsoring R&D on allanblackia as an oil substitute in Cameroon, Tanzania and Ghana. The Mars Corporation is seeking AFTPs that farmers can intercrop to raise the value of their plantations at the same time they increase the quality of their cocoa trees. The Common Fund for Commodities (CFC) has financed ICRAF and partners to improve the quality and profitability of shea products (vitellaria) in the Sahel; this project involves all stakeholders from large scale private sector actors to women producer groups. The University of California-Berkeley Haas School of Business is helping ICRAF in Cameroon to improve the profitability of cola enterprises. Medium and small scale trade of AFTPs within Africa and for export is known to be large but market information is scattered and in many cases scanty. Southern African analysts have done quite a lot to document the trade in medicinal plants and indigenous fruits. Ndoye and colleagues at CIFOR have documented internal trade of forest and agroforestry products in the Congo Basin. Tabuna and others have documented the scale of trade between West Africa and Europe in natural products. Ndoye has also shown that with better market information, farmers can significantly increase their bargaining power with traders.

These efforts are excellent but piecemeal. They may concentrate on one product or subsector or on one region. To achieve poverty reduction goals, smallholder farmers in Africa need a range of options and need materials and resources that help them decide how to invest. The private sector needs also to know about the range of options and potential to work with smallholders. We need urgently to compile all of this information, fill gaps and generate useful training and communication materials to assist these market actors. We need to integrate market information with information on tree management, ecology, and propagation. We have to identify processing options appropriate to different markets and show farmers how to obtain quality germplasm.

This project seeks to create a resource center to assist farmers to market AFTPs, traders and merchants to reach farmer groups, and consumers and policymakers to better understand these products. The center takes inspiration from agroforestry and forestry programs in the West that have created market guidance for their constituencies (see e.g., British Columbia Small Woodlands Program, USDA Agroforestry Program, Australia Master Tree Farmers Program).

ICRAF is in a very good position to organize and manage this kind of center. First there are its four robust African regional programs, each with vibrant market projects and a roster of partners and experts. Second, there are key central resources such as the Germplasm Resource Unit, which can evaluate and disseminate tree germplasm, the Communications Unit, which can create targeted information products, and the GIS unit, which can assist in mapping variables related to markets, infrastructure, and agroecosystems to make recommendations on appropriate product options. Finally and perhaps most critically, ICRAF is a neutral party in the market: it will neither produce products nor sell them. It will rather facilitate communication among market actors, improve the value of products and increase the size of the markets to enhance economic growth. Investors such as CFC, BMZ, IFAD and DFID have already placed their confidence in ICRAF to fulfill this role. ICRAF will be able to start with the lessons and resources from these projects and move quickly to a strategic

continent-wide level. Our regional programs will create antennas of the resource center, able to quickly access its resources and services.

Vision, Mission, Goal

Vision

Profitable smallholder enterprises from a diversity of trees

Mission

Create an information and resource center that is supported by clients who are smallholder farmers, traders, private sector investors, donors and researchers

Goal

A sustainable institution valued by a wide variety of stakeholders that contributes significantly to the development of local, national and regional development of tree product subsectors in Africa

Objectives

1. To provide services to clients on a partial fee basis such as:
 - Market information and intelligence on a wide array of tree products
 - Business plans, model contracts and business models
 - Private sector and farmer group contact information
 - Roster of experts
 - Training and capacity building for small enterprises
 - Value addition products and processes, profitability analyses of value addition
 - Domestication and tree management information and training; improved germplasm?
 - Certification options and analyses
 - Sustainable harvesting and diversity guidelines and analytic tools
 - Smallholder plantation diversification options
2. To maintain an up-to-date Web site with multiple databases on tree products
4. To sponsor workshops, seminars, exchange visits and other events among actors in tree crop businesses
5. To carry out policy advocacy to improve tree product markets and smallholder access in appropriate fora
6. To educate consumers in developing and developed countries on AFTPs grown by smallholders
7. To display equipment, improved germplasm and other items of interest to clients.

Targets and logistics

Key Sectors

Local fruits

Smallholder timber

Nursery businesses
Charcoal and fuelwood
Fodder
Nuts
Products from barks, resins, gums, roots, twigs, leaves (medicinals, essential oils, botanicals, foods)

Need to decide whether to include:

Vegetables/fruits grown in AF systems
Traditional tree crops (cocoa, coffee, oil palm, rubber) in AF systems; shade coffee
NTFPs from “natural” forests
Exotic fruits
C-sequestration and other ecosystem services payments

Location

Virtual at first

Indicative budget: \$3m for five years with some client cost recovery

Potential donors

DFID, CIDA, USAID, RF, CFC, Mars and other private foundations, World Bank (but not sure of mechanism)

Partners

FAO, CIRAD, CIFOR, Conservation International, WWF, Cocoa Foundation, Farmers Federations, World Bank Tree Crops Initiative, STCP, NEPAD, UNECA

Related ventures

FAO statistics and market divisions (forestry), Non-wood news
CIRAD perennial crops (don't deal with minor products); CIRAD forest?
ASNAPP
PhytoTrade
CPWild
Technoserve and Enterpriseworks oil transformation projects
ICIPE and some Africa2000 (honey products)
IITA FoodNet (market information on food crops)
Other market information services with market information on AFTPs (collected by Anand Aithal, on T&M Web site)

High Value Agroforestry Zones (HIVAZ)

“Although cocoa agroforests have successfully conserved part of the forest environment of southern Cameroon, they have not been able to sustain farm revenues at times of crisis...the model may be difficult to reproduce...unless cocoa and noncocoa revenues from these agroforests can be increased.” Ruf and Schroth 2004: 128-129.

“Native species suitable for shading coffee and producing useful products could be identified, propagated and introduced into coffee plantations...useful diversity can also be increased by exchanging management information and perhaps germplasm between coffee-growing areas.” Somarriba *et al.* 2004: 218.

“Widespread oil palm plantation establishment is converting lowland forest outside of [Protected Areas], thus increasing pressure on PAs...In 2002, the area allotted to industrial plantations in West Kalimantan totaled ~35,000 km², with >31,000km² slated for oil palm production, a 40-fold increase in the plantation area designated since 1992.” Curran *et al.* 2004: 1002.

Discussion

Research in agroforestry, biodiversity conservation and tree crop markets clearly indicates a need to stabilize incomes of tree crop farmers, diversify and add sufficient value to plantations that they can be maintained sustainably across landscapes. When these investments do not occur, significant encroachment into forests continues, plantations erode in value and livelihoods of tree crop smallholders continue to be in peril. These investments are particularly critical in areas of high biodiversity value.

Certification schemes are fragmented and costly: some schemes such as FSC certify forest management, others certify products according to various criteria (bird friendly, organic) still others certify production processes (ISO, HPPC). The only scheme that comprises some measure of local value addition, process and land management is the “appellation” scheme used in Europe for wines, cheeses and other products, and being introduced into the developing world.

Like other schemes, appellation is oriented to high value commodities. Appellation differs from other schemes however in the emphasis on product quality and local control of the label. Although commodity-focused, appellation contains within it the notion of “terroir,” a cultural and agroecological zone that is delineated by producers themselves and comprises historical “savoir-faire” in production and processes of certain products. The recognition of terroir and appellation are negotiated processes within a value chain that includes processors, merchants and certifiers (INAO in the case of France).

Certifying a product is one step in better production and higher value for producers but in this world of commodity booms and busts, to paraphrase Ruf, it is no guarantee of sustainability. A new approach would be the creation of High Value Agroforestry Zones (HIVAZ) in areas of important biodiversity and high value tree crops. There is a good body of knowledge about what grows well in keystone tree crop plantations and in some areas market information is available on intercrops; in other areas it is lacking. There have been some schemes proposed to promote and increase the value of intercrops but on a commodity-by-commodity basis (e.g., certain fruit trees in Cameroon, smallholder timber in Kenya). ICRAF’s closest experience with something like HIVAZ is promoting the recognition of juggle rubber agroforests as a sustainable land use.

HIVAZ is related to other concepts and models used by ICRAF such as RUPES and Negotiation Support Systems (NSS) but there is a key difference: it is based in commodity markets rather than markets or provisions for environmental services. Markets for environmental services may or may not prove viable for smallholders whereas commodity markets have been around for thousands of years. They provide revenue not just to producers but to intermediaries as well as giving value to consumers. They build local economies. Commodity production is virtually always incompatible with conservation however. Producers deplete natural resources when prices are high and degrade them when prices are low.

On the livelihood side, there are also severe problems with commodity-focused economies. Commodity markets are organized to benefit manufacturers of finished products who buy large quantities at low prices. Improved quality at farm level may not be rewarded with higher prices unless the farmer is part of a certification scheme. Certification is expensive and ultimately the label is owned not by the farmer or group but by the manufacturer. Local savoir-faire is not recognized.

Commodity production is not going to go away even as it may be incompatible with conservation. Conservation is not likely to succeed with “fences and fines” approaches over time and co-management or “conservation concessions” without revenue streams—especially in parks with little or no tourism revenue—are a recipe for failure. As discussed above, concentration on one commodity in a given area is going to bring the same cycles of boom and bust that are inherent in global high value commodity markets. Investment in other high value products and in better land management is needed but it is very costly for smallholders.

Description

HIVAZ need to have institutional backing as well as being integrated into Value Chains that assure markets. They can be affiliated with important Protected Areas, with cultural-spiritual areas important to a particular population (such as around Mt Kenya or sacred forests) or be organized by VCI (Value Chain Intermediaries) together with facilitators and communities (Rwandan high value coffee project which delineated zones with GIS).

The HIVAZ concept should be endorsed at high levels of key organizations such as FAO, CIRAD, UNESCO, UNEP and large conservation organizations. It must achieve international recognition. ICRAF could be the certifying body involved in training local institutions to certify HIVAZ. HIVAZ would have cultural and biodiversity value. Savoir faire in agronomy, management, local processing and production methods as well as having “terroir” characteristics such as particular provenances, soils, and vegetation would be recognized. As a HIVAZ achieves status, it is assisted to develop new markets through the identification of and linking to VCIs. VCIs are also provided with assistance to promote and study HIVAZ products as well as develop new products and markets. Other certification schemes, particularly organic production and FSC, would be integrated into the HIVAZ. At the highest level, VCIs create niche markets for HIVAZ products that highlight their unique qualities.

A HIVAZ can be characterized by:

- ❖ Diversity of tree and other crops
- ❖ Organic production
- ❖ Grading, primary processing and value addition using artisanal methods (cultural and “terror” based “savoir-faire”)
- ❖ Sustainable forestry
- ❖ Biodiversity value

VCI include:

1) Certifiers and analysts, which provide services such as:

- ❖ Certification of products
- ❖ Lab testing
- ❖ Inventories and provenance analyses
- ❖ Product improvement

2) Marketers, retailers & wholesalers, which provide services such as:

- ❖ Bulking and repackaging for various consumers
- ❖ Product development including niche markets
- ❖ Publicity/public relations
- ❖ Quality control
- ❖ Linking with producer groups

3) Processors, which carry out secondary value addition steps such as:

- ❖ Disinfecting/purifying
- ❖ Distilling
- ❖ Roasting
- ❖ Refining
- ❖ Mixing

Note: 2) and 3) can be merged in some instances depending on commodity

Producers in HIVAZ **are not required** to sell to specific VCIs; they should access many markets for diverse products and qualities (See Figure on last page) but all production must remain within the HIVAZ which is registered internationally.

Plan of action

ICRAF and partners will pilot HIVAZ in three in areas of global conservation value such as around World Heritage Sites centered on a “keystone” tree crop: cocoa, coffee and shea (or gum or oil palm) and integrating other high value tree and other crops.

Phase 1: Initiation of the concept

- ❖ Synthesize lessons of certification, plantation diversification, agroforestry around protected areas
- ❖ Identify key partners (e.g., CIRAD, FAO, CIFOR, CI)
- ❖ Work with certifying bodies to create HIVAZ labeling and identity
- ❖ Launch concept

Phase 2: Site selection

- ❖ Discuss and debate universe of sites and choose up to 10
- ❖ Identify sponsoring institutions at sites
- ❖ Visit sites and narrow down to 3
- ❖ Identify VCIs (proximate and distant)
- ❖ Determine needs for VCIs
- ❖ Carry out preliminary delineation of the HIVAZ
- ❖ Initiate preliminary market studies

Phase 3: Pilot implementation

- ❖ Implement MOUs and cost sharing with host institution(s)
- ❖ Hold stakeholder workshops and create action plans
- ❖ Negotiate co-management agreements with PAs
- ❖ Carry out full market analyses and create market linkages
- ❖ Implement full delineation of HIVAZ
- ❖ Register savoir faire in key products

- ❖ Carry out baseline biodiversity inventories
- ❖ Promote the HIVAZ in various venues
- ❖ Attract investment to HIVAZ

Phase 4: Refining and scaling up

- ❖ M&E
- ❖ Dissemination
- ❖ Site visits
- ❖ Capacity building

Indicative budget

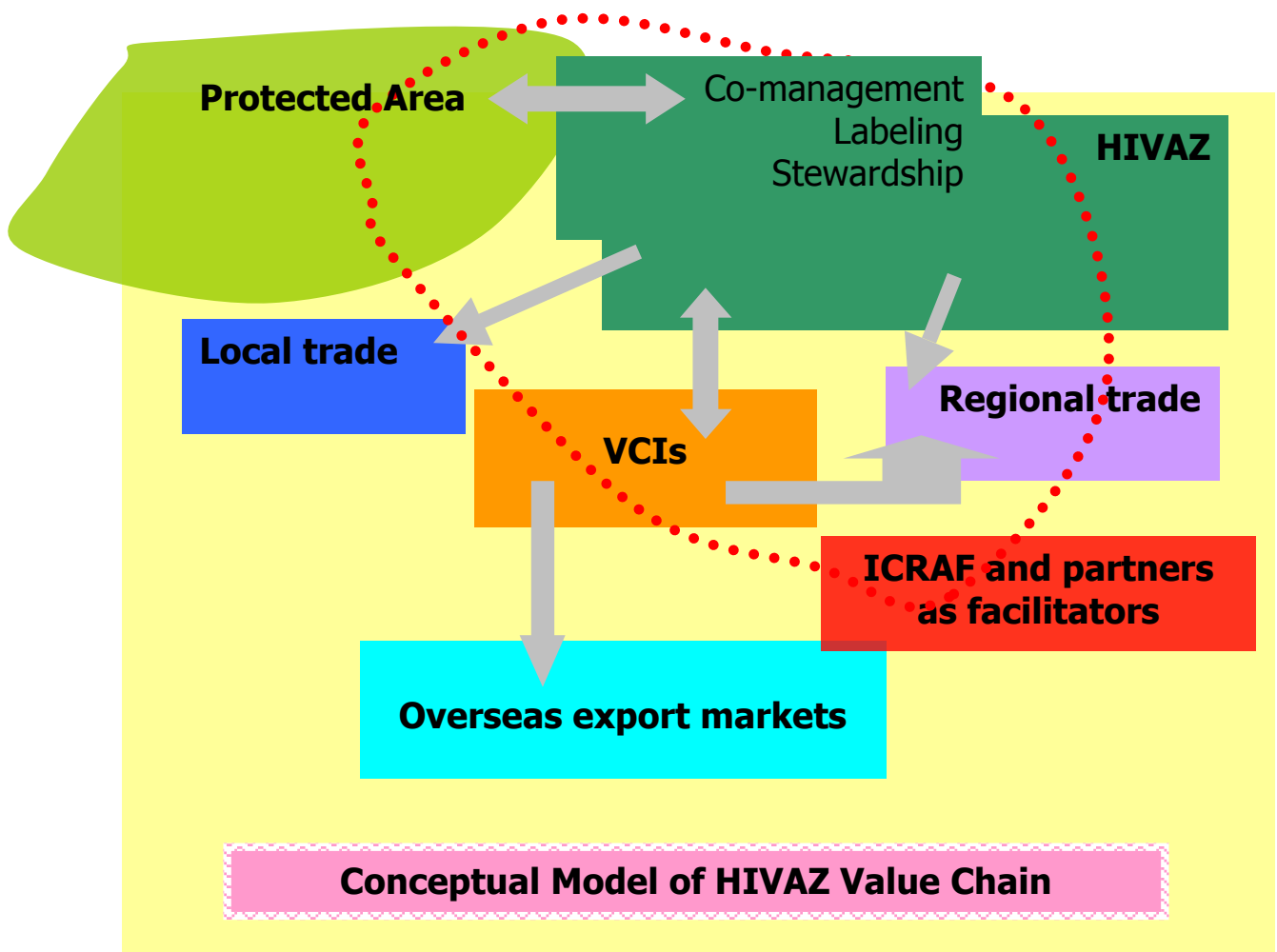
We need to envision at least a 10 year project because it takes time to grow trees!

Phase 1: \$1 million over 2 years

Phase 2 & 3: \$10 million over 5 years (\$1m per 3 sites)

Phase 4: \$5 million over 5 years (beginning in Year 3; overlapping)

Total: \$16M



The Njangui¹ Project: Learning from and supporting the mid-scale African entrepreneur in agricultural and forestry enterprises

A think piece and concept note

Overview

In the development business, we hear a lot about donors, projects, logframes, strategies, and new technologies. These are the staples of our bureaucratic lives. Yet out in the real world, the vast majority of Africans make a living outside of these projectized frameworks. Agricultural development efforts of research organizations and NGOs may benefit a few at selected “sites” and craft useful technologies and information products but the major forces in the livelihoods of farmers and rural dwellers are the men and women who buy their products; these traders and merchants are entrepreneurs who seek to make a living by meeting the demands of consumers.

A legacy of African history

Projectization, weak grasp of economic development dynamics, micro-level projects that do little to support African industries, and failure to promote entrepreneurialism are legacies of colonialism and its aftermath. Historians have noted that one aim of colonialism was to distance Africans from the market in order to dominate it, often keeping them in lower level civil society positions and restricted to trade in low-value products. Where African entrepreneurs competed strongly with Europeans and were gaining ground, drastic measures were taken to promote European enterprises at the expense of Africans. African entrepreneurs were marginalized first by the colonialists and then by generations of African leaders trained in the colonial civil service model and in many cases influenced by socialism. Socialist and nationalist strategies discouraged entrepreneurialism even more drastically than colonialism by promoting patrimonialism, centralization and state-run enterprises. African entrepreneurs continue to be marginalized in markets dominated by the Western powers and increasingly by Asia.

Stereotypes create barriers

There is widespread ignorance about entrepreneurialism in African society: its roots, its myriad forms, and its struggles in the face of this colonial and neo-colonial dominance. Entrepreneurs can be stereotyped as profit-seeking, greedy, exploiting and unconcerned, while individuals in humanitarian and non-profit careers are portrayed as enlightened, caring, high-minded and not motivated by greed. In reality, all people struggle to earn a living and their values are determined internally and not by their professions. Cultural beliefs that discourage entrepreneurialism are found in large numbers of ethnic groups, and thrive in rural areas. Entrepreneurialism is associated with evil doings such as sorcery and zombies. Why is this so? One explanation given by historians is the link between entrepreneurs and the traffic in human beings in Africa. Another more contemporary explanation is that sorcery accusations against better-off people are a form of extortion. These “leveling mechanisms” may also serve to discourage speculation that takes land and other resources away from people. Real entrepreneurialism is confounded in many people’s minds, understandably so, with the politics of land-grabbing by elites. Whatever the reason, rural development experts have found many obstacles in promoting entrepreneurialism in areas where these beliefs are widespread.

¹*njangui* is a Cameroon term for savings, credit and mutual aid association.

The trajectory of development

Yet we know that economic development cannot succeed without entrepreneurs. History tells us that the efforts of entrepreneurs, who are motivated to earn a living and, surprisingly often, give back to their communities, play an important role. They take risks to go into rural areas and bring back consumables. Farmers are not very mobile: to be a good farmer means staying on the land and caring for it, not traveling to markets and learning their intricacies. Studies show that most traders do not obtain excess profit margins in their businesses.

Those who seek to build industries play an essential role: they provide employment as well as producing needed products. Without industry, agricultural development stagnates because excess labor from rural areas is not absorbed and turned into consumer power. Without consumer power, which creates conditions for increased competition and hence better farmgate prices, agriculture remains a non-remunerative affair. Its lack of profitability means that people will not want to invest much into it even when provided with new technologies and tools. Poor urban consumers with no jobs but greater political clout than rural dwellers will lobby to keep food prices low and retain most investments in urban areas.² Only investment in agricultural and forest industries can break this vicious cycle.

Challenges to entrepreneurs

African entrepreneurs, from the women selling firewood to the moguls of industry, face enormous odds. The enabling environment for business in Africa ranges from poor to catastrophic. Development planning tends to ignore entrepreneurs to privilege “farmer groups”—often made up of community members who have time on their hands and are not particularly entrepreneurial. Entrepreneurs are rarely tapped to run NGOs or bureaucracies yet NGOs and governments routinely try to run businesses, with largely poor results for the business climate. To make matters worse, entrepreneurs often work in border areas where there may be significant trade differentials and gaps in national resources that bring profits, however cross-border trade even among the friendliest African nations is fraught with difficulty.³ Small enterprises based on forestry products in particular face additional regulations from outdated forestry frameworks.

Integrated policy framework

Let’s be clear: for entrepreneurial dynamism and the profit motive to achieve development objectives, businesses have to operate under the rule of law. A nation must on the one hand encourage an enabling environment for enterprise while on the other hand prevent abuse and corruption in businesses: a fine line to walk. Taxes on working individuals and businesses should be used for social services (education, health, infrastructure) that raise the standard of living and hence the buying power of the population: these people will demand more products and services that entrepreneurs can provide. Unfortunately in most African countries policies have done little to encourage entrepreneurialism and public investment into agro-industries has been weak.

There are many examples of over-regulation, both formal and informal, of enterprise in Africa that not only inhibit entrepreneurialism but do not little or nothing to enhance the rule of law or improve the standard of living. The kind of entrepreneurialism that thrives has tended to be the patrimonial rather than the productive kind; in other words, it is sustained by relationships and government subsidies rather than the ability to meet consumer needs.⁴

² This is not to say that many urban dwellers in Africa are not desperately poor, but they are poor with at least some access to modern infrastructure.

³ Admittedly traders also benefit from price differentials caused by “hard barriers” between countries.

⁴ Patrimonialism and corruption in business is of course rampant in the Western world, for example in companies such as WorldCom and Parmalat and in the heavily-subsidized agricultural and aerospace/weapons industries of the US and Europe, but these are (somewhat) offset by the large numbers of legitimate enterprises, legal structures and vibrant consumer culture.

Let's go back a minute to the colonial legacy. Africa is still suffering the effects of exploitation of its labor, land, and the flight of capital from the continent to enrich external and internal elites. Capital flight is not so surprising because returns to investment in Africa are low compared to the US, Europe or even Asia. So who is investing in Africa? In some cases it is companies that want to get rich quickly on natural resources without having to make large investments in the country: companies trafficking in timber, minerals, oil and other natural resources.

Snapshot of African entrepreneurs

Although the business models and dealings of extractive industries deeply affect the development landscape in Africa, let us leave these companies and their local counterparts aside for the moment. Let us focus on the African entrepreneurs who despite the odds are investing in agricultural and forestry development over the long term. Who are they? What can we learn from them? Entrepreneurs are not miracle-workers and they are as flawed as any other group of humans. But they do have some characteristics and dynamics that need to be understood and encouraged if genuine development is to unfold. Let us look at examples from different levels of society.

Smallholder entrepreneurs. Who are the men and women who start small businesses in their communities? Are they the better educated? Are they from families with entrepreneurial backgrounds? Why do many keep trying at businesses even when they may fail? When visiting a village it is usually evident who is serious about farming or forestry as a business: Who has the best looking plantations or nurseries? Who runs a road-side stand? Who experiments with value-addition technologies?

Family enterprises. Does entrepreneurialism run in families or even within certain ethnic groups? If so, can their strategies be learned by others? What strategies are used to train children, to promote investment, to provide credit and advice to family members? How have the Nande people of eastern DR Congo continued to produce high quality vegetables in their enclave within the DRC and ship these far and wide even during years of conflict? How have the Bamiléké of Western Cameroon built up large-scale family enterprises, even banks, within the framework of their community investment structures?

Small businesses. What enables and motivates people with no access to formal credit, training or other resources to set up small businesses? Some young people are motivated by an intense desire to get out of the village: they may not have land or other assets, they may feel stifled or controlled, they might want to see the world a little. As traders they may reap few profits but if they learn and have luck, their profits may increase. One businessman I interviewed in Kisangani started with two meters of cloth out of which he produced a product. From the profits of that product he bought four meters of cloth. When I met him he ran several thriving businesses, put 12 children in school, and owned several buildings, a Mercedes and a large truck. One of the most successful rice traders in the region, he made substantial investments in the rural areas where he bought rice.

Medium and larger scale enterprises. In many parts of Africa, medium and larger-scale enterprises such as small industries, trading companies, wholesalers or service merchants have not typically been owned or managed by indigenous Africans, even after the nationalization efforts that swept many countries in the 1970s. This is changing in many countries. African entrepreneurs now own hotels, factories, even airlines, many but by no means all in partnership with "external investors." Africans with MBAs and experience are running companies, but many are frustrated by the lack of opportunity. Family firms may not want them and some companies continue to import management expertise from Europe and Asia. How do Africans achieve high business success? Are ties to government as important as some people think? What types of businesses are sustained and grow?

Enterprise development approaches

Enterprise development projects supported by donors, NGOs and governments typically target non-entrepreneurs and groups that may or may not have any cohesiveness as enterprises. Enterprise development should not be a charity or group activity (with the exception of training). It has to be built on the profit motive: that individuals will make a profit from their investments. There is nothing wrong with this nor is it incompatible with social development goals: there are other ways of investing in community services and if individuals do not have means they cannot invest either in themselves or in their communities. Ideally taxes and levies on their profits will be used for social development.⁵

More innovative approaches to enterprise development in Africa include:

- Working at the level of an entire subsector to identify and strengthen links in the supply chain
- Working at policy levels to identify and remove blockages to investment
- Promoting regional trade by removing trade barriers, creating regional trade associations and assessing regional demand and supply
- Business roundtables and investment fairs

We can learn from these efforts but few are targeted at or reach indigenous African entrepreneurs. What about micro-credit operations? SOCODEVI and other groups have had some successes working in urban areas however micro-credit will not be a major force in development because it is, as its name implies, working on the micro level.

The major gap that needs to be filled is the medium scale—the industries that link rural producers with the growing urban and semi-urban consumers/workers. Without this medium scale, products will rot in rural areas and urban consumers will be left with the choice of low quality local or high priced imported products and few employment options. The dynamic of agricultural development can over time increase well being, wealth and standards of living. The middle class consumer society that is the backbone of all modern democracies has to be built on industry rather than civil service or military employment.

An integrated approach is needed that combines support to industries and entrepreneurs, stakeholder and policy dialogue, data collection and information sharing. The aim of the Jangi Project should ultimately be to work for agricultural and economic development processes that minimize dependency on donor aid. It should support the energies and dynamism of African entrepreneurs within the rule of law and strong civil society.

Key R&D questions

Our key question is: What can be done to encourage more African entrepreneurs to invest in agricultural and forestry industries? The structure of African economies often privileges shorter-term investments such as general commerce, or multiple-purpose investment such as real-estate that can be leased, used for trade or as collateral. Enterprises that create highly visible investments such as factories will attract numerous taxes and controls as well as family members and friends who need jobs. Entrepreneurs must be extremely skilled in managing these pressures. Often “outsiders” tend to have it easier in this game. How can the playing field be leveled while at the same time avoiding the pitfalls of nationalization and preferential partnership, which actually often benefit non-entrepreneurs?

A subsidiary question is: What is attracting the few who are making food products, wood products, natural medicines, cosmetics and other products sourced from rural areas? What resources do they draw upon and what sustains them? Is there any form of assistance that can

⁵ People may accept taxation if they know it will benefit their communities; they will evade it when they have no idea what it is used for or if they know it is being used for individual rather than social benefit.

support entrepreneurs to get into these businesses, sustain them and grow them? How can urban entrepreneurs be better linked on the one hand to smallholder enterprises in rural areas as suppliers and partners and on the other to buyers outside of the region? What is needed to build and sustain associations that can lobby for better policies and frameworks?

Objectives and activities

To help meet the needs of medium-scale entrepreneurs in agricultural and forestry industries, the Njangui Project seeks to:

1. Identify medium scale African entrepreneurs in agricultural and forestry industries
2. Promote mentoring and capacity building of young and fledgling entrepreneurs
3. Identify and assist associations and other institutions that support these entrepreneurs
4. Collect and disseminate data on constraints and issues affecting these businesses
5. Seek ways to link medium scale and smallholder, rural based entrepreneurs
6. Carry out market research to identify opportunities and products in these sectors
7. Work with entrepreneurs and associations on the development of quality and sustainability measures for agricultural and forestry products appropriate to African enterprises and consumers
8. Identify best practices in business taxation policy for sustainable development
9. Explore, enhance and publicize modes of philanthropy used by African entrepreneurs

Activities supported by the project could include:

- Articles and TV spots about entrepreneurs and industries
- Working sessions for industry associations and government
- Training for entrepreneurs in management and product development
- Mentor program to link senior and fledgling entrepreneurs
- Associate program for CG and national scientists to work with entrepreneurs and for entrepreneurs to be associated with CG centers and national research centers
- Policy initiatives to encourage rural-urban links and medium scale commercial investment in the agricultural and forestry:
 - ❖ An “open road” initiative to encourage removal of police/military barriers on roads and routes into rural areas where agricultural and forest products are transported
 - ❖ A “my taxes at work” initiative to highlight where business taxes are being invested back into communities and for infrastructure that will attract additional investments in agriculture, agroforestry and forestry
 - ❖ A “right regulations” initiative to promote stakeholder (producers, traders, industry, consumers, government) dialogue on regulations pertaining to agricultural and forest resources, products, commerce and enterprise

Implementation

The Njangui Project is conceived as a collaboration of the CGIAR with such groups as Nepad, UNECA, the ILO, FAO, regional agricultural associations, chambers of commerce, government ministries and industry associations. A small secretariat housed in a CG center would support regional antenna. Why house it in the CG? This would indicate a shift in mentality of the CG toward an understanding of the centrality of entrepreneurialism and medium scale industry in agricultural development in Africa. The CG is a neutral party that is supposed to benefit all countries and national organizations at all levels from farmer to industrialist.

Phase 1 (3 years)

Creation of small secretariat with antennas in up to five countries
Inventory of entrepreneurs and industries in the countries
Establishment of working groups, planning activities
Workshops, training, publicity
Mentoring program established

Research on constraints and opportunities
Communications of initial findings in major conference

Phase 2 (5 years)

Extension of activities into other countries
Creation of regional association(s)
Incorporation of project activities into industry associations
M&E (from baseline in Year One, how many new industries, changes in policies, new products promoted)

Indicative budget

\$1M for secretariat, 500K for each antenna per year

Staffing: 4 full time employees at secretariat (director, secretary, communications officer, commercial officer and policy officer), interns, volunteers from industry; 2 employees at antennas (communications and commercial officers)

Managing Markets in Africa

Consultative Regional Workshop:

Shea product quality and product certification system design

6-8 October 2004

Palais des Congrès

Bamako Mali

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Introduction

- **West Africa as ancient hub of trade**
- **The effects of colonialism**
- **Nationalization and import substitution**
- **Market boards**
- **Structural adjustment**
- **Continued challenges in world markets**

Between the 11th and 15th centuries West Africa exported goods across the Sahara Desert to Europe and beyond

The following sections are from IFPRI publication *Reforming Agricultural Markets in Africa* by Mylène Kherallah, Christopher Delgado, Eleni Gabre-Madhin, Nicholas Minot, and Michael Johnson.

Since the early 1980s, almost all African governments have embarked on economic reform programs to reduce state intervention in the economy and to allow markets to play a larger role. In the agricultural sector these programs were designed to eliminate price controls on agricultural commodities, disband or privatize state farms and state-owned enterprises, reduce the heavy taxation of agricultural exports, phase out subsidies on fertilizer and other inputs, and allow greater competition in agricultural markets. These measures have been highly controversial. Proponents argue that the reforms have improved market efficiency, reduced budget deficits, stimulated export production, and increased the share of the final price received by farmers. Opponents argue that the reforms have destabilized agricultural prices, widened the income distribution gap, and reduced access to low-cost inputs.

The challenges of evaluating policy changes across a continent are well known: the scarcity of reliable data, the difficulty of separating the impact of policy changes from the effects of other factors (such as drought, AIDS, and changing world markets), and the diversity of experience, both across countries and even within countries over time. Nonetheless, some patterns stand out.

The pace and extent of reforms have varied widely across countries, and the reforms have often not been implemented fully. Food markets have been dramatically transformed in some countries (such as Ethiopia, Madagascar, and Tanzania) but only partially so in others (such as Malawi, Zambia, and Zimbabwe). Export markets are much more liberalized than they were in the 1970s, but a number of countries continue to control exports through state-owned enterprises (such as West African cotton producers). Universal fertilizer subsidies and state enterprises that monopolize fertilizer distribution, once common, are now rare, but fertilizer markets continue to be subject to targeted distribution programs, indirect subsidies, and other forms of intervention (as in Ethiopia, Malawi, and Zambia).

In cases where domestic markets have been liberalized, the private sector has responded with rapid increases in the number of traders, greater competition, and, in many cases, reduced marketing margins. At the same time, most private traders operate on a small scale with minimal investment. Marketing costs remain high because of poor transport infrastructure and uncertainty. Similarly, export marketing has generally become more efficient, allowing farmers to keep a larger share of the export price. Liberalized export markets may be vulnerable, however, to collusion by the small number of exporters, particularly when political connections are necessary to enter the market. Another problem is that, in a competitive market, agricultural traders are reluctant to offer farmers inputs on credit because the farmers can sell to a competitor and avoid repayment.

In cases where producer prices have increased, farmers have responded by expanding output, although the supply response is greater for export crops than for food crops. Furthermore, farmers have generally increased supply by reallocating land from one crop to another or expanding overall cropped area rather than by increasing yields. The overall agricultural supply response is limited by structural factors including poor infrastructure and limited use of purchased inputs.

Agricultural productivity has increased in a few countries, particularly those in which policy was strongly biased against agriculture before the reforms, but **does not show an upward trend overall.** The removal of fertilizer subsidies and the liberalization of fertilizer markets has not reduced fertilizer use continent-wide, as is often suggested, but it has not boosted fertilizer use either. Fertilizer use has declined or is stagnant primarily on maize (in eastern and southern Africa), but it has grown in several countries (particularly in West Africa) where it is applied to export crops. Overall fertilizer use on the continent continues to grow slowly.

The evidence on the impact of agricultural market reforms on poverty is mixed. On the one hand, some poor groups have been adversely affected. Poor urban consumers in some countries have been hurt by the deregulation of food prices (such as for maize in Zambia and Zimbabwe) or by large devaluations when the staple food is imported (such as for rice in West Africa). In addition, remote farmers may have lost when pan-territorial prices were abandoned (for example, in Tanzania and Zambia). There is, however, little reason to believe that the agricultural reforms have consistently hurt the poor. The urban poor have benefited from lower marketing margins and lower food prices, particularly in eastern and southern Africa. Growers of export crops and crops that compete with imports (such as rice) have generally benefited from export liberalization and exchange rate adjustments. The costs associated with eliminating fertilizer subsidies have been proportional to the quantities of fertilizer used, so larger, commercial farmers were more adversely affected than marginal farmers.

If agricultural reforms in Africa are to fulfill the high expectations of their proponents, improvement will have to be made in four areas. First, the task of liberalizing agricultural markets must be completed. This task implies the **withdrawal of state enterprises** from direct agricultural production, marketing, and processing, as well as convincing signals from political authorities that the reforms will not be reversed or undermined.

Second, **complementary policies in other sectors** are needed to enhance the benefits of the reforms and alleviate the negative effects. A stable macroeconomic environment, progress in taming corruption, and stronger legal infrastructure are prerequisites for stimulating domestic and international investment, including that in the agricultural sector. Similarly, programs to provide a credible safety net for households adversely affected by the reforms are justifiable on their own terms as well as for the political sustainability of the reforms.

Third, the **withdrawal of the state from commercial activities should not be interpreted as withdrawal from its essential role in providing public goods.** Governments and

international organizations need to reverse declining investments in agricultural research and extension, improve transport infrastructure, promote the sustainable use of natural resources, and develop public services such as market information, plant protection, and disease control.

Fourth, the government can play a role in **promoting nongovernmental institutions** in the agricultural sector. Farmer associations facilitate dialog between the government, on the one hand, and farmers and traders on the other. This dialogue should guide the design of public institutions such as grades and standards, plant protection regulations, and market information services. Contract farming has the potential to provide inputs on credit and better link small-scale farmers with market outlets for high-value agricultural commodities, but the government may need to play a role in mediating and establishing the ground rules for these arrangements. Pulling Africa's millions of poor people out of poverty depends on strengthening agriculture and creating economic opportunities in rural areas. Although a range of policy reforms is required to achieve pro-poor agricultural growth, rural people in Africa have little chance of improving their livelihoods without well-functioning markets. This book makes clear what still needs to be done to achieve this essential goal.

What have we learned?

- **Balanced roles for government, external investors, private sector and civil society**
- **No simple equation for value addition**
- **Link NRM to market incentives (e.g., forest policies)**
- **Tree crops part of overarching rural development strategy**

There needs to be a balanced role for government, civil society and the private sector. Often we speak of the “enabling environment” for economic growth—what this entails is strong institutions in all of these sectors that are in communication, can set goals together and have modes of resolving disputes. Movement from control to supporting private sector to install its own controls in line with the market and environmental concerns.

Success stories or lessons learned?

Each of these has been touted as the route out of rural poverty. Market development turns out to be much more complex than that!

- **Vanilla in Uganda**
- **Cut flowers in Kenya**
- **Cassava starch in Nigeria**
- **Groundnuts in Senegal**
- **Tobacco in Malawi**
- **Cocoa in Ivory Coast**

Vanilla

The hype

"I have never in my life seen anything as profitable for smallholders as vanilla," says Steve New, a high value crops advisor with more than 25 years' experience. He works for a USAID funded project called Investment in Developing Export Agriculture (IDEA) which has provided training and technical assistance to vanilla growers in Uganda since 1995. Vanilla is better suited to smallholder production, says Mr New, because it is so labour intensive. Each plant requires individual attention during cultivation and each flower must be pollinated by hand. Other advantages for smallholder production include the ability to intercrop vanilla with bananas, coffee and trees and the low start-up costs. "The capital cost of starting a vanilla garden is only US\$1,000 per plant," he says. "After establishment of the plants, the only significant cost is labour."

Being accessible to smallholders has been crucial to vanilla's success in Uganda to date, and the UNVA reports that there are now more than 20,000 growers, a figure that is increasing daily. As a result, Ugandan production of green vanilla pods has almost doubled from less than 180t in 1998 to 350t last year, making it the country's fastest growing smallholder crop. Uganda has excellent conditions for vanilla production and major international buyers are already sourcing Ugandan vanilla. According to Steve New, buyers report that quality is good, but the quantity available is insufficient to meet demand.

This high demand has led to many farmers harvesting the beans early, in the first half of June in Mukono District, east of Kampala city and as early as May in Bundibugyo in south-west Uganda. High prices have also encouraged thefts of the crop, particularly in Mukono District. "Processors and speculators want to take advantage of high prices and pressurise growers to pick early," says Mr New. "If they do not pick, there is also the possibility of theft, with prices being so high for green beans."

IDEA's technical activities will end in March next year, but USAID and other donors will continue to support the fledgling industry through new projects. "Major capital investment is not needed," says Steve New, "but interventions should focus on the private sector and on expanding extension, training and market promotion activities carried out by the UNVA. Resources also need to be allocated for applied research to ensure the long-term future of the industry."

The reality

1st September 2003

The ever rising Vanilla prices in the international market are forcing the food manufacturers all round the globe towards synthetic vanilla substitutes. This has resulted in a **drop in the demand for natural vanilla**. Vanilla is the most sought out flavour among the food lovers and it is recently voted as one among the top five flavours in US. Vanilla.com (industry organ)

Cut flowers

Kenya's flower industry, the oldest and largest in Africa, benefited from financial assistance from the World Bank and USAID. Today, flowers account for 8% of Kenya's total export earnings. Kenya has 60 percent of the African flower trade, and nearly all of its flower exports are destined for the European market. Kenya also has some of the largest flower farms in the world, with up to 10,000 workers living in on-site compounds. Kenyan plantation owners are concerned that when the Cotonou Convention enters fully into effect in 2008, they will lose preferential trade benefits because the EU will not classify Kenya as a "Least Developed Country," a category that includes Uganda and Tanzania.

Kenyan plantation owners are concerned that when the Cotonou Convention enters fully into effect in 2008, they will lose preferential trade benefits because the EU will not classify Kenya as a "Least Developed Country," a category that includes Uganda and Tanzania. Approximately 65 percent of Kenyan flower workers are employed as "casuals", meaning that they do not receive any benefits and that female workers likely to be fired if they become pregnant. In addition, casual workers can not join unions, which is one reason for the low rate of unionization. In 1999, the Kenya Plantation and Agricultural Workers' Union (KPAWU) had only 3,400 members employed in the cut flower industry.

Cassava exports

From Africawoman.com: The stage is set for the cassava war, pitting Nigeria women versus big time export interests. The women simply want to keep the popular "gari" on their family menu while the government and several donor and international agencies have set their sights

on the export market.

Cassava is in demand for several reasons. For countries in central and southern Africa, it is used as a major ingredient in the production of animal feed. Cassava is also useful to producers of paper and gum. It is also processed into high quality starch for industrial and pharmaceutical use.

The United States Agency for International Development, the International Institute of Tropical Agriculture and the Shell Petroleum Development Company have signed a US\$11 million agreement to support the Cassava Enterprise Development Project in the Niger Delta. The crop produced will be for export. The Nigerian housewife, despite the obvious gains, has been left wondering what impact foreign exchange earnings from cassava will have where it matters most – the dining table.

Regardless of the uphill task women now face keeping their families well fed, the long term economics gains from cassava exports cannot be ignored. With a potential income of \$5 billion – about one-third of the income from crude oil – every effort is being made to put agriculture back in pride of place, thereby lessening Nigeria's dependence on oil.

President Olusegun Obasanjo set up a committee, headed by federal Attorney-General Akin Olujimi, to prepare a draft bill on the use of cassava for bread making. This came almost three months after the inauguration of another presidential committee on cassava –this time on preparing and developing cassava products for export in accordance with international standards and practice.

Ironically, these initiatives are coming to the fore at a time when cassava meal, popularly known as gari and the staple for more than 60 percent of Nigerians, is becoming increasingly scarce. Some recall the government's earlier moves to protect the cost of this staple, conserving it for home consumption, and the resulting export ban.

Since the ban was lifted, **gari smuggling has become a thriving business** across the border with Benin. With the ban still in force in that country, surplus quantities have led to a crash in prices in Cotonou and it is now cheaper to buy gari smuggled into Nigeria than buy locally from the southern regions.

Says Deborah Daramola, a matron in a private hospital in Lagos and mother of three: "We are tired of the whole situation. We eat more gari than any other staple. This is something we produce in Nigeria, so why is it that the price only goes up?"

She claims market women have let it be known that local gari is loaded into vehicles and taken to the north or exported. "Where does that leave us? Why doesn't the government do something to increase gar production at home, so that it will be within the reach of everyone? We are not prepared to make any more sacrifices."

Some farmers are also unimpressed by the potential gains from exporting cassava. There is an underlying feeling that hard currency transactions are only for the big mechanised farmers who are not interested in home consumption. Says Victor Roberts, a farmer who grows cassava in Lagos State and produces gari for local consumption: "These new initiatives will benefit only the agents, who are few in number. The market has already become closed and these agents only exploit the smaller farmers. Although they offer slightly higher prices, the agents make the real profit without going through the headaches of growing and nurturing the tuber."

According to Roberts, the government should be funding ways of improving gari production methods, which would eventually lead to a drop in costs for the end user.

Funmilayo Ajayi, director of the Ekiti State Department of Agriculture, says Nigeria is the largest producer of cassava in the world and, since it grows easily on most soil types, earning from oil should be invested in cassava production for food security. "Oil money should be given to research institutions to look into preservation methods and peasant farmers should cultivate food for consumption while surpluses can be used for industrial purposes," she says.

These fears are well founded, especially when you take into consideration the painfully long process the small producers go through to get their product to the market. Mama Folarin has only recently been able to significantly reduce production time after buying both frying and sifting machines. She confides: "My assistant and I used to fry 10 hours daily for five days to produce 200 kilos of gari – that is four bags. Now I can do it in an hour."

Now she is able to sift 100 kilos in 45 minutes instead of the five it used to take her prior to buying her equipment. With improved production, she will be trying for a pressing machine to dry the cassava before sifting and frying.

External pressures on cassava are also likely to affect the hospitality industry. In major towns across the country, private businessmen have invested heavily in hotels, guesthouses and tourist resorts that are popular venues for conferences and other meetings. For such establishments, haphazard and unstable pricing can have devastating results.

Bassey Eyo, restaurant supervisor in one of the larger hotels in Calabar, capital of Cross River State which is some 500 kilometres from Lagos, says: "The cost of gari has already gone up by 60 percent, but that will not stop our customers from eating it. All we have to do is adjust our prices."

The average Nigerian housewife has little leeway to be so optimistic. It all boils down to whether or not food will be available to the child who expects to come home from school to a nutritious and filling meal, the distraught mother at her wits end to stretch the ever-shrinking naira to meet her family needs and the harassed father eking out a living in the face of an ever-rising family budget.

Groundnuts in Senegal

afrol News, 21 March 2002 - Senegalese farmers again prove good economists, quickly responding to the fall in groundnut prices. While the harvest of peanuts, the country's main cash crop, generally has been good, revenues still were marginal. **Cultivators now turn to safer crops, assuring food security.** Also issues with privatization.

Tobacco in Malawi

Malawi fears over tobacco treaty

Tobacco prices have fallen by 50% over the last 10 years

Malawi, one of the biggest producers of tobacco, is coming under pressure to sign a new treaty limiting its production.

The World Health Organization's Framework Convention on Tobacco Control has been signed by 168 countries. Tobacco, or "green gold", accounts for 70% of Malawi's export earnings, the BBC's Health Matters reports. Some government ministers are concerned signing up to the convention could mean millions are condemned to poverty.

Malawi is the largest producer of burley - a type of tobacco particularly favoured by manufacturers as a filler in cigarettes. The crop accounts for up to one third of the country's Gross Domestic Product. In Malawi the mantra is tobacco saves, not kills.

But this situation could change. The World Health Organization estimates five million people die from tobacco related illness each year.

Proliferation of standards

- **Industry standards**
- **Consumer demands**
- **National standards emerging**
- **Who bears the costs?**

Thanks to Dave Gibson

EUREPGAP Major Musts

(“Euro Retailer Produce Working Group”) is adopting standards of Good Agricultural Practice:

Must conduct a risk assessment to determine impacts of new ag lands on adjacent crops and areas

Must adopt cultivation techniques that minimize soil erosion

Must enhance environmental biodiversity on farm through conservation management plan

Must equip, train, certify and protect pesticide handlers and applicators

Must rinse, pierce, keep secure, and never reuse pesticide containers

Must provide access to clean toilets, washing facilities and first aid boxes

Must comply with applicable labor and health requirements

Producers who want to be EUREPGAP-certified must meet their standards. As of mid-2003, the GAP standards were being applied to fruits and vegetables; special standards for grain, animal production, feed, coffee and flowers are being developed (from Northern Great Plains)

Appellation

- **Results from successful negotiations among producers, companies and government**
- **Entails relationship between the product and its origin, marked by many specifically established natural and human factors. The product cannot be reproduced outside its area of origin**
- **All production phases carried out in the same geographical area in which the natural and human factors are located.**
- **Domains are collective and public property of interprofessionnal or stakeholder association**
- **The recognition procedure allows a debate about product specificity and quality**
- **Controls help to maintain collective discipline and global uniqueness of the product**

What is quality for Institut National des Appellations d’Origine (INAO)?

- The stakeholders determine collectively the “type” i.e. the desired characteristics of the product
- “Quality” doesn’t deal with hygiene or international standards
- The product must be the result of a local know-how

Thanks to Laure Guillerme, INAO

What can we do?

- **Target capacity building and prepare appropriate materials**
- **Compare certification approaches (costs & benefits)**
- **Support to R&D → private sector find ways to work with smallholders (ex of allanblackia partnership)**
- **Work with donors on tree crops (e.g., World Bank initiative)**

Hope for the future? Government, private sector & NGOs

Peter Anyang' Nyong'o MP, Minister of Planning and National Development of Kenya, spoke of the stifling red tape and bureaucracy the business community had to endure under the previous "predatory" regime. This had been reduced, and **the business community now spoke with one voice through the Private Sector Alliance**. Property rights, even for hawkers, are an important issue, and so is access to credit for small enterprises. He stressed the importance of having **strong financial institutions and the need to lower costs of production if Africa is to be competitive**.

From: United We Stand: The Role of Organized Business in Development
04.06.2004 Africa Economic Summit

Market information systems: modes proliferating

Tropical Commodities and their Markets

A Guide and Directory on the Web

by Peter Robbins

Published by TWIN 1995

ISBN 0 7494 1672 0

PART ONE

[1.1 Markets for Tropical Products](#)

[1.2 Exporting tropical products](#)

[1.3 Trading Commodities on Future Markets](#)

[1.4 Volatile Oils](#)

[1.5 Natural Fibres](#)

[1.6 Fruit and Vegetables](#)

[1.7 Spices](#)

PART TWO

Directory of commodities

PART THREE

Useful addresses

KENYA AGRICULTURAL COMMODITY EXCHANGE (KACE)

A Guide to Accessing Daily Market Price Information Through Your Safaricom Mobile Phone

For more information or assistance,
please phone: Mr. Wycliffe Ochieng or
Ms. Susan Shitambanga at KACE:
Mobile 0721-272322; 0733-220551;
4441829/30.

Business services expand

- Fair trade assistance (Phytotrade, Honeycare)
- Business development services (SanProta, Pride Africa, CPWild, CECI, Technoserve, EnterpriseWorks, IDE)
- Need more support to and integration of small traders, merchants

Market information systems: where are they headed?

Web and cell phone based information systems are fine but still reach way too few rural people; other modes are also needed especially linked to extension services

Market analysis is essential for AFTP promotion. Prioritization of products and zones of action requires analysis of key market factors such as consumer demand, market chains,

infrastructure, competition and investment channels. Sound analysis of benefits and risks to different categories of people (genders, poorer, chronically ill, marginalized, youth) is necessary to target market interventions. Analysis of land and resource use and tenure systems (de facto and de jure) is also essential to understand how benefits to individuals and groups relate to land management. Often it is important to look at complementary and competing sectors, such as the dairy industry's trends impact on fodder shrubs, or the price of coffee in incentives to maintain and diversify plantations.

Support to businesses

Examples

Southern African Natural Products Trade Association
Tulimara Fruits Caroline de Cock

Microcredit

Pride Africa's average loan size is US\$125, and these loans finance everything from trading operations to production of foodstuffs to manufacturing of clothing. Micro-finance is a proven but under-utilized development tool. Pride Africa's case shows the potential for ICT-based strategies to bring micro-finance to scale by increasing efficiency, enabling access to commercial finance for rapid expansion, and mediating between banks and micro-enterprise to the benefit of both. Pride Africa's ability to realize its business goals will depend not only on clarification of the financial policy ambiguities surrounding micro-finance, but also on access to finance for technology development and elimination of the barriers facing East Africa's ICT sector in general—restrictive policy environment, critical shortage of local ICT talent, and inadequate infrastructure.

Market training

For NGOs assisting community based enterprises
Need for serious look at incentives, management, subsidies
Farmer group empowerment

NGOs and enterprises: getting professional

The study shows that, despite the inefficiencies associated with nonprofit organizations that emanate from opportunism and lack of incentives for their managers to be efficient, the organizational characteristics in the South African nonprofit sector show benefits that can counterweigh some of the above inefficiencies. Through incentive structures designed to minimize agency costs, allowing all stakeholders to participate in the project implementation, use of volunteers, project locations, and the nature of goods and services in which they specialize, **nonprofit organizations in South Africa reveal a potential to minimize transaction costs**. The competitive edge through transaction cost minimization, however, can only be realized if the sector can control a range of organizational inefficiencies associated with lack of ownership and opportunism.

From: Nonprofits as Economic Organizations: Transaction Costs and the South African Nonprofit Sector

by **Martin Kaggwa**, University of Witwatersrand - South Africa

Attack structural constraints to competitiveness in Africa

- Investing infrastructure
- Promoting literacy, numeracy
- Strengthening African nations in world economic fora (e.g., IMF)
- Encouraging public-private partnerships for R&D
- Strong, flexible and transparent subsector bargaining bodies
- Promoting intermediary organizations and building skills of market actors

THE BOTTOM LINE: Higher quality products

Rural development framework

- **Invest in rural industries that use products**
- **Integrate traders, merchants, processors into R&D agendas**
- **Monitor resource sustainability and tree management with producers → cost effective domestication and silviculture**
- **Carry out macro and micro policy analyses and improve policy environment**

We need to see how AFTPs contribute to rural development as a whole. Rural development is a long-term multi-factor process of encouraging productive investment through economic and policy “enabling environments.” Benefit from trees and technologies at farm level is thus strongly linked to consumer demand within overall economic growth and the “policy environment” affecting smallholders; as a result, improving the ability of farmers to understand and influence market and policy reforms is central to a T&M strategy.

Un très grand merci á

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Hubert Omont, CIRAD
Fabrice Pinard, ICRAF-CIRAD
Eliot Masters, ICRAF
Steve Franzel, ICRAF
Cori Ham, CPWild/Stellenbosch
Agroforestry database (Baxter & Lovett photos)

History repeats itself!

**WORKSHOP ON NON-TIMBER TREE PRODUCT (NTTP) MARKET RESEARCH
From 1997?**

By Julie Witcover and Stephen A. Vosti (ASB)

The major themes revisited throughout the workshop reflect a perceived need to design research so as to inform policy. They point towards the development of new market research methods that go beyond traditional tools by ensuring measurement of three types of impact critical to development policy—on economic growth, on poverty alleviation, and on the environment—as well as by giving new emphasis to understanding the dynamics—in economic, ecological, and political spheres—behind NTTP markets. Namely, a) the consequences of market failure or imperfections; b) the central importance of who (objectives, skills, and resources at their disposal) and where (local, regional, national, or international) the primary actors in the NTTP markets are to how scenarios are likely to “play out”; and c) the idea that a mix of research methods will likely be required to uncover ingredients for successful development of NTTP markets that will in turn be likely to include prescriptions for mixes of actors, of policies, and of products themselves.

The “playing field” policy makers must confront to start with, however, often involves a complex, seemingly muddled web of interlinked, imperfectly functioning markets. To researchers, then, will fall the task of identifying which policies, under which conditions, are the public sector *sine qua non*’s for establishing that “playing field” so that the winners, once picked, will fulfill development policy objectives. This investigation may well require methods to disentangle the effects of markets for critical inputs to and by-products from NTTPs (or clusters of similarly behaving NTTPs), on the markets for, and the impacts of, the NTTPs themselves.

How anthropological methods can improve our work

Presentation for the Environmental Anthropology workshop, February 19, 2003

Some people question if there are “real” methods in anthropology given the relative lack of sophistication of anthropological methods compared to economic or biophysical modeling.

Methods are integrated into an APPROACH, which is typically characterized by long-term research, language ability, cultural adaptability, holism (seeking links among elements of a system) rather than reductionism. This approach has evolved → from working in one village (that is stereotype really if you think of Malinowski!), anthros are now working at regional levels (multi-site ethnography) and on global issues (role of environmental NGOs).

Anthropology stresses learning by doing and not reading methodology in a book.

Why anthropological methods?

- Anthropological methods respect the integrity of local knowledge systems
- Not all behavior can be explained by economic models, survey instruments
- PRA as practiced does not provide enough information on populations/social relations
- Some patterns of behavior and practices can only be understood through history
- Ethnographic studies of agricultural systems feed theories of agrarian change that underpin all of our work

Why anthropological methods are particularly important in Africa and other developing areas (including minority communities of developed world) is because in many countries there are poor statistical data so often have to start from scratch to get good sample frame or any sample frame to do valid surveys; to get quality data means fieldwork. Also much of what people do to make a living is illegal, semi-legal or restricted and thus not amenable to questionnaires. For other reasons also there is a disconnect between what people say they do and what they actually do: Inability to recollect over time, Shame, Fear, Respect behavior, Deliberate deception (case of fallow times in Cameroon)

Much of the reasons for why people do things (and hence why they adopt for example) has to do with cultural, historical, political than “rational” choice. Communication systems have to be understood: what messages are people really getting and what are they doing with information, training, etc.? Group interviews of any kind (PRA, RRA) have different meanings in different cultures. Compare Fiji and Congo. Fiji groups are hierarchical and men, higher class and older speak. Congo people may speak more freely but factionalism can disrupt meetings. In Cameroon’s eastern province need to interview pygmy, Bantu and muslim (Fulani) groups separately and men and women separately. Need to know who is being left out of group—could be productive or marginalized people. People settle on the land for many different reasons that shape how they can and do use land—long-term inhabitants vs recent migrants, those who have settled in a place or those who have fled to a place. Even longer timescales tell us that “wilderness” was once settled, even densely settled. Land that is suitable for pastoralism is now being used for agriculture and the costs of this are enormous. Theories of agrarian change discuss how farming households and societies evolve as part of wider States. They look for example at how people invest in and out of agriculture as a strategy for getting ahead; how agriculture is or is not a driver of economic growth and fits with other sectors (industry, commerce). One big question in Africa has been, when do African farmers reinvest or not back into agriculture (case of cocoa in Nigeria → determined the importance of patronage investments). Another question has to do with the relation between urban food supply and food security in rural areas. Rural areas produce for cities or export yet there can be significant malnourishment. Theories used by CG still put prominence on food production rather than distribution and pricing.

Theory to method

- Communities” are diverse and shifting
- Local knowledge and technology use is embedded in social relations
- History and social organization shape land use including soils
- Intensification and differentiation are closely interrelated
- Tracing lines of power and authority leads to better understanding of behavior

Communities are diverse, even in ethnically “homogeneous” areas, you can find variance in wealth and education, pockets of occupational differences, some migrants and people coming and going. At household level there are men, women, juniors and elders and some in categories that don’t fit the notions of “household” (example of *mintobo* in Cameroon)

Local knowledge and technology use are embedded in gender and class relations—who has control of knowledge (problem of “model farmer” extension is that there is an assumption that knowledge will flow)

Discussed history of land use as a factor in assessing appropriate technologies—Kapchorwa is interesting example as the peoples there are formerly pastoralists and HGs now trying to do commercial farming under considerable land stress—we will discuss this later

Environmental/ecological anthropology in one tradition is closely linked to economic anthropology in looking at subsistence strategies and their integration into world market and political systems. Intensification is a key issue—When is AF intensification? It can involve additional labor (it can also save labor), land, germplasm inputs, management, knowledge. Differentiation refers to how different households either make it out of poverty (Marx referred to them as the kulak class) or become/remain serfs, wage laborers, or even landless. With intensification comes differentiation with some households not being able to compete with intensified systems. Some theories are specific to the role of household composition (number of wives as intensification strategy) while others focus on the inroads of the market. Methodological approaches here include measuring differentiation and how it may be passed on through investment strategies such as in education or patronage, tying this to different land uses. This is relevant to issues such as absentee landlordism, land-grabbing, excisions, etc.

Overview of methods

- Importance of *research question*
- Participant observation
- Ethnobiology and ethnoecology
- Other ethnographic methods
- Spatial/regional methods
- Quantitative methods
- Comparative methods/analysis

Research methods stem from the research question. Research question in turn relates to the nature and scope of the problem. It is not the case that ethnographic methods can only be used at small scales. Systems can be traced and then intensive interviewing done at nodes of the system (examples include market systems, environmental discourses such as what is important in conservation).

Participant observation is the method closely associated with anthropology but it is also used by some sociologists and other disciplines. It is actually a very rigorous method. Parallels in natural history observation but adding the element of emotional intelligence needed to interact in human society.

Ethnobiology and ethnoecology employ a range of methods including market surveys, observations, mapping, key informant interviews, oral histories, linguistics (mapping the diffusion of names), aerial photographs, PRA, population structure analysis and monitoring

Other ethnographic methods include various methods for classifying and ranking
Spatial methods include integrating ethnography with remote sensing to assess changes in land use over time (case of secondary succession)

Quantitative methods include formal surveys, structured observation (such as time budgets), input-output measurements for agricultural production, catch per unit effort (formal economic anthropology)

Comparative methods—anthropologists tend to compare cases rather than comparing data points, using description rather than quantitative comparisons, but comparing households for example might involve quantifying assets. Quantitative comparisons can also be made on loss or retention of knowledge based on plant identification. We need to explore rigorous methods of case analysis for cross-site comparisons, using both quantitative indicators and qualitative findings collected across broad categories.

The participation paradigm

- What do we mean by participation?
- Who defines it and determines it?
- Why are some methods deemed participatory and others are not?
- Relation between participatory methods and quality of data
- Integration of multiple methods

Participatory methods of data collection came into vogue because of the over-use of surveys that were expensive and often did not answer the questions of project designers or planners—it was easier, more efficient and more equitable to go to people and ask them the questions directly (RRA)

The element of community organizing was added on in PRA so that the time frame was collapsed even further. People not only could answer the questions they could frame the solutions. PRA became PLA and now with added elements of adaptive management.

These are powerful ideas. But they don't solve all problems. Back to the idea of the complexity of “communities.” How to assure that all voices are heard in the process and that what people are saying is valid (remember that what people do is often different from what they say)

Triangulation helps and is included in many PRA exercises but more careful observation and social mapping assures that all categories of people are represented. Some can be “invisible” but important for NRM (recap on *mintobo*, poor resource harvesters in Fiji)

There have also been questions about the quality of data collected in participatory exercises because there is little or no validation (do leaders push ideas or claim activities that may be exaggerated or even false?). Validation is fraught because in a sense you are questioning people about what they have claimed to be true: did your group really meet often and train 100 other farmers? Where are the records? Can we interview other farmers? It is time consuming...but perhaps we need to be doing more of this.

There is also the issue of “recycling of ignorance” when local people do not have key data such as market prices or access or policies and so are not in a position to make good action

plans without external data. New forms of action research incorporate these data and also capacity building into the process.

Importance of using multiple methods (case of household survey in Fiji revealing that PRA exercises did not touch the majority of the population despite being seen as a highly successful “participatory” project)

“Communities” and other units of analysis

- Defining ethnicity and “indigenous”
- Defining “household” and using other units of analysis
- Measuring wealth and other variables
- Social mapping via key informants, participant observation and censuses
- Oral histories and genealogies
- Groups in relation to institutions

Anthropologists question units of analysis because we see that a unit is only as good as its analytical utility

What is ethnicity? This is the heart of anthropology it seems yet anthropologists found very early on that it is a slippery concept. We are all one species, no significant biological differences. Colonialists used ethnicity to divide and rule, people cross boundaries (even Hutu and Tutsi). Much ethnic division is really class division.

What is a household? Is it always the appropriate unit of analysis? People live in a house but many are away and may contribute. Some contribute but do not live in the house. Some investments are made in larger family units such as clans and lineages while others are individual (man buys beer and doesn’t share with wife!) There is the assumption that the household unit shares while often there is a lot of negotiation that goes on to obtain labor and other resources

Measuring wealth is not straightforward—wealth can also be in influence, connections (case of “richest man in the village”)

Go back to concept of social mapping

Oral histories and genealogies are used to show evolution of groups, families, ethnicities; also to map ancestral domains for conservation and territorial integrity

Groups do not equal institutions and institutions are not always embodied in groups—some are sets of rules, rituals and other structured behavior (initiation), traditions. Through institutional change comes real change, not just forming groups.

Local knowledge and practice

- From lists to systems to performance
- Comparative methods (Berlin)
- Comparative methods (LEK)
- Holistic methods
- Eliciting gender and power dimensions in knowledge systems
- Measuring change/evolution

Learning about local/indigenous knowledge is more than collecting lists of species in local names, this is clear.

People have moved into comparisons, among taxonomic systems (Berlin) and between indigenous and “scientific” knowledge (LEK)

Others say that all knowledge has to be put into context of the whole culture (what is culture?) and so it is critical to understand how people use and manage natural resources

Also how different categories of people do so

Knowledge systems change, generational differences can be stark

Some methods include plant identification while others focus on shifts in occupations. For example in many parts of Cameroon people have lost many occupations that still exist in Congo such as blacksmithing, large canoe making, pottery, basketry, traditional food processing. When you lose the occupation often you lose the knowledge of the species. For example blacksmiths use specific trees to make hot fires. Now these trees are cleared in making gardens and are not saved. Priority trees saved now are fruit trees (in Cameroon).

Land use and management

- Spatial methods (GIS, participatory)
- Social and economic networks/ regional analysis (Smith school)
- Oral histories and genealogies for land rights and claims
- Stakeholder analysis/CPR analysis
- Appreciative inquiry

In the field of land use and management, there have been significant advances in the integration of remote sensing and ethnography (actually this goes back 40 years and was pioneered in Kenya by Patricia Reinhart using aerial photographs).

Participatory mapping also has advanced to include very large areas such as the whole coast of Central America and large areas in Cameroon

Social and economic network analysis is not new—think again of Malinowski studying the Kula ring of traders. Carol Smith (Duke) piloted the linking of social/economic networks with central place theory from economic geography and I think that still has validity, esp if you look at the role of commodity networks in shaping infrastructure such as roads and physical market spaces, access to inputs and resulting social formations such as cooperatives, outgrowing schemes

Harder to trace but equally important are patronage networks that link “investment” by elites to access to human and natural resources in rural areas→ physical manifestations include schools, community centers. But often there can be unproductive investments and land-grabs. There is a distinct difference between indigenous modes of patronage (ex of Bamileke) and more “modern” modes based around political patronage. We have discussed how oral histories and genealogies are being used for land rights and claims.

What about “stakeholder” analysis—is this just another way to “depoliticize” what is a highly complex process of identifying who has rights to resources. Are all “stakeholders” equal? How is it used to assess ways to manage common and shared property/resources such as lakes, slopes? Mapping has been used but it is not an end in itself because land claims, conflicts, overlapping claims must be understood and adjudicated.

Appreciate inquiry has been used to highlight the successful ways that people and groups have managed conflicts and common property both “traditional” such as with taboos and restrictions and “modern” such as with bylaws, management committees and those that cross-cut such as work groups and mutual aid societies.

Figures removed for email transmission

- Dendritic market system (Smith)
- Folk taxonomic levels (Berlin)
- Genealogy: mapping kinship relations (Chagnon)

Intensification and differentiation

- Peasant agriculture, the State, and agrarian change through class analysis
- Mapping commodity patterns
- Technology winners & losers
- Investment priorities in agriculture through case study analysis (Berry)
- Investment and coping strategies through surveys, measurements, observations

Class is a word that we don't use in our work but perhaps we should

It has utility in looking at transformations in agricultural systems as we discussed for intensification and differentiation. The implication is that different strategies are needed for different forms of farm enterprise and that farming in itself will not bring people out of poverty, the creation of rural enterprise is key. This means differentiation but with productive investment in rural areas rather than only urban groups and outside the country. How to measure that? Move from sites to centers and look at densification of rural industry through market studies, margin analysis.

Who are the winners and losers and how can strategies be crafted to meet their needs?

Many very poor people rely more on wage labor than on farming to meet food needs. How can we measure this in surveys, PRAs and through examining cases and how can we address this in our strategies?

Diversification and specialization are also key issues: how do they relate to intensification and differentiation? In some cases, crises lead to diversification while in other cases to specialization. Similarly, opportunities such as subsidies and germplasm supply can lead to "specialization" but this is not a path for growth (case of maize in Kapchorwa; eucalyptus).

Sara Berry pioneered the use of case analysis to study investment priorities in ag (actually she is economic historian not anthropologist). She looked beyond typical investments into such social investments as bridewealth and funerals to ask why such emphasis is placed on these rather than on "productive investments." She determined that social security is a key factor in strategies for survival and advancement. In addition, there is need to show solidarity because people fear being identified as successful. Investment is made "outside" because it is less subject to scrutiny. Savings take the form of trade enterprises or even traditional wealth objects (Fiji) that may not be "profitable" but that keep assets rather than dispersing them. Cash is quickly dispersed for example. At the level of the State, Bates has looked at how ag subsidies and projects become political assets and so political variables determine investments in specific regions, crops, inputs

Coping strategies are those that people do to deal with mostly adverse situations (reversals of fortune). These can be studied on a social as well as biophysical level (extensification is one measure)

Political dimensions

- Integrating the wider political economy through multi-site ethnography
- Knowledge is power: discourse analysis
- Patron-client relations through event analysis (Gluckman, Vincent)
- Records and archives as treasure troves of legal and economic data
- Beyond stakeholder analysis

In 1986, I went off to practice multi-site ethnography in Congo not realizing that there were almost no roads! It was the latest thing but of course not really the latest. One of the most challenging questions is what is meant by a "system" within which we choose nodes to study ethnographically...I chose "rice trade system" because it was fairly easy to delimit (specific

group of traders, producers, a set of laws and rules including new rules that were springing up everyday). But what of spatial systems such as “watershed”? Does this have social reality? In fact both social and biophysical elements of a system need to be mapped and compared.

The political economy dimension comes in when we map power differentials and also influence of external actors. For instance in the case of the rice trade, the US government was a key actor because of food for peace program that provided rice at subsidized prices.

This interfered with local trade. In the case of watersheds, often conservation policies and distant actors in conservation “discourses” shape use of higher slopes and floodplains are areas of conflict because of nutrient concentration (needs verification).

Discourse analysis is also not new, as anthropologists have been talking about “struggles over meaning” for a long time. The point is that names, nomenclature, ideas have power as much as physical actions and assets. They can obscure as much as they reveal. For instance we don’t talk about class anymore although it is very clear that class formation continues to take place. Environmental discourse is heavily weighted on the one hand to protection of biodiversity in “hotspots” and on the other hand to environmental justice for groups that are paying the price for conservation. Who wins and who loses in the discourse wars?

An older generation of anthropologists, the Manchester school, primarily working in Africa, pioneered the use of “event analysis” to capture relations of power and authority. They used events such as ceremonies to take a snapshot of how people spatially arranged themselves. An example of my own fieldwork is a group meeting I did in Banalia DRC many years ago where I noted that the “mamans paysannes” did not sit on chairs but stood behind the “manans officiels” who were the wives of officials and also traders. They did not speak Swahili but the local languages. This led me to understand that there were in fact two distinct classes in this village that saw themselves as quite distinct even though they joined one “mamas group.” The nature of participation is quite tricky here.

Records and archives can also illuminate both local and wider political economies—for example legal records can shed light on conflicts brought before formal bodies. Business records might indicate where firms are buying wood and the relative costs of different locations. Clinic records can show cases of specific kinds of malnutrition linked to lack of fruits and vegetables. But access is difficult and does not tell the whole story (businesses keep 2 sets of books for example)!

A colleague, Cathy Galvin, is developing models of multi-actor decision models used to ILRI to help KWS and other assess wildlife management by different groups including Maasai, tracing actions across the land

Incorporating external actors into stakeholder models is key, as discussed. These actors including international conventions, policies, informal policies, laws, trade regulations and practices, have to “sit at the table” in stakeholder discussions. If an issue is police harassment (charcoal trading) then a representative has to be there. Often the level is not appropriate because too low to make policies.

Cross-site and comparative analysis

- 3 modes of case analysis
 - Indicators/quantitative (Indiana, BCN)
 - Participatory (AFN)
 - Detailed, holistic (CIFOR ACM)
- Integrating surveys and ethnography
- Using spatial sample frames
- Diachronic analysis

Harvard Law, Medical and Business schools use case analysis for teaching because it is a method that facilitates the generation of principles from real-life situations. Hence the future lawyers, doctors and CEOs learn not only the “facts” but how these are applied to often-ambiguous and challenging realities. Similarly, case studies of different levels of complexity are used in anthropology to compare sites, strategies, processes, systems

Ethnological comparisons using HRAF (human relations area files) database are also done, for example seeing how warfare incidences relate to other social variables such as gender imbalance, protein consumption

The three examples from above illustrate types of comparison but we can also look at it from the perspective of levels:

- Micro (comparing indicators such as population densities in relation to proportion of land degraded to try and find correlations)
- Meso (comparing an issue such as conflict relations to draw generalities about that issue)
- Macro (comparing whole sites along multiple parameters to draw conclusions about broad issues such as land management within contexts)

What of the issue of site selection and “generalizability” in case study analysis?

One idea is to link sites to broader NRM surveys using spatial sample frames and then use surveys to show similarities and differences; one problem with that is that economic and social parameters don’t necessarily have a readily identifiable spatial dimension. Other sample frames can be used such as population density or simply random selection (NRM survey in Cameroon)

Site selection for anthropologists often rests on compatibility and acceptance by locals and authorities as it is long-term residence

Diachronic analysis has been facilitated by remote sensing but our colleagues have stressed that without “ground-truthing” remote images do not yield as much as they could—can we distinguish secondary forest from long fallows? Oral histories combined with written records, archives are needed

Where to go from here?

- Don’t fetishize methods
- Start with *research question*
- Factor ethnography into projects
- Hire and train local ethnographers
- Use resource book
- Build community of practice: don’t reinvent the wheel!

Methods do not solve the problem of poor problem analysis and lack of good research question or poor practice—practice really takes practice!

Multidisciplinary research questions are the most exciting—how can teams work together to look at different aspects of a problem, for example how soil fertility relates to chemistry, physics, social organization and belief systems (see paper from Cameroon)

If we are to use anthropology we have to use anthropologists! We can build this into projects by hiring and training local ethnographers to live and work at sites instead of expensive survey teams. Use the book and keep in touch—there is a hundred years of history in the discipline so let’s use it!

Overview of research questions & methods on socioeconomic and livelihood studies in landscapes around protected areas

Workshop designed and facilitated by Diane Russell for WWF-DRC (get permission to use)
Kinshasa, April 2005

Some principles

- Social research requires a rigorous approach from defining questions through data collection to analysis and interpretation
- Data collection choices have implications for analysis, planning, overall approach
- Methods can and should be integrated through GIS, relational databases and research management tools
- Integrate basic research with planning, M&E, communications, policy, extension

What are our key concerns?

- Saving protected species—understanding location, type, severity of threats
- Protecting ecosystem services (e.g., water quality and flows, watershed integrity)
- Improving livelihoods and well being: conflict/violence, tracasseries, lack of basic assets, poor infrastructure, disease, health services, access to medicinal plants, food security concerns (calories, protein, micronutrients)
- Understanding NRM in landscapes and PAs: large and small-scale exploitation, de facto and de jure land & resource tenure (concessions, hunting groups, family forests, control of waterways, etc.)
- Understanding livelihoods in landscapes and PAs: sources of cash revenue and estimates of revenue, agricultural production, hunting, fishing, household and village infrastructure, markets, assets
- Tracing links between livelihoods and NRM in landscapes and PAs: agricultural practices, fishing, bushmeat and hunting practices, NTFPs (value, methods)

What are our key research objectives?

- Obtain basic demographic information: populations, mortality, migration patterns, age pyramid, population density estimates, well being indicators
- Sociopolitical situation analysis: gender-intrahousehold, wealth ranking at village level, institutions regulating land and resource ownership/control (de facto and de jure), ethnic dynamics, violence and conflict, mediating institutions

What is our action agenda?

- Mitigating threats to PAs and protected species in landscapes
- Understanding motivations, incentives to shape positive investments
- Finding opportunities for collaboration with local communities, institutions: institutional inventory, valuation of institutions by population → building local constituencies

What are our hypotheses?

- It is possible to find common ground between conservationists and local actors in identifying threats and opportunities
- Protected areas can become assets for at least a subset of local populations
- Local people bring something to the table in conservation planning and implementation
- Some local and non-local actors represent threats to protected species
- Some local and non-local actors represent threats to livelihoods

Assembling materials and choosing methods

Literature review

- Existing data and statistics
- Maps
- Key informant interviews
- Observations
- Concerns, objectives, questions, hypotheses, action agenda

Matching methods to research questions

- Survey methods
- Test hypotheses through statistical analysis
- Find variation in population, comparing different areas, individuals
- Seek correlations between/among variables → yet cannot answer “why” questions; often get superficial and even wrong responses
- Use pre-determined categories, units hence risk of primary errors (definition of units)

Qualitative methods

- Can address the “why” questions directly
- Capture local knowledge of groups
- Can adjust categories and units to local knowledge and practice
- May not be generalizable because units differ
- Can be linked to surveys through case studies
- Require interpersonal skills
- Can be highly rigorous and systematic (e.g., comparative ethnobotany, RRA)
- Require lots of analysis!

Action research (e.g., PRA, PAR)

- Links data gathering + planning
- Raises expectations; implies commitment
- Privileges local knowledge, categories and modes of problem-solving
- Requires good understanding of sociopolitical context → who is participating?
- Can reinforce existing power relations

Regional analysis

- Defining a region and its boundaries
- “Real” regions
- “Heuristic” regions defined by problem/question

Defining and delineating units

- Administrative boundaries
- Ethnic divisions, new migrants?
- Villages, subvillages, hamlets
- Markets (spatial marketsheds and non-spatial)
- Concessions, larger plantations, church territory, government territory
- Integrating and using data
- Integrating data via GIS
- Relational databases
- Case studies linked to surveys
- Mapping social as well as spatial relations

Returning results and final points

- Communication messages
- IPR and sensitivity issues
- Testing and verification
- Local units have to be measured
- Need glossary of local names
- Para-taxonomist may be needed
- Gender dimensions of interviews
- Raising expectations and interview protocol
- Interpretation takes much longer than data gathering
- Cleaning
- Analysis
- Integration

The AGILE approach

- Inspired by Landcare
- Australia, NZ, Philippines, South Africa → now moving to East Africa
- Integrating and building on African experiences and practices
- Building capacity for decentralized NRM
- Grassroots collective action for NRM, conservation & sustainable enterprises
- Experiences of Landcare and AGILE around PAs show significant threat reduction

Process

- Institutional inventory
- Identification of key partner(s)
- Identification of active groups and “champions”
- Inclusion of local government including PA management
- Role of private sector/market actors in attracting investment

Action planning

- Venn diagrams indicate institutional arrangements and capacity
- Start with strengths → identify gaps
- Bring in new information and capacity

Other interesting models for communities in conservation planning and management

- Negotiation support services (NSS)
- Village with special conservation designation
- Bylaws support
- Community forestry experiences

The big picture

International level

- Policies, markets, treaties, actors

National level

- Policies and political processes
- Concession, forestry, tenure, PA

Regional level

- Migrations
- Infrastructure
- Investments

Markets

- International market in ivory, live animals, animal products
- Regional markets in bushmeat
- NTFP markets?
- Agricultural products
- Food crops
- Cash crops

Policies

- Land and resource tenure
- Customary tenure
- Smallholder plantations (“fermes”)
- Community forestry
- Co-management
- Concessions

Market policies and practices

- Forest products regulations
- Legitimate market taxes
- “Tracasseries”

Political processes

- Elections
- Treaties with neighboring countries
- External and internal conflicts
- Changes in territorial administration
- Capacity building for decentralized management
- Army and militia mobilization and demobilization

Research approaches for large-scale processes

- Political mapping
- Identifying key actors
- Modeling patron-client systems (incentives, threats)
- Case studies of influence
- Following the money
- Traders’ margins
- Terms of trade to different livelihoods
- Investment patterns
- Tracing investments

Action approaches

- Sharing data and information
- Policy briefings
- Coalition-building
- Pressure groups (internal and external)
- Consumer pressure

Increasing positive investment pathways

CLIFS Baseline Study English summary

Report to Innovative Resources Management (IRM) by Prof. N'zinga Luyinduladio;
Executive summary prepared by Diane Russell (reproduce with permission of IRM)

Overview

The baseline study for the Congo Livelihood and Food Security Project (CLIFS) will help the project, IRM and USAID to better understand the status and needs of the population in the target areas. There has been little data collected in these areas for decades and as such the study not only assists the project but provides scientists and policymakers with insights into these marginalized and isolated areas of the Democratic Republic of Congo (DRC).

This study was a substantial undertaking, comprising 642 households, 333 traders, 27 markets and 68 villages within 26 Secteurs, 36 Groupements, 13 Territoires, 5 Districts, and 3 Communes as well as 6 Cités of 2 large towns along the 5 designated “axes” (corridors) of the CLIFS project target area within the Provinces of Bandundu and Equateur. The study team interviewed a great diversity of peoples:

- 95 “tribes” (5 tribes represent 41% of the population)
- 410 clans
- 61 local languages
- Farmers, fishing peoples, traders, hunters and a handful of other occupations

Because of the nature of the project, non-random sampling was employed; the sampling involved selecting a minimum of 70 households per corridor (350) while the rest (350) were randomly determined. After eliminating some households, the total came to 642. Given the random nature of the corridors in terms of administrative boundaries, there is no way to determine what this number represents for any given unit. The study employed 2 major methodologies: household and trader surveys and focus-group interviews in villages and markets using instruments developed by a team of ICC scientists and Prof. N'zinga Luyinduladio. The study was coordinated by Prof. N'zinga. Local teams of enumerators were trained by Prof. N'zinga and his assistants. Data analysis was carried out in Kinshasa and Yaoundé Cameroon using SPSS (Statistical Package for Social Sciences) software.

Major findings

Human Capital

Demographics

- 14% of households are female-headed and close to 60% of these women are between 25 and 45 years old. With an average age of 43 years old, one must consider these female-headed households as at-risk due to aging and extremely low incomes (see below).
- The population is very young: an average of 21 years old; 50% are less than 15 years old. This finding indicates a need for a strategy to involve and benefit young people who may not have easy access to land and other resources.
- The ratio of men to women, representing the number of men for 100 women, is on average 96 men per 100 women within the 5 corridors. There is significant variation however: in Mushie-Kiri and Mbandaka-Bikoro where the ratio is 107% and 105% respectively, indicating a deficit of women in these zones. In Gemena-Akula, which suffered heavily in the war, there is a deficit of men (91 men for 100 women), particularly between the ages 15-54 years old (78 men per 100 women). This finding indicates that heavy labor burdens are placed on women.
- Women in these corridors are giving birth at a higher rate than the national average: the ratio of children to woman (number of children under five per 100 women) is 94% while it was 78% for the whole country in 2001.

- The area has large households of over 8 persons per households which is more than the average found in the Multiple Indicator Cluster Survey (MICS) of 2001. Elders are hence responsible for a large number of household members. The number of polygynous households needs to be determined.

Health and effects of war

- Mortality rates are very high. During the last 12 months before the study (May 2003 to May 2004) the 642 households studied in the 68 villages suffered 182 total deaths: 105 men and 77 women.
- Under-five mortality was determined to be 107.46 per thousand with significant disparities between males and females (133.80 per thousand and 80.65 per thousand respectively). Overall mortality averages 34.80 per thousand.
- People are not dying of starvation, however: there is a relatively high rate of protein intake and number of meals per day; this is especially true in the fishing areas. In Mbandaka-Bobangi and Mushie-Kiri people eat meals with protein almost 25 meals in 14 days. In Gemena-Akula however there is cause for concern: less than 5 meals with animal or fish protein are eaten over a 14-day period.
- Malaria is the most cited disease.
- Overall, 28.3% of households were direct victims of war from 1998 through 2003; 93.7% of those affected (170 households out of 181) were forced to relocate because of war.

Education and skills

- The household heads, overall, have high levels of education. 43.4% attended 4 to 6 years of secondary school whereas 20.8% attended 4-6 years of primary school. Only 5.3% never received any formal education.

Financial and Physical Capital

Revenue and assets

- The average revenue in the project area is extremely low: not more than 107 USD per year (comprising the major agricultural season) per household on average over the corridors.
- There is however a wide range in income levels: the range is about 230 USD. There is a particularly significant disparity between households headed by men and by women: 117 USD for male-headed households and 47 USD for female-headed households; thus female-headed households are three times poorer than male-headed households.
- There are also wide differences among the corridors: where the proportion of fishers in the village is over 25% the revenue is higher than villages with fewer fishing peoples.
 - ❖ 277 USD in Mbandaka-Lilanga- Bobangi, which included 60% fishers
 - ❖ 206 USD Mushie-Kiri where fishers represent 32% of the population
 - ❖ 150 USD Gemena-Akula where fishers account for only 22%
 - ❖ In Kikwit-Idiofa-Panu/Kikwit-Lusanga and Mbandaka-Bikoro, where the percentage of fishers is 7% and 15% respectively, revenues are very weak: around 36 USD for Kikwit-Idiofa-Panu/Kikwit-Lusanga and about 70 USD in Mbandaka-Bikoro.
- 36% of revenue comes from food crops. Fishing brings in 21% of the revenue of those interviewed. There are very few households getting remittances.
- The number and condition of tools and household goods demonstrates extreme poverty: 23% of households do not have a hoe. 30% of households do not have a bed and 45% have no table or chairs.
- 25% of household revenue goes for school fees, while about 21% is for health costs; only about 15% of revenue goes for food. This finding differs from studies in DRC that concentrate on urban areas and show that food and housing are by far the most important expenses.

Market conditions

- In the five corridors, there are hardly any traders buying food crops, forest products or fish directly from villagers. Along the corridor Kikwit-Idiofa-Panu/Kikwit-Lusanga, for more than 200 km, one finds about 4 traders in the principal (agricultural) season and only 2 in the off-season. Only in Mbandaka-Lilanga-Bobangi, which is rich in fish products, can one find 152 traders in the principal season and 115 in the off-season.
- Market access is largely by foot: 50% of the population gets to markets by foot, 28.41% by pirogue and about 14% by bicycle.
- Market infrastructure is rudimentary: of the 27 markets studied, 21 did not have any storage facilities and only 4 had any toilet facilities.
- Market access is severely hampered by “barriers”:⁶ For all 5 corridors, respondents cited a total of 224 barriers and control posts between their villages and markets: an average of 3.3 barriers per village. While in 23 villages there are no barriers, in one village (Mobzeno) there are as many as 34 barriers to go through to get to distant markets.
- Markets are not collecting much tax, according to market authorities. In the principal season, the markets studied collected on average 4,235 FC (11.14 USD) while in the off-season the tax went down to 2,278 FC (5.99 USD). These figures have to be taken with caution however because they came from a single interview event and could have been under-estimated by the market authorities.
- On average a market is a 30-km walk from the village.

Technologies

- Technologies are rudimentary along the corridors. The only technology for maintenance of soil fertility is natural fallow.
- There are also rudimentary technologies for conservation and transformation of agricultural and forest products, i.e. retting, kneading, smoking, etc.

Village infrastructure

- One remarkable finding here is that by far the most important structure in the villages is the church: 308 were found in the 68 villages, as opposed to 150 schools, 68 clinics, 20 markets, and only 17 storage areas, 7 stores, 3 pharmacies and 4 improved water sources. These figures indicate the pressing need for investment in the areas of health and clean water. They also raise the question of possible social fragmentation in these villages, where small church denominations have few resources and may even represent fissures in the village social structure, as has been seen in many other areas.

Credit and savings

- There is no formal credit available but demand for savings exists. Only 5% of households mentioned any formal credit arrangement and less than 5% said they had received credit. Most people borrow from friends and family.
- Except in Mushe-Kiri, a large percentage of households are saving; 95% are just saving cash in their own homes.
- Tontines (rotating credit associations) are not widespread and churches are not assisting with credit or savings. While the villages have an average of five churches, only 17% of households turned to them for credit or savings, even though it is likely that churches collect funds for their own purposes. 80% are not contributing to tontines in the 4 corridors; while in Mushie-Kiri 100% do not contribute.
- While Mbandaka-Bikoro boasts the largest tontines, Mbandaka-Bobangi has the largest contribution amounts.

⁶ A « barrière » (barrier) is a makeshift checkpoint manned by soldiers/police officers or other administrative authorities for ID control and for checking other official documents (licenses, taxes, etc). In rural and some urban areas, a barrier turns out to be a point of harassment of peasants and traders who are forced to give parts of their goods/merchandise or money to those manning it.

Social Capital

- Within the 68 villages the study found 190 active organizations (as defined by the respondents) that can be described as:
 - ❖ 87 (45.8%) community based development organizations
 - ❖ 28 (14.7%) mutual aid⁷
 - ❖ 22 (11.6%) church groups
 - ❖ 19 (10%) tontines
 - ❖ 15 (7.9%) kinship or cultural associations
 - ❖ 4 (7.4%) cooperatives
 - ❖ 5 (2.6%) other types of associations
- More than half of markets have traders' associations. The NTFP traders are most active in these associations and men are more involved than women. 17.3% of traders interviewed belong to an association.

Natural Resources Capital

- This study reveals that in the sites surveyed a variety of crops are grown. Food crops mentioned are manioc (cassava), maize, niébé (cowpea), plantain, banana, sweet potato, and taro. Perennial crops consist of palm trees and coffee. Moreover, amaranthus, tomato and sorrell are vegetables the most grown. Besides the fields where are grown food crops, there are also hut gardens.
- While maize and groundnut are found in all markets (27), manioc tubers are only present in 15 markets and manioc flour in only 9 of these markets; likewise, for NTFPs, only caterpillars are found in 22 markets; and only 2 types of fish are found in all markets. The most mentioned NTFPs are caterpillars, cola nuts, mushrooms, and African plum.
- Local communities use their own local varieties of food crops and hut garden staples, as there is no structure of multiplication, distribution and extension of improved seeds.
- As there was no way of determining the productivity and production levels while the baseline survey was being undertaken, the data from the last available statistics of agricultural production from the Ministry of Agriculture Statistical Services are given as indicative levels.

Implications of the baseline findings

- Female-headed households are much worse off and need to be specifically targeted for aid interventions.
- Young people need to be targeted because they represent a large proportion of the population and may not have access to resources (land, labor, capital).
- Clean water, health and education are clear priorities in all the villages.
- Without tools and with very low sales value for agricultural products it is unclear how farmers will respond to improved varieties, especially those areas not near markets. It may be necessary to find a way to provide tools in some areas. Agricultural development should start near towns and work outward. Need to integrate findings on NTFPs that are still being carried out to see whether they could significantly increase revenues in more isolated zones.
- Areas with fish resources have also some savings and people eat fairly well. Gemena-Akula stands out as a poverty pocket. Animal husbandry is one option to explore there.
- Mushie-Kiri stands out in its isolation and lack of social capital. Increasing boat traffic in this area would be an important first step.

⁷ A mutual aid ("mutuelle") is a cash fund to which members contribute monthly a set modest amount of money. In emergencies (funerals, illness, etc), the treasurer gives the member a set amount of cash as matching fund. The criterion for membership is varied, e.g. living in the same neighborhood, trading the same goods or along the same route, etc.

- Getting to the market is difficult yet there are a number of important markets. Besides the long distances, needless “barriers” have to be opened up. One way for achieving this would be to have “market workshops” where traders and local authorities would interface to ease this problem.

Focus group guide for livelihoods in landscapes

Prepared by Diane Russell for WWF-DR Congo workshop on socioeconomic and livelihood studies in CBFP landscapes; do not use without permission of WWF-DRC

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Aperçu globale

Membres du group

Diane Russell
Alain Nsuku
Nadeche
Omari Ilambu
Richard Ngalula
Salomon
Jean Marie

Termes de référence

Créer des guides d'entretien pour focus groups au niveau des villages et pour les groupes spécifiques. Lier les questions aux objectives de l'enquête et plus globalement aux objectives du projet. Fournir des hypothèses qui pourraient être testé avec les questions posées dans les focus groups, c'est-à-dire des hypothèses au niveau des groupes et institutions et leurs rôles dans le GRN, et leur potentiel de être les menaces ou partenaires.

Types d'instrument

Guides d'entretien

Focus-group général village

Mini-focus-groups acteurs spécifiques ou informateurs clés

- Chasseurs
- Pêcheurs
- Petit commerce : Artisanat huile de palme, commerçant ambulant
- Agriculteur
- Notables (origines de village, conflits)
- Femmes (utilisation d'eau, forêt)
- Jeunesse
- Gardes du parc
- Militaires ? Soldats ? Policiers ? Services de sécurité ?
- Concessionnaires et leurs représentants
- Gouvernement

Guides d'observation

Marches

Villages infrastructures

Systèmes agricoles

Questions sur la méthodologie

Question : Comment choisir les participants du focus-group ? Comment inclure membres de chaque « sub-secteur » de la population ?

Réponse : Avant l'interview, les enquêteurs locaux doivent assurer la participation des secteurs en discutant avec les notables, et en observant les quartiers et cités du village.

Question : Est-ce que le nombre des participants doit être choisi selon la densité de la population du village ? Chaque etuka doit être enquêté ou représenté ?

Réponse : Cela dépend de grandeur du village et de sa complexité (disons, nombre des hameaux, des groupes ethniques, des migrants, etc.). Les enquêteurs doivent être bien formés pour déterminer ces éléments.

Question : Comment déterminer si les réponses des participants sont vraies ? Comment « trianguler » les réponses en cas de disputes/différences sensibles ?

Réponse : Il faut noter les identités des participants des focus-groups: *pas* leur noms mais leurs professions, identités ethniques, habitations, niveaux de scolarité, sexe et si possible, leur rôle dans le village : notable, chef, femme du chef, leader dans une église. Il faut approfondir informellement (dans les après-midi autour d'un verre de lotoko ou vin de palme), les questions qui provoquent beaucoup de discussion et aussi ceux qui provoquent une réticence.

Question : Quelle est la meilleure méthode de poser des questions qui demandent aux gens de ranger [« rank »] certains activités, ressources, problèmes, etc. ? [Par exemple, l'abondance des certaines animaux dans une quelconque période de temps]

Réponse : D'abord il faut que les *critères* selon lesquelles ils doivent ranger les éléments soient très clairs aux participants. Les participants doivent être capable de distinguer clairement les différences entre les éléments. Il ne faut pas par exemple demander aux gens de ranger des éléments selon leur « importance » si on n'a pas bien spécifié importance *pourquoi* ? Si il s'agit de ranger les éléments selon leur abondance ou rareté dans une période

de temps ils faut d'abord créer un « timetable » que montre des événements clés qui tout le monde connaît.

On peut utiliser la méthodologie de « pairwise ranking » selon lequel on compare plusieurs éléments par pair et chaque « gagnant » est comparé avec un autre élément jusqu'au fin des éléments ; ceux qui « gagnent » les plus sont ranger plus haute.

Voici une méthodologie un peu plus nuancé : demandez aux participants de choisir leurs propres indicateurs [ex. du pression sur les ressources, du bien être, du changement dans l'écologie] ; en suite leur propres façons de classer ces indicateurs : c'est leur « ethnotaxonomie ». Quels sont les critères qu'ils utilisent ? Comment ils justifient leurs choix ? Ils peuvent organiser les éléments différemment que nous mais ça indique leur façon de percevoir le processus. C'est-à-dire que ranger et classer n'est pas nécessairement facile ni « naturel » pour tout le monde surtout si les critères ne sont pas bien entendus.

Question : Combien de focus-groups est préférable? Si trop, ça va prendre beaucoup de temps ; si moins l'on risque d'avoir des informations trop générales

Réponse : On commence avec focus group générale au niveaux du village et on identifie les informants clés ou petits groups pour un suivi « follow up »

Question : Comment aborder les femmes quand elles ne veulent pas parler ou elles cèdent chaque question aux maris ?

Réponse : Mettre les femmes a laisse par les interviews plus informels dans les endroits comme aux champs, aux points d'eaux ; interviewer les groups des femmes existants au village (groups former dans l'église) ; les femmes doivent interviewer les femmes ; il ne faut pas porter des bijoux ou des pagnes ou chaussures élégantes ; soyez simple ; jouer avec des enfants et aider dans la cuisine ; demander les questions qui nécessitent la connaissance des femmes, par exemple sur la maternité, les soins des enfants, les champs vivrières, les soins médicaux

Questions poser mais pas résolues définitivement :

Comment interviewer les acteurs qui jouent un rôle dans le « landscape » en exploitant les ressources mais qui ne sont pas basé au village, tels que les commerçants qui vivent dans les rivières, les militaires qui sont dans leurs camps et les chasseurs qui sont dans leurs campements ?

Comment obtenir une information sur les utilisateurs et décideurs non-locale ? Identifications des sociétés. Inviter représentatives des sociétés privées aux focus groups ?

Réponse partiel : Demander quand même des renseignements auprès du village, interviewez les acteurs ou représentants du secteur prive si possible comme informants clés

A résoudre : moyens d'interviewer les acteurs important mais « difficile » même dangereux

Comment identifier les partenaires potentiels ou informants clés dans les ou lorsqu'aux interviews? Les discussions informels après les focus groups et les autres enquêtes formels : observer qui a une bonne connaissance des chose et qui demande le respect des autres

Focus group mixte ou homogène au niveau du village?

Mixte: plus de chance pour les minorités, marginaux, *si ils osent parler*, de s'exprimer

Homogène: souhaitable pour les groups qui peuvent être freiner de participer activement (femmes, jeunesse, pygmées)

Questions pour le questionnaire ménage

Indicateurs pour « wealth ranking »

Consommation de la viande de brousse

Obtenir des informations démographiques essentielles: mortalité, pyramide d'âge, nombre des enfants, taille des ménages, niveaux de scolarité

Objectives et hypothèses

But

Gestion durable et protection des espèces dans le landscape

- Préserver les espèces protégées—comprendre l'emplacement, le type et la gravité des menaces
- Protéger les services de l'écosystème (par ex. la qualité et les flux de l'eau, l'intégrité des bassins versants)
- Améliorer les moyens d'existence et le bien-être des populations: conflit/violence, tracasseries, manque des biens essentiels, infrastructure délabrée, maladies, accès aux plantes médicinales, préoccupations de la sécurité alimentaire (calories, protéines, micronutriments)
- Développer des plans de gestion pour le landscape

Objectif Global

Comprendre la problématique de la GRN [Gestion des Ressources Naturelles] dans les landscapes et les AP [Aires Protégées]: menaces et pressions direct et indirect et liens entre les petites et grandes exploitations ; filières qui acheminent les produits de l'AP et le landscape dans les marches visibles et moins visible; accès *de facto* et *de jure* à la terre et aux ressources : concessions, groupes de chasse, forêts claniques, plantations, contrôle des voies navigables

Hypothèses

La discussion de cet objectif a fait sortir plusieurs hypothèses sur le rôle et type des acteurs et les menaces/pressions :

Hypothèse 1 : villages près du parc utilisent les ressources du parc plus intensivement que les villages plus loin

Ceci a provoqué une discussion sur l'importance de l'AP dans l'enquête : étant important, l'étendu de l'enquête doit être le landscape en général ; aussi cette hypothèse n'est pas tellement révélateur parce que évidemment les gens plus proche vont être capable d'utiliser les ressources plus intensivement. Néanmoins, il peut être souhaitable de savoir quels types de *personne/ménages* utilisent les ressources de l'AP plus intensivement selon l'hypothèse que les gens qui ont les systèmes d'agriculture et d'agroforesterie plus diverses et riches n'ont pas besoin de extraire les ressources du parc pour leurs nécessités [le cas de Parc Kitanglad en Philippines].

H2 : Niveau de vie : pauvreté est le facteur le plus important de pression sur le landscape/AP [s'appui sur les données Mike Salonga] Les pauvres sont les plus grand menaces ? Ou les gens plus aisées qui ont par exemple des fusils, pièges, nattes ou plus haut que ça, les gens qui financent les activités des acteurs locales ?

QUESTIONNAIRE MENAGE

H3 : Les moyens de subsistance d'une personne déterminent son utilisation des ressources [dans le landscape/AP] : Il faut donc déterminer les liens entre moyens d'existence et GRN dans les landscapes et l'AP: pratiques agricoles, pêche, gibier et pratiques de chasse, PFNL [Produits Forestiers Non-Ligneux] [compliquer quand une personne a plusieurs moyens de subsistance]

QUESTIONNAIRE MENAGE

H4 : Les voies d'accès déterminent l'exploitation des terrains et ses ressources, donc les gens près de ces voies ou avec des moyens des transport (ex. pirogues motorise) utiliseront plus intensivement les ressources

H5 : Le parc est un terrain non gouverné donc accès libres à tous [« open access area »] donc les ressources du parc sera utilisé plus intensivement que les terrains sous le contrôle de une population locale: selon l'expérience du gouvernance environnemental, dans les zones « open access » l'exploitation des ressources intensifie parce qu'il n'y a pas des contrôles]

H6 : Le parc contient des ressources plus abondantes que le reste du landscape [à déterminer]
ENQUÊTES BIOPHYSIQUES

H7 : Dans l'exploitation des ressources, il y a des liens importants entre les élites et les pauvres/non-élites

H8 : L'identité culturelle d'une personne joue un rôle dans la façon dont il exploite les ressources
QUESTIONNAIRE MENAGE

H9 : L'âge/génération d'une personne joue un rôle sur le mode et l'intensité d'exploitation des ressources

H10 : le type de mariage et nombre des naissances dans une famille jouent un rôle sur le mode et l'intensité d'exploitation des ressources

H11 : Il y a des gens qui vivent « en harmonie » avec la forêt

H12 : Si une personne peut satisfaire ses besoins alimentaires, surtout en protéine, il sera moins motivé de entrer dans l'AP

Tous ces hypothèses peuvent être abordé dans l'enquête, mais certaines sont moins faisable ; choisissons quelques-unes qui sont les plus pertinentes aux nos objectives

Objective spécifique 1 [threat identification]

Identifier et localiser les chaînes des menaces [threat chains] aux espèces et aux écosystèmes (acteurs, systèmes, institutions, problèmes structurels)

Donner un appui aux inventaires biologiques

H1 : Les menaces directes sont liées aux menaces indirectes par les relations économiques, culturelles, pouvoir

Direct

Présence et utilisation des fusils et pièges

Entrer dans la réserve n'importe l'activité (toujours une menace ?)

Marchés locaux

Indirect

Financement des activités d'exploitation

Politiques des concessions, forestière

Présence de militaires, milices

Marchés éloignés? Tracer les filières des ressources clés (Janet McGaffey comme personne-ressource pour les enquêtes des filières « illégales »)

Objective spécifique 2 [sociopolitical structures for NRM]

Comprendre, analyser et cartographier les systèmes et structures clés dans la gestion des ressources naturelles : unités, institutions, régimes foncières, accès, droits

Analyse de la situation sociopolitique à chaque niveau afin de mieux intervenir (stratégiquement)

Objective spécifique 3 [key actors]

Identifier et comprendre les acteurs dans la gestion des ressources naturelles

- Acteurs directs et indirects (chaines)
- Population locale
- Utilisateurs
- Décideurs politique et économique

Objective spécifique 4 [partnerships, motivations, local needs]

Identifier les opportunités et contraintes de collaboration (institutions, systèmes de gestion) :

Comprendre les motivations, les stimulants pour promouvoir des investissements positifs

Comprendre les motivations économiques, les besoins et le bien être de la population

Questions et observations par objectif

Objective 1 [threat identification]

Questions générales au niveau village

Type d'exploitation de votre forêt (liée à la cartographie participative)

Croyances qu'utilisent les espèces protégées (notables ?)

Quelles sont les menaces qu'ils perçoivent ? (ex. existence du parc)

Notables

Nombre des armes

Nombre des chasseurs

Taux d'immigration

Notion des menaces aux ressources et moyens de subsistance

Femmes

Participation dans la chasse

Utilisation des forêts

Méthodes de brûlis des champs

Collecte des PFNLs

Etat des ressources naturelles (eaux, plantes médicinales)

Menaces qu'elles perçoivent

Jeunes

Menaces qu'ils perçoivent

Leurs professions préférées

Chasseurs et pêcheurs

Où se pratiquent cette chasse

Notions de menaces de leur moyen de subsistance

Les types d'espèces attrapées

Moyens et technologies

Agriculteurs

Localisation de leurs champs

Conflits animal-homme dans le cadre de l'agriculture (ex. leopards)

Observations

Marche : animaux, PFNLs (type, nombre, prix, état)

Chefs : utilisation des insignes (peau des animaux)

Objective 2 [sociopolitical structures for NRM]

Questions générales au niveau village

Identification de village : nom, secteur, etc.

Coordonnées GPS

Clans, groupes ethniques, « bituka »

Nombre des gens et nombre des maisons → peuvent être posé au niveau de village

Infrastructure de village et autour du village

Puits, marches/étalages, malaxeurs, tronçonneuses, moulins

Camps militaires et campement du militias/policiers informel

Moyens d'aces (nombre et voies d'aces au village)

Niveau de trafique/circulation ?

Combien des marches, noms des marches, voies d'aces aux marches

Calendrier agricole/activités villageoises/saisons

Ex : Besoin d'argent avant la fete

Notables

Nombre des ménages ? → Informants clés (selon propre recensement)

Histoire et origine de village

- Migrations, relocations
- Clans fondateurs et relations entre les bituka

Lois et pratiques

Types et résolution des conflits (terrains, autres)

Femmes

Leur role dans le GRN

Jeunes

Leur role dans le GRN

Agriculteurs

Identité des agriculteurs (hommes, femmes, jeunes)

Pourcentage des cultures commercialises

Observations

Types de champs et plantations

Etat des plantations

Taille moyen des champs

Distance champs/village

Objective 3 [key actors]

Chasseurs

Où se pratiquent cette chasse ?

(Endroits spécifiques/rivières/route principal)

Effort de chasse [catch per unit effort] ?

Temps/Distance/Quantité/prix/

Méthodes de chasse

Moyens de conservation et stockage

Chasse individuel, collectif ? Travail en group, combien ?

[Collectif est en train de disparaître ?]

Saisonnalité

Quelle est la période où on attrape plus de gibier ?
Quelles sont les espèces que vous attrapez le plus ?
Localisation des marchés où ils vendent
Institutions, association, bylaws (règlements informel)
Provenance des outils, intrants et prix des intrants

Pêcheurs

Où se pratiquent cette pêche ?
(Endroits spécifiques/rivières/route principal)
Effort de pêche [« catch per unit effort »]
Temps/Distance/Quantité/prix/
Méthodes et modes et techniques de pêche
Moyens de conservation et stockage
Pêche individuelle, collective ? Travail en group, combien ?
[Collectif est en train de disparaître ?]
Saisonnalité
Localisation des marchés où ils vendent
Group ethnique
Institutions, association, bylaws (règlements)
Année de la création de l'association
Provenance des outils, intrants et prix des intrants

Notables

Identification des acteurs hors de village

- Concessionnaires
- Commerçants
- Militaires, police, milices
- Chasseurs et pêcheurs non-locales
- Mineurs

Observations

Objective 4 [partnerships, motivations, local needs]

Questions générales au niveau village

Les forces et biens [« assets »] capital social du village

- Activités communautaires réalisées
- Connaissances indigènes spéciales sur GRN
- Eléments culturels importants : musique, danse, art, structures sociales

Type et nombre des institutions au niveau de village

Eglises, dispensaires, chefferie, école, organisations locales

Diagrammes Venns institutionnel indiquant les perspectives des gens sur les institutions

Institutions actives (avec indicateurs d'activité)

Dépenses clés (investissements)

Mariage : le montant et mode de la dot, comment on se marie ?

Construction des maisons

Santé

Education

Autres investissements

Termes d'échanges (prix des marchandises/prix des choses vendus par les gens au niveau de village) → indiquent niveau de vie et potentiel de obtenir des biens

Marchandise

Sel

Savon

Pagne

Friperie

Produits locaux

Gibier (parti) ex antilope

Cossettes de manioc (chikwangue)

Mais sac

Molangi lotoko

Distances aux marchés

Postes de contrôle ?

Crédit ?

Notables, femmes, jeunesse

Notions de la conservation

Sécurité alimentaire (indicateurs locaux)

Problèmes de santé

Jeunesse

Accès au terre et moyens de subsistance

Moyens de distraction

Leur rôle dans la vie du village

Visions de l'avenir

Chasseurs, pêcheurs, agriculteurs

Notions de la conservation

Observations

Indicateurs de bien-être et « social capital »

- Types des maisons (nombres en dur)
- Infrastructure (no des boutiques)
- No des cliniques, dispensaires, terrains de foot, églises

Learning landscapes: Integrating institutional analysis and social action into landscape-scale conservation in the Congo Basin

Concept Note

World Agroforestry Centre, Yale School of Forestry and Environmental Studies and
World Wide Fund for Nature-Central Africa Regional Program Office
(Not funded as it was submitted late to USAID)

Overview

“Landscape” scale conservation will in theory bring greater biodiversity, ecological and social benefits than small-scale projects: “benefits beyond boundaries,” as the theme of the 2004 World Parks Congress reflects. Parks and protected areas (PAs) are under threat from incursion and lack of buy-in from local populations. In many areas important species populations are found outside of PAs. Previous generations of integrated conservation and development projects (ICDPs) were criticized for providing neither sustained conservation nor livelihood benefits due to limited scope, faulty logic, and lack of attention to larger-scale economic and policy factors and flows. Landscape scale conservation must engage and motivate people yet avoid the flaws of ICDPs. New strategies involve integrated social and biophysical analysis coupled with effective modes of planning at regional scales

Nowhere could a landscape approach be more challenging than in the Congo Basin, yet nowhere is it most needed: it is a region of global importance for biodiversity conservation as well as being a major focus for poverty alleviation and conflict resolution. Unable to attract tourists in any significant numbers, spanning large areas of remote terrain with low population densities, the institutional and financial foundations for PAs are weak. The legal framework governing rights to land, forests and forest resources for local people is in flux while powerful interests continue to extract resources undeterred. Destabilizing situations lead to poor outcomes for conservation: people are migrating from conflict areas into PAs or using them as bases. Guns have proliferated and lawlessness prevails in many areas.

Plantations that once provided valuable tree crops are in ruins. Clearly micro-level approaches are inadequate to attack the scale and complexity of the problems. Protectionist approaches are impractical across this vast terrain yet there is a need to identify threats to endangered species and positively engage both local and external stakeholders in meeting them. There is little data, knowledge and guidance to draw upon. There is above all need to develop strategies for working with communities in the context of protected areas and community forests and consider how landscape conservation strategies will link to initiatives such as the zoning proposed under the auspices of the Forestry Code for DRC.

Co-management of PAs as a component of decentralized natural resource management is in its infancy in Africa despite many pilot projects and a foundation in community-based natural resource management. Given the politically fraught nature of negotiations about land use in Africa, a positive approach to working with communities around PAs needs to be developed through sound sociopolitical analysis using a suite of tools for community engagement developed in other parts of Africa and by ICRAF and partners in Asia.

Conservation practitioners increasingly grapple with the questions: What *is* this community that we are supposed to work with? How can we best understand and interact with the diversity of peoples found in landscapes around protected areas? We know now that sound

social analysis is crucial to any conservation initiative. It is essential to understand social groups, factions and lines of power and authority. While communities *are* complex there are methodologies for untangling composite population groupings, migrations, and tracing links between “internal” and “external” stakeholders and resource users. There are ways to work more effectively with people given patience, respect and grounding. There are also many paths to conflict and alienation if approaches rely on unfulfillable promises, subsidized incentives, and inadequate understanding of livelihood strategies, customs, technology choices, markets and political power structures. This project will demonstrate positive and tested approaches.

Learning Landscapes (LL) will develop and provide the needed knowledge and guidance, drawing on a large body of experience in both social science for conservation and livelihoods in the Congo Basin and elsewhere:

- The World Agroforestry Centre (ICRAF)-Yale School of Forestry and Environmental Studies (F&ES)-University of Georgia (UGA) partnership for agroforestry and social science in conservation funded by USAID linkage funds and the European Union (EU) funds for policy research
- The ICRAF-Centre for International Forestry Research (CIFOR)-Centre International del Agricultura Tropical (CIAT) partnership (ICC) under the USAID-funded Congo Basin Livelihood Improvement and Food Security (CLIFS) project to carry out livelihood studies in DR Congo
- The experience of World Wide Fund for Nature Central Africa Regional Program Office (WWF-CARPO and DR Congo), Wildlife Conservation Society (WCS), Central African Regional Program on the Environment (CARPE) and other conservation and development groups in studying and working with local populations in Congo Basin landscapes
- Landcare approaches from work with farmer/agroforestry groups around protected areas pioneered by ICRAF and partners in the Philippines and Uganda (AGILE project)
- Approaches to assisting communities around protected areas to work more effectively with other stakeholders, such as Negotiation Support Services (NSS) developed by ICRAF and partners and applied in USAID-supported Gunung Halimun site in Indonesia
- Lessons for and approaches to socially sound conservation from the growing body of knowledge of the American Anthropological Association/ Anthropology and Environment/Conservation and Community Working Group (CCWG)

LL project goal

To improve design and implementation of landscape-level conservation strategies

LL objectives, activities and deliverables

1. To create, test and disseminate tools for social analysis and approaches to engaging stakeholders in conservation and sustainable development
2. To influence current landscape-level conservation planning and management by offering methodological innovations for integrating knowledge in conservation and social science
3. To contribute to improvements in conservation outcomes and local livelihoods in two Congo Basin landscapes through better identification of and interaction with institutions

The major activities of LL are

- Designing, testing and implementing R&D tools and approaches for landscape level social analysis, planning and action approaches appropriate to the Congo Basin.
- Communication and wide dissemination of lessons, training modules, instruments, and approaches through CGIAR, F&ES, UGA, WWF fora and networks, Web sites and publications.
- Contributions to conservation and livelihood initiatives through learning activities (e.g., training, data and analysis sharing, negotiation support, market analysis).

While refining tools such as community mapping integrated with GIS and remote sensing that have been employed at spatial scales for planning within CARPE, LL will introduce innovative tools such as policy and “marketshed” mapping to reveal patterns of use and exploitation back to distant users, owners, investors and even consumers. The notion of “threat” will be extended along a “threat chain” from proximate to distant actions affected fragile landscapes and resources. Conservation and livelihood priorities and threats will be determined consultatively at “Landcare initiation workshops” with emphasis on priorities of marginalized groups.

Deliverables will include

- Training and guides to research and building sample frames at regional levels: delineation of boundaries and key units of analysis within regions
- Research instruments including surveys, interview guides, observation guides, mapping procedures at different scales
- Monitoring tools to track pressures and shifts in environmental and livelihood status
- Analytical tools such as GIS databases, relational databases, modeling software for scenario analysis
- Training in regional-scale analysis of resource flows (market chains, patron-client relations, trade routes)
- Methodologies for integrating and comparing conservations targets, management objectives, status of threats, and the utility of different approaches within and across landscapes
- Communications and monitoring strategies within and across landscapes
- Institutional inventories and analyses of roles, strengths and weaknesses of institutions
- NRM planning and action methodology training to identify and work effectively with local communities (AGILE approach built on Landcare)
- Capacity building and negotiation support approaches for local stakeholder groups
- *A Learning Landscapes* Web site linked to ICRAF, WWF and Yale sites
- Publications on lessons and tools for different audiences and in English, French and Lingala

LL will be built into the three major partner organizations—ICRAF, F&ES, WWF-CARPO—and their networks. As such, the project lessons and benefits will be sustained at the sites and within the institutions. LL will also seek to work closely with other USAID-funded initiatives such as FRAME and CARPE/CBFP and its lessons will extend to planned work in Guinea and Liberia.

At two selected “learning landscapes” within the Congo Basin Forest Partnership (CBFP) LL will bring together a team to create, implement and disseminate the tools, approaches and analyses detailed above. These are planned to support the first phases of CBFP and contribute to its major goal of crafting land-use plans for the landscape. Two sites that have been suggested by WWF-CARPO are: Salonga-Lukenie-Sankuru Landscape in DRC and Lobéké in Cameroon with extension into Dzanga-Sangha in Central African Republic (CAR). ICRAF has already worked with WWF-DRC and partners on drafting socioeconomic study plan for the Salonga-Lukenie-Sankuru Landscape. Additional sites where ICRAF and WWF are already collaborating are Dja and Campo Ma’an National Parks in Cameroon. Within the LL partnerships there is a wide network of sites and groups for the sharing of information.

Roles of partners

- ICRAF (with CIFOR and CIAT colleagues working in Congo Basin): training, design of instruments, adapting approaches from other areas
- WWF-CARPO: site coordination, logistics, biophysical research integration, links to other CBFP and CARPE partners

- Yale F&ES (with UGA): students, technical inputs, liaison with central African universities, input of F&ES staff, Web site, publications

Indicative Budget

\$150,000 per year with expected 3 year life of project = \$450,000

- Personnel and administration (coordinator, overhead/administration, staff time of personnel in organizations): \$75,000
- Travel: \$25,000
- Materials, publications, communications: \$25,000
- Support to local institutions: \$25,000

US Conservation comes to Congo: Scientism, salience and the role of social research

Paper prepared for session on “The Political Ecology of Protected Areas and Local Communities in Global Perspective” at the annual meeting of the Society for Applied Anthropology, 5-9 April 2005, Sante Fe, New Mexico

By Diane Russell, PhD, MEM⁸

“There is great potential for conservation within Zaire because many of its forested lands are pristine” –World Conservation Monitoring Center (1998)

“The rain forest, far from being an evolutionary Eden, is a dangerous, bandit-ridden place, perhaps as violent as any inner-city in the West... There is an urgent need to fill this gap in knowledge, and to take account of new social realities in these supposedly ‘pristine’ environments, where automatic weapons and crack cocaine may be as common as on the streets of Liverpool or Detroit.” –Jane Guyer and Paul Richards, “The Invention of Biodiversity,” *Africa* 1966.

Overview

Have you heard about the thousand-hectare conservation “landscapes” carved out of the “Congo Basin Wilderness area” (Map 1)? From one perspective, this initiative appears nothing but imperialistic: it hearkens back to the Berlin treaty that carved up Africa and the granting of vast concessions in the “opening up” of the American West. From another, it presents openings for significant dialogue about the relationship between conservation planning, poverty, conflict and rights to valuable natural resources. Like so many American-led efforts it emphasizes technology and “science” yet to date has spent little effort in understanding people, place and power relations.

Map 1: Landscapes in CBFP (source: CARPE)



This attempt to “zone” large territories in central Africa, like its predecessors, is enshrined first in cartography: “if we map it, we master it, even if we have no idea what is *in* it!” It is claimed that these landscapes represent the densest concentrations of biodiversity (of different taxa) in the region as well as encompassing ranges and habitats of important

⁸ Senior Anthropologist, World Agroforestry Centre (ICRAF), African Humid Tropics Regional Programme, Yaoundé Cameroon. ICRAF bears no responsibility for the views expressed in this paper. Parts of this paper were presented at the conference on “Grassroots perspectives on the conflict in the Democratic Republic of Congo (DRC)” organized by the Conflict Research Group Monasterium PoortAckere, Oude Houtlei 56, 9000 Gent, Belgium, 26-28 May 2004

populations of critically endangered species such as forest elephants, okapis and three species of great apes (chimpanzees, bonobos and gorillas). It is also home to hundreds of small ethnicities who are among the poorest most marginalized and oppressed peoples on earth.

The scientific legitimacy of these landscapes derives from “expert opinion” collected during a workshop in Libreville Gabon in 2000 organized by World Wildlife Fund-US. WWF admits that the “expert opinion” was sparse in hard data and involved few social scientists with field experience in the region who might have been able to imbue these territories with cultural and sociopolitical salience. Despite these drawbacks, the landscapes are now enshrined in well-funded conservation initiatives involving many conservation organizations. At the time of the landscape delineation, the role of social scientists was to locate and describe “threats” to endangered species and habitats and fill in basic demographic data related to these “threats.” Questioning the science, likely efficacy or indeed the morality of this project was not on the agenda.

With the initiation of the multi-million dollar Congo Basin Forest Partnership (CBFP), the time has arrived to operationalize these landscapes, ultimately zoning them for different land-uses (Box 1). Operationalizing them is a daunting process: conservation organizations must now deal not just with clearly delineated protected areas and endangered species but with the complexities of populations and natural resource management at large scales. Oversight of US investments in conservation in the Congo Basin and efforts to get the myriad groups to collaborate are increasing as the US Agency for International Development (USAID) attempts to enforce coordinated workplans and monitoring of results.⁹ After much assertion that the landscape approach would be far superior to Integrated Conservation and Development Projects (ICDPs) or reliance on Protected Areas (PAs), proof of concept is now demanded.

This paper addresses the following questions: What are the precepts underlying this landscape concept? What are some alternatives and complements to it? Finally, how can social scientists in conservation best address the landscape approach of CBFP? At the heart of this paper are serious questions about how to interact with and assist the impoverished and rights-weakened populations of this region rich in natural resources: is a landscape, zoning approach likely to further weaken their rights and future economic options or may it possibly help to protect them from predations of private sector, military and government actors?

Conservation paradigms

I am not arguing against the need for conservation; the most critical challenge of our times is how to achieve intergenerational equity

⁹ The efficacy of “performance monitoring” using preconceived indicators and rigid workplans of the sort imposed by USAID on its grantees can of course be questioned in light of the fact that adaptive and flexible planning, employing ongoing research results, is surely going to be a key requisite for success. It is hard to see how the main indicator to be tracked, proposed by USAID, “number of management plans” is going to enlighten the process.

Box 1: Press release from Conservation International Web site

U.S. Government Commits \$36 Million to Protect Congo's Forests

Three International NGOs Match Government Commitment

JOHANNESBURG, SOUTH AFRICA - U.S. Secretary of State Colin Powell announced today that the United States will commit at least \$36 million in newly allocated money over the next three years to the Congo Basin Forest Partnership. The partnership will help protect the world's second largest block of intact and interconnected tropical forest.

The Congo Basin hosts some of the most charismatic biodiversity in the world, ranging from forest elephants, bongos and chimpanzees to forest buffalos and western lowland gorillas. The bonobo, or pygmy chimpanzee, is also found in this region, where it is restricted to the Democratic Republic of Congo. Our closest living relative, the bonobo, is considered one of the most endangered apes in the world.

Biodiversity in the Basin faces serious threats, most notably logging and bushmeat hunting. Logging feeds the bushmeat trade as roads built to gain access to forestlands become access routes for hunters. The widespread slaughter of wild animals in the Congo Basin creates “empty forests,” which diminish opportunities for local communities and threaten the forests' long-term viability.

in resource use and allocation and mitigate the forces of resource extraction that disproportionately harm the poor. In addition, one can certainly argue that destruction of the lives and habitats of non-human species is morally wrong.

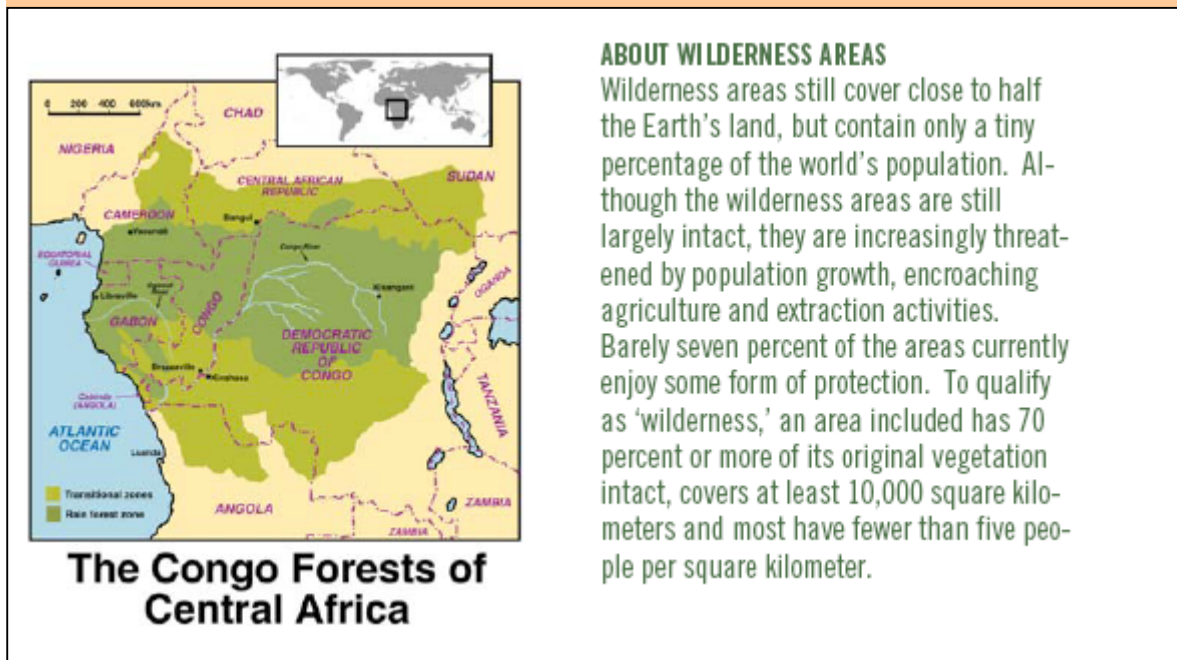
The question of whether it is *more* morally wrong to destroy “intelligent” and “charismatic” species such as Great Apes and elephants found in the Congo Basin is a complex one. On the one hand, the fates of charismatic species evoke much sympathy from conservation donors both public and private thus increasing “international” support for conservation¹⁰, while on the other laying the basis of conservation planning on the range and habitats of these species (and on the sympathies of the “international community”) may have serious consequences for human livelihoods. Or not, depending on the implementation strategies. There is additional parameter addressed in this paper: the need for conservation and land-use planning to take into account ecosystem functions over a large scale: this may be the most important element of any conservation strategy as it affects the natural resource base upon which all species depend.

Conservation concepts

In theory, investments in conservation at large scale could lead to better lives for peoples in Congo Basin countries because remote areas do not get much positive investment and people could be assisted to band together, reduce conflicts, fight militarism and strengthen their rights to land and resources in return for stewardship. The very framework of conservation investment in the Congo Basin has been built however on the premise that this is a “wilderness” area hence people are scarce and vegetation is “original”(Map 2). Some anthropological literature gives the impression that the region is made up of small-scale “acephalous” tribes and “forest peoples” who would be unable or unwilling to band together for large-scale collective action. This view neglects the history of the two large-scale peasant rebellions in the Congo in the 1960s (the Simba and Mulelist rebellions) within which rural people, linked by complex clan and political alliances, played an extremely important role. Understanding these roots of these alliances, the systematic dismantling and destruction of “customary” authority and political resistance is essential to rebuilding the social infrastructure of this region.

¹⁰ Like many others, I think the charismatic species emphasis jeopardizes conservation efforts in the long run by presenting the preservation of icons of “nature” as key conservation goals rather than the importance of preserving human-natural systems. This strategy tends also to demonize those “threats” to the precious species rather than the more insidious and vastly more important threats of poor resource governance.

Map 2: Congo Basin Wilderness Area (source: Conservation International)



Part of this history is the fact that the creation and expansion of protected areas was carried out without consultation—there has never been any framework for consultation in the region on any matter—and regard for inter-generational rights, access and compensation. These protected areas may or may not even encompass the species valued by the “international community”¹¹; and no one seems to have taken into consideration what lands and resources are precious to the peoples of the area.

Despite claims that there has been significant “buy in” to the landscape approach of CBFP, it is hard to imagine how this could be the case given that few people in the region could have access to, much less understand, planning documents. Even the Director of the Congolese Conservation Institute (ICCN) was excluded from some key meetings where CBFP planning was carried out (Bashige pers. comm. 2003). The planning process resulted in a patchwork quilt of zones “managed” by US-based BiNGOs (big conservation NGOs) with a few MeNGOs (medium scale conservation NGOs) and SuDeNGOs (sustainable development NGOs) doing various things that may or may not be coordinated at the national or regional scale, with a small pot of funding, long delayed, for LoNGOs (local NGOs).¹²

Privileging the “international” level

The notion of “landscapes,” like that of “transboundary conservation areas,” privileges international organizations as they correspond neither to administrative nor to cultural territories and as such are beyond local control (Brosius and Russell 2001). Indeed the creation of landscapes effectively detaches the responsibility for conservation from the national institutes responsible for protected areas (PAs), as they have no mandate outside of the PAs. Even the nomenclature “Congo Basin” denotes a territory rather than a set of

¹¹ In fact it is surprising that after many years of investment in international conservation organizations in the region, little can be said about the status or even the location of endangered species (CBFP 2005). There is even less known about the administrative (*de facto* and *de jure*) units within these landscapes.

¹² The politics of inclusion of groups and their role and budgets in the CBFP should be the focus of further study as it may be the case that the very complex planning and negotiation processes involved present a serious barrier to success by any definition: pork must have its many barrels.

independent nations. While the supra-national ecosystem level is surely important for biophysical flows, as discussed below, research into environmental movements indicates that it is a sense of place and patrimony that motivates people and creates conditions for successful conservation (Kellert...). It is national and local pride in unique species and areas, heritage and cultural values, and attraction of tourism (internal as well as external) that has galvanized populations in countries such as Brazil, India and the Philippines.¹³ It makes more sense to plan and carry out some conservation efforts at the national level: carrying guns and polluting riverbanks should be banned whether in protected or “non-protected” areas; CITES of course has to be enforced in the whole country to have any effect. The challenge is that national implementation of conservation strategies has to go hand in hand with improved governance at all levels. The particular kind of “predatory weakness” of central African states means that enforcement falls on the weakest and consultation processes are not in place: this reality necessitates first and foremost building up of local capacity to demand accountability and the rule of law.

However, probably more than any region in the world, support to local capacity in conservation and environmental governance has been weak and resources for these efforts are few compared to the resources that go into international conservation-led efforts.¹⁴ During my years on the USAID-funded Central African Regional Program on the Environment Strategic Objective Team (CARPE SOT), a view expressed by many partners (some now in CBFP) was that local conservation groups were “weak” and “ineffective.” Even though they received meager funding compared to the international organizations it was felt by many to be largely a waste of funds—except for the local groups “created” by the international NGOs. Yet the question of how local conservation efforts were going to be strengthened and more broadly how conservation would be supported over time in the region could not be effectively answered.

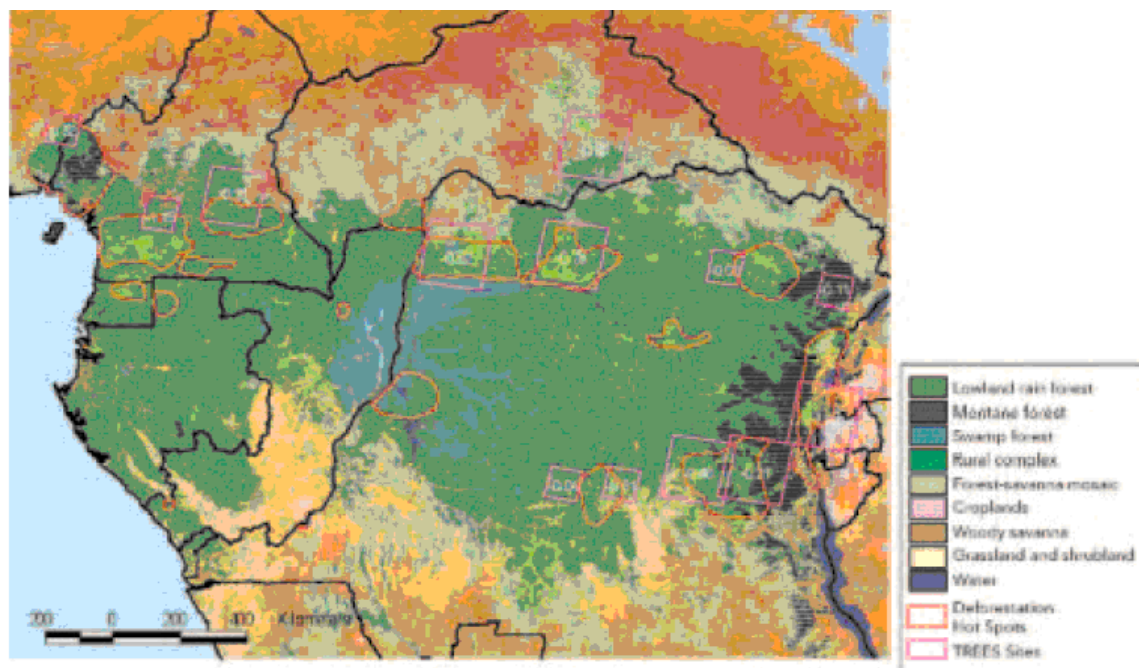
Ecosystem services in the equation

“Threats” in the Congo Basin have been assessed largely with respect to impact on biodiversity—high visibility biodiversity such as okapis, white rhinos, mountain gorillas, forest elephants, chimpanzees and bonobos. To counter threats to wildlife, conservationists recommended an increase in the size of parks (“landscape” size!), creating corridors for animal migration and focusing on remote, low-density “pristine” areas. Until recently there was little if any thought about how this approach contributes to the protection of the Congo Basin ecosystem, the lifeblood not only of the country but of the continent (Russell 2001) (Map 3).

“Freshwater is the world’s most vital natural resource and issues surrounding it are urgent and global in scale” (Singh *et al.* 1999: 265). The Congo River basin transports half the total continental water flow from Africa to the tropical Atlantic (Mahe and Olivry 1995). It is the second largest watershed in the world with 3.6 million km² (WRI 2000). The cataracts and uniform flow of the Congo River mean that the potential for hydroelectric power is enormous. Estimates have been made that hydroelectric facilities on the Congo River could supply energy for half of the African continent (Wolfire *et al.* 1998).

¹³ Only in Gabon is this strategy being tried but from observers’ accounts, it is a very top-down approach and local buy-in to Gabon as a major conservation-tourism destination is weak due to lack of local benefit.

¹⁴ For example, in 2004 the founder of a local Congolese conservation organization, one of the few working with the military and other national institutions to forge effective strategies for protecting the bonobo (*Pan paniscus*), confided that she did not have enough funds to continue paying her workers, while at the same time the US-based Bonobo Conservation Initiative (BCI) with little or no direct experience in the country, fundraised, set up offices, positioned itself as a leader in the field and got a share of the CBFP funds.



Map 3: Ecological zones in Congo Basin (source: CBFP 2005)

Although rainfall has diminished less in the Congo Basin than elsewhere in Africa, there is more pronounced seasonal variability and reasons to be wary: “In western Africa and to a lesser degree in central Africa, river depletion has speeded up since the beginning of the seventies and increased considerably during the eighties due to the persistent rainfall deficit since the start of this period resulting in a reduction of runoff coefficients” (Mahe and Olivry 1995: 109). Bruijnzeel (1996: 92) observes that “the frequently observed deterioration in tropical river regimes following forest removal is not so much the result of clearing *per se* but rather due to a lack of good land husbandry during and after the operation.” Hence it is the *type* of clearing as much as clearing the forest in itself.

Logging concessions create conditions for increased bushmeat hunting, which has been identified as the most critical threat to the fauna. Logging in forest areas adjacent to savanna and woodland would make these areas more vulnerable to fire—and the woodland-savanna-forest transition area is vast. Logging will also open up areas to migration and increased burning with the creation of agricultural plots (cf. Uhl *et al.* 1997: 366). Deforestation of the Congo basin forests through agricultural burning will release carbon into the atmosphere with the potential to change local and regional weather patterns.

The existing network of PAs and landscapes is in a weak position to counter these threats. Few are located in transition zones where logging pressures are likely to be high. Protecting riverine and lake habitats was not a priority. In any case, the protected area model is not appropriate for protecting rivers: riverine populations must be organized and motivated to protect their territories and fish resources as a common property resource. One of the new (non-PA) landscapes in CBFP, Lac Tumba, may partially fill this gap in conservation strategy as it is centered on major waterways and marshy areas of the Congo River but it is unclear if there is expertise within CBFP to model watershed dynamics and support local management, especially as the landscape may or may not encompass areas that represent pressure points in the watershed system.

The logging and agricultural conversion threats are strongest in areas where transportation is easiest. In the Bas Congo region of DRC, most of the forest has disappeared and even reserve

forest has been cut down for timber. There is virtually no attention focused on this area. The mining areas of the Kasais and Katanga are threatened with deforestation and erosion, pushing those populations to make livelihoods in the forest. Large cities like Kinshasa and Douala act as vacuum cleaners, sucking up trees for charcoal and firewood and every other living thing for food and construction with few if any attempts to reforest. Some areas of the DRC are so poor in plant and animal resources that a large percentage of the population suffers from kwashiorkor (protein deficiency). Plantations that were once sources of revenue and resources are abandoned. These ecological, natural resource management and health issues affect not only large-scale ecosystem processes but the livelihoods and migration patterns of the populations. The pristine isolated areas that CBFP seeks to protect cannot in fact be protected from large-scale incursions unless steps are taken to address poverty and pressures on resources within the whole region.

An ecosystem focus could improve the lines of communication between conservationists and local people because it places emphasis on things that local people care about: rainfall, water quality and flow, soil fertility, limiting erosion, the predations of concession logging, and deforestation that results in losing valuable species. Add to this a focus on freshwater biodiversity and agrobiodiversity and you have a much richer suite of options to discuss with local people than the option of “keep out of the forest and don’t kill big mammals.”

CBFP should help the region explore if the large size and “open access” nature of existing PAs makes sense. Perhaps the size of the PAs should be trimmed to a core area and the rest of the area be run as extractive reserves (Sayer et al., 2000). Wildlife Conservation Society (WCS), a major player conservation in the region, may have a hard time with this option, as it is a proponent of increasing protected areas to minimize threats from hunting. The risk is that once the population gets mobilized, or new more dynamic immigrants move in, the whole protected area system will crumble due to lack of internal constituency.

Livelihoods and conservation

In a recent study of two provinces in DRC, the average *household* revenue was calculated to be \$107 per year, making the daily individual revenue (about \$.04 a day) far below the extreme poverty line of \$1 per person per day. This poverty is not a result of lack of resources or lack of ingenuity but lack of a way to make productive investments.

At the heart of the problem is a need to reform tenure regimes, clarify lines of authority and eliminate the numerous barriers to enterprise at all levels (cf. Uhl *et al.* 1997: 167). Corruption has created a culture of cynicism. It is well known that high officials run the smuggling rings for ivory and other valuable forest products despite lip service to conservation. People are pretty savvy about who gets the benefit from both conservation and resource exploitation. The lack of interest of the “international community” in helping people to get the rights and opportunities that they have been demanding for so long does not help. Indeed, up to the present, the “help” given them has done far more harm than good (viz., US support for Mobutu over decades, the fact that millions died in DRC before there was any intervention in the recent conflicts). Clearly the proliferation of militias and their guns is the key threat to both people and animals.

There are many and detailed arguments and examples that link conservation with livelihood security. I am not talking about ICDPs that were promoted—and then disparaged—by conservation institutions and donors but the need to maintain species diversity, ecological resiliency and other key processes upon which local and wider livelihoods depend. These species and processes cannot be maintained without internal constituencies that understand links and create and adjust management institutions. Many scientists within the international conservation community fail to understand this essential point because they see

“development” goals as interfering with “pure” conservation.¹⁵ The most critical objective of international conservation has to be strengthening local constituencies and bolstering efforts to make visible the links between livelihoods, patrimony and conservation.

What kinds of livelihood and conservation links need to be made? First there must be consultations about conservation priorities with various populations including forest dwellers, forest users, hunters, agricultural populations, fishers, harvesters, artisanal miners and small-scale forest exploiters (chainsaw loggers) as well as recent migrants and large scale private sector actors and concessionaires. These sectors are now defined as “threats” to conservation yet in reality there is no way that sustained conservation can be achieved without them, by a handful of scientists planning from capital cities. What do these people see as threats to *their* resources? It is likely to be lack of secure land and resource rights, no rule of law, extractive elites and lack of investment.

Can landscape approaches achieve better results than ICDPs in linking conservation and livelihoods? ICDPs were by and large based on the flawed premises that

1. Local actors represent the most serious threats to protected areas; conversely that working with local populations and other local “stakeholders” could address structural issues such as the politics of land and resource use and allocation, markets for endangered species and poverty of rural dwellers in remote areas.
2. Substituting one type of enterprise for another would entice people to give up the undesired activities rather than just adding new ones.¹⁶
3. The protected area is the locus of conservation—what matters is actions in it and much less attention is paid to trends “outside” of it.

Landscape approaches may avoid some of these flaws if landscapes are defined strategically: each problem or issue is nested at different levels, and the different levels may or may not correspond with a given spatial landscape or the units within the landscape: some forces that shape land and resource allocation, markets and poverty dynamics are national or even supra-national; some correspond to particular administrative units, ethnic territories or agroecosystems. Others relate to specific localities in terms of control over specific terrains. While the existing “landscapes” may or may not harbor the species to be protected, the location and trajectories of the forces affecting management of these species and their habitats can only be determined empirically and in relation to specific questions. Migration of people and animals occasioned by climate change, conflict, pressures and livelihoods will of necessity shift conservation focus. Hence the need for carefully designed adaptive research.

At an even larger scale in time and space, there needs to an understanding of different scenarios for how the control and use of natural resources leads to capital formation and hence to different trajectories of economic development. If Congo Basin countries are forever poor, even as their resources continue to be mined, who will pay for conservation in the future? Western society was built on the back of resource exploitation, accumulation of capital and the struggle to share the fruit capital accumulation in the form of improved working conditions, government investments and philanthropy. Should conservationists care about these trajectories? Can they afford not to?

¹⁵ As a colleague from an international conservation organization said to me recently, “Why do they keep asking us about poverty? We are trying to do conservation!” In every conservation workshop about and in the region I have attended, when discussions strayed into livelihood, well being, or corruption, at one point there is always a comment to the effect that “wait up here, let’s move the focus back to conservation.”

¹⁶ An example that illustrates the flaws of this premise is a project that promoted deep sea fishing to keep people off endangered reefs. People just continued reef fishing along with the deep sea fishing, using boats bought by project for deep sea fishing that actually enabled intensified reef fishing.

Environmental governance lessons

Global experience has clearly shown that if users of a resource have little or no say in the management of the resource or if there are conflicting and multiple regulations surrounding a resource, an “open access” situation is likely to be created where exploitation will proceed unchecked. Giving local people “some” rights, unclearly defined, with most benefits going out of the local area and with most rights being vested in the state or private sector, is likely to result in this scenario.

But rights are not enough. There has to be positive sustained investment in both material infrastructure and in education. Uganda has some of the highest levels of donor assistance in Africa and a strong commitment to decentralization but after a decade most rural populations cannot access these decentralized funds because they lack organizational capacity and clout at the national level. Co-management of protected areas appears in every project proposal but is scarcely implemented because there are serious differences in approach between field level and management of conservation institutions (both national and international).

There are implications for local people of this “remote, pristine” paradigm: very low population densities mean continued marginalization of the population at the national level. They also lack resources and numbers to resist incursions. Cordoning off large areas of the forest is likely to mean that large-scale actors have free reign in these areas. I have hypothesized—to be tested by upcoming studies—that conservationists are not finding large species populations in the huge La Salonga Park in DRC precisely because there were few settlements in it and thus militias and “poachers” could do as they liked without encroaching on local people’s territories. Without rural industries that may come with migrants from more densely settled areas, people in isolated rural areas are forced into high risk activities such as hunting, smuggling, joining militias, artisanal mining and chainsaw forestry.

“Landscapes” have no objective reality. They are defined in relation to selected criteria or problems; in the case of CBFP the alleged concentration of biodiversity. What “real” human units can be identified at scales larger than village agglomerations? What processes are going to knit together small management units that in themselves may be fragile? Government should in theory be the convener of these processes, and thus administrative units respected above all, but it is fragmented, weak (compared to organized military and private sector) and, most significantly, despised by the local populations in the wake of the depredations of the last 40 years. Large-scale concessions exist: what will motivate their owners to participate in any conservation or landuse management planning much less in one that might benefit local populations?¹⁷

In the cultural-historical context of central Africa, relations of trade and kinship were forged among “tribes” and clans across large territories, shaped as in any region by conquest and migration. Religion is now a more potent organizational force than kinship yet the mainstream religions that organized over large territories are losing ground to numerous charismatic and millenarian sects. The baseline study for the Congo Livelihood and Food Security (CLIFS) project found, on average, *five* churches per village: far more than the number of schools, clinics or markets. There was a low number of *tontines* (rotating credit associations) that are the framework for group investment.

Could political action play a role in organizing masses of people or will it further complicate the situation? Elections are coming up in DRC with resulting registration drives for political parties. Some activist groups such as Rainforest Peoples Movement are working with different ethnic groups to give them voice in forest and conservation policy reform.

¹⁷ Two American brothers, the Blattners, alone, control millions of hectares within the interior of the DRC.

Observers say that the city-based elites working with these movements who attempt to speak for their ethnic groups in the countryside do not actually enjoy respect in their own territories, probably because they can deliver few concrete benefits to their constituencies. Hence coalition building has to be a truly grassroots affair but the dangers of travel to the interior of DRC have certainly hindered grassroots organizing.

Innovative approaches developed in other parts of the world to associate people at large scale so that they can represent their interests vis a vis the state, private sector and large NGOs may have potential. Two approaches, adapted from Latin America and Southeast Asia are proposed: large scale participatory mapping and assets-based approaches exemplified by the African Grassroots Innovations in Livelihood and Environment (AGILE) project inspired by Landcare. Participatory mapping, adapted from Mac Chapin's approach (ref) (and taught by him) has been tested in Cameroon and DRC by Innovative Resources Management (IRM). It has the potential to help peoples delineate territories at large scales for management. However it is a tool that must be embedded in deep ethnographic research and a long-term planning process, as Chapin has done in central and South America and has been done in Southeast Asia by groups supported by the now-defunct Biodiversity Support Program (BSP).¹⁸ The AGILE process, which has not been tested yet in Congo Basin, uses Appreciate Inquiry (AI) to focus on the assets and strengths of a given group of people including cultural, social, natural and human assets (AGILE reports; cf Field Museum approach developed by Janis Alcorn and Alike Wali). Institutional inventories and assessments feed into a participatory planning process that delineates a role for internal and external actors and creates a forum for interaction with local government and the private sector. Related to AGILE is "negotiation support services" (NSS) devised by the World Agroforestry Centre and partners in Indonesia.

Conservationists have feared a larger mandate encompassing livelihoods of local people will blur their focus yet perhaps the mandate has to be even larger. Can one even conceive of "success" in conservation in countries that are run more like medieval fiefdoms than modern polities? Can any outcome in the region be positive when villagers have to traverse on average three military barricades to get to market and where many people gave up farming because of fear? These larger governance issues bear on the efficacy of efforts such as participatory mapping and AGILE.

Power, poverty and conservation outcomes are intimately linked. Cameroonian villagers near a large protected area told me that it was outsiders with guns (aka military) that set up to 500 traps in the forest to catch high value animals such as leopards, leaving the "bushmeat" to rot. These high powered groups threaten their livelihoods and safety. Similarly in the Democratic Republic of Congo (DRC), according to key informants, it is well-organized military groups funded from upper levels that run large scale poaching operations.¹⁹ The creation of large PAs (if landscapes are defined as such) may lead to the policies that discourage "migration," while large scale exploiters will be able to get around any restrictions under existing governance regimes.

¹⁸ BSP in Asia was managed by renowned ethnobotanist Janis Alcorn and mapping had the technical support of Mac Chapin and other groups working with indigenous peoples. Legal services played an extremely important role as well in the strategy used by BSP in Asia.

¹⁹ In the workshop for social research in La Salonga park much discussion centered on how to interview and interact with soldiers, police and militias. There was fear that any interaction could result in unwelcome "scrutiny" of activities yet it was acknowledged that somehow these groups must be better understood. The big question is who controls them and how to even find this out.

Conclusion: the role of the social scientist

Is it better to be on the inside as a social scientist helping to study and implement the landscapes or to set oneself up as a critic of the landscape concept based on social theory and experiences of other regions in conservation implementation, environmental governance and social processes? Is it possible to do both? Critique of the landscape approach without providing alternatives is unproductive. Working inside and outside at the same time, the social scientist can provide guidance on theory, methodology and approaches needed to understand the populations, forces, flows and structures in the region. Anthropologists have worked at regional levels for generations and have tools to bring to bear on the issues of local-extra-local linkages, mapping social and economic flows and the complexity of boundaries and management units. Another element of advice is how to deal with sensitive information and informants who risk a great deal to reveal information. Anthropologist Janet MacGaffey's research into smuggling networks in DRC provides a model of how to collect and use this kind of information (cites).

Keeping attention on African conservation scientists who live and work in these landscapes, one sees that they are highly aware of the contradictions and complexities of any approach. Helping them to match theory and the lessons of others to their own observations can provide the framework needed to better articulate their concerns. For example, one person observed at a recent workshop that substituting domestic livestock for "bushmeat" as proposed by international organizations will never work because of the "customary" role and management of livestock: it is for gifts and savings not to eat. He was not aware that many studies have shown that these kinds of substitution schemes are problematic. Another person mentioned that the heaviest pressure on the "landscape" comes from an area not formally in the landscape and this led to a discussion of how to include and deal with actors of this region even as they were not "on the map."

An afterthought

It is intriguing to see the parallels between the approaches of US NGOs and workings of the US government in its present incarnation: the affinity for technocratic solutions, the monopolistic mentality, the lack of concern for the poor and marginalized, the emphasis on PR blasts over longer-term solutions to complex problems, the vision of the "rest of the world" as kind of blurry without any real identity.

The landscape approach reflects the ahistoricity and instrumentalism of American thought: that we seek to divide up territories for particular "uses" rather than envision them as tapestries woven of the histories of people, animals, plants, soils and waterways. We seek to erase the traces of struggle that once brought people together to fight injustice. In Europe there is much greater emphasis on the cultural and historical dimensions of conservation and the importance of lands and terrains to populations' identities. If American conservationists don't embrace that view they miss a huge opportunity to empower some of the poorest people on earth to take pride in their extraordinary patrimony. As we study this troubled region we need to study our own troubled region and think on how our fates are intertwined.

Landscapes, logging and local voices in DR Congo's reconstruction

Paper prepared for conference on Grassroots perspectives on the conflict in the Democratic Republic of Congo (DRC)

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Abstract

As peace continues to hold, major investments are pouring into the Democratic Republic of Congo (DRC) to rehabilitate infrastructure, shore up protected areas and modernize antiquated laws and regulations in the forestry sector. Reintegration of the country proceeds albeit with continuing pockets of unrest. This paper argues that it is imperative that scientists and activists continue and begin work in DRC on local management and governance of resources. The World Bank and some NGOs are already becoming polarized on the subject of forest concessions, with the Bank wishing to reform the logging sector and NGOs protesting the lack of voice of local people in the process. Donors and conservation NGOs are bringing large sums of money for conservation into the country yet the genuine participation of local communities in planning use of these funds is highly questionable. Many communities were displaced and terrorized during the war; people had to flee into the forest and lost all their household assets. They are now in a situation of direst poverty. Other areas experienced significant incursions by external military and business interests as well as the formation of local militias. Underlying these recent problems are longstanding ones such as the attempts by the Mobutu regime to destroy customary governance institutions and the law (Bakajika) that gives the State rights to all land in the country. Those who work closely with local communities need to help bring local voices into the open within these debates. Reconstruction will be greatly enhanced by research on local institutions for resource governance, valuation of forest and other natural resources by local communities, the impact of migrations and militarization on natural and social assets, and enhancing local participation--including identifying and working with subsectors and minorities within communities.

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BOX 1**U.S. Government Commits \$36 Million to Protect Congo's Forests****Three International NGOs Match Government Commitment**

JOHANNESBURG, SOUTH AFRICA - U.S. Secretary of State Colin Powell announced today that the United States will commit at least \$36 million in newly allocated money over the next three years to the Congo Basin Forest Partnership. The partnership will help protect the world's second largest block of intact and interconnected tropical forest.

The Congo Basin hosts some of the most charismatic biodiversity in the world, ranging from forest elephants, bongos and chimpanzees to forest buffalos and western lowland gorillas. The bonobo, or pygmy chimpanzee, is also found in this region, where it is restricted to the Democratic Republic of Congo. Our closest living relative, the bonobo, is considered one of the most endangered apes in the world.

Biodiversity in the Basin faces serious threats, most notably logging and bushmeat hunting. Logging feeds the bushmeat trade as roads built to gain access to forestlands become access routes for hunters. The widespread slaughter of wild animals in the Congo Basin creates "empty forests," which diminish opportunities for local communities and threaten the forests' long-term viability.

Press release from Conservation International Web site

BOX 2

The World Bank is helping to fight poverty and improve the living standards for the people in the Democratic Republic of Congo. As of March 2004, the World Bank had approved a total of 84 loans and credits for the Democratic Republic of Congo for a total amount of approximately US\$3.46 billion. The commitment value of six ongoing IDA/IBRD-financed operations is approximately US\$1.14 billion. Six active operations will impact the following sectors:

- ▶ Agriculture, fishing, and forestry
- ▶ Education
- ▶ Health and other social services
- ▶ Transportation
- ▶ Law and public administration
- ▶ Energy and mining
- ▶ Water, sanitation and flood protection
- ▶ Finance
- ▶ Information and communications.

From the World Bank Web site

The key challenge for DRC is to ensure that economic growth is both sustainable and broadly shared. In a country as richly endowed as DRC, it is no surprise that the return of peace and progress towards macro-economic stability rapidly result in renewed economic growth. But the economic history of the country over the past decades suggests that growth does not necessarily translate into enhanced living conditions for the majority of people. It also suggests that the past focus on natural resources and extractive industries (rather than, say, agriculture and services) might have contributed to the mismanagement of the economy. The objective is therefore to go beyond growth - towards shared growth. –World Bank 2004: 27.

Introduction

Grassroots perspectives on the conflict in the Democratic Republic of Congo (DRC) are essential but they are even more necessary during the **reconstruction** process in order not to repeat past mistakes of misguided investments. This paper discusses ways to amplify grassroots voices during reconstruction. It argues that influxes of donor funds and international organizations will not bring fundamental change to the DRC unless the realities of history and power are confronted directly. It looks at some current investments in DRC in light of historical and present social realities and suggests specific reforms that are needed for sound long-term development strategies. The problems in DRC are not going to be solved solely by sectoral projects such as creating or enlarging protected areas or reinvigorating the forestry or mining sectors; in fact conflicts may even be exacerbated over the long term in these sectors unless the roots of rural poverty and disempowerment are addressed. A comprehensive rural development strategy is needed that unleashes the energy of the rural population and meets the needs of a growing consumer class. Such a strategy will link producers in rural areas with consumers through industries that support national growth.

Learning from history

The DRC has been run by small cartels of powerful individuals for their personal gain for over 100 years. During the colonial era there was support to colonists and merchants for productive investment in rural areas; in the later colonial era rural development lessons were emerging but they were too little and too late (INEAC documents techniques paysannats indigènes 1956-60). What was left of rural infrastructure after independence declined precipitously and virtually disappeared after zairianization. By the 1980s, practically all rural development was carried out by religious organizations and some donor projects, mostly working through these organizations. Development efforts were small-scale and haphazard.

Rural institutions were impoverished and now the rural people of the DRC are among the most destitute in the world (World Bank 2002). This situation has been made even direr by the conflicts of the past years. Ties with the outside world, tenuous as they were, were cut and many areas became terrains of conflict and chaos. When a colleague returned from a trip to the interior of Equateur last year she described how many people she encountered did not even have clothes to wear to appear in public (Samu 2003, pers. Comm.). Their fear of being attacked by militias and lack of farm implements led people to abandon agricultural activities.²¹

These realities lead to the conclusion that a dedicated long-term process of outreach and capacity building is needed in rural areas. Women and minority populations (especially forest dwellers) need to be reached in particular because their voices are very weak relative to men and to major ethnic groupings. To the best of my knowledge, there are no women on the staff

²¹ In a few weeks our team from University of Kinshasa and ICC (ICRAF, CIAT, CIFOR) will have initial findings from research on the welfare and living conditions of isolated populations in Equateur and Bandundu and we will be able to say more about how people are living these days.

of the project I am currently affiliated with, either in Kinshasa or in the provinces. When I queried this I was told “it is too difficult to work with women” and “they don’t have the right to speak in the village.” Literacy requirements set up by the project will bar most women from participating in technical workshops. This repeats the mistakes of the past where agricultural development efforts were targeted to men and did not improve family well being, in fact led to increased malnutrition because of use of women’s labor (Russell 1988a, 1990, Henn et al. 1988).

As the Poverty Reduction Strategy Plan (World Bank 2002: 18) states: “The difficulties women face in accessing factors of production are reinforced by the legal and institutional framework, which incapacitates married women by requiring that they first obtain authorization from their husbands. It has been ascertained that a minority of Congolese women (10 percent only) have the right to manage their property on their own. In rural areas, women account for 75 percent of food output, keep stocks, process food products to ensure family subsistence, and market 60 percent of output without, however, being able to dispose of the resulting income, a right that pertains to the husband.”

Policy reforms such as decentralization and market liberalization are not new ideas but it seems that proponents do not learn from the mistakes of the past. In Uganda, where decentralization is a mantra of the donor-influenced government, local communities are still in the dark about how to access funds (Tanui et al. 2003). Policy reforms that are supposed to invigorate rural or agricultural development can only work with a strong, vibrant and empowered rural population. Reform efforts in the 1980s in DRC (Zaire) met with failure for many reasons. One was that final decisions on allocation of monies were actually made in Kinshasa and this allocation was far from transparent. The other was that decentralization moved rent seeking to a different location or level that actually made it harder to trace than when it was more centralized. Three years after liberalization of the rice trade, the local cost of getting a permit to trade rice increased by 1,333% and the rules were a constantly changing morass of formal and informal bureaucracy (Russell 1991). In theory anyone could participate in the trade but the barriers to trade and even to farm successfully were immense. Without commitment to long term capacity building of rural people to request, manage and use funds, decentralized investments will not be used for productive investment.

De facto decentralization was actually the rule in the Mobutu years as *attributaires* and *cessionnaires* managed most of the productive infrastructure. Lack of transparent allocation and management of infrastructure such as road and bridge maintenance was common in the past as firms were given contracts, did not perform the work, and then tried to get free labor to do the work.

For decades, the most lucrative rural “industries” have involved smuggling and rent seeking by military and police (McGaffey 1991, Malemba 2003). Barriers, particularly physical barriers, to rural trade and industry have been and continue to be enormous (IRM 2003). Arbitrary arrests, imprisonments and taxation for numerous and dubious causes such as “sorcery,” public drunkenness, lack of identification were common in the rural areas (Russell 1991). For any investment to succeed, institutions and individuals that depend on rent seeking (*tracasserie*) for their revenues have to realigned and provided opportunities to carry out productive activities. These include demobilized soldiers. As Tollens (2004: 7) notes “peace must absolutely generate benefits [for soldiers] so that it is attractive and profitable.” Without attention to demobilization and anti-*tracasserie*, there is no way that investments can stimulate rural economies.

There is still a lack of formalized guaranteed land security for most rural dwellers as the state lays claim to all land and resources per the *Loi Bakajika*. Without significant land tenure reform based in well-managed local-level negotiation processes there can be no serious discussion about poverty reduction and local benefit in the rural areas. Decisions on

concessions and large-scale land and resource allocations require a transparent and participatory process, not just involving chiefs and local elites, who may receive funds for their own benefit.

In addition there is a long history of destruction or disparagement of customary institutions and practices because these are not seen as “modern” by the state and elites or they challenged state power structures.²² Projects should not proceed with untested assumptions that local institutions are “weak” and incapable of management (they may in fact be “weak” but alternatives may be weaker). While it is true that civil society has been strengthened in the last ten years, it is still mainly run by elites, and elite thinking continues to be grounded in notions discriminatory to genuine grassroots participation and indigenous institutions.

Before large-scale investment begins, awareness must be created that certain *modus operandi* long practiced in rural areas are no longer acceptable according to international norms. These include:

- ❖ Constraints on mobility and migration (e.g., regulations that prevent people from leaving their areas without “permission”).
- ❖ Excluding local farmers from the cash economy by offering only barter exchanges or “company store” arrangements, allowing (even encouraging) cartels and monopolies to dominate rural economies.
- ❖ Forced labor of any kind or labor paid “in kind” including using young women as commodities to obtain revenue and services. This includes also agricultural development projects that oblige villagers to produce food or commodities that they are not allowed to sell directly or must get “permission” to sell.
- ❖ Restrictions against “off-season” agricultural sales.
- ❖ Regulations prohibiting the transformation of commodities in order to bolster industry (e.g., in the 1980s, prohibitions against artisanal palm oil production in Bandundu and artisanal rice hulling by villagers around Kisangani).

There needs to be a colossal dedication to primary education in rural areas. The World Bank country strategy notes that “Education’s allocation in the national budget, however, has never been above 1 percent, (compared with an average of 14 percent for Sub-Saharan Africa), and substantial efforts will be needed” (World Bank 2004: 31). Many of the investments coming in however are short term: focusing on achieving project “results” that do not build capacity over the long term and relating to sectors with high potential for quick revenue for the government on the assumption that it is the government and private sector that will lead development efforts. Without comparable attention to grassroots development and empowerment, government and private sector efforts will reinforce inequities and ultimately fail to bring sustained economic growth. The focus has to be on the next generation of Congolese. Without that, there can be no genuine participation in development.

Now let’s look at two particular investments and their ramifications: conservation investments and investments in forest policy reform.

Conservation

In theory, investments in conservation and natural resource management could lead to better lives for rural people because they would be based in rural areas and help people to use and manage resources without depleting them. However, the very framework of conservation investment is flawed. Creation or expansion of protected areas has been carried out without consultation (there has never been any framework for wide consultation in the country on

²² Two examples of my knowledge were attempts to destroy matrilineal systems and to destroy or coopt traditional chiefdoms through a law that unseated chiefs if any member in the family committed a “crime” (as potential crimes were so multiple and widely defined it was easy to find one).

anything) and regard for inter-generational rights, access and compensation. These protected areas may or may not encompass valued species and ecosystems; one must ask also “valued by whom?”

The current paradigm of conservation investment within the Congo Basin Forest Partnership (CBFP) is centered on “landscapes” devised and managed by conservation experts from the West. Despite claims that there has been significant “buy in” to this new paradigm, it is hard

Box 3
How did the nations of DR Congo, Republic of Congo, Gabon and Equatorial Guinea become the “Congo Basin Wilderness Area” as depicted on maps put out by the US based Conservation International? What does this designation imply for management?

Map taken out for email transmission

to imagine how this could be the case given that few rural people could have access to, much less understand, planning documents. Even the Director of the Congolese Conservation Institute (ICCN) was excluded from some key meetings where CBFP planning was carried out (Bashige pers. Comm.). The planning process resulted in a patchwork quilt of international NGOs doing various things that may or may not be coordinated with

some small funding for national level NGOs.

It is taken as a matter of faith that species are highly “threatened” and that this landscape approach will lead to conservation of the valued species and terrains over the long term.²³ There does not seem to be a focus on how this approach will contribute to the protection of the Congo Basin ecosystem, the lifeblood not only of the country but of the continent (Russell 2001). “Landscapes” of course privilege international groups as they correspond neither to administrative nor to ethnic territories and as such are beyond local control (Brosius and Russell 2001). I am not arguing against the need for conservation, as I believe it to be the most critical challenge of our times and a matter of intergenerational equity, but I am saying that possibly effective solutions are stifled in the Congo Basin discourse because of preconceived and untested notions of “conservation success” (UGA 2003).

Support to local conservation efforts and institutions is weak and resources for these efforts are few compared to the resources that go into international conservation-led efforts.²⁴ When I was in Kinshasa recently a local conservation organization led by a Belgian-Congolese woman, which is one of the few working with the military and other national institutions to forge effective strategies for protecting the bonobo (*Pan paniscus*), confided that she did not have enough funds to continue paying her workers, while at the same time an “international” bonobo conservation organization with little or no direct experience in the country fundraises, sets up offices, and positions itself as a leader in the field.

There are many and detailed arguments and examples that link effective conservation with livelihood security. I am not talking about ill-conceived “conservation and development”

²³ Questions about monitoring the international institutions’ effectiveness during the first phases of CARPE have never been adequately raised much less resolved. Efforts to monitor under CBFP may or may not improve but it is unlikely, based on discussions with project leaders, that these efforts will be based on independent scientific evaluation of the efficacy of funded projects.

²⁴ During my years on the Central African Regional Program on the Environment Strategic Objective Team (CARPE SOT), several international partners, now involved in the CBFP, argued vociferously against funds being set aside for local conservation groups, as these are seen as being “weak” and “ineffective.” It was felt that support to local groups is largely a political sop rather than a tool for effective conservation. And indeed the conditions for receiving money within the CARPE or CBFP are so arduous and non-transparent that few if any truly community based organizations could qualify.

projects pushed—and now disparaged—by conservation institutions and donors but the need to maintain species diversity, ecological resiliency and other key processes upon which local and wider livelihoods depend. These species and processes cannot be maintained without internal constituencies that understand links and create and adjust management institutions. Many “conservationists” within the international conservation community fail to understand this essential point because they see “development” goals as interfering with pure conservation.²⁵ The most critical objective of international conservation has to be strengthening local constituencies and bolstering efforts to make visible the links between livelihoods and conservation.

What kinds of livelihood and conservation links need to be made? First there must be consultations about conservation priorities with various populations including forest dwellers, forest users, agricultural populations, fishers, harvesters, artisanal miners and small-scale forest exploiters (chainsaw loggers) as well as recent migrants and large scale private sector actors and concessionaires. Many of these people are now defined as “threats” to conservation yet in reality there is no way that sustained conservation can be achieved without them, by a handful of Western scientists with fancy maps. What do these people see as threats to *their* resources (clean water, medicinal plants, valuable trees, soil fertility, food species and varieties, bushmeat to eat and sell) and how do they respond?

Global experience has clearly shown that if users of a resource have little or no say in management of the resource or if there are conflicting and multiple regulations surrounding a resource, an “open access” situation is likely to be created where exploitation will proceed unchecked. Giving local people “some” rights, unclearly defined, with most benefits going out of the local area and with most rights being vested in the state or private sector, is likely to result in this scenario.

But rights are not enough. There has to be positive sustained investment in both material infrastructure and in education. Uganda has some of the highest levels of donor assistance in Africa and a strong commitment to decentralization but after a decade most rural populations cannot access these decentralized funds because they lack organizational capacity and clout at the national level.

There is an assumption among conservationists that migration, development and population growth lead to natural resource degradation (Hardin 2000). Very low population densities mean continued marginalization of the population, however, because they lack resources and numbers to resist incursions. Cordoning off large areas of the forest is likely to mean that large-scale actors have free reign in these areas. Cameroonian villagers near a large protected area told me that it was outsiders with guns (aka military) that set 500 traps in the forest to catch high value animals such as leopards, leaving the “bushmeat” to rot. Without rural industries that may come with migrants from more densely settled areas, people in isolated rural areas are forced into high risk activities such as hunting, smuggling, joining militias, artisanal mining and chainsaw forestry.

Forest Policy Reform

As mentioned, policy reform (structural adjustment and decentralization) was an utter failure in “Zaire,” and arguably elsewhere in Africa, during the 1980s. Some elements of the scenario have changed but others have not.

The World Bank is trying to draft a new forest policy document aimed at reforming the forest industry sector. The forestry sector policy report is still in draft and so I will have to talk

²⁵ As a colleague from an international conservation organization said to me recently, “Why do they keep asking us about poverty? We are trying to do conservation!”

more generally about the flaws of a sectoral, technocratic and hasty approach to reform. There is potential to influence policy formulation because of the clamor of civil society for a more participatory process. However civil society itself needs to have a realistic strategy for rural and industrial development and decentralized management that does not lead to elite capture.

What are the major aims of reform of this sector? The most important one is increased and sustained revenue for the government and ostensibly for its national rehabilitation efforts. Logging will bring in large revenues quickly. After reform, at least some of this revenue will be permitted to accrue at “local” levels, but what exactly does that mean? If some logging revenue can accrue at the provincial level, by what processes will this revenue be allocated toward education and development in extremely poor and marginalized communities?

A second objective is better management of the forest estate. It is public knowledge that a large proportion of existing concessions have been suspended pending review and there is a provision for the creation of community forests. What will the “new” concessions look like? By what process will these be allocated and how can that involve local communities given lack of transportation infrastructure, isolation and overall disempowerment of rural dwellers vis a vis large scale actors? How will community forests operate? I worry that just on a technical level important species and forest areas cannot possibly be well managed because there is so little knowledge about how to do this in the region. In Cameroon, community forests tend to be too small to be production forests and thus turn into agricultural fallows of varying stages of regrowth. Loggers simply bribe forestry agents and chiefs to take the largest and most valuable trees (high grading in forestry terms) with consequent decline in quality of tree genetic resources.

How can there be adequate local monitoring, reforestation or any “sustainable forest management” when capacity is so low in rural areas, the cash economy is so weak and the opportunities for corruption so high? Replanting efforts in the DRC forest industry through the Service National de Reboisement are widely known to have been totally ineffective, and it is hard to see how they can improve unless there is significant investment in research on silviculture, propagation, regeneration and tree germplasm supply.

In the past, forests were allocated to industrial users or conservation areas with little if any consideration for the needs or wishes of the local populations. Rights to land for locals were based on *clearing* forest for agriculture and/or replanting with exotics (*mise en valeur*). Thus for forest regeneration to take place there needs to be a change in the incentive structure as well as the basic forest research mentioned above.

Tree plantation rehabilitation and diversification is a major part of a sustainable land use strategy given that both smallholder and large scale plantations of oil palm, coffee and rubber already exist in great numbers and these present one of the few non-extractive industries with a future (Tollens 2004).²⁶ Unilever’s large-scale oil palm plantations in Province Orientale, however, have been given over to the international conservation organization Conservation International; it is unclear how they intend to manage them or what capacity they could have to manage them. Mr Rawji, the new owner of Marsavco (bought from Unilever) in Kinshasa, which is the major processor of palm oil in the country, told me that he is not willing make investments in improving smallholder oil palm in nearby provinces as his Unilever tried to do, although he is willing to pay “Malaysian spot price” for the oil to whomever gets it to Kinshasa. NGOs and some small donor projects help out with localized efforts to modernize

²⁶ Hydroelectric power is another promising industry but it may be threatened by logging and other exploitation near river banks. Also if it does not bring rural electrification it will have little value as a rural development strategy.

smallholder production but it is difficult to see how these will rebuild this industry and others based on valuable trees crops, which have the potential to reinvigorate rural economies.

Community forestry will not work for conservation or development without significant capacity building for plantation owners and market development for forest and smallholder “sustainably managed” plantation products. The new owners of valuable trees and forests will simply rent them out to industrial users, as is happening in Cameroon.

Rural development: where is it going?

Finally I would like to question the logic of the many “sectoral” investments, which tend to be planned and managed outside of the country by “advisors.” We see investments in conservation and forestry, in agriculture and fisheries but where are the consumers who are going to buy these products? This lack of attention to the creation and maintenance of a stable consuming class was the fatal flaw of structural adjustment. Neither logging nor “landscapes” will bring industrial development and sustained economic growth.²⁷

There needs to be strategic links between investments in industries to produce products for urban dwellers using materials that could be grown, mined, harvested or managed by rural dwellers (Russell 1988b). Without these links and strategic investments there cannot be real economic growth in both rural and urban areas.²⁸ One does not see this focus on strategic investments at all in the World Bank Poverty Reduction Strategy Plan or in the Country Assistance Plan. Private sector investment in the forestry (read logging), mining and energy (oil) sectors with some attention to telecommunications (South African Vodacom and Korean companies rehabilitating the land-lines) are highlighted. In short, it is a repeat of colonial policies that encourage raw materials export in order to increase foreign exchange earnings.

I am not arguing for a return to “African socialism,” which brought market boards and other misguided efforts to control the market, whose ramifications are still felt. I am arguing for a consistent and coherent strategy of rural development, using the donor funds that are now coming in. This strategy would build on the wealth of literature showing how sustained rural

Box 4 Grassroots voices in the PRSP

The community dynamics pillar is an original and peculiar feature of the PRSP. It underscores the important part played by grassroots communities in the daily life of the population and above all in activities designed to withstand the effects of crisis. In the particular institutional context of the DRC, the importance of this pillar is based on the fact that, faced with the crisis and the ensuing extreme poverty, the population has developed survival methods of its own in all sectors (including agriculture, nutrition, human rights, health, education, and transportation) in which government intervention has either been nonexistent or barely perceptible. The I-PRSP proposes identifying and making an inventory of these experiences in order to reinforce and disseminate them for use in other initiatives. Through this process, the I-PRSP, and the strategies it proposes, will be reformulated and updated as new experiences and information are accumulated.

From: Poverty Reduction Strategy Plan: page 11 (World Bank 2002)

²⁷ The mining and energy sectors are the other major targets of investment and it can also be said that these investments will have little impact on rural poverty (WB 2004).

²⁸ Although private sector investment is absolutely critical to this needed economic growth, we must recognize that the private sector is not going to be in the forefront of making the necessary reforms. First of all, the existing private sector is made up of firms that have survived under highly adverse conditions and have adjusted their management systems to be extremely non-transparent. New ones coming in will conform to this pattern unless it is significantly altered.

development is tied to the growth of a consuming class and to rural industrial opportunities. How can agricultural development, seen as the backbone of sustained economic growth, take place in DRC when no one can afford to buy food?

A very large percentage of Congolese now live in urban areas and despite their dire poverty they feel that they live better than they did back in the village. In large part this is because of the harassments, both large and small, of rural life but it is also because of total lack of opportunity for advancement. Small-scale, scattershot projects, projects focused on reforming a specific sector, projects based on large-scale exploitation of natural resources to be shipped overseas, and ones that replicate existing power relations will not advance national reconstruction over the long term. If the larger issues I advanced in the first part of the paper are not addressed investments in any sector will not generate benefits for rural people.

Conclusion

Reconstruction will be greatly enhanced by research on local institutions for resource governance, valuation of forest and other natural resources by local communities, the impact of migrations and militarization on natural and social assets, and enhancing participation, especially identifying and working with women, subsectors and minorities within communities. This goes way beyond the inventories of grassroots “coping strategies” called for in the Poverty Reduction Strategy Plan (Box 5).

During reconstruction, grassroots voices need to be amplified both on their own through associations and networks that reach policymakers and donors, and by sound data and strategies showing how investments in rural areas need to be structured to achieve lasting development impacts while at the same time safeguarding against destruction of the natural resource base.

We need to learn from history and past mistakes that privileged technocratic, hasty and sectoral approaches to development. These lessons come not just from DRC but from all over Africa and other parts of the world such as the ex-Soviet Union. South Africa has shown that rights-based development is the way to go. It is not a perfect process but it has put the country on the track to become the African super-power.

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World Bank 2004. DRC Transitional Support Strategy. January 26. 2004

Annex: Recommendations for donors working in the DRC

- ❖ Severely limit or ban “food for work” projects that discourage incentive and a cash economy.
- ❖ Severely limit or ban subsidized food imports that discourage local food supply.
- ❖ Encourage employment of individuals in rural institutions rather than relying heavily on Kinshasa based NGOs and institutions.
- ❖ Promote transparent and financially certifiable process for distribution of decentralized revenues and also clear prioritization process for use of funds.
- ❖ Invest in science and research that designs, tests and monitors approaches and projects rather than relying exclusively on rapid appraisals.
- ❖ Always use participatory approaches in extension and technology development.
- ❖ Not assume that rural people want to volunteer their labor for projects.

People, Trees & Forests: ICRAF/ICC, agroforestry and community forestry in the Democratic Republic of Congo

Outline of ICRAF/ICC presentation for
Communautés et gestion forestière en RDC :
Bilan des modèles de gestion participative
29 November-1 December
Kinshasa, DRC
Written by Diane Russell
Presented by Useni Kembolo

Introduction

Today's presentation
Focuses on agroforestry
Discusses agroforestry in community forestry and landscape conservation strategies
Gives an overview of ICC activities in CLIFS and DRC
Suggests an integrated approach to community forestry in DRC
Provides information on resources for agroforestry technologies, agroforestry in landscape conservation & tree crops

Who are we?

ICC is a consortium of 3 R&D institutions within the Consultative Group on International Agricultural Research (CGIAR)
ICRAF: World Agroforestry Centre
CIAT: Centro Internacional del Agricultura Tropical
CIFOR: Centre for International Forestry Research
Working in DRC under the
Congo Livelihood & Food Security Project
Managed by IRM: Innovative Resources Management
Supported by USAID within
Strategic Objective 4: Livelihoods improved in targeted areas

ICC Team

Useni Kembolo Marcel, agronomist, ICC Coordinator
John Mafolo, agronomist, ICC Site Coordinator Mbandaka
Leon Epongola, agronomist, ICC Site Coordinator, Kikwit
N'zinga Luyinduladio (demographer) and team, UNIKIN, Coordinator, ICC baseline research, M&E
Zac Tchoundjeu, forester, Regional Coordinator, ICRAF
Diane Russell, anthropologist, Theme Leader, ICRAF
Ebenezer Asaah, domestication specialist, ICRAF
Ann Degrande, socioeconomist, ICRAF
Ousseynou Ndoeye, economist, Regional Coordinator, CIFOR
Chimere Diaw, anthropologist, ACM, CIFOR
Abdon Awono, economist, CIFOR
Ann-Marie Tiani, ecologist, CIFOR
Nteranja Sanginga, Director, Tropical Soil
Biology and Fertility Program, CIAT
Pascal Sanginga, social scientist, CIAT
Bernard Van Lauwe, agronomist, CIAT

What goes into community forestry?

Managing natural forests over time (harvesting trees and tree products, regeneration, replanting)
Marketing forest products for revenue
Capacity building is essential
Technical skills in forestry & agroforestry
Inventory and valuation
Wood products
Value addition technologies
Nurseries and propagation
Management skills
Financial management
Land management
Understanding and linking to markets
Legal and negotiation support
Smallholders can capture benefits from community forestry only with capacity building and market linkages

Agroforestry in landscape conservation strategies

Research on the role of agroforestry in biodiversity conservation is increasing
Schroth et al. edited volume an excellent resource (See Resources section)
Alternatives to Slash and Burn (ASB) models of forest margin tradeoffs for Congo Basin (available on Web site)
ALAM (Agroforestry in Landscape Mosaics) project (ICRAF-Yale School of Forestry & Environmental Studies-Univ. of Georgia) on agroforestry in landscapes around Protected Areas (studies in Cameroon 2003 and DRC 2004). This project sends students out to Protected Area sites to examine agroforestry interventions.
One study now in progress in Okapi Faunal Reserve (Yale student) focusing on zoning project.

ALAM & ICRAF findings

Many conservation groups use agroforestry but with limited knowledge and few species
Participatory prioritization of species is needed
All groups including women, young people, traders, & minorities must be included in agroforestry strategy
High value tree domestication can provide improved germplasm (lack of germplasm is a key constraint)
There are often policy constraints to agroforestry relating to land tenure and tree planting in conservation areas (esp. use of indigenous trees)
Livelihood is not a project: enterprises and market development must work within existing markets
See following section on ideas for community forestry in DRC

Matrix Matters” landscape strategy: ICRAF & CIFOR joint project

ICRAF and CIFOR have a joint project to study tradeoffs in livelihood and conservation within multi-use landscapes. Based in experience in Asia including “Negotiation Support System” between communities and protected areas, RUPES (Rewarding Upland People for Environmental Services) and ASB (Alternatives to Slash and Burn) for ICRAF and Adaptive Collaborative Management (ACM) for CIFOR. How can land uses be negotiated to optimize livelihoods and conservation outcomes? (The idea of win-win strategies is no longer considered realistic.)

Agroforestry & community forestry in Cameroon—ICRAF's experience

ICRAF works in “agroforestry zones” and community forests around the Campo Ma'an and Dja protected areas

Evolution of activities in community forestry:

Species prioritization → skills building in domestication → market information, analysis and support → enterprise training and support → attracting private sector and facilitating linkages
Including: intra-species (landscape level) tree diversity management; support to minority (Batwa) populations

ICC-ICRAF in DRC

55 representatives of farmer groups and CBOs already involved or interested in cultivation of fruit trees and food crops identified and trained as farmer trainers in August 2004 on techniques of participatory tree domestication of agroforestry tree species and improved food crop cultivation systems in Equateur and Bandundu

ICRAF has put 15 nurseries into place with improved and local germplasm and will demonstrate multi-strata plantation model

Strategic partnerships developed with local development organizations (Salvation Army, CBFC, BDD, AR Congo, CANDEUR) and other community based organizations in Equateur and Bandundu provinces

ICC in DRC

ICRAF and CIAT are demonstrating/testing improved agricultural technologies (seeds, varieties, soil fertility technologies, legumes)

CIFOR is carrying out NTFP market studies

CIFOR is working with IRM on the Community Options Analysis and Investment Tool (COAIT) in Equateur

CIAT is identifying and will be demonstrating processing technologies

ICC has key role in CLIFS baseline study →

Extensive baseline study for CLIFS

SURVEYING

642 households

333 traders

27 markets

69 villages

ENCOMPASSING

26 Secteurs

36 Groupements

6 Cites

3 Communes (urbains)

13 Territoires

5 Districts

2 Villes

95 “tribus”

410 clans

61 local languages

Some findings from the baseline study

Average household revenue is \$106/hh/year

Household assets are few: 32% do not even have a bed in the house!

Important markets exist in both areas but many accessible only by pirogue or on foot

Large number of control barriers and “tracasseries” between villages and markets affects revenue of farmers and traders

Basic tools are few and in very bad shape: 23% of households do not own hoe!

Nevertheless, people are not starving because they have access to natural resources

Plantations abandoned; little or no revenue at present

Agriculture is #1 priority of population

ICRAF & CIFOR in DRC forest policy reform

CIFOR & ICRAF involved in drafting/reviewing forest policy paper with World Bank...our role was to emphasize the importance of smallholder forestry, livelihoods of forest dwellers & the potential for agroforestry

Need for regeneration strategies and study of genetic impact of high grading

Importance of land tenure reform for any decentralized NRM, community forestry

Importance of local-level capacity building for any decentralized management

UNEP 2004 study called African Environment Outlook shows extensive forest degradation in Africa. For DRC, the report notes significant degradation of woodlands. Between 1980 and 1995, Africa lost more than 10 percent of its forests, or approximately 150 million acres. In the 1990s the rate of deforestation increased, with forests disappearing 15 percent faster than they had in the 1980s. Between 1990 and 1995, Africa lost more than nine million acres of forest each year to civil unrest, agricultural conversion, overgrazing, wildfires, cutting for firewood and charcoal, and logging. Source: Rainforestweb

An FAO report claims that African forest loss between 1990 and 2000 was over 50 million hectares, representing an average deforestation rate of nearly 0.8 per cent per year over this period (FAO 2001a). As a consequence, availability of forest resources per capita declined from 1.22ha/person in 1980 to 0.74ha/person in 1995 (African Development Bank 2001).

Next steps for ICC and ICRAF

ICC has highly competent core staff in DRC (Kinshasa, Mbandaka, Kikwit)

CLIFS2 project? How to expand impact and better link with conservation NGOs and private sector

Publications from baseline and technical guidelines in French and local languages

Working closely with conservation NGOs to improve agroforestry, agriculture and NTFP interventions (agreements with WWF, CI, WCS, AWF)

An integrated strategy for community forestry in DRC

Capacity building at all levels

Support educational institutions to build professional expertise in sustainable agriculture, forestry and forest products commercialization

Train technical local cadres in forestry, agroforestry and subsector markets to support community concessions and agroforestry zones

Generate locally-appropriate technologies in forestry, agroforestry and sustainable agriculture through participatory farmer-led extension

Thorough policy reform processes

Designate clear rights and responsibilities for forest communities: experience shows the importance of taking time to identify and empower appropriate sub-units for management and revenue rights

Develop negotiation and legal support structures

Use lessons on decentralized forest management from other countries but be aware of diversity in DRC (there can be no UNIFORM strategy!)

Reform policies on land and resource tenure BUT carry out detailed ethnographic and historical analysis of land tenure, use and management
Support viable management units based on appropriate administrative and social institutions

Demand-focused market approaches

Work with all actors in the market chain using a sub-sector (filière) approach; don't reinvent this wheel by introducing cooperatives or focusing solely on community-based enterprises
Support rural-based industries for forest products: producers needs markets!
Attract appropriate private sector investment in DRC's forest and tree products
Focus on rehabilitating smallholder plantations
Provide negotiation support to market actors

Integrated conservation strategies

Integrate local wildlife management component into community forestry: gun control, strengthening hunting bylaws, sustainable use of wildlife
Include conflict and "tracasserie" management component: creation of livelihood opportunities for soldiers and officials in community forestry
Implement logging concession monitoring: environmental effects, regeneration, high-grading, spread of disease, guns, displacement, market distortions in zones of operation
Adapt conservation approaches to embrace needs of local communities (agrobiodiversity, clean water, medicinal plants) and ecosystem management (water, soils)

Resources

ICRAF

ICRAF publications and information
www.worldagroforestrycentre.org
(Tree) Biodiversity Analysis Package
<http://www.worldagroforestry.org/treesandmarkets/Pages/download.htm>
ANAFE (African Network for Agroforestry Education) contact a.temu@cgiar.org and course materials (j.beniest@cgiar.org)
Agroforestry database (online)
<http://www.worldagroforestry.org/Sites/TreeDBS/AFT/AFT.htm>

Landscape conservation

Schroth et al. 2004. Agroforestry and biodiversity conservation in tropical landscapes. Washington DC: Island Press.
ASB publications/Congo Basin
www.asb.cgiar.org
Matrix Matters by Cunningham, Scherr & McNeely (available from CIFOR: www.cifor.org and on CD)
ALAM publications
www.yale.edu/tri
Tropical Resources Institute

ICC

Reports on ICC activities: usenimarcel@yahoo.fr
CLIFS Baseline report (available from IRM)
NFTP market study (forthcoming)
Background papers
Landscapes, logging and local voices in in DR Congo's reconstruction by Diane Russell, paper prepared for conference on Grassroots perspectives on the conflict in the Democratic

Republic of Congo (DRC), Organized by the Conflict Research Group Monasterium PoortAckere, Oude Houtlei 56, 9000 Gent, Belgium, 26-28 May 2004
An ecosystem approach to conservation in the DR Congo by Diane Russell, Prepared for Tropical Forest Ecology course, Yale School of Forestry and Environmental Studies, 2001
Russell, D. et al. 2005. People, trees and parks: Is agroforestry in or out? Forthcoming, Journal of Sustainable Forestry special edition. (PowerPoint on CD)

Tree crops

Allanblackia and ProKarite projects: ICRAF projects in domestication, commercialization, certification of high value trees and tree products with private sector partnerships Contact: t.simons@cgiar.org, www.prokarite.org

Trees of prosperity: Agroforestry, markets and the African smallholder. D.Russell & S. Franzel 2004. Agroforestry Systems 61: 345-355. (on CD)

ICRAF-CIRAD coffee-agroforestry partnership (on CD) (f.pinard@cgiar.org)

Sustainable Tree Crops Programme (IITA) www.treecrops.org

World Cocoa Foundation: cocoa improvement, conservation & tree crops, plantation diversification (www.worldcocoafoundation.org)

CD Rom left with CARE in DRC has many of these resources and more

An integrated strategy for West Africa (ICRAF-CIFOR)

Goal: More diverse and profitable tree-based enterprises with improved livelihood security for the poorest and most vulnerable

Strategy: Tree-based livelihoods are promoted within improved natural resource management frameworks (technologies, policies and institutions)

Rationale

An integrated strategy for forest management, agroforestry, and tree products for West African ecoregions must include technical, institutional and policy elements. ICRAF and CIFOR have a comparative advantage in R&D for West African forest and tree sectors given experience, expertise, partnerships, networks and tested technologies and tools.

Comparative advantage in trees and forests

West Africa has a comparative advantage in tree-based industries and tree products due to its ecogeography, culture, economic history and market density (Tollens 2004). Tree products are highly valued, local, regional and international markets for tree products are robust relative to other African regions (but could be improved greatly), farmers are used to planting and nurturing high value trees and managing plantations, tree ownership and planting can improve tenure security, tree products are critical to the nutrition and livelihoods of the most vulnerable and selling tree products provide women and poor people with important livelihood options.

Trees, forests and agroforestry are integrated with other livelihood and agricultural options: trees are retained in food crop fields and silvipastoral systems, while fallow systems regenerate valuable trees. As a Natural Resources Institute (UK) report stated in 1992 in reference to southern Cameroon: “for technical and social (land tenure) reasons, it is not realistically possible to allocate land separately to agriculture or forestry. These two activities are so closely inter-related that, in effect, they form a single compound land use.” In the Sahel the “Parklands” represents another integrated system where valuable trees are maintained and regenerated on farmland and in silvipastoral zones. Even in the imperata grasslands of DR Congo, trees play the essential role of harboring caterpillars, a major source of protein for the population, as well as providing fruit, firewood and medicinal substances. Savanna is interspersed with riparian forests and many households have fields in both savanna and forest areas to diversify production.

There is a deep economic interplay as well between tree/forest products and food crops. When crises in tree crop markets occur, farmers turn to food crop production with negative effects on forests and ultimately on crop management (Sunderlin *et al.* 2000, Ruf and Schroth 2004). High value tree crops such as cocoa and oil palm are largely grown by smallholders, often in complex agroforestry systems. Extension systems, improved germplasm and market linkages have been developed for these crops but much less so for the high value tree intercrops. High demand for tree products and the need to buffer risk requires improved tree management and plantation diversification.

Complex challenges to conservation and environmental management

While holding some of the most globally important and threatened species in the world, such as three Great Apes, forest elephants, leopard and okapi, protected areas in West Africa are much less economically viable than those in eastern or southern Africa. There is little tourism revenue and few livelihood options for adjacent communities. Conservation institutions and forest departments persist in top-down management and there is substantial community resistance to state-run conservation and forestry. Community forestry is yielding a few

lessons but has a long way to go to generate models that are economically and ecologically viable. Community forestry and agroforestry must work within legal and institutional frameworks barely evolved from the colonial era. Forest policies negatively affect tree planting and markets for forest products (Ashley et al. forthcoming). Silviculture has been neglected and in any case rarely applied in part because of poor knowledge of species ecology, regeneration and recruitment (Dupuy 1998, Russell 2001). Deforestation rates are high overall (UNEP 2004) even as some communities retain and manage complex agroforests, sacred groves and community forests (Fairhead and Leach, Muam-Chi 2001, Carriere 2004).

Conflict has been rife in West Africa for a decade, with war breaking out in Sierra Leone, Liberia, the DR Congo (DRC), Republic of Congo (RC), Central African Republic (CAR) and most recently Côte d'Ivoire. Nigeria is an economic behemoth that contains within it significant local conflicts. Extractive industries such as mining, oil exploitation and logging destabilize the region while adding little to local economic growth. Significant economic growth has come to only a handful of countries such as Ghana, Senegal, Equatorial Guinea and Gabon; in the case of the latter two the sustainability of that growth is questionable. Others stagnate or decline. A recent study in the DRC showed that rural populations in two provinces were getting by on a little over \$US100 per year per *household* in terms of monetary revenue.

Tree-based industries offer alternatives to extractive industry and stability for a dislocated population. There are strong regional markets for tree products but these could be much stronger if trade barriers and "tracasseries" (informal "taxation" by military and police on roads, rivers and borders) could be reduced and efforts made to promote regional trade. Without sound NRM and land tenure policy frameworks, however, increased trade could bring about mining of tree and forest resources. The question of tree tenure in relation to migrants in West Africa is a complex one but local level solutions can be crafted when the issues are not highly politicized. When they become politicized, everyone loses because tree crops become speculative ventures and cannot be managed sustainably.

While these weak institutional frameworks and conflicts present significant challenges, there is huge scope for improvement in environmental governance due to pressure for decentralization, devolution, poverty reduction and increased empowerment of local communities. ICRAF and CIFOR have learned that sound policies have to be crafted and supported at all levels from the local (bylaws) to the international (MDGs, conventions). An important area of intervention is communicating and linking policy efforts, negotiation support and building institutional capacity to implement better policies and decentralized NRM. ICRAF-CIFOR have growing policy experience in West Africa and also draw on work by the Alternatives to Slash and Burn (ASB) program and from Southeast Asia.

Capacity and partnership

ICRAF and CIFOR's experience in tree product markets is rapidly expanding. CIFOR has carried out extensive analysis of NTFP markets in the Congo Basin area, while ICRAF is now running projects to promote agroforestry enterprises in the Congo Basin and managing a large-scale multi-partner project to increase local benefits in the shea (*karité*) subsector in the Sahel funded by the Common Fund for Commodities (CFC). ICRAF's partnership with Unilever is developing a new tree product for African smallholders from the species *allanblackia*.

In environmental management, CIFOR has extensive experience in community forestry and has pioneered the use of adaptive collaborative management (ACM). ICRAF's and ASB's work in watersheds and at the landscape level has developed models of land use trade-offs and is testing the potential for poor but ecologically important regions to capture benefits for better land use. Technologies for soil fertility improvement have been extensively tested by

ICRAF and its partners in several regions. Diversifying and improving fodder species is another important element of both livelihood and environmental management strategies. ICRAF's work in fodder shrubs includes not just the technologies but the methodology for scaling up use of a variety of species and integration with animal husbandry.

ICRAF and CIFOR make use of a balance of science and development methodologies, technologies, tools and approaches. There is a commitment to high quality science, be it biophysical or social, to bringing science to bear on development problems and at the same time subjecting development efforts to rigorous appraisal: what is working, what is not, why, how it can be improved, and how benefits can be extended. Leveraging core and project funding enables ICRAF and CIFOR to carry out longer-term research while achieving development objectives in shorter periods. ICRAF has pioneered several participatory priority-setting, assessment and evaluation methodologies.

Partnerships add a great deal of value to CIFOR and ICRAF in terms of sustainability of benefits and capacity building. Their work is embedded within local, national and international institutions and networks. Opportunities are provided to local partners for scholarships, training and networking with peers in other countries. New partnerships with Conservation International and CIRAD add the dimensions of conservation planning and traditional tree crops such as cocoa, coffee, rubber and oil palm.

Key activities

1. Livelihoods baseline survey modified from CLIFS (DRC project) baseline survey: households, village level institutions, markets and traders
2. M&E: selecting indicators from livelihoods survey, monitoring, participatory evaluation
3. Identification of "poverty traps" and strategies for improving livelihoods and nutritional status of most vulnerable (e.g., female headed households, marginalized, land-poor), risk analysis of changing policies, market forces, impact of differentiation (increased gaps between richest and poorest) and mitigating elite capture in projects
4. RAFTS—Rapid Agroforestry and Tree Product Surveys: survey of demand for forest and agroforest products, description of markets, delineation of marketsheds for products, identification of market actors and entrepreneurs, identification of entry points for donors, NGOs and projects
5. Species prioritization and nursery development for priority species linked to market demand and nutritional needs
6. Nutritional analyses of fruit and other tree products, analysis of constraints to production and consumption
7. Identification of key livelihood issues around protected and fragile areas, potential for agroforestry, community forestry and co-management of state forests, ecosystem functions analysis in relation to land-use and protection status
8. Development and dissemination of improved community-based silvicultural practices in relation to management and market objectives
9. Market actor workshops in priority subsectors and/or target regions
10. Policy analysis of constraints to market development in forestry and agroforestry sectors; policy briefs and workshops for ministries and other stakeholders
11. Improved prioritization and extension methodologies through AGILE strategy workshops, identification of change teams (facilitators chosen by communities), facilitators training
12. Training in agroforestry, domestication and NRM technologies
13. Market training for NGOs and extensionists
14. Agroforestry and forest product development, testing value addition options
15. Sustainable tree seed systems options
16. Capacity building of forestry, agroforestry and agricultural professionals through training and professional advancement, linking with African networks

Materials available

- Domestication methodologies and training materials
- Livelihoods baseline survey and M&E framework
- Poverty trap identification methodology
- RAFT protocols and survey instruments
- Market workshop design
- Stakeholder workshop for subsectors
- NTFP market study protocols
- Market training materials
- AGILE guidelines, facilitators training
- Agroforestry database
- ALAM R&D methodology and lessons on livelihoods around protected areas
- ANAFE networks, scholarships, curriculum development
- Scaling-up models and approaches
- Adaptive Collaborative Management guidelines
- NEEDED: plantation diversification and rehabilitation guidelines

ICRAF-CIFOR's West African Experience

Sahel

Cameroon/Congo Basin

Ghana

Nigeria

Liberia trip

Guinea trip and proposal

Activities of ICRAF-CIAT-CIFOR ("ICC consortium") in USAID-funded Congo Livelihood Improvement and Food Security (CLIFS) Project in DR Congo

- Baseline study on livelihoods, M&E
- Agroforestry training and nursery development with priority species
- Plantation rehabilitation models (agroforests)
- Study of NTFP markets
- Identification and dissemination of improved processing options
- Source improved germplasm and create demonstration plots
- Assistance with implanting the Community Options Analysis and Investment Tool (COAIT) led by Innovative Resources Management (IRM)

What ICC could have done in CLIFS project but insufficient funds and time (2 yrs)

- Market workshops to facilitate exchange between market actors in subsectors or regions (based on Market-oriented Agroforestry Workshop in Kenya, Smallholder timber subsector workshops in Kenya, market training in Kenya, Zambia and Indonesia, ProKarité project and farm-agribusiness linkages workshop (FAO-ICRAF))
- Community-based extension methods, including identification of change teams and participatory priority setting (based on Southern Africa scaling up methodology, participatory prioritization developed in several regions, African Grassroots Innovations for Livelihood and Environment -AGILE- project methodologies from Uganda)
- Community forestry (CIFOR) (See CIFOR-ICRAF Liberia proposal, work in Cameroon and proposed work in DRC with CARE), Adaptive collaborative management (ACM) models and methodologies (CIFOR)

- Integrated conservation and development for communities adjacent to Protected Areas (Agroforestry in Landscape Mosaics-ALAM-project of ICRAF-CIFOR, Yale School of Forestry and Environmental Studies, University of Georgia, partnership with Conservation International)
- Integrated work on watersheds and ecosystem services (ASB, ICRAF Southeast Asia, Lake Victoria models)

What selected ICRAF and CIFOR partners could add in Region

- Conservation International—conservation and land use planning, sustainable tree crops, wildlife conservation, policies
- CIRAD—tree crop plantations, perennial crops (CP) and CIRAD-Forêt Divisions
- Conservation International—tree crops around protected areas, corridors, connectivity, land use planning
- IRM—methodologies to understand and deal with barriers to market access (“tracasseries”) developed under Rélevance Economique project, Community Options Analysis and Investment Tool (COAIT)
- CIAT—improved legume germplasm and technologies, farmer enterprise development methodologies, sustainable livelihoods approach
- ICRISAT—groundnuts, market oriented approach
- Relma-ICRAF—water harvesting, farm management
- Yale University and University of Georgia—livelihoods around protected areas
- Laval University—agroforestry in Parklands, participatory communication
- Unilever—private sector partnership in tree product development (*allanblackia*)
- CPWild (Commercial Products from the Wild) based in South Africa—market analysis, identification of products, training, enterprise development
- FAO—smallholder timber, NTFPs, farm-agribusiness linkages
- SOCODEVI—micro-credit
- CECI—enterprise development in shea subsector
- Fergus Sinclair and U Wales, Bangor—local knowledge in agroforestry
- Sustainable Tree Crops Programme (STCP)—farmer field schools

Key ICRAF personnel and expertise

HQ

Mohamed Bakarr, Director of Strategic Initiatives, conservation biologist, conservation and livelihoods, land-use planning, policy and science-based strategic planning

Tom Tomich, Global Coordinator, Alternatives to Slash and Burn (ASB), economist, rural development, policy, partnerships, land use

Tony Simons, Co-Theme Leader, Trees & Markets, forester, domestication, private sector partnerships, smallholder timber

Frank Place, Theme Leader, Land & People, economist, soils and water management, land tenure

Brent Swallow, Theme Leader, Environmental Services, economist, watersheds, biodiversity, poverty traps, HIV/AIDS

August Temu, Theme Leader, Strengthening Institutions, forester, University Professor, capacity building, curriculum development

Ramni Jamnadass, microbiologist, lab manager, molecular analysis

Lou Verchot, ecologist, carbon sequestration, land use change

Ric Coe, statistician, capacity building in research methods and analysis

Jens-Peter Lillesø, ecologist, seed system specialist

Roeland Kindt, ecologist, landscape-level tree diversity, agroforestry around protected areas

Steve Franzel, economist, fodder, participatory M&E, scaling up, research for development

Jan Beniast, horticulturalist, training, curriculum development

Anand Aithal, Junior Professional Officer, market and business development

Sahel

Amadou Niang, Regional Coordinator, Sahel, forester
Eliot Masters, development specialist, tree products agribusiness
Antoine Kalinganire, forester, domestication specialist
Bokary Kaya, forester (?), capacity building, land degradation
Cheik Omar Traoré, economist, economic evaluation of technologies

African Humid Tropics

Zac Tchoundjeu, Regional Coordinator, African Humid Tropics, forester/agroforester, domestication specialist
Diane Russell, Co-Theme Leader, Trees & Markets, anthropologist, market systems, rural development, NTFPs, conservation and livelihoods
Ann Degrande, socioeconomist, scaling up methodologies
Ebenezer Asaah, agroforester, tree domestication specialist
Honoré Tabuna, ethnobotanist, NTFP agribusinesses, export market specialist
Charly Facheux, market analyst, enterprise development
Peter Mbile, ecologist, landscapes, ecology of trees
Marie-Laure Mpeck, forester (?), training, capacity building

Others within ICRAF community

Meine Van Noordwijk, Regional Coordinator, Southeast Asia, ecologist, modeling, watersheds, NRM
Chip Fay, policy analyst, Southeast Asia, negotiation support approaches
Ann Stroud, farming systems, coordinator African Highlands Initiative, watersheds, integrated methodologies, partnerships with national institutions
Caroline Jacquet, Junior Professional Officer, scaling-up and out with partnerships
Joyce Mitti, agronomist, development specialist, southern Africa, scaling up
Qureish Noordin, development specialist, Kenya, scaling out with consortiums
Joseph Tanui, rural development specialist, AGILE Coordinator, African Highlands Initiative (Uganda)—AGILE methodology
Liz Betser, markets and rural development, consultant—RAFT surveys
Christine Holding-Anyonge, FAO—smallholder timber market analysis

Databases needed

- Species and products inventory
- Institutional inventories for each country and at regional levels
- Agroecosystems and ecoregions
- Biodiversity hotspots and conservation priorities
- Degradation areas
- Poverty areas
- Tree crops market flows
- Policy issues
- Population, demographic trends
- Conflict areas
- Donor investments and priorities

Questions for the donors

- What are the target areas/populations in the country? Why were they chosen?
- What are the objectives and activities of existing livelihoods, forestry and agricultural projects?
- What other strategic objectives in the country (for example in health, environment or education) are being pursued and how are they linked to agriculture, forestry?
- What capacity building activities are being funded?
- Is there any Food for Peace or other food aid activity in the country? Do food aid initiatives have any development objectives?