

Mainstreaming Natural Resource Management into Development Programs

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Abstract

Natural resource management (NRM) can and should be a central player in poverty reduction, agriculture, governance and conflict management strategies. Experience shows that when NRM is part and parcel of the strategies in these apparently “separate” sectors, the results on the ground—in both areas (NRM AND poverty reduction, agriculture, governance, or conflict management)—are better and more lasting.

Why, then, is the NRM sector only an afterthought when people develop strategies for poverty reduction, agriculture, governance or conflict? If the local success stories are so good, then why aren't they being replicated elsewhere? How can we show how a dollar invested in NRM can perform more effectively than a dollar spent elsewhere, and, conversely, how can we prove that in order for the goals in these other sectors to be achieved, investments in NRM need to be made?

This workshop identified and described the critical empirical and analytical links between NRM and economic growth, agriculture, poverty reduction, governance, and conflict management. It also developed approaches and methods for integrating and mainstreaming NRM into strategies and programs in these areas. Finally, it discussed knowledge management (KM) as a key element of better NRM decision-making and made recommendations to increase the effectiveness and efficiency of these tools, with a particular focus on strategies for enhancing FRAME's impact.

Acronyms and Abbreviations

ACODE	Advocates Coalition for Development and Environment
AHI	African Highlands Initiative
ASARECA	Association for Strengthening Agricultural Research in East and Central Africa
BTEC	Business Transformation Executive Committee
CBNRM	community-based natural resource management
CBO	community-based organization
CDIE	Center for Development Information and Evaluation, USAID
CG	contact group
CMM	Office of Conflict Management and Mitigation, USAID
COP	community of practice
DRC	Democratic Republic of the Congo
ENR	environment and natural resources
GDP	gross domestic product
HYV	high-yield varieties
IEHA	Initiative to End Hunger in Africa
ILEG	Institute for Law and Environmental Governance, Kenya
INRM	integrated natural resources management
IRG	International Resources Group
KM	knowledge management
NEPAD	New Partnership for Africa's Development
NGO	nongovernmental organization
NRM	natural resource management
NWP	Nature, Wealth, and Power
PAC	Partnership Africa-Canada
PG	producer group
PRSP	poverty reduction strategy paper
R&D	research and development
RRB	regional rural bank
SC	steering committee

UNDP	United Nations Development Program
UNEP	United Nations Environment Program
USAID	U.S. Agency for International Development

Introduction

Natural resource management (NRM) can and should be a central player in poverty reduction, agriculture, governance and conflict management strategies. Experience shows that when NRM is part and parcel of the strategies in these apparently “separate” sectors, the results on the ground—in both areas (NRM AND poverty reduction, agriculture, governance, or conflict management)—are better and more lasting.

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NRM and Poverty Reduction—Sustainable livelihoods of poor households often depend upon the natural resource base and access to common goods. Although the poor often lack resources, control, and the “margins of subsistence” needed to manage the environment successfully, empirical evidence points to the resourcefulness of poor people and their ability to manage under the right conditions.

To better integrate NRM into broader rural development programs as part of poverty reduction—in particular the Poverty Reduction Papers, PRSP—support should be provided so that a country's budgetary process better reflects natural resources contribution to the local and national economies. Additionally, actors at the local levels need to be enabled to better understand the poverty-NRM linkages and investment needs to be made so that local communities can better access and use resources, increase productivity and benefit from wider market opportunities.

NRM and Agriculture—Unlike NRM, there is a huge depth of research, data and analysis to support agriculture's inclusion and implementation. In agriculture, unlike NRM, there is also a very entrenched awareness and education supporting function to back up its adoption and implementation. At the workshop, one participant made the observation that agriculture is well researched and very articulate and so decisions are naturally made in its favor. While agriculture is a dynamic *subset* of natural resource management, in some cases, it is neither the optimum land use nor the most important economic sector. Increasing and protecting the productivity of the natural resource base is vital to sustainable economic growth in rural areas because: land degradation is reducing agricultural GDP by 5 percent annually; the high cost of agricultural technologies (fertilizers, high yield varieties—HYV, irrigation) are more productive and profitable when used in

combination with good NRM practices; and well-managed forests/woodlands and water resources contribute to rural income diversification and poverty reduction, often providing income for disadvantaged groups.

To achieve a broader view of agricultural development that adds resource management issues to the production and consumption chain, institutional changes that encourage cross-sector collaboration are needed in African governments and donor agencies, particularly with respect to agricultural research and service providers. In addition, fund should be allocated to promote multiple rural development strategies rather than targeting projects with rapid, easily-measured benefits for a limited number of people. Further, studies, information, capacity building, and lobbying activities that increase decision-makers' understanding of the core role that sustainable agriculture *and* NRM can play in rural development and poverty alleviation should be supported.

NRM and Governance—Nature-based wealth in Africa is often transformed not just into economic power but also political power. Access to natural resources is a major perk of political office and is often used as patronage to maintain power. At the same time, the decentralization of natural resources is often justified for improving management efficiency and increasing equity. Yet to achieve these results, meaningful transfers of sufficient discretionary power to accountable, representative local institutions are required. Many reforms in Africa in the name of decentralization are limited and highly controlled making local institutions more accountable to central government agencies than to their constituents. This actually serves to strengthen the state's control over rural regions and often leads to resource degradation and social inequities.

As the main source of livelihood (the “bread and butter”) of marginalized populations, natural resources are perhaps the most compelling vehicle for promoting and consolidating key governance principles of participation, vertical and horizontal accountability and representation. While building the capacity of citizens to participate is important, this needs to be complemented by building an enabling environment for participation. Of particular importance is the need to strengthen state officials and institutions with specific rural representations responsibilities, such as elected local government officials and legislators.

NRM and Conflict—Competition for resources is almost always at the heart of every conflict. There is a growing demand within the development community to begin to think more strategically about how to tackle conflict. Failure to manage natural resources effectively and equitably contributes to conflict—at the regional, national and local levels. Experiences presented from across Africa show that NRM activities are an effective vehicle for stakeholders to negotiate agreements that mitigate conflicts. They also demonstrate that ecosystems are more likely to bring social security and sustainable development where natural resource management is based on economic viability, ecological sustainability and social justice.

People have been fighting over land and water and other valuable resources for ages, and they're going to continue. In achieving environmental justice and managing conflict there will always be winners and losers. The challenge is to see what development practitioners can do to reduce the lethality, particularly by building institutions and processes that channel conflict in productive directions. To achieve this, NRM practices can be integrated into conflict management and resolution programs through: participative management of natural resources that integrate traditional knowledge and rules related to natural resources with scientific information; support training of local partners in conflict and resources management that meets the objectives of sustainable local

livelihoods and resource conservation; base environmental conflict resolution on environmental justice that reconciles all stakeholders' interests and that is premised on innovative NRM strategies that take into account economic, ecological and social justice factors; negotiate NRM-related projects among all stakeholders, ensuring that the role of the local community, particularly that of women and other marginalized minorities, is predominant; encourage well-defined and clear channels of communication; and forbid markets for "blooded" resources.

Knowledge Management and FRAME—Knowledge management (KM) is a key element of better NRM decision-making. "Knowledge" refers to the expertise, skills and facts (both written down and resident within people) that are used to solve problems. Knowledge management and sharing are becoming increasingly important to the development process. Natural resource endowment is not a sufficient basis for economic growth and poverty reduction in African countries; a management process involving scientific, economic and political inputs must accompany it. Above all, the process should be underpinned by an appropriate application of knowledge. In the world of NRM in Africa it is not the resources one has but what one knows that is important.

A key element of knowledge management, and indeed of FRAME, is support to "communities of practice" (COPs). FRAME's objective is not just to increase the flow of information on NRM but also to help provide high quality advice and knowledge when it is needed to improve decision-making. To help increase the effectiveness and efficiency of FRAME, there is a need to separate the information management and technology function of FRAME (the website) from the community of practice (Contact Group) side of FRAME. This will help illustrate how FRAME can have multiple sub-communities without "subsuming" them, and thus encourage other development partners to participate more freely. Further, a lack of global leadership on many issues has made strategic partnerships—that is, the coming together of groups (who may be similar or disparate) over particular commonalities of interest—is becoming more and more important. This makes FRAME's ability to support formation of these partnerships a key element for advancing their impact.

NRM and Poverty Reduction

Poverty and its root causes are not well understood. By extension, although poverty measures exist as a means for describing the magnitude of poverty, the indicators are static and limited in terms of explaining why people are poor. What *is* known is that the problem of hunger in Africa is widespread and getting worse. In fact, Africa is the only place in the world where poverty is on the increase.

Natural Resources are *the* critical resources for the poor. Not only are they a source of income for the poor, contributing to their livelihoods, but they also serve as their socio-economic safety net. Sustainable livelihoods of poor households often depend upon the natural resource base and access to common goods. Like wealth, poverty too is inherited. **The children of asset-poor families need special attention to become active agents in securing a better future for themselves.** The *Nature, Wealth and Power* paper points out that control of and access to resources stands at the center of prosperity and enfranchisement in Africa. *Nature, Wealth and Power* also points out that although the poor often lack resources, control, and the “margins of subsistence” needed to manage the environment successfully, empirical evidence points to the resourcefulness of poor people and their ability to manage under the right conditions. Transforming natural resources into assets depends on individuals or the communities securing access to them.

In the Sahelian countries, the link between NRM and poverty is inextricably connected. Natural resources play a vital role at all levels—both macro and micro. In fact, in many respects the economic deterioration of countries in the Sahel has been accompanied by an accelerated degradation of the natural resource base. For the Sahel, poverty reduction is above all an improved *management* of the natural resources. Take the case of “Transformation in Forest Management Practices” in Burkina Faso, for example. In Burkina Faso, a new forest policy was adopted in 1981 to promote a shift from the simple protection of forests to their improved management. Guidelines were developed for the preparation of forest management plans. While the initial sets of management plans proved to be cumbersome and difficult to implement, the forest management planning process has been steadily simplified and improved through experience. The new community-based forest management system has brought real environmental, economic and governance benefits to the participating men and women. Members enjoy economic benefits through their participation in forest-based enterprises such as livestock-raising and the processing of non-timber products such as shea nut.

In **Mali**, cotton producers farming on weathered, acidic soils doubled their yields and reduced following by intensifying. Intensification included but did not start with high-yielding varieties and fertilizer. Intensification started with soil conservation and soil amendments. Farmers invested in NRM in order to increase the efficiencies and reduce the risks on inputs. Given that 80-90% of arable lands in Africa (a) have soil constraints that would reduce the effectiveness of high-yielding varieties and fertilizer and (b) that NRM techniques can reduce many of those constraints, the lessons from Mali have broad application. Yet, it is not a lesson that we always see incorporated within poverty reduction strategies.

The complexity of the relationship between NRM and poverty is no more evident than it is in **Tanzania**—a country with a considerable natural capital base.

Causes of Poverty	Causes of Environmental Degradation
<ul style="list-style-type: none"> • Inadequate land and resource tenure, so people can't capitalize on land value • Poor infrastructure and markets • Inadequate skills • Culture of dependence and subsistence • Limited alternative income-generating opportunities—both farm and non-farm • General policy failure • Corruption 	<ul style="list-style-type: none"> • Land degradation • Lack of accessible water • Environmental pollution, which is affecting the health or rural and urban communities • Pollution and poor management of rivers, lakes, coastal and marine waters • Loss of wildlife habitats and biodiversity • Clearance of forest and woodlands
...and other causes	
<ul style="list-style-type: none"> • Inadequate controls and enforcement at the district and national levels—governance issues • Corruption and privatization of public resources • Inappropriate skills and technology • Inadequate accounting for environmental goods and services 	
Impact of Poverty on Environment	Impact of Environment on Poverty
<ul style="list-style-type: none"> • Usually local and negative: short-term requirements drive the poor's agenda • Community-based options starting, but dominated by capacity limitations and short-term costs from foregone benefits • Slow to show impact...patience and longer-term support is necessary 	<ul style="list-style-type: none"> • A degraded environment especially threatens the livelihoods of the poor and makes them poorer • In towns, landless poor settle in environmentally difficult areas and therefore are more susceptible to environmental hazards, disease (downward spiral of poverty) • Natural disasters have greater impact on poor than the rich

People grasp very easily the importance of Natural Resources vis-à-vis poverty reduction, but what they need to be convinced of is the need to invest in the management of those resources. To apply the old adage about giving a man a fish...

“If we give a man a fish, it will satisfy hunger but we will need to continue providing fish. So we teach him how to fish. But what happens when there are no fish in the river. Then what?”

Convincing evidence from Africa supports the value of being strategic in allocating resources to manage natural resources. Why, then, is the NRM sector only an afterthought when people develop strategies for poverty reduction? If the local success stories are so good, then why aren't they being replicated elsewhere? How can we show how a dollar invested in NRM can perform more effectively than a dollar spent elsewhere (i.e., economic rate of return) and, conversely, how can we prove that in order for poverty reduction goals to be achieved, investments in NRM need to be made?

There are no easy answers. Especially when there is vested interest in maintaining the status quo. There is no doubt NRM should be integrated into broader rural development programs as part of poverty reduction—in particular the PRSPs. In addition, support should be provided so that a

country's budgetary process better reflects NR's contribution to the local and national economies. Additionally, there is urgent need for actors at the local levels to be enabled to better understand the poverty-NRM linkages. And investment is needed for local communities to make better access to and use of resources, increasing productivity and benefiting from wider market opportunities.

The five principles and associated action recommendations from the “Wealth” chapter of the *Nature, Wealth, and Power* offer an excellent summary of how NRM can contribute to poverty reduction strategies:

1. Be strategic about the economics of natural resource management;
2. Strengthen markets and make market incentives a more important part of NRM strategies;
3. Invest in rural organizations as the long-term “building blocks” of rural development;
4. Create a framework in which people can make better NRM choices in their own self-interest; and
5. Assure that resource managers have—and perceive themselves to have—secure access to the means of production and the benefits of their NRM investments.

NRM and Rural Economic Growth—Agriculture

For the past two decades, agriculture has been seen as *the* major economic driver in Africa and the automatic development approach. In agriculture, unlike NRM, there is a huge depth of research, data and analysis to support its inclusion and implementation. In agriculture, unlike NRM, there is also a very entrenched awareness and education supporting function to back up its adoption and implementation. At the workshop, an observation was that agriculture is well-researched and very articulate and so decisions are naturally made in its favor. When agriculture fails, then people rely on natural resources.

What is the interface between NRM and agriculture? We need to find it. Ministries currently see agriculture as a very defined field and there needs to be a more holistic approach. In the 1980's, environmentalists stole NRM away from agriculture, but now we need to re-integrate it. One of the problems with re-integrating NRM into agriculture is the fact that agriculture decision-makers have a stranglehold and bias that turns resources away from NRM. Also, the economic incentives to engage in agriculture are strong, evident, and beneficial and because governments see agriculture activities as being beneficial—both economically and socially. A 1% increase in agricultural productivity has been shown to reduce poverty by 6 million people.

It is not that agriculture is *less* important than NRM—productivity across all sectors is key. But, there are not blueprints for success—not all strategies work in all cases. Two recent indications of increased donor interest in agriculture and natural resources management are USAID's Initiative for Ending Hunger in Africa (IEHA), and the World Bank's new rural development policy (Reaching the Rural Poor, 2002). This policy recognizes that agriculture is the principle source of rural economic growth, and that agricultural growth is the cornerstone of rural poverty reduction. Natural resources, however, are *necessary* for agricultural production and also is an economic sector in its own right.

Agriculture and other natural resource-based activities are the major source of income for 80 percent of Africa's people. Well-managed development of these resources enables rural households to increase incomes

Central Plateau of Burkina Faso

In 1980, this region was considered to be the most degraded area of the country. The vegetation was disappearing, groundwater levels were falling, and between 1975 and 1985 up to 25% of the families left villages to settle in more humid regions. Processes of environmental rehabilitation and agricultural intensification in this region during the period 1980-2002 have resulted in the following:

- ➔ increased millet and sorghum yields (by about 50%)
- ➔ cultivated fields treated with soil and water conservation techniques exhibit more trees than 10-15 years ago.
- ➔ increased investment in livestock by women and men, and changes in livestock management from extensive to semi-intensive methods (meaning more manure available for maintaining or improving soil fertility)
- ➔ greater availability of forage for livestock due to local regeneration of vegetation
- ➔ a strong decrease in rural to rural as well as rural to urban migration since the start of soil and water conservation
- ➔ increased organizational capacity of villagers
- ➔ substantial reduction of rural poverty, up to 50%, based on people's criteria mainly related to degree of household security

that enable them to access basic social services (i.e., health, education). What is becoming increasingly apparent by the development community, and pointed out in the *Nature, Wealth and Power* paper, is that fact that “agriculture, however, is also a dynamic *subset* of natural resource management, and, in some cases, is neither the optimum land use nor the most important economic sector.” *NWP* continues in saying that “NRM contributes to the more efficient and effective use of agricultural inputs and that improved agriculture benefits forestland and other natural resources.”

Increasing and protecting the productivity of the natural resource base is vital to sustainable economic growth in rural areas because 1) land degradation is reducing agricultural GDP by 5 percent annually; 2) the high cost of agricultural technologies (fertilizers, HYV, expensive irrigation schemes) are more productive/profitable when used in combination with good NRM practices; and 3) well-managed forests/woodlands and water resources contribute to rural income diversification and poverty reduction, often providing income for disadvantaged groups.

What is needed is a broader view of agricultural development that recognizes the key role of integrated natural resources management by adding resource management issues to the production and consumption chain. But this requires the following:

- Institutional changes in African governments and donor agencies, and agricultural research and service providers that contribute to cross-sector collaboration;
- Allocation of funds to promote multiple rural development strategies rather than targeting projects with rapid, easily-measured benefits for a limited number of people; and
- Support of studies, information, capacity-building, and lobbying activities that increase decision-makers’ understanding of the core role that sustainable agriculture *and* NRM can play in rural development and poverty alleviation.

The fact is that many people in Africa live in areas with poor soil, capricious climates, challenging topography, or extreme temperatures. The lesson is two-fold: first, there are options to annual crops as the way out of poverty, and second, the best use of land in many part of Africa is probably something other than annual crop production. As the *Nature, Wealth, Power* paper points out “Agriculture has to be seen in the larger context of land use and resource management and not as an automatic response to rural economic growth and poverty alleviation. In fact, many rural production systems blur the lines among agriculture, forestry, animal husbandry, and other forms of land use and count on integration for optimization. NRM practices get the most from “marginal areas” and can contribute to raised agricultural productivity.”

Impoverished, the rural of **Namibia** and **Botswana** switched from communities in arid part subsistence agriculture to wild life-based and veldt-based enterprises as their main way of earning a livelihood and substantially increased incomes.

The African Highlands Initiative (AHI), a regional research program of the Association for Strengthening Agricultural Research in East and Central Africa (ASARECA), works where the people and landscapes in the densely populated highlands of Eastern Africa are under pressure. AHI’s core role as a research-innovator is to develop methods and approaches for participatory integrated natural resources management (INRM) that are tested at local levels but have strategic regional and global application. Initially, AHI’s research had regionally-determined thematic technical agendas (i.e., integrated pest management). Subsequently, AHI changed from the top-down

thematic approach towards using participatory research methods; integrated farm systems and multi-institutional teamwork and partnerships. An “action” research and learning mode is promoted for deriving experience and best practices. Some examples of best practices arising from this work are: how to improve and enhance farmers’ ability to innovate and integrate options at farm level; how to best support social dynamics and collective action; how to integrate technical solutions and social action to address concerns related to market, equity, and NRM issues including conflict management; landscape analysis methods useful to farmers and planners; and efficient and effective ways to increase the grassroots’ capacity to plan, implement and demand services. Key success factors for AHP’s activities were determined to the following:

- Policy environment that favors local participation and institutional involvement;
- Investments have to pay—benefits need to be fairly immediate and express themselves in better food security and improved incomes;
- Processes need to strengthen and favor local institution-building and need to factor in conflict resolution, collective action and disparities (power, gender)—e.g., start from the poorest, most marginalized scenarios;
- Economies, generally, need to diversify so as to absorb and provide other kinds of employment;
- R&D institutional arrangements, role, responsibilities and outputs must “add up” to impact;
- Investments in R&D needs stability and to be at higher levels and R&D agendas need more focus, longevity, and better coordination.

By-law reforms in Kable, Uganda

Policy Task Forces have been started at 3 levels of administration with members from local government, NGOs and research. Community capacity building is ongoing so they can analyze, design and implement by-laws related to terrace maintenance, controlled grazing practices, and tree planting. The work is a micro-watershed level with resident communities but linked to district decision-makers through the policy task forces. The process is under development so as to derive a useful and best practice set of guidelines.

NRM and Governance

The relationship between environment and governance is complex. Natural resources provide an excellent lens into representation and democracy questions. They are at once the basis of national wealth and of local livelihoods. Nature-based wealth in Africa is often transformed not just into economic power but also political power. Access to natural resources is a major perk of political office, even a justification for many to run. Once in office, those natural resources are used for patronage to maintain power. It is sadly ironic, then, that Africa's rural people—those who have been marginalized and disenfranchised by the state—are often those whose votes usually maintain the status quo.

In most developing nations, natural resources supply the single largest share of wealth to governments and commerce, and are the basis of livelihoods for the vast majority of rural people—still more than 90 percent of the population in some African nations. Africa's rural poor are more dependent on the goods and services of ecosystems than the better-off in urban centers and they are more adversely affected by lack of access and environmental degradation. Given the importance of ecosystem goods and services to rural livelihoods, it is not surprising, then, that nature is a galvanized issue that brings rural people together and around which they organize and mobilize themselves.

In order for democracy to take root, democratic institutions must be available to citizens, and they must deliver on matters that are meaningful to them. Security in productive natural resources is almost always and everywhere a central issue for Africa's rural people. As a source of livelihood, then, nature is key for engaging local populations and is arguably *the* most important issue that democracy must deliver on.

Principle 10 of the Rio Declaration calls specifically for the rights of access to information, decision-making, and recourse in environmental matters.

Of specific importance is the issue of security in land and natural resources. But property rights, just like other important environmental rights, can only be realized through participation. Before the relatively recent democracy movement within the developing world, participatory methods were considered to be the most effective way for local views to reach policy-makers and influence programs affecting people. Consequently, participation approaches, especially those involving NGOs, dominated the environmental management project landscape.

Ruth Meinzen-Dick, in her paper “Agricultural Development Strategies and Natural Resource Management: Linking the Natural and Institutional Environments,” points out the importance of collective action, as well as the dilemmas of collective action in projects:

Importance of Collective Action	Dilemmas of Collective Action in Projects
<ul style="list-style-type: none"> • Management of natural resources (e.g. irrigation, watersheds, rangelands, fisheries) • Facilitates joint investment by small farmers • Dissemination of technologies • Marketing • Group empowerment 	<ul style="list-style-type: none"> • Which groups get rights • Inequality within groups • Build on existing or new institutions (tradition vs. democracy) • Weak collective action institutions • Institutional organizers vs. community dependency

Environmental NGOs have been among the first of civil society organizations to capitalize on the larger systemic governance reforms that are being made. In Kenya, the Institute for Law and Environmental Governance (ILEG) is one of the few NGOs contributing to the environmental provisions in the new draft constitution. Kenya's current constitution and all its previous ones did not include any provisions granting either substantive or procedural environmental rights. In Senegal, a green party has emerged that is a good example of an issue-driven political partying Africa. Such initiatives will hopefully help transform Africa's political competition that is often driven more by cultural differences than policy differences. Perhaps more than with health, education and other areas, NGOs with NR interests are developing specific expertise in policy and in building skills to participate in policy reforms. While most NGOs remain focused on service-provision, new environmental NGOs are being established that work principally on policy research and advocacy. Environmental NGOs are also often leading other community service organizations to protect, broaden, and guarantee procedural rights. (See text box.) Environmental policy, research and advocacy are becoming full-time professions and attracting high-quality people.

Building the capacity of citizen associations is insufficient, however. It is also important to strengthen the enabling environment for participation. Of particular importance is the need to strengthen state officials and institutions with specific rural representations responsibilities, such as elected local government officials and legislators. There are many rights that governments tend to limit to restrict NGO participation—e.g., freedoms of speech and association. And while NGO participation has made important contributions to environmental management, it also has had costs and limitations.

ACODE—Uganda

The Advocates Coalition for Development and Environment (ACODE) has ensured that the rights of access to information, decision-making processes, and recourse are codified in Uganda's new fisheries policy and forestry legislation. ACODE led the local NGO efforts in contributing to the NGO Act, they stopped the government from amending the Land Law to give itself exclusive power to degazette protected areas (therefore protecting citizen participation rights), and they are now leading the community to create a Freedom of Information Act.

The decentralization of natural resources is often justified for improving management efficiency and increasing equity. But to achieve these results, meaningful transfers of sufficient discretionary power to accountable, representative local institutions are required. Many reforms in Africa in the name of decentralization are limited and highly controlled making local institutions more accountable to central government agencies than to their constituents. This actually serves to strengthen the state's control over rural regions and often leads to resource degradation and social inequities.

This leads us to the debate of the use of the word "devolution" vs. "decentralization." Murphee indicates that CBNRM needs to "constitute local-level jurisdictions with sufficient internal legitimacy

to subsume internal differentiation under collective goals, with sufficient external legitimacy and skills to negotiate and promote local objectives in the face of external interests, and with sufficient innovation and resilience to sustainably meet the needs of their constituencies in the context of demographic, ecological and economic change”. That is a mouthful. Murphee adds, “for effective units of local organization to develop they must have the requisite authority and legitimacy which motivates responsibility, stewardship and adaptability. This suggests a policy of devolution rather than decentralization.”

Investments to help achieve the twin objectives of good governance and NRM can be consolidated as follows:

- Identifying and strengthening local institutions and public interest organizations that help the poor, including identifying “champions”;
- Providing training programs for the judiciary and legal practitioners in environmental/public interest issues;
- Supporting programs that strengthen parliamentarians’ capacities to represent NRM interests of their constituencies;
- Documenting case studies that simultaneously demonstrate successes for governance and NRM; and
- Building local, national, sub-regional and international coalitions that promote governance and NRM.

Why should governance practitioners invest in NRM? Because natural resources are the bread and butter of marginalized populations, and is, perhaps, the most compelling vehicle for promoting and consolidating key governance principles of participation, vertical and horizontal accountability and representation.

In **Namibia** and **Botswana**, programs have been implemented whereby legally recognized and democratically governed associations of community members have been granted wildlife user rights and tasked with management responsibilities. The result has been an increase in wildlife populations and in household incomes. Just as important, however, is that some of these same CBOs have broadened their mandates to manage other natural resources and to tackle other socioeconomic issues such as health and education.

NRM and Conflict

Conflicts involving access to and use of natural resources important to rural livelihoods are inevitable and the links between NR and conflict are vast and deep-rooted. Contrary to what many people think, competition for resources—and not ethnicity—is almost always at the heart of every conflict.

There is a growing demand within the development community to begin to think more strategically about how to tackle conflict. At USAID, for instance, a new Conflict Management and Mitigation (CMM) office is dedicated to looking at the relationship between conflict and development assistance. Currently all USAID missions are required to undertake conflict analysis when they craft new country strategies. And what they are finding is that in virtually every assessment, natural resources are at the heart of much of the violence in the developing world, whether it's competition over water in Central Asia, land/oil/grazing rights in Nigeria or timber in Indonesia. Because NR are always at the center of conflict (in one way or another) it is imperative for NRM to be integrated into conflict programming. One of the most important (and difficult) tasks, therefore, is to clearly and convincingly demonstrate the links between conflict and traditional development assistance (i.e. NRM, agriculture, etc.)

As cited in the *NWP* report, “Failure to manage natural resources effectively and equitably contributes to conflict—at the regional, national and local levels.” A perfect case in point can be found in the Democratic Republic of the Congo (DRC). The DRC is a country with a wealth of natural potentials. It is the home of 44% of the African freshwater, and 44% of African forests. It is also the home of various minerals (especially gold, diamonds, copper, uranium, etc.) and oil. Unfortunately, however, neither forests/water resources nor minerals are really bringing wealth to the local populations. What is important to remember with regards to internal conflicts brought on by the mining of precious minerals, is the fact that African countries aren't fighting alone but have “partners in crime.” That is to say, the private sector is involved and needs to be more transparent regarding the exploitation of natural resources.

Diamond-mining at Tshikapa in DRC

An investigation of the environmental and social impacts of the diamond industry by the Partnership Africa-Canada (PAC) in 2001 concluded:

- Diamond mining really generates a lot of money but it destroys the natural environment including the landscape;
- The local communities around the diamond-mining are living in extreme poverty (no schools, infrastructures, etc.)
- There is no sustainability for the diamond-mining
- The contradiction between the money from diamonds and the increased poverty is a real social time bomb and the main source of the local environmental conflicts.

The connection being clear between conflict and NRM, the question we need to ask ourselves is: “How can NRM advance the objectives of conflict mitigation?”

NRM practitioners need to be able to demonstrate clearly to the Conflict, Democracy and Governance sectors the benefits of using a natural resources or environment lens. That means that NRM practitioners need to move from the descriptive to the analytical. What is needed is an

improved analysis of conflict situations to identify the “true” issues and core problems. For instance, if we know the characteristics of resources that tend to ignite conflicts and we know characteristics of socio-economic and governance systems (e.g., highly centralized) then why can’t we develop strategies to effectively manage the conflicts?

The *NWP* paper points out the fact that “ongoing democratization and decentralization processes have made the pluralism of local areas more apparent and more concrete; a number of autonomous and independent groups with fundamentally different value, perceptions, and objectives are demanding a role in decision-making about natural resources management.” This is a positive development. Donors have to be more accommodating of bottom-up approaches and traditional decision-making processes should be recognized and used in conflict resolution processes. Although participatory local solutions are necessary in many cases to help with conflict management, they are certainly not enough.

Experiences presented from across Africa have shown that NRM activities are an effective vehicle for stakeholders to negotiate agreements that mitigate conflicts and that ecosystems are more likely to bring social security and sustainable development when there is effective NRM based on economic viability, ecological sustainability and social justice.

Recommendations for integrating NRM into conflict analysis are as follows:

- Participative management of natural resources that integrate traditional knowledge and rules related to natural resources with scientific information. This participative management should be supported by training of local partners in conflict and resources management that meets the objectives of sustainable local livelihoods and resource conservation.
- Environmental conflict resolution should be based on environmental justice that reconciles all stakeholders’ interests and that is premised on innovative NRM strategies that take into account economic, ecological and social justice factors.
- All NRM-related projects should be negotiated among stakeholders, and the role of the local community, particularly that of women and other marginalized minorities, should be predominant.
- Applied scientific research and training at the community level should be strongly encouraged and clear channels of communication well-defined.
- To avoid perpetuation of environmental conflicts, markets for “blooded” resources should be forbidden.

In achieving environmental justice and managing conflict there will always be winners and losers. It is important that we avoid conception of all-inclusive, conflict-free solutions. People have been fighting over land and water and other valuable resources for ages, and they’re going to continue. But the challenge is to see what development practitioners can do to reduce the lethality, build institutions and processes that channel conflict in productive directions—and integrating NRM practices into conflict management and resolution programs and activities is of strategic and paramount importance.

Addressing Knowledge Management and the Future of FRAME

KNOWLEDGE MANAGEMENT

- “Knowledge” refers to expertise, skills, facts, both written down and resident within people, which are used to solve problems. Knowledge resides with the resource users, not with the analysts. Knowledge management and sharing are becoming increasingly important to the development process.
- A key element of any knowledge management approach has been the support of “communities of practice”.
- FRAME’s ability to reach to users, and to treat them as peers is crucial. Knowledge sharing can support this approach, but only if they look beyond the confines of RRB, Washington, and the world of forms and NGOs.
- Natural resources endowment is not a sufficient basis for economic growth and poverty reduction in African countries; a management process involving scientific, economic and political inputs must accompany it. Above all, the process should be underpinned by an appropriate application of knowledge. In the world of NRM in Africa it is not the resources one has but what one knows that is important.
- Knowledge is socially constructed and not created in a vacuum. It is important to bring more African inputs into the knowledge flow.
- Although it is amazing how much influence certain COPs have had (USAID, World Bank), one of the pitfalls is over-reliance on technology and the formalization of groups.
- FRAME needs a knowledge management system that
 - Enables FRAME to collect and manage NRM data of all types
 - Enables FRAME’s clients to easily access this information.
 - Permits FRAME and its clients to track rapidly changing information with automatic notification
 - Enables FRAME to quickly form virtual “sub communities of practice” along functional, organizational, and geographical lines;
 - Permits FRAME to be able to extend the system to accommodate changing NRM requirements

- Helps FRAME to build consensus, exchange ideas, facilitate standardization, and connect its clients to the knowledge they need.
- One of the main concerns is how to link the more technological approaches (internet) with local stakeholders (farmers). How can knowledge be shared among farmers across the continent and then with FRAME? How can we bring these two knowledge bases together to make NRM into something that has real bearing on the ground? Suggestion was made that places be established at the village level where knowledge can be collected, stored, and then disseminated using traditional methods. The challenge is to do this in addition to FRAME and to use other types of media. It was stated that:

“When the sand and fertile soil blows with the wind so does the knowledge.”

THE FUTURE OF FRAME

- FRAME combines web-based knowledge and an expert community of practice to help decision-makers and practitioners analyze issues, plan strategically and advocate their positions (i.e., knowledge generation and dissemination).
- FRAME’s objective is not just to increase the flow of information on NRM but to help provide high quality advice and knowledge when it is needed to improve decision-making. The website is a strategy. It didn’t start out solely advising USAID but also represented the COP’s own agendas. The second part is emerging now more. They are still advisors but now they offer advice to anyone who wants to read their information. So, there has been an evolution.
- FRAME is a vehicle for dialogue and interdisciplinary exchange of ideas among Africans and their counterparts throughout the world. “We are islands of experience. What FRAME does is organize the islands into a framework. It is an interfacing device.
- If FRAME wasn’t around, it would have to be invented because of the large number of people and NRM processes involved and the rapidly changing and increasing NRM knowledge AND the existence of a large pool of underutilized and/or unused NRM information.
- FRAME is beginning to establish links with African policy organizations and other development partner institutions like NEPAD, CILSS, UNDP...

Recommendations

- USAID need to avoid seeing FRAME activities as separate or as something that comes in addition to its poverty reduction/conflict/governance agenda in Africa.
- FRAME’s work needs to be integrated into USAID’s broader agenda in the above areas as a deliberate strategy for adding value to its national and regional poverty eradication efforts.

- FRAME should facilitate the involvement of African stakeholders (governments, researchers, NGOs, civil society, etc.), in setting their NRM agendas and implementing regionally agreed upon strategies, plans (e.g., NEPAD, Agenda 21, etc.)
- USAID, FRAME and FRAME's intermediaries (CG, SC members, communities, etc.) need more frequent, more adaptive and more pro-active arenas for dialogue and exchange of views.
- FRAME's NRM activities in Africa need to be given high priority by the countries' *own* national authorities and also be seen as part and parcel of USAID's total efforts in the countries.
- The CG should be more ambitious about applying FRAME and use it as a lens. There is such a vast amount of expertise inherent within FRAME and we have to figure out how to mobilize this expertise so that it can be used as a lobby tool to help African decision-makers with regards to NRM make the right choices vis-à-vis sustainable development.
- FRAME needs to link up with "champions of change". Most successful NRM practices have been driven by charismatic driven people.
- One of the real questions is how FRAME can advance policy dialogue and have more informed decision-making.
- FRAME needs to be able to help USAID's field missions understand how to operate. It would be a mistake to depend on USAID central funding. [Do Missions support FRAME? How can FRAME help Missions on the ground? What does FRAME bring to the table? How can FRAME help other sectors make their decisions and how does that, in turn, translate to Mission impact on the ground. How does FRAME define results?]
- Until now, people have been participating in FRAME as individuals, not organizations. This may need to be reviewed. Although it has been a strength, when we start talking about partnerships and sustainability it becomes an issue.

The value FRAME adds can be described as:

1. Facilitating dialogue across borders;
2. Providing an opportunity for African practitioners to learn from each other, better understanding achievements and failures;
3. Providing a vehicle for interfacing among the islands of experiences and champions of change
4. Providing insights, peer reviews; and
5. A source of expertise, providing examples of lessons learned and best practices in the field.

Appendix A. Daily Notes of the Workshop

DAY 1: JUNE 9, 2003

Victoria Michener (MSI) opened the meeting and welcomed participants to the workshop and introduced **Mike McGahuey (USAID)** and **Carl Gallegos (USAID)**.

Mike McGahuey stated the general objectives of the workshop—to assess and strengthen the role of Natural Resources Management (NRM) activities in increasing economic growth, reducing poverty, strengthening governance, and mitigating conflict. He was reminded of the words of a wise old forester who, when asked “If you could have one type of information about development, what would it be? He responded “I would like to see the pins on a map showing me successful cases.” That wise old forester was Fred Weber. Assessing case studies, Mr. McGahuey cited, will not provide all the answers, but it is an approach that is used too rarely. Fortunately there are teams capitalizing on peoples’ experiences now and both USAID and the World Bank are supporting initiatives. A couple of case examples from both Mali and Botswana were given and followed by the following two lessons:

1. There are options to annual crops as the way out of poverty; and
2. The best use of land in many parts of Africa is probably something other than annual crop production.

Mr. McGahuey added that if the NRM sector is going to be a central player in economic growth, poverty reduction, and local governance, we have to show how a dollar invested in the sector can perform more effectively than a dollar spent elsewhere. And, turning the inquiry around, we need to challenge others with the question: Can economic growth, poverty reduction, stronger governance and conflict mitigation be achieved in the absence of investments in natural resource management?

Carl Gallegos followed **Mike McGahuey** and thanked everyone for coming. He also thanked those who were joining us virtually! He mentioned that representatives from over 10 African countries were present at the meeting and over 15 countries were represented if one includes Europe, the America’s and Asia! Among the participants we had high-level officials who, in addition to their official positions, have distinguished records as NRM practitioners in their own rights. Mr. Gallegos mentioned that it is important that we capitalize on their experiences as we discuss ways to advance natural resources management as an effective vehicle for achieving economic growth, reducing poverty, and strengthening governance.

Mike McGahuey then introduced **Emmy Simmons (USAID)** and **Wade Warren (USAID)**.

Emmy Simmons, the keynote speaker for the workshop, opened with remarks on how Environment and NRM used to sit in different bureaus at USAID but now they have been combined within EGAT. She mentioned that sustainable AG and NRM must converge if we are

going to have profitable and higher goals. But also noted that when one talks about mainstreaming one is compromising the topic and it could disappear altogether. Integration is a better term! She hopes that sustainable solutions can be worked on together. She also mentioned the importance of building upon successes and looking for case studies and other ways of building upon success. One of the questions she posed was “How can we highlight the role of NRM in development?” A couple of key issues she suggested were:

1. Understanding ecosystems and how they interact together. What are the causal factors that make things happen down the line—i.e., the science-oriented understanding of ecosystems.
2. The need to constantly re-examine assumptions of how things work. How is it that communities come together to do NRM projects? What are the factors that make women groups able to take on a forest project? We really need to dissect successful examples in order to replicate them.
3. There is the question of *who* benefits—not *what* benefits. For instance, when talking about NRM, the destruction of a watershed does not only affect that place but ecosystems in a much larger area.

Wade Warren followed Emmy Simmons. He mentioned that the workshop is timely and that working across sectors is critical. AFR spends about \$75 million annually on NRM projects, and they are most effective when they emphasize the integration of environment, economics and governance. He mentioned two very important activities that USAID’s Africa Bureau has been supporting: (1) The Nature, Wealth and Power study that is going to be discussed later, and (2) the “Initiative to End Hunger in Africa” (IEHA), which was announced by the Bush Administration at the World Summit on Sustainable Development in Johannesburg in 2002.

After the above introductory remarks, the facilitator, Vicky Michener, went over conference materials and logistics and participants introduced themselves to one another.

First Presentation: “Nature, Wealth and Power”

Presenters: Jon Anderson (USAID), Asif Shaikh (IRG), Peter Veit (WRI)

Jon Anderson introduced the topic and gave participants an outline of the organization of the presentation. He mentioned that Nature, Wealth and Power (NWP) is a discussion paper that was developed by a partnership (community of practice) between Cornell, WRI, CIFOR, CLUSA, and IRG and that the purpose of NWP is to:

1. take stock and assemble lessons learned from CBNRM experience in Africa;
2. enhance the debate on rural development and NRM in Africa;
3. move towards a collective effort to develop a comprehensive rural strategy; and
4. advocate for rural Africans and for an integrated approach to NRM.

Jon then went on to define the different components as follows:

Nature—Resources (land, water, forests and wildlife that are dynamic and socially embedded, economic and political). He added that human institutions define resources and their use.

Wealth was defined as natural capital that is the basis for rural productions and economic systems and the single most important non-human economic asset.

Power was defined as environmental governance and the distribution, exercise and accountability of power and authority over nature. For rural Africans, he added, a major governance issue is control and access over resources.

The above three components were presented in a triangle diagram that shows that they are related and linked to one another. Jon went on to discuss the linked challenges for rural Africa and then about resources being (1) political and economic; (2) dynamic and socially embedded; (3) mediated by institutions; and (4) knowledge management. He then went on to describe the principles of resources as (1) improving information and knowledge management systems; (2) promoting land use planning and appropriate resource tenure systems; (3) fostering social learning, innovation and adaptive management; (4) building capacity and investing in human resources; and (5) promoting cost-effective technical advisory and intermediary services.

Asif Shaikh then spoke of Economics as it relates to the NWP discussion. The principles he cited were the following: (1) to be strategic about the economics of natural resources management; (2) strengthen markets and make market incentives a more important part of NRM strategies; (3) invest in rural organizations as the long-term “building blocks: of rural development; (4) create a framework in which people can make better NRM choices in their own self-interest; and (5) assure that resource managers have secure access to the means of production and the benefits of their NRM investments.

In operationalizing the principles, Asif mentioned that one needs to look at village organizations as building blocks and have to think of organizations as being versatile. Policy is an integrator and a way of putting principles into action.

Peter Veit was the last presenter on the NWP discussion and spoke of why governance is important to the environment and conversely why the environment is important to democracy. He stated that we know from experience that environmental management is not just a technical issue or just a management matter. It is about the array of governance issues in which the uses and struggles over nature take place. Environmental decisions are embedded in larger governance systems and made in the context of political processes that define the rules about the exercise and limits of power. Without consideration of these rules, environmental objectives can be difficult to achieve.

Peter added that today many development professionals consider democratic principles universal but the relationship between environment and governance is complex. In addition, in many developing nations, natural resources supply the single largest share of wealth to governments and commerce and are the basis of livelihoods for the vast majority of rural people.

In addition, experience has shown us that for democracy to take root, democratic institutions must be available to citizens and they must deliver on matters that are meaningful to them. Security in productive natural resources is almost always and everywhere a central issue for Africa’s rural people.

Peter mentioned a number of governance issues that are discussed in NWP. He mentioned the importance of security in land and natural resources. But property rights, just as other substantive environmental rights, can often only be realized through the rights of participation.

Second Presentation: Nature, Wealth and Power Discussion

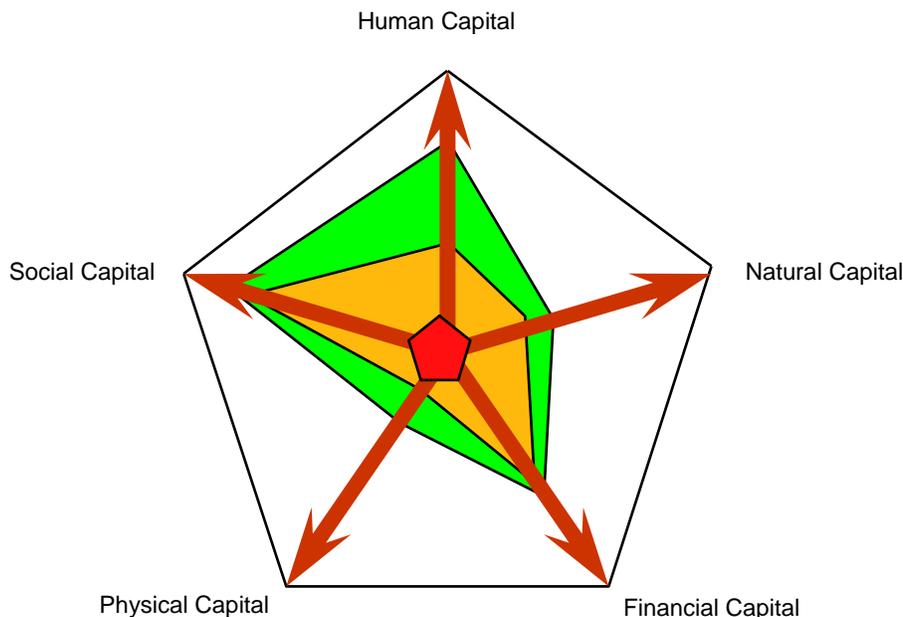
Discussants: Steve Johnson (Research Dynamics), Ndey Njie (UNDP)

Steve Johnson, better known as the “bearded wonder” opened this presentation with a South African perspective. He opened with a saying from Jeremy Anderson asking “How do you eat an elephant? One bite at a time—but then you gotta chew like hell!” And that, he said, is how you have to address the issues of nature, wealth and power. He then went on to point out that Community Based Natural Resources Management or CBNRM has up to this point primarily focused on one set of theoretical and academic issues (tenure, proprietorship and ownership) but that now it is necessary to systematically address strategic short-term interventions to develop a broader acceptance of CBNRM as a complimentary approach to achieving national and regional development objectives.

Steve then compared Agriculture and CBNRM as development approaches and mentioned that to date agriculture has been the automatic development approach of choice because the economic incentives to engage in agriculture are strong, evident and beneficial, and governments see this activity as being beneficial both economically, and socially. Furthermore, communities and the private sector involved in agriculture are generally well serviced by research and extension functions and have access to developed markets facilitated by the government. So, where have natural resource managers been going wrong for the past twenty years he asked? There has been insufficient government buy-in to benefits of CBNRM (power), weak demonstration of benefits to land-holders (wealth) and lack of research into the management, use and socio-economic potential of NRs (nature).

Steve then proposed an expansion of the NWP triangular model and suggested a more 3-D approach with the power process playing a more influential role in the dynamics of the model, because that is what is going to make this process work or fail. A balance of power is needed.

It was suggested by Steve that consideration should be given to comparing the NWP model with the “Livelihoods Approach” used in disaster management processes, with its five categories of assets: human capital (skills, knowledge & information, ability to work, health), natural capital (land, water, wildlife, biodiversity, environment), financial capital (savings, credit, remittances, pensions), social capital (networks, groups, trust, access to institutions) and physical capital (transport, shelter, water, energy and communications) (See Figure 1.)

Figure 1. The Livelihoods Approach Model

Steve then presented a strategic coverage of the NWP report and said that, with regards to “Nature”, information and knowledge management is key for the future. There is a need to understand how to improve the economic performance of CBNRM enterprises, and engage in markets more actively. He also mentioned the need to promote cost-effective technical advisory and intermediary services and that it is important that CBNRM projects, and which have diverse, strong, committed support organizations to guide their development and implementation. With regards to “Power” and Governance, he mentioned that policies exist to serve society in a certain manner and that people will do what they have to do to survive. He cited a quote from Murphee (2001) that states: “for effective units of local organization to develop, they must have the requisite authority and legitimacy which motivates responsibility, stewardship and adaptability. This suggests a policy of *devolution* rather than *decentralization*.” Steve then described the difference between devolution and decentralization. With regards to the “Wealth” component, he mentioned that it is important to make sure that incentives out-weigh lack of political will and that it is vital that one creates systems that facilitate market participation and promote the establishment of robust rural CBNRM groups and federations.

In challenging the document, some things were seen to have been omitted. For example, the issue of gender needs to be addressed. This is a critical element and needs to be addressed as an integral component of CBNRM and not as a standalone initiative. Also, the question of integration hasn’t been addressed adequately. Most projects take place on a linear, hierarchical and chronological basis. There needs to be greater buy in from all key stakeholders at the beginning of the project, and not successively as the project progresses.

In conclusion, he mentioned that we must remain long-term visionaries but become short-term strategists. We must also remain committed—over the long-haul—this is not a “quick fix wonder cure and we must work smarter because of the limited resources we have and because the clock is ticking and people want results!

Ndey Njie (UNDP) made the next presentation. She made a few recommendations with regards to the NWP discussion with some examples from Gambia. One example she cited was the Gambian National Planning process that resulted in an overhaul of NRM-related aspects of agriculture. She also referred to Capacity 21 which has 3 important aspects: integration, information and participation.

Ndey mentioned that there has been a collapse of the extension system. Between the HIV/AIDS pandemic, the brain drain, and the weakness of African training institutions, there is a serious capacity crisis, which will likely worsen over the next decade. There are a number of initiatives that are trying to look at this issue of how they can actually address development in an integrated manner.

Networking and knowledge management is a process ongoing in Africa. There is a lot of potential for us to do what we do better. Integration for development is what she calls this. We need to do ground work on who is doing work on integration and how we can build partnerships on integration. While virtual means work, there are serious problems.

One point Ndey brought up was looking to the African diasporas for assistance to see what roles they can play in policy implementation.

At the conclusion of Ndey's presentation there was a Q and A period. One participant asked for clarification on difference between devolution and decentralization. Another participant had a question for Steve regarding the difference in the size of NRM projects now as opposed to in the 60's when they were very large. His question had to do with how small NRM programs can influence policy.

Another participant mentioned that we have spent decades looking down at community levels and not up at political levels. This is still being done in Tanzania and she wondered if there is a way of working on empowerment of communities and also takes into account what national levels of government can perceive of as progress over time. The answer was that we don't have the data in the field at this time—although we need it.

Vicky Michener concluded the session with the following summary:

1. NWP is saying that NRM is inherently lined with economic growth, political issues and this is especially important when talking about the rural poor.
2. Steve Johnson opened with why NRM has less attention than agriculture and how do we make CBNRM more successful? And the answer is that we need incentives. CBNRM needs to be strategic about political aspects. Njie gave the case from Gambia that had some successes and failures. Challenges cited were policy implementation, rural extension systems and the need for improved networking regarding Knowledge Management.

Next, the purpose of the working groups was explained to the participants. They were told that they had probably seen from the workshop agenda that they were going to be asked to formulate recommendations during the workshop. They were asked to think about who audience is for the recommendations, why they are developing the recommendations and what the recommendations are for. Here is a summary of comments from participants on this topic.

Guidelines for Recommendations

Questions: Why? What? When? When to put into practice? What form? How? Who has to be convinced? What information is needed to form recommendations? How specific should they be?

WHO

	Poverty Alleviation	Governance	Conflict	Rural Economic Growth (agriculture)
Donors—multilateral, bilateral	X	X	X	X
Regional Organizations (CILSS, ASARECA, etc.)	X	X	X	X
National Governments	X	X	X	X
NGOs	X	X	X	X
A more global audience—beyond FRAME/Africa	X	X	X	X
UN and World Bank consultations on science and technology	X			
Universities	X	X	X	X
ECOSOC	X	X	X	X

WHAT

- How to integrate NRM into the strategies of these other sectors
- Participants should share their own experiences on how challenges have been addressed, how NRM has been integrated or helped advance another sector.
- The information that people need in order to be convinced of the importance of integrating NRM into other sectors. What information is necessary for input into strategies?
- In order to get NRM integrated, could we borrow from NWP, addressing the questions of who does what?
- We target specific programs if we have enough information about them.
- We need to “sell” improving livelihoods rather than NRM sub-sectors and link into poverty.
- We must link NRM to poverty because of the trend towards poverty reduction.
- Must respond to the trend toward direct budget support assistance.
- Need to bring the issue of gender in more concretely

- Are we targeting African policy-makers also?
- Recommendations need to be as focused as possible. Avoid general statements.
- Need true, compelling, powerful data that will demonstrate how NRM will contribute to the success of programs. Need to demonstrate to other sectors that in certain areas they will not be successful if they do not integrate NRM.
- We need to think about how we are going to follow-up on these recommendations. Are they really going to be implemented?

Break for Lunch

NRM and Poverty Reduction Panel

Tim Mahoney, USAID, Frank Turyatunga, Musa Mgenga (CILSS), George Jambiya

Tim Mahoney started out with a discussion on “Building Assets to Reduce Poverty”. His talk focused on two things: an overview of poverty analysis literature and a sketch of strategic outline for poverty reduction. Regarding poverty analysis he discussed the “Sustainable Livelihoods Approach” which unifies different sectors within a common framework, and is centered on people and their livelihoods. Household assets are the critical units of analysis. He then discussed the “Asset Pentagon” which is one organizing framework that takes into account social capital (networks, membership and political rights), human capital (knowledge, skills, health), natural capital (land, water, livestock), financial capital (savings, pensions, and insurance) and physical capital (shelter, machinery and infrastructure). Tim mentioned 4 guiding principles of asset-based approach to development:

1. protecting assets of the poor should be the first goal of development;
2. enabling the poor to expand their assets is the only sure means for escaping poverty
3. empowering the poor is essential to enable them to articulate and defend their interests; and
4. converting assets into capital helps the poor participate in the process and benefits of market-led economic growth.

Frank Turyatunga next spoke on experiences integrating poverty reduction and natural resources management using examples from Uganda. He mentioned that with regards to collaborative forest management, there have been agreements between the Forest Dept. and local communities on forest protection and in return communities receive access to forest products and related income. However, the Forest Dept. continues to receive a share of revenue from royalties and fees. Frank cited several other examples (1) cultivation of wild indigenous plants of commercial value; and (2) sustainable charcoal production and marketing. Constraints toward integration of poverty reduction and NRM included the following (1) use rights are not clear; (2) form of land tenure can be a hindrance; (3) lack of capacity in handling modern technology; (4) concepts are difficult for communities to grasp quickly; (5) markets are not guaranteed; (6) NRM enterprises are not viewed

through business lens; (7) agriculture is still viewed as rural economic engine for development; and (8) decentralization reforms do not include sufficient powers over resources.

Musa Mbenga was the next speaker and the title of his presentation was “Natural Resources Management and Poverty Reduction: Regional Approach.

Musa mentioned that in the Sahelian countries, the link between natural resource management and poverty is evident for the fact that they have been confronted for more than three decades by an ecological and socio-economic crisis. Natural resources play a vital role so much on the level of macro-economic performance as on the conditions of existence of the populations, particularly the rural ones. In many respects, the economic deterioration in the course of these last decades in the Sahelian countries is accompanied by an accelerated degradation of the natural resource base. Almost everywhere in the Sahel, poverty reduction is above all an improved management of the natural resources. Mr. Mbenga cited several examples from Burkina Faso:

- the concerted management of shared pastoral resources in the Beli zone;
- the participative management of the banks of the Mouhoun river;
- the participative management of the Toumousseni forest.

And also examples from Chad:

- the use of developed lands of the Lac development company by the women of Bol; and
- sand silting control of the polders at Doum Doum.

George Jambiya was the final speaker on this panel. He mentioned that in Tanzania there is a plethora of policies and that each one of them touches upon the environment sector principally and at some point talks about poverty. Despite its enormous natural capital base, it is a poor, very rich country indeed!

George cited experiences from the field—urban areas—and mentioned how the burden of disease plays a significant role in the poverty cycle. He mentioned that disease debilitates, and that debilitated people can't work well and so earn less. An unhealthy environment therefore further exacerbates poverty. He also touched upon areas of coastal and marine areas, forestry, energy, tourism and wildlife, mining and industry, and agriculture and livestock. The general causes of poverty were also cited: inadequate land and resource tenure, poor infrastructure and markets, inadequate skills, culture of dependence and subsistence, limited alternative income generating opportunities, general policy failure, and corruption.

George spoke of impact of poverty-environment linkages and what could be done under PRSP like integrating the environment and NRM into the PRSP, providing more support to local levels, etc.

Q and A period followed which was then followed by working group discussions on NRM and poverty recommendations.

Report-outs from working groups were as follows:

Group 4

- How do we integrate the different level of NRM needs, from global to village needs. We must be able to interest all levels- micro and macro.
- How do you get NRM to be a priority at the village level? Should water, roads, etc. gain priority over NRM? Don't go in with an NRM agenda. Instead, look for NRM opportunities in what people express as their needs.
- The loss of ownership has severed the link between communities and good NRM leading to disempowerment.
- We need impact studies
- We need to conduct trainings to build local capacity to determine their own priorities.
- Donors should value non-market as well as market benefits that accrue from NRM
- CBNRM should be integrated into broader rural development projects.
- We need to train forestry departments and NRM agencies
- We need to understand poverty better

Group 3

- What can/has been be mainstreamed? Soil and water conservation; soil fertility management
- What is the definition of "mainstreaming"? Mainstreaming into the economic planning process; identifying economic assets; making a logical framework for the discussion.
- NRM policy is not the same thing as NRM mainstreaming
- Budget is a core issue. (budget time frame- annual?)
- Budgets at which levels: national, regional, sub-regional
- The first step to mainstreaming is the planning framework. Planning process involves good governance and transparency
- National Action Programs: There is resistance to mainstreaming NRM due to each sector having its own agenda
- NRM is the vehicle while poverty reduction is the main objective.
- Why mainstream?

- Natural resources are the dominant not-human asset of the poor; the source of income of the poor.
- Common property resources is a way to reduce vulnerability.
- Resource competition can lead to conflicts
- The “elements” of NRM to be mainstreamed should be defined through integrated planning process
- We need to build local capacity to negotiate agreements
- Some key elements such as mapping, property rights need to be taken into account
- Need to build integrated national resources management programs into poverty reduction strategic plans
- Need more case studies about the link between poverty reduction and NRM

Group 2

- Think of vulnerability as an argument to integrate NRM
- Invest in local communities to increase productivity
- Recommendations to governments... to USAID: use the idea of global benefits to pay for local NRM
- Global trading system is important—an opportunity or a constraint?
- Governance and skills issue...
- Need to examine our terminology- translate it to lay terms or to communication better with other sectors

Group 1

- The relationship between poverty and NRM. Poverty reduction through NRM is very complex.
- Equity, distribution of benefits
- NRM approaches are insufficient
- Economic rate of return—be able to show the cost of management versus the benefits.
- How to make the institutional and financial arrangements within poverty reduction programs

- How to integrate NRM into Ministries
- Understanding the causes of poverty
- Natural resources are the basis of wealth; successful NRM can contribute to poverty reduction.
- We need more success stories.
- We need ways to make NRM politically attractive

Report-outs were followed by a final Q&A period. Summary comments from this Q&A period include the following:

- What we really need to do is put ourselves in the shoes of other sectors so that we can really try to see how to proceed with integration.
- NWP does not produce a wealth of field experience. We are faced with major challenges and we need to try to analyze successful NRM experience in Africa. We need convincing evidence to present to people in other sectors.
- How do we strengthen this framework so that it becomes a common entry point for everybody?
- The planning process is VERY important. NRM should not be the only or the primary entry point. We need to look at priorities of local communities and have the people themselves express the demand for this. There needs to be the demand.
- A lot of effort goes into trying to get local priorities but NRM is never on the “shopping” list. We need to figure out a way to elicit local priorities in a much smarter way.
- It’s not necessary to convince anyone of the importance of NRM—it is accepted. What isn’t accepted is managing NRM. We need to focus on management of NRM as a way of re-investment.
- There was mention that we need data before we can manage!
- Only way to sell it is to link it with other sectors.
- People listen when you merge NRM with conflict!
- How do we get attention paid to NRM when it is not seen as a priority?
- Haven’t heard the political side of this yet—There is a lot of interest in Africa about keeping the status quo. We need to look into lobbying activities to develop the arguments and organize capacity.

DAY 2: JUNE 10 2003***First Session: Addressing Knowledge Management Needs*****Presenters: Joe Rabenstine (USAID), Tony Pryor (IRG)**

Joe Rabenstine began his talk by saying that at the beginning, USAID KM's program constituted an informal working group. Just last year they started working on a more formal strategy. The President's Management Agency goal for Strategic Management of Human Capital requires Federal agencies to develop and implement KM initiatives. Just last December there was an agency-wide KM fair to continue awareness and showcase about KM activities. Development itself is a KM activity. USAID has had a lot of KM initiatives, but what they are trying to do differently now is get more systematic and develop better networks. Under BTEC, the Agency is just wrapping up six 90-day workplans:

1. KM Strategy- building on the 2003 network
2. CDIE Online
3. KM Inventory—online and KM Yellow Pages
4. KM Website (<http://knowledge.usaid.gov>)
5. COP Pilots (Education, Youth, Management metrics, HIV/AIDS)
6. Advisory Services

In addition, there are 2 other things going on:

1. PPC summer seminar on COP
2. The planning of another Knowledge Fair scheduled to take place on Oct 20-22, Knowledge.usaid.gov is the new website.

Tony Pryor started his discussion with the overall objectives of FRAME:

- To link the “art” and “science” of NRM
- To improve decision-making in NRM in Africa
- To promote links, relationships and partnerships between NRM practitioners

He then continued with a brief introduction to what we've done to improve FRAME citing the cyber sessions on Tuesday and Wednesday, the live updates from the site and Friday's business session. He gave a brief intro to the new website Frameweb.org which he mentioned is still in transition—it works, and most content is transferred, but not all! Most importantly, our focus now moves to promoting online communities.

A presentation on the definition of “knowledge” and why it matters followed. Knowledge includes skills, expertise and experience that help us solve problems and is not just shorthand for documents. Sharing knowledge, therefore, implies far more than improving the flow of printed or typed information. Tony explained “communities of practice”—a key KM concept and then talked about the relationship between Knowledge, KM and NRM. In many respects, NRM programs are ideally suited to an emphasis on KM; NRM programs often have long time frames, and are experimental in nature. He mentioned that knowledge resides with the resource users, not with the analysts and that FRAME’s ability to reach to users and to treat them as peers is critical. Tony gave a case example from USAID Madagascar that has had over 4 Mission Directors, 6 contractors, and innumerable technical assistance staff. BUT, USAID/Madagascar has a very strong community of specialists and supporters, which has enabled them to manage with all the staff changes. He concluded his talk with a diagram showing the spread of knowledge about NRM practices in Africa—dating back to the late 1970s in Niger, through other Sahelian countries in the 80’s, in Malawi and Madagascar in the 1990s and then to present.

Presenters were asked about USAID’s document clearing house or the DEC.

The response was that most project papers and results are sent to the DEC. Tony added that CDIE on line is trying to make all these assets more accessible and added that it is amazing how much information is there.

Mike made the comment that one thing coming up is the exploration of possible applications of KM.

Tony and Joe’s presentations were followed by a session with the following Knowledge Management Discussants:

George Abalu (Agrosearch)

Edouard Bonkougou (CNRST)

Webster Whande

George Abalu’s presentation centered around the idea that natural resources endowment is not a sufficient bases for economic growth and poverty reduction in African countries and that a management process involving scientific, economic and political inputs must accompany it. Above all, the process should be underpinned by an appropriate application of knowledge. Knowledge is not automatic but it is not an accident—it is being done for a purpose and it is not being done in a vacuum. In the world of NRM in Africa it is not the resources you have but what you know that is important. How **do we** use NRM to solve the **chronic** poverty problem? How do **we use NRM to help the poor to feed themselves** today and tomorrow?

The second point he made was that knowledge is always done in a context and is not automatic—it is socially constructed. We must be able to bring more African inputs into the knowledge flow.

The final point he made, regarding COPs, is that it is amazing how much influence certain COPs have had (e.g., WB and USAID). One of the pitfalls of COPs, however, is the over reliance on technology and the **over** formalization of the groups.

Edouard Bonkougou from Burkina Faso started his talk with the challenge of how we can link the more technological approach (internet) and share information with other stakeholders in local communities—i.e., farmers. How do we share knowledge between farmers across the continent and then with FRAME? How can we bring these two knowledge bases together to make NRM into something that has real bearing on the ground?

Edouard made the suggestion that places be established at the village level where knowledge can be collected, stored, and then disseminated using traditional methods. The challenge is for us to do this in addition to FRAME and to use other types of media. He used the expression, “when the sand and fertile soil blows with the wind so does the knowledge.”

Webster Whande talked about the CBNRM regional program that is being implemented both in South Africa and Zimbabwe. The overall objective of the program is to contribute to the enhancement and sustainability of rural livelihoods as a means to reduce poverty in Southern Africa. It will do so by promoting, and engaging communities and decision makers to have a deeper understanding of how natural resources can be used and managed sustainably to enhance rural livelihoods, and advocating a people-centered approach to development and biodiversity conservation. He mentioned that there were 2 main ways to look at this program. First is research where regional thematic teams are looking at various themes like tenure issues and biophysical factors. The second is communication—electronic networks, regional thematic workshop and annual workshops.

Challenges he cited were how to communicate with resource users and packaging research findings. Another challenge he mentioned was how to integrate CBOs and other relevant local institutions that will enhance our understanding of the complexities of resource use. Possibilities for this now include working with CBO networks. But, that having worked with theatre groups for four years, he feels we need to reach out more to package knowledge in a way that can be accessed by more people.

Question and Answer period followed

- There was a lively discussion about the fact that we have only talked about the positive nature of COPs but that they could also be negative. How do we judge COPs and balance off the good with the bad? The response was that there are certainly many dimensions to COPs and that the prevailing thinking is that knowledge leads to positive change. Another issue here, though, is that BP found that COPs for people that just wanted to chat was negative. At the end of the day there is a job to do and that promoting COPs willy nilly is not positive.
- There was also discussion about the composition of the COPs. One participant mentioned that he wasn't in agreement with the definition of members of COP because it always needs to include members on the ground. “We need to walk with always one foot on the ground”, he said. The bottom line is that if you want to have a good COP you must have the right people and it has to be able to serve people on the ground.
- Point was also made that the field of knowledge is important related to NRM in Africa. People don't have basic scientific data so universities should play a key role in indigenous knowledge. There is a lot of mythology, which affects practice, and an example was cited.

Second Session: NRM and Rural Economic Growth (Agriculture) Panel

“Agricultural Development Strategies and Natural Resource Management: Linking the Natural and Institutional Environments”

Presenter: Ruth Meinzen-Dick

Ruth Meinzen-Dick started out her presentation with a discussion of collective action—a definition followed by its importance. Collective action was defined as “a action taken by a group in pursuit of members’ perceived shared interests (Marshall 1998). Collective action also includes rules for use (and non-use) of resources and may or may not include an organization. Collective action was cited as being important in:

- management of natural resources (e.g., irrigation, watersheds, rangelands, fisheries)
- facilitation of joint investment by small farmers
- dissemination of technologies
- marketing
- group empowerment
- protection of property rights

The dilemmas of collective action in projects include: the question of which groups get the rights, the existence of inequality within groups, the question of whether to build on existing or new institutions, and weak collective action institutions.

Ruth then spoke of the importance of property rights because of the incentives they provide and the fact that it results in a distribution of resources and control over resources and empowerment.

Ruth concluded with a presentation of challenges for Africa. Among these were (1) fewer preconditions of Green Revolution (need more investment in irrigation, soil fertility, information) and (2) misconceptions of property rights which lead to tenure insecurity. For more information one can check out the following url: www.capri.cgiar.org.

“Future Directions for Agriculture—Draft Strategy for Agricultural Development”

Presenters: Tom Hobgood (EGAT) and Chris Kosnick (EGAT)

Tom Hobgood and **Chris Kosnik** presented aspects of USAID’s draft strategy for agricultural development. Tom started off by saying that he is glad agriculture and NRM are under the same roof now in the EGAT bureau and that he hopes the Agency re-engages in agriculture in a more holistic way than in the past. Tom mentioned the four guiding principles of good governance, sustainability and adaptive management, expanded alliances (GDA), and knowledge management. In addition to the guiding principles, four strategic themes provide the foundation of the strategy: (1) expanding global and domestic trade opportunities and improving capacity; (2) improving the social,

economic and environmental sustainability of agriculture and NRM; (3) mobilizing science and technology and fostering capacity for innovation; and (4) bridging the knowledge divide through training outreach and information communication technologies. Theme two, “improving the social, economic and environmental sustainability of agriculture has four supporting objectives (1) strengthening local NRM capacity; (2) enhancing economic frameworks for NRM investments; (3) improving health of natural resources; and (4) strengthening agricultural and NRM policy and governance.

Q&A period for agricultural development strategies and NRM

(Summaries to be given tomorrow)

Third Presentation: Experience Integrating Agriculture and NRM

First presenter: Chris Reij

Chris Reij centered his talk on Success Stories in Africa’s Drylands using a study on the Central plateau of Burkina Faso as a key example. Some pointers to success included the following:

1. Investments in on-farm water harvesting techniques
2. Investment in agricultural research
3. Building farmer innovation into national extension programs and into AG and NRM projects
4. Land users responding to market opportunities
5. Investment in rural roads substantially reduce transaction costs and facilitate access to markets
6. Support communities to improve their common property resources
7. Strengthen farm-non-farm linkages
8. Promote rural financial systems to reward savings and to respond to demand for credit

Next Steps included:

1. Expansion of the database of successful agricultural and NRM projects
2. Improve project and program monitoring
3. Mainstream the findings of this paper!

“Local initiatives for planning sustainable natural resources management in Tigray, Ethiopia”

Presenter: Mituku Haile

Mituku Haile opened his presentation by stating that conservation interventions should not be indifferent to social and environmental context. He further elaborated that the conservation interventions should not be reductionist in approach and not associated with authoritative perspectives that set the environment before its social, political and economic issues.

Mituku brought up the 1968 Act (Negarit Gazeta), which regulated management of forestland and restricted the clearance of forestland. He mentioned that it was not strictly enforced because there was lack of manpower to enforce the Act.

In the 1974-1991 period there were several regulations in force but since Tigray was in civil war, no government policies were implemented. However since 1993 there are different attempts on NRM. Policy interventions, institutional set-ups and technical capacities were improved to support the efforts made by the communities to determine the implementation of the NRM.

With regards to management efforts, they have accomplished the following: the physical structures are in place, there are trees, and rainwater-harvesting ponds are dug and water is used for supplemental irrigation. With regards to achievement, they now have fodder for livestock, migration has decreased and there has been stabilization of the catchments. There also has been attitudinal change and the role of women in NRM has been accepted positively. With regards to sustainability issues, farmers are not interested in mere protection of NR—there needs to be an emphasis on management of resources through rational use.

“Local NRM initiatives and Participatory Innovation Development in Cameroon: Constraints and Opportunities”

Presenter: Paul Tchawa

Paul Tchawa told of a case in the highlands of northwest Cameroon where one farmer tackled soil fertility problems by developing a system of keeping cattle overnight on fields to be cultivated. This set off a chain of innovations by other farmers, such as an irrigation system to take fuller advantage of the fertilized areas. It also improved relations between farmers and cattle-keepers. From this short situation, ISWC developed an inspiring process of participatory improvement of these local initiatives of NRM. After five years of fieldwork with farmers, researchers and field agents, he was able to draw some observations:

1. Local strategies of NRM are generally linked.
2. Innovations are neglected but in fact they are strongly adapted to local NRM issues
3. Local innovations for NRM are multipurpose and have very pertinent impacts on social dynamics and conflicts. On the other hand, NRM is adapted to fight against poverty.
4. Our experience really shows that participatory development of innovations can really boost local initiatives of NRM.
5. Sustainability of these approaches are conditioned by a rigorous strategy on institutionalization and a favorable economic environment giving possibility to local people to reach relevant information and have good market opportunities.

ASARECA and the African Highlands Initiative (AHI)

Presenter: Ann Stroud

Ann Stroud started out her presentation with some information about ASARECA (Association for Strengthening Agricultural Research in Eastern and Southern Africa). The Association was established in 1995, has 10 member countries and 19 networks, programs and projects. Currently they are reviewing their strategy.

Ann then spoke of the African Highlands Initiative (AHI) and the multiplicity of issues that the project is addressing. For instance, the people and landscapes in the densely populated highlands of Eastern Africa are under pressure. Steep slopes, degraded soils, unreliable rainfall, invading pests and diseases coupled with limited economic opportunities and development are resulting in erosion, water shortages, falling yields and increased poverty levels. In Ginchi, Ethiopia, there are land tenure issues and communal grazing issue. What are needed here are policy reform, technologies, collective agreements and action, and links to market.

Lessons Learned include the following:

- Localized impact are quick to see but time is needed for capacity training
- It is important to work in institutional, policy and social and economic dimensions and integrate with technical aspects needed for impact
- It is important to work at multiple levels and with multiple actors: farmer/farm; community/landscape, etc.
- It is important to link income generation with NRM
- The transaction costs of integration may initially be high, but potential benefits are large
- Use a process management approach

Challenges and constraints were identified as follows:

- Capacity challenges with partners
- Institutional challenges
- Coordination and facilitation limited for integration
- Technical/technology limitations
- Government and policy support
- Upscaling

A couple of key success factors included:

- Policy environment that favors local participation and institutional involvement
- Investments have to pay—benefits need to be fairly immediate and express themselves in better food security and improved incomes.
- Processes need to strengthen and favor local institution-building and need to factor in conflict resolution, collective action and disparities (power, gender, pro-poor)

Q and A period for panelists

There was some dialogue on how local farmers could be assisted—farmers that have minimal resources and need to improve soil fertility. Responses to this issue included the fact that very often farmers themselves can find local systems that are very low cost. They can also try to negotiate good or services with others in their community without the exchange of a single coin. Farmers are not that isolated and could exchange info and have meetings.

One participant asked for one of the presenters to explain rural financial systems and mentioned that he thought they still present a problem. The answer was that there is still a need to be very careful with micro-credit and that there are cases where credit can play a useful role.

Another question that was posed had to do with how to better link formal research with innovations that happen in societies. How does one help the other and how can we truly enhance innovation? One of the presenters answered that the institutionalization of innovation is something being worked on right now in Ethiopia.

Working groups were given the task of discussing what they would say to decision-makers developing AG/PR strategies about why, how and what specific aspects of NRM to integrate into their strategies.

Report-outs:

Group 2

We didn't get to coherent recommendations but did have fun. Especially we have a number of "actionable" ideas.

1. Recall that a dollar spent in NRM must compare favorably to a dollar spent on something else.
2. Challenge to the sector: Make arguments to decision makers in language that they use. In particular, conduct more rigorous analyses. We've done a poor job of organizing information and showing results in the language of decision-makers.
3. Challenge others to consider the likelihood of achieving the objectives of a market-based growth strategy in the absence of a strong NRM investment.
 - Assess the short-term, as well as long-term costs and benefits of soil-water conservation measures?
 - Given that most arable soils in Africa have major constraints that would limit response of HYV's if not amended by NRM, what is the range of substantial benefits from HYV

- in the absence of NRM? E.g., if SWC measures are incorporated into a HYV-based strategy, how many more people could use HYV's to help themselves out of poverty?
- Or, given that a large portion of the population lives on land marginal for monoculture but favorable for other NRM-based enterprises, what is the rough percentage of people who could feasibly be helped out of poverty by NRM?
 - What are the returns to NRM if incremental benefits over time are analyzed?
 - What is likelihood of people investing in more intensified land management if they do not have secure user rights?
 - How do we value environmental services?
 - Calculate the value of NRM products that are not part of the national accounts but which are sources of revenues for many rural poor and could be vehicles for people to move out of poverty if better managed and marketed.
 - Given the risk reduction that producers use, even as they move out of poverty, assess the importance of economic diversification afforded by NRM systems to rural households.
4. Lobby critical decision makers: Ministries (Agriculture, Financial, etc.); Parliaments, interparliamentary committees; donors; etc. The political game to compete for resources
 - Recognize that there are two types of lobbying—factual, analytical, etc.
 - Political
 5. Promote/strengthen champions to do the lobbying (link champions to each other, get the necessary information to the champions, provide appropriate training to champions, etc)
 - NGOs and confederation of NGOs
 - Producer groups and confederations of PG
 - Donors
 - Research organizations, especially those conducting policy research (these organizations would also feed info to other champions)
 - Media
 6. Keep hot issues on the table and in the view of the public: Help people take advantage of existing laws/treaties/policies (enabling policies/treaties/laws exist but people not using them to achieve their NRM objectives).
 - Educate affected/interested groups on these instruments

- Ensure that there are champions at all levels to advocate for the instruments to be respected
 - Build capacity and support watch-dog groups
 - Strengthen means to ventilate information about violations to public
7. Ensure that NRM decisions are negotiated agreements in which all stakeholders (particularly producers) play significant roles.
- Take actions to favor open negotiations in NRM decision-making process.
 - Strengthen the capacity of stakeholders, particularly producers, to advocate for themselves during the negotiating process.
8. Capitalize on farmer innovators
- a. Capture local knowledge before it disappears and combine it with science.

Interjection by the facilitator

Many of the groups have mentioned the lack of information or data needed to show the results or benefits of NRM. In terms of developing recommendations, we could think of the justification as the “whereas” followed by the recommendation.

Whereas... [why NRM is important/beneficial to your sector]... we recommend [what you should do and how]

Group 3

We have to convince others. Why integrate?

- Ag. is prone to shocks and vulnerabilities; land use is prone to conflicts; Diverse genetic resources can be used for agriculture. Example of plant that is used to suppress hunger

How?

- Need good economic analysis of NRM
- Need to promote NR development initiatives—saying to community they can engage in tree farming, ...
- Training: need to change mindset.
- Universities to teach NRM. New teaching techniques.
- Research—example from Uganda where how NR enhance agriculture productivity

What?

- Soil and Water Conservation
- NR-based enterprises that involve active management of natural resources and then other enterprises.
- Cleaner production technologies for agriculture
- Genetic resources to be integrated into agricultural system

Group 4

We decided to look at who we are trying to target and their mindset.

We need to find the interface between Ag and NRM. Ministries currently see Ag in a very formal and constrained view whereas there used to be a more holistic approach. The 1980s Environmentalists stole NRM away from Ag. Now we need to re-integrate it.

Why?

- Saw NRM in a very broad-based context....
- NRs are the assets of rural people- and not separate from agriculture
- Political agendas—Agriculture decision-makers have a stranglehold and bias that turns resources away from NRM
- Resources that are not brought under management control are appropriated by the rich.
- Anti-poverty measures lead to reduced vulnerability, which lead to diversification and assets, which lead to more agricultural production.
- NRs are capital and can become financial assets
- Agriculture is well researched and articulated so decisions are made in its favor. When Ag fails, people rely on NRs.
- Rural people have integrated strategies
- World Bank sees Ag as key...many of projects they will support has a huge agriculture bias.
- Production is the engine of rural growth across agriculture and NRM.
- Not saying that agriculture is less important. Productivity across all livelihood sectors is key.
- Not all strategies work in all cases- no blueprints

- One of major problems is that ministries are fiercely sectoral

How?

- Promote introduction of innovate structure such as those introduced in Mozambique.
- USAID should ensure that their strategies should be in line with new approach that is being advocated- holistic, integrated, cross-sectoral.

Group 1

- How do you justify integration of NRM in Ag. strategies?
- Need strong economic analysis- need to make NRM economic
- Need to quantify the benefits of NRM
- Need for quantitative data.
- Some benefits of integration are:
- NRM diversifies rural production- spreads risk
- NRM could help with the for exchange or balance of payments
- Might have influence on balance or foreign exchange.
- Need to show National level impact—sometimes stuck in small scale.
- Need to link to national trends/priorities (decentralization, food security, etc)
- Land use is about more than just agriculture
- Links to conflict mitigation
- Links to rural-urban migration and rural employment
- NR is necessary for agricultural production but also an economic sector in its own right
- NR can lead directly to economic growth/industrial sectors (timber)
- NRM helps sustain rural production; can lead to growth in non-crop systems.
- NRM can be a buffer for commodity fluctuations
- Talked about land use incentives and frameworks
- Avoid prescriptions/one size fits all

- Talked about vested interests that skew policies
- Economic growth may help poverty reduction but not automatic correlations.
- Cases of overall growth where poverty level remained the same.
- The fact that donors require environmental reviews could be helpful
- Need to evaluate environmental goods and services

NRM, Governance and Conflict Presentations

Presenter: Don Muncy

Don Muncy mentioned how much of an advocate he is for African-based projects and expressed how he has always been interested in fostering cross-sectoral linkages at the Agency.

Presenters: Peter Veit and Jesse Ribot

Peter Veit started off by saying that by focusing on participation, environmental advocates and development practitioners have accepted that participation of local populations and especially NGOs in decision-making and implementation leads to equity, efficiency and sustainability. But, that just as the relationship between democracy and environment is unclear, so is the relationship between participation and environment. Theory and experience suggest that transparent and open decision-making processes with opportunities for all citizens and their associations - not just the best funded, and most organized of independent groups—to participate are more likely to result in decisions that promote broad-based development, address environmental sustainability and limit corruption.

Jesse Ribot explained how natural resources provide an excellent lens into representation and democracy questions. Natural resources are at once the basis of national wealth and of local livelihoods, and when commercial interests exploit these resources under the protection of national governments, they are forced into both cooperation and conflict with the vast majority of rural populations who depend on these resources for daily sustenance. In a sense, natural resource use is the crucible in which commerce and subsistence, urban and rural, come together and often clash.

Because they are of such great importance to the wealth of nations and to the daily well-being of rural populations, natural resource use policy and practice to engage everyone. He went on to say that he believe that natural resources are much more critical to local conflict and cooperation and to local democracy compared to the other sectors (such as health, education, and infrastructure) because natural resources are net producers of wealth rather than consumers of central funds, and natural resources require a great deal of local knowledge and input into their management due to their great variability.

Strengthening good governance and security in the context of ENR

Presenter: Godber Tumushabe

Godber Tumushabe presented the following key messages:

1. ENR can be a vehicle for empowering communities - can and should be used as a vehicle for civic education;
2. ENR can lead to strengthening democracy;
3. ENR presents the poor people with new or alternative enterprise opportunities; and
4. Democratizing decision-making

Key governance issue:

1. Have to have very clear mandates
2. Secure the autonomy of ENR institutions in policy and decision making over ENR—
3. Provide adequate funding for ENR institutions to enable them to fulfill their institutional mandates.

Key governance issues in the context of ENR— access to information:

1. Environment and NRM sectors are shrouded in secrecy—e.g., award of forest exploitation permits, revenue from national parks, quality of water, and information on pollution.
2. Improving access to environmental information could scale up the ability of the poor to have access to new economic opportunities

NRM, governance and conflict management in arid lands

Presenter: Tidiane Ngaido

Tidiane Ngaido talked of how conflicts illustrate negative outcomes associated with the incapacity of rural institutions and users to manage access, uses and control of natural resources—especially rangelands, water and forest resources. Numerous factors have been identified as causing land conflicts including resource scarcity, dysfunctional local institutions and state appropriation of natural resources.

Tidiane presented a framework that determines the nature of conflict as well as the potential policy options. Discussion around NRM and governance and conflicts must revolve around three important components: 1) type and nature of resources, 2) resource users, and 3) legal and institutional frameworks regulating ownership, management, access and use of a given resource. Moreover, the interfaces between these three components generate four types of intersections that determine the nature and type of relationships as well as the types of conflicts that may arise from such interactions. The first interface relates to tenure regimes governing natural resources and

conflicts opposing state and local institutions. The second interface concerns the rights allocated to resource users and conflicts resulting from overlapping and competing claims between different users. The third interface consists of production systems and conflicts over resource access and use. The fourth interface was the critical triangle, which links resources, users, and legal framework and illustrates cases of good governance and sustainable resource management.

DAY 3: JUNE 11 2003

First Presentation: NRM, Governance, and Conflict (cont'd.)

“Conflict Strategies and NRM”

Presenters: Sharon Morris (USAID); Scott Bode (USAID)

Sharon Morris introduced herself as a conflict specialist and not a NRM specialist. She started off her talk mentioning that by now everyone is familiar with the terrible costs of conflict and that millions of lives have been lost, decades of investments have wiped out and billions have been spent to assist in the recovery of war-torn countries.

She continued by saying that there has been a growing demand that we begin to think more strategically about how we tackle violence and that there is a new office at USAID – CMM – that is dedicated to looking at the relationship between conflict and development assistance. They have found that it is a multipart process.

The first step is analysis. All missions are required to undertake conflict analysis when they craft new strategies – basically a report that lays out key sources of tension and strain in society and then talks about how development assistance can address those. In virtually every assessment, natural resources are at the heart of much of the violence in the developing world. And because NR are always at the center of conflict, it is imperative for NRM to be integrated into conflict programming. She continued with the explanation that in the past, analysis has spoken about violence in a way that is not easily accessible to development officers. For example, ethnic polarization is often driven by competition over access to land or water. Officers have a range of programs at their disposal that focus on land rights and land reform. The real difficulty is that the language conflict practitioners speak is not the same as development practitioners, and so while development officers can agree with the statement that politicized ethnicity is driving violence, they don't see how it is relevant to their area of expertise, say in agriculture or in NRM. We need to work together with officers in your field to develop these links more clearly so that they make sense to your fellow NRM officers. Secondly, with regards to programs, demonstrating clear direct links is important but it's only the first step. She has had no problem in getting NRM officers to agree that conflict is important or even that is related to their area, but what is much harder is identifying a menu of program option/subset of activities for each development sector that address causes of violence. The office is developing toolkits for this.

Finally, there is the challenge of increasing the comfort level of development officers and other with risks associated with conflict programs. It is also important to be realistic about what can be accomplished, and be very modest with regards to goals and expectations. Despite the many challenges, many of the most important causes of violence fall squarely in the realm of NRM.

Scott Bode continued the discussion. In describing and presenting links between NRM and conflict he mentioned a number of possible causes. He mentioned that valuable natural resources can act as a trigger for violent conflict and that scarce natural resources can act as an underlying stressor. Control, management, access to and “lootability” of natural resources can fuel conflict (Liberia, Sierra Leone, DRC, Angola) as well as greed and grievance (economic drivers or war and conflict).

The main theme of his presentation was the idea that we need to think about what we know in describing characteristics that cause conflict and that we need to look at *positive* examples in the field instead of just looking at NRM as a driver of conflict. We need to move from the descriptive to the analytical because if we know the characteristics of resources that tend to make them easily “conflictible” and we know characteristics of socio-economic and governance systems then we could start to get out in front of conflicts – develop indicator, anticipate conflicts and develop strategies, etc. Natural resources management represents an opportunity to create peace-building mechanisms in post conflict countries and we need to demonstrate more clearly to the conflict and D&G sectors the benefits of using a natural resources or environment lens!

Second Presentation: Experiences Integrating Conflict and NRM

“Natural Resource Management and Environmental Conflicts in DRC”

Presenter: Dieudonné Musibono (University of Kinshasa)

Dieudonné Musibono started out explaining to audience that DRC is a large country with various natural resource potentials. However, neither forests/water resources not minerals really bring wealth to people. He added that the social gap is increasing rapidly and might be the source of environmental conflicts. People think of development as a dream and communities do not believe in it anymore.

Dieudonné continued with a natural resources overview of the DRC explaining that it is a watered country but that all neighboring countries are either in difficulty or in shortage for water. The country has about 44% of the African freshwater and the Congo River is the second biggest river in the world. Similarly, the country has 44% of forests in Africa and 46% of grassland and fertile soils with high agriculture and livestock potentials. Regarding biodiversity, DRC has an important stock of species (plants, animals) but investigations are still needed in this area.

Regarding management and conflicts, DRC natural resources are not rationally managed - e.g., fishing refers most of the time to illegal nets and chemicals. He presented two different types of conflicts. The **first** being *internal* and dealing with the pressure of the local population on resources. The **second** conflict being *external* and dealing with actual war. The country is so rich in minerals (gold, diamonds, copper, uranium and oil) that there are conflicts arising over the management of these resources.

He concluded that sustainability requires regional or sub-regional integration policy.

Third Presentation: Regional NRM Governance Commentary

“Natural Resources Management and Poverty Alleviation Strategies in Sahelian West Africa, Delusions and Realities: The case of Burkina Faso.

Presenter: Fidele Hien (INERA)

Fidèle Hien opened by stating that he used to be a national-level minister but that he is still first and foremost a researcher! He began his talk with a description of the state of NRM in Burkina Faso. Regarding the socio-economic context of the country, over 80% of the population depends on natural resources for their livelihood but the ways they use the land unfortunately don't allow it to regenerate. This strong dependence on the land by people **can explain** poverty. In addition, activities based on NRM contribute 40% to PIB, **including** 25% for agriculture. In 1998 45.3% of the population lived below the poverty line. With regards to the role of NR in the economy, fuel wood is the primary source of fuel for 90% of the population. What is very important to note here is that non-timber plays a very important place in the rural economy—especially for women as it is the first source of income for poor women.

He went on to list what doesn't work when talking about NRM and poverty alleviation: the cost of natural resources management, the priorities of decision-makers which are generally different of NRM, the ministers in charge of NRM not being present at **negotiations** with donor agencies on **development strategies**, a weak capacity for negotiation for nationals, institutional instability, the lack of decentralization, and faulty hypotheses when defining poverty alleviation strategies. He went on to explain what worked: several participatory NRM projects allows an increased income for farmers and an increased productivity for agriculture, which leads to a best access to basic social services. Number of those projects leads to auto-financing of forests and farms.

In conclusion, what is really needed is an improvement with the mainstreaming of NRM into other strategies, and especially in poverty alleviation strategies, as 80% of population depend on NR for their livelihood. We also need to include activities that deal with gender issues. More value needs to be given to both timber and non-timber resources (income generating activities).

Q & A period

A question was posed to Sharon and Scott asking them for clarification about the level at which conflict is identified. There are conflicts within life every day—but at what level does one decide to intervene? The answer to this question was that, yes, conflicts are a normal part of everyday life but that development is about the business of change. What the agency is interested in is the type of conflict that spills up to widespread daily violence that leads to crisis. Also looking for potential areas of conflict and gave the example of what is going on in Kyrgyzstan. Interested in the types of development activities that lead to more tensions or strains and in the processes that turn it into a healthy environment.

There was another question for USAID staff on the toolkits that are being worked on for USAID and its partners. The question was whether the kits were just going to be used by USAID or used by other practitioners in country. Do they see partners working with USAID on this? Absolutely, these

took kits are not meant to stay within USAID mission. But, until USAID can understand the issues very little can be done in the country. Until we can convince offices that there are things they can do to manage violence, it won't happen. There is a role for partners to talk to USAID missions about links—here are the conflicts and this is what can be done about it. A lot of convincing needs to be done because USAID is uncomfortable with the topic.

A comment was made about the validity of decentralization happening too fast. The participant used Mali as an example and said that Mali wasn't prepared to the extent they should have been and they are always asking for assistance. Thought that what was happening in Burkina Faso was actually good—to go slowly and see challenges and with each example see challenges and problems.

There was some discussion about the fact that conflict never happens because of just one cause but that there is a layer of causes that are traditional, cultural, political and economic in nature. What needs to be addressed is how it all fits together— holistic approach.

One participant said that the biggest challenge to peace is poverty!

Different reasons for conflict were discussed: one participant mentioned the post- Cold War power vacuum and the change from centralized tyranny to decentralized tyranny—an erosion of institutional order. Another person mentioned that there is a tendency to have conflict where access to resources is not clear.

Vicky made some announcements. Regarding the working groups, two different topics have been covered—good governance and conflict—so participants can choose between these two topics. Working group guidelines are as follows:

1. Explain why and how NRM advances the objectives of governance/anti-conflict programs (i.e., vehicle for public participation; vehicle for mitigating conflict”)
2. Offer guidelines to the governance/conflict practitioner on how they can exploit/use NRM to advance their own objectives.

Vicky also went on to ask participants not from Africa if the topics that have been covered at the workshop have been relevant to their respective region's issues. A couple of participants spoke up and said that... Yes, they were very relevant and addressed principles that they can draw from. Mike went on to say that as people went into their working groups they should also think about links between NRM and conflict that show how NRM activities have actually helped by serving as a vehicle where people can come together and negotiate agreements.

Lunch Break

(During lunch break a video was shown and there was also a table-top discussion)

Working Group Report-Outs on NRM and Governance

Group 2

The benefits of NRM

- Identifies when there is a lack of governance
- Is a vehicle for negotiating agreement
- Is a vehicle to the assurance of benefits, incentives, rights
- Is a vehicle for participation in local governance
- National laws benefit from local experiences in NRM
- The dynamic nature of resources requires adaptive government
- Decentralized NRM can bring more actors into governance and accountability
- Decentralized NRM planning process is a vehicle for negotiated agreements between government agencies and communities
- Vehicle for ensuring equity of benefits to all stakeholders
- Gets civil society involved
- In NRM decision making there are real consequences for daily livelihood (makes governance real at the local level)
- NRM takes into consideration local traditions in NRM and land use for good governance.

Group 1

How/Why NRM advances public participation

- NRM is foundation for civil society nation/state building
- Is governance or NRM the objective? Governance for NRM or NRM for governance?
- Can we attach NRM to governance projects?
- Governance needs a medium (NRM)
- NR serve patronage interests

Guidelines for HOW

- In Benin case where a villager became a parliamentary champion for NRM. Women organized around shea nut butter and become powerful, linking to coalitions.
- Democratize decisions over NRM
- Strengthen local institutions, cooperatives

- Capacity building (civic education, technical knowledge, marketing skills), organize around economic goods, services
- Local ‘elites’ can be stronger than national laws
- Document case studies of success in good governance and NRM
- Local investment in local development projects
- Good NRM leads to economic empowerment, leads to greater demand for accountability/participation—governance
- Build coalitions of local-sub-regional-national groups (public interest groups). Eq. High value (also regional/international goods)
- Link up with parliament/elected officials
- Who initiates local level organization
- Budget advocacy—local budget preparation capacity building.
- Support champions, local leadership
- Sensitize and train the judiciary,
- Support training in environmental law

Conflict Group 1

- *At which scale do we treat the question?*
- Need to clarify NRM rules (rights of access...tenure) increasing the stakes
- Types of conflicts (within communities) in relation with rules and rights
- Boundary conflicts can be solved within framework of good NRM practices by giving incentives to neighbors
- NRM practices give room to social stability
- Conflict is a crisis in governance
- External conflicts- NRM is a buffering, it provides better livelihood conditions

Main Findings

- Bring resources under management

- It clarifies rights within and outside communities
- Create a framework for incentives
- Negotiates agreements
- Enforce mechanisms
- Fully understand and explore NRM in terms of issues which are at play
- Seek partnerships in the NRM sector
- Unlike other sectors if you perceive a proper way you can exploit NRM as a source of wealth
- Understand, foresee and be proactive about impact of change of resource pressure
- Seek the partnership within the NRM sector
- NRM is likely to bring social stability when effective
- NRM has a capacity to empower the parties in conflict esp. the disadvantaged group- to bring back equilibrium
- Provision of information on resource value for the grassroots
- Systematically capture lessons from different points of the works on how to reduce conflicts through better NRM
- Understand all the values of NR (cultural, financial...) can bring in stability (different from conflicts)
- Roles of civil society organizations like conflict mitigation
- NRM can be a basis for building trust through equitable partnership.
- By its very nature, the resource at the disposal of the poor is a source of conflict
- By using NRM to reconcile the different interests, NRM provides automatically the resolution
- Integrating traditional use-rights and modern state.

Conflict Group 2

In answering the question of HOW, the group came up with the following ideas:

- Dispute mechanisms

- Conflict resolution groups
- River Basin authorities (Regional Transboundary Reps, SADC, Civil Society)
- Constituents (Traditional authority, officials, few women, donors)
- Regarding the scope of mandates. Implementation is problematic because it is usually top down, trickle-down .
- Situation specific - some of the best examples are at the local levels.
- Often Ngo's come in and train in the conflict resolution processes and sometimes bring in traditional practices
- Women are often excluded—esp. if traditional law is involved

With respect to the question WHY:

- Need to get main protagonists to buy-in and sanction conflict resolution process/representation
- Competition for resources is almost always at the heart of the issue
- Ethnicity is usually not root of problem
- Some cultural values may cause conflict—how do you place a value on such issues?
- In-migration is increasingly becoming an issue (CAMPFIRE, Lake Malawi)
- Land also has non-economic value, especially related to issues around commons.
- Scale—size: vertical: local to national (local lobby groups: at what point do you move from national to local conflict resolution have to also look at local lobby groups...)
- Conflict inherent in global good organizations vs. rights of local communities
- There is a need to build capacity and raise awareness so that they can represent their own interest (KM is critical)
- Facilitating platforms to allow local communities voice their issues and demonstrate levels of support
- Conflict is more easily managed if levels addressing issues are seen to be legitimate by protagonists.
- Donors/International NGOs can form coalitions to form mediation mechanisms (Agendas?)

With respect to the question WHAT (principles)?

- Partnerships should be fostered
- Scale should be taken into account
- Listen to voices of poor and disenfranchised to suggest solutions
- Forums should be interdisciplinary to prevent negative impacts coming up on Natural resources
- Optimal land use models need to be considered especially for protected areas
- Need better analysis of situations to identify the “true” issues and core problems and understand trade-offs from landholders’ perspectives (scientists/analysts). Must not dismiss any perspectives. Have to realize it is not always a win-win. What is important is how you manage loosing.
- Gender must be an integral component of process and outcome
- Processes and structures need to be flexible and adaptable and need built-in feedback mechanisms and feedback is responded to.
- Donors have to be more accommodating of bottom up approaches and actually incorporate end-users landholders in solutions
- Natural resources are more often common property-based and therefore NRM can suggest excellent models for conflict resolution.
- The NRM debate on “commons” can provide great insights to other situations
- Traditional decision-making processes should be recognized (and used) in conflict resolution processes
- There is a question of scale inherent in conflict resolution. Some can only be addressed at the higher macro levels.
- Our interests are in how we can make a difference at medium to local levels (micro)

Discussion After Presentations

- Discussion on importance of mapping (GIS), modeling and planning (scenario).
- Discussion on the key to successful conflict resolution being that one has already thought about what the consequences of what the resolutions are going to be.... It is important to continually get feedback because it is a dynamic process. Hard to predict but you can help prevent....

- Discussion on how it is important that we use the term conflict management and not avoidance. The whole idea here is that we are after management and not avoidance.
- Point was made that parties themselves within communities are desirous to resolving conflicts so we should always keep in mind that we need to work within the LOCAL conflict resolution systems. NR is a source of wealth and livelihood.
- Point was made that in achieving environmental justice and avoiding conflict it is important to realize that there will always be winners and losers and that it is important that we avoid conception of all inclusive, conflict-free solutions.

Preparation for Mainstreaming Recommendations: Topics and presenters were identified for next day's sessions

Two back-to-back presentations on Simplify were then available to participants

Presentation: AFR/NRM Simplify Knowledge Portal

Presenter: Tony Pryor

At this presentation, Tony gave a FRAME and Simplify overview and then participants had a hands-on experience with Simplify (30-minute guided intro with some time for “hands-on” practice afterwards).

He mentioned that FRAME is a knowledge tool initiated by the Africa Bureau to provide information, learn from best practices, support debate, and improve strategic decisions related to natural resources management. FRAME is moving to a new software application—Simplify. Simplify will better meet the objectives of FRAME. The guidebook introduces the application, and the new, improved FRAME.

DAY 4: JUNE 12, 2003

Welcoming of participants and review of the day's agenda

First Session: Presentation of USAID's Agriculture Strategy and the President's Initiative to End Hunger in Africa (IEHA)

Presenter: Jeff Hill (USAID)

IEHA is a presidential initiative that goes back to USAID's re-commitment to agriculture. The initiative was formally launched at a workshop held in August 2002 at the World Summit of Sustainable Development in Johannesburg, South Africa. It is relatively new, but it evolves from a lot of work that has taken place of how to invest in agriculture that serves in a variety of functions in

Africa. USAID and the Africa Bureau have shaped a lot of this. Invest in agriculture in Africa is a priority.

IEHA is a US government initiative—not just a USAID initiative. Partners include: Dept. of Agriculture, Dept. of State, National Security Council, EPA, and Customs. It is a collective agenda being used to address very important goal of helping to reduce hunger and poverty in sub-Saharan Africa and they are taking a multi-year timeline to do this.

The fact of the matter is that hunger in Africa is expected to rise. More than 50% of the population lives on less than \$1 a day and more than 33% of the population is undernourished and getting worse. Agriculture is the key: a very powerful tool. A 1% increase in agricultural productivity has been shown to reduce poverty by 6 million people. There is broad consensus within the international community that agriculture is key if hunger and poverty are to be halved by 2015.

IEHA has a number of distinguishing features.

- It's a market-oriented and smallholder-based growth strategy;
- It's a sub-Saharan-wide strategy that focuses investments in those countries that will serve as models of success
- National development strategies will be complemented by regional ones
- It encourages multi-sectoral cooperation
- It is focused on working with partners who are committed to working with the rural sectors
- It is building alliances and constituencies with other stakeholders, e.g., NEPAD, and other local, private or multi-donor efforts.
- The Initiative is dedicated to rigorous data collection and planning, and effective monitoring and evaluation systems.

IEHA has identified 6 areas of investment: Science and Technology, Markets and Trade, Producer Organizations, Human and Institutional Capacity Infrastructure, Sound Environmental Management, and Targeting Vulnerable People.

IEHA is building on a regional approach. Initial efforts are concentrated on a key country in each of three regions: Uganda in East and Central Africa, Mozambique in Southern Africa, and Mali in West and Central Africa. The plan is that by 2005 the Initiative will expand to cover 3 countries in each of the sub-regions.

Q&A period

Q: A question was put forth about the role of the state in this Initiative, and the fact that it had been deliberately subdued.

A: There is recognition that one can't achieve sustainable development without the involvement of the state, but IEHA is committed to working through a process that includes a more holistic

dialogue with the national governments that will result in a common vision. The bottom line is putting resources in the hands of the people that can deliver.

Q: There was a question about the criteria that were used to pick the focus countries and to what degree the local citizens were involved.

A: 35 indicators around 5 basic criteria were used to look at a country's performance in a number of different areas. Detailed analysis was also done in each country and will be updated on an annual basis. Partnership Committees in each country have been formulated which include a number of different levels of stakeholders.

Q: There was a question about the Quick Start activities that the Initiative has identified. The activities chosen (a) training in agricultural science and policy and (b) wide dissemination of agricultural technology packages, including biotechnology seemed to be more top-down. The question was why not focus on simpler technologies that the farmers, themselves, have come up with.

A: This initiative has a 15-year timeline but knows everything cannot be solved within this timeline. The commitment is to put money in technology proven to perform at the local level; 2) the issue of capacity does need to be addresses; and 3) there is a commitment to improving knowledge management systems. This initiative recognizes and puts on the table that the future of Africa must rest in the hands of Africans and asks to make them accountable.

Q: The question was brought up that the workshop participants had just spent 3 days arguing that agriculture and NRM belong "together" and that agriculture is a sub-set of NRM. It seems the IEHA treats agriculture as a separate process and leaves aside NRM.

A: That isn't the case. The intention is to be much more holistic. The sectors need to be brought together. Let's get the issues on the table and examine the issues from a common framework. It is clear that there is a public good that needs to be invested in NRM and now we need to get that articulated.

Q: There was a comment about the immense need for infrastructure improvement in Ethiopia.

A: Africa has the lowest rates of investment in infrastructure than anywhere else in the world. There is recognition that infrastructure is a very important issue and that is on the table.

Q: One participant requested an elaboration on "markets" vis-à-vis IEHA.

A: There are 3 dimensions to this: 1) we need to put on the table about where Africa is now with regard to competitiveness and what they have to do to get it competitive; 2) what is happening with markets and systems that is allowing for trade. The issue with Africa is that trade is centralized in the capital cities and with the port cities - it needs to move closer to where production areas are; 3) Need to see whether or not creating an enhanced operating framework for making different markets work. How are incentives created?

Second Presentation: NEPAD: An Overview

Presenter: Hespina Rukato (South Africa)

Hesphina presented some basic information about NEPAD and its structures. NEPAD is “a pledge by African leaders on a common vision and firm and shared conviction, that they have a pressing duty to eradicate poverty, both individually and collectively on a part of sustainable actively in the world economy and body politic.” She mentioned that its focus is on reversing the relationship that underpins Africa’s underdevelopment and that it is a new partnership because it is to be driven by Africans for Africans.

Hesphina reviewed the sectoral priorities of NEPAD and mentioned that Action Plans have already been developed for the following sectors: agriculture, environment (in progress), infrastructure and tourism. They are being developed for health and science and technology. Above all, the strategic focus is on peace-building, conflict resolution, and good governance which are considered to be preconditions for sustainable development.

Within NEPAD there is a Heads of State Implementation Committee (5 initiating countries), a Steering Committee, the NEPAD Secretariat and also a technical, coordinating and administrative staff. All action happens at the national level, with regional economic communities (RECs) playing a coordinating role at sub-regional levels. With regards to their relationship with the UN, NEPAD is now the development conduit between Africa and the UN. Hesphina continued that for the first time in the history of Africa, Heads of State meet periodically to review progress in implementing development and now the focus or challenge is on internal marketing. They have been criticized as using a top-down approach, but the fact of the matter is that it had to start somewhere and that now the challenge is for Africans to take responsibility. NEPAD is more than just a collection of projects, the objective and challenge is to rebuild the confidence of Africans, and for them to take charge of their development agenda.

With regards to work in the environment sector, an Action Plan initiative was started by AMCEN and the plan now is to go to the AU Summit taking place July 4-12 in Maputo.

The challenges they have for this work are to make the processes transparent and inclusive and to make sure there is institutional coordination. It is also expected that the action plan will be evolving in order to accommodate new and emerging issues.

Opening and intro of George Jambiya and Chris Kosnik by Mike McGahuey

Words of welcome/background info from George

Third Presentation: Recommendations for Mainstreaming NRM and Next Steps

George Jambiya (REPOA) and Chris Kosnik (USAID), Co-Chairs

Introduction and Linkages between Themes—Asif Shaikh

Asif spoke of two linkages two ways. First, starting out with sector program areas and following them to see where there are intersections and then going beyond linkages to see that many issues are part of the same whole. He then spoke of 4 things:

1. Myth of standing still—fundamental drivers in RM are putting pressures on resources. When resources are not brought under management they tend to be appropriated by rich and powerful. This redistribution of assets increases the vulnerability of the poor and increases the potential for conflict because it changes the context.
2. Credibility is a 2-way street. Have to say where it is not relevant to all 4 sectors. It would be coincidental if it were central to each of the 4 programmatic areas—but equally coincidental if it were not relevant in many places. One of the participants at the workshop spoke of NRM as infrastructure for agriculture.
3. Getting out of the poverty trap. Subsistence is no longer viable because of soil mining and taking out more nutrients out than we are putting in. From subsistence to commercial production. How does this transition happen for rural poor? On-farm NRM management provides opportunity for short-term production and builds capital essential for agricultural transition.
4. Call it what we need to know. This is about KM and trying to tie together issues on linkages. KM and the 4 areas are linked. All presentations stressed that point. Linked, but not the same thing—they intersect but have a different dynamic than agriculture—different time frames and a different science—important and connected, but they are not the same thing. It is a sphere dynamic. We are talking about integration but not subsuming one to the other.

For the following topical presentations, speakers were asked to site 3 compelling reasons for integrating NRM and then 4 recommendations.

Presentations and Recommendations

Ndey Njie—NRM and Poverty

3 key points:

1. Poverty and its root causes are not well understood, and therefore reduction measures cannot be effective
2. Natural Resources are the critical resources for the poor, as sources of incomes (livelihoods) but also as their socio-economic safety nets
3. The loss of ownership/say in management of critical natural resources for livelihoods has severed the links between communities and good NRM practices leading to disempowerment, and vulnerability to poverty.

Recommendations

1. There is urgent need for actors at local levels to be enabled to understand better the poverty-NRM linkages. Therefore, capacity building in this area is needed to make more informed choices and decisions.

2. Investment is needed for local communities to make better access to and use of resources, increase productivity and benefit from wider market opportunities.
3. NRM should be integrated into broader rural development programs as part of poverty-reduction—in particular the PRSPs.
4. Support should be provided so that the budgetary process reflects better NR's contribution to the local and national economies.

Dieudonné Musibono—Conflict and NRM

4 key points

1. Ecosystems are more likely to bring social security and sustainable development when there is effective NRM based on economic viability, ecological sustainability and social justice.
2. Natural resources are limited in quantity and quality. They can be sources of conflicts, particularly since more than 80% of people depend on natural resources. Such dependence can exert competing uses and increase pressure on resources.
3. In the absence of wise and rational NRM, sustainable development cannot be achieved.
4. Conflicts involving access to and use of natural resources important to rural livelihoods are inevitable. Experiences presented by this group from across Africa have shown that NRM activities are an effective vehicle for stakeholders to negotiate agreements that mitigate conflicts.

Recommendations

1. Participative management of natural resources that integrates traditional knowledge and rules related to NR with scientific information, rules and laws of the modern state should be promoted
2. Participative management should be supported by training of local partners in conflict and resources management that meets the objectives of sustainable local livelihoods and resource conservation.
3. Environmental conflict resolution should be based on environmental justice that reconciles all stakeholders' interests and that is premised on innovative NRM strategies that take into account economic, ecological and social justice factors.
4. All NRM-related projects should be negotiated among all stakeholders, and the role of the local community, particularly that of women and other marginalized minorities, should be predominant.
5. Applied scientific research and training at the community level should be strongly encouraged and clear channels of communication well defined.

6. To avoid perpetuation of environmental conflicts, markets for “blooded” resources should be forbidden.

Fidele Hien—Agriculture and NRM

Points:

1. Agriculture and other natural resource based activities are the major source of income for 80% of Africa’s people
2. Well-managed development of these resources enables rural households to increase incomes which enable them to access basic social services (health, education)
3. Increasing and protecting the productivity of the natural resource base is vital to sustainable economic growth in rural areas because: 1) land degradation is reducing agricultural GDP by 5% annually; 2) high cost of agricultural technologies (fertilizers, HYV, expensive irrigation schemes) are more productive/profitable when used in combination with good NRM practices; and 3) well-managed forests/woodlands and water resources contribute to rural income diversification and poverty reduction, often providing income for disadvantaged groups.

Recommendations:

1. A broader view of agricultural development that recognizes the key role of integrated natural resource management by adding resource management issues to the production to consumption chain. This requires 1) institutional changes in African governments, donor agencies, and Ag research and service providers that contribute to cross-sector collaboration; 2) allocating funds to promote multiple rural development strategies rather than targeting projects with rapid, easily measured benefits for a limited number of people.
2. Greater investment to promote scaling up of many documented NRM success stories that have increased incomes and reduce poverty, often for particularly vulnerable groups such as youth and women.
3. Support of studies, information, capacity building, and lobbying activities that increase decision makers understanding of the core role that sustainable agriculture and NRM can play in rural development and poverty alleviation.

Godber Tumushabe—Governance and NRM

Why governance practitioners should invest in NRM:

1. Because NR matter is the bread and butter to the poor people, it is a compelling vehicle for promoting and consolidating key governance principles of participation, vertical and horizontal accountability and representation.
2. Because governance is undermined by using natural resources capital to “buy” political patronage (at both the center and under decentralization); investing in democratizing

decision-making over NR is a major disincentive to political fraud and a boost to governance.

3. Environmental rights are human rights. They are fundamental because they touch on livelihoods and quality of life. Investments that promote environmental rights (such as environmental procedural rights) empower people and broaden their opportunities to make free choices;
4. NRM is the foundation for civil-society nation state building and therefore the foundation for good governance.

Recommendation: Investment to help achieve the twin objectives of good governance and NRM:

1. Identifying and strengthening local institutions and public interest organizations that help the poor, including getting champions.
2. Training programs for the judiciary and legal practitioners in environmental /public interest issues.
3. Support programs that strengthen parliamentarians' capacities to represent NRM interests of their constituencies.
4. Documenting case studies that simultaneously demonstrate successes for governance and NRM.
5. Building local, national, sub-regional and international coalitions that promote governance and NRM.

Discussion shifts slightly:

Future of FRAME: George Abalu

- Frame combines web-based knowledge and an expert community of practice to help decision-makers and practitioners analyze issues, plan strategically and advocate their positions.
- The objective is not just to increase the flow of information on NRM but to help provide high quality advice and knowledge when it is needed to improve decision-making.
- FRAME supports and complements other efforts by USAID's EGAT and Africa Bureaus, and other African development efforts.

How important is FRAME in Africa's Development Agenda? NRM decision-making

- Influenced by several stakeholders
- Involves knowledge generation and dissemination
- Results in policy choices and actions that influence the lives of millions of people

- Results in dialogue and interdisciplinary exchange of ideas among Africans and their counterparts throughout the world.
- If there was no FRAME it would have to be invented because of the large number of people and NRM processes involved and the rapidly changing and increasing NRM knowledge AND the existence of a large pool of underutilized and/or unused NRM information
- FRAME has had a head start and is beginning to make significant in-roads in the decision-making process in Africa
- Links with African Policy Orgs, development partners institutions in progress (NEPAD, CILSS, ASARECA, UNDP, etc.)

Recommendations:

- USAID should avoid seeing FRAME activities as separate or as something that comes in addition to its poverty reduction/conflict/governance agenda in Africa
- Integrate and mainstream FRAME's work and activities into USAID's broader agenda in these areas as a deliberate agency strategy for adding value to its national and regional poverty eradication efforts
- Facilitate the involvement of African stakeholders (governments, researchers, NGOs, civil society, etc. in setting their NRM agendas and implementing regionally agreed NRM strategies and plans, e.g., NEPAD, Agenda 21, etc.
- USAID, FRAME, and FRAME's intermediaries (CG, SC members, communities, etc) need more frequent, more adaptive and more pro-active arenas for dialogue and exchange of views.
- Facilitate FRAME's NRM activities in African countries so that these activities are also given high priority by the countries' own national authorities and be seen as part and parcel of the total USAID's efforts in the countries.

Joaquin Tamayo (OAS)—Globalization of FRAME

(OAS created in 1948, has 34 member states and creates and promotes spaces for dialogue on political, social and economic regional issues. The organization also fosters the exchange of information among various sectoral areas of society and promotes technical cooperation through the adoption of integral developmental projects.)

- Sees possibility of fostering exchange of experiences and common objectives and goals
- Exploring possible synergies or mutual issues and applications of initiatives based on the African experiences on sustainability and growth policies to tackle poverty and social conflict

- Arrange with Steering Committee Members of FRAME the presentation of FRAME to the political bodies of the OAS.
- Include the presentation of NWP
- Make OAS members cognizant of findings of this seminal of community-based NRM framework

Steve Johnson—Nature, Wealth and Power: The Way Forward

Opportunities for enhancing the NWP Model:

- Globalization
- Leadership—emergence of champions. Most successful NRM have been driven by charismatic driven people
- Gender—hasn't surfaced in this doc as much as it should have. Needs to be clarified as to how it can be embedded in process
- Smart growth—promoting acceptance and lack of best practices, etc. We need to get smarter about that
- Science & Technology—not adequately covered in document.
- Cultural perspective—plays a great part in success or failure of community resource programs and could be better highlighted.
- Private sector—role of private sector that is the engine of the triangle of NWP. Need to identify and place true value on NR and need to be developing markets so that they can trade more effectively

Some other areas in the evolving dialogue:

- Greater integration of concepts and across sectors
- Adaptive management and learning organizations, social learning—Knowledge management is integral.
- Productivity is found to be a common thread between AG and NRM

Suggestion to change the model slightly: Private Sector should sit in middle of triangle representing the engine of the process.

Recommendations:

- Enhance KM—improve empirical side of process—more case studies and greater use of spatial planning tools

- Enlarging the analytical framework with an emphasis on private sector processes to drive pyramid
- Improving the analytical framework including issues of globalization, leadership, role of science and technology, gender, substantive rights, smart growth
- Enhanced second version of the NWP model that will lead to an operationalization of the process
- Feel that whole process of NWP has been a very constructive model for dialogue across Africa and should be used, critique and should be taken into second phase.

Operationalising Strategies:

- Need to pilot country test cases
- Integrated participatory planning
 - Special planning
 - Scenario planning
 - Identification of economic land-use options
 - Multi-sector integration
 - Innovative institutional mechanisms to reduce conflict and improve governance
- Sharing lessons learned beyond Africa

These presentations were followed by 5-minute responses from the following panelists:

Ambassador Diatta (Niger):

Explained how he fully agreed with us when we talked of how NR are sources of conflict in Africa. He cited some examples—Sierra Leone with diamonds and then DRC with conflict over control of gold, diamonds and cotton. Tribes are fighting for control of those minerals. Went on to say how all these conflicts lead to significant loss of human life and handicap the development of country. Initiatives have been undertaken on regional and sub-regional levels to deal with these issues (ex. NEPAD) Sustainable development is impossible without peace and stability. He mentioned that certain sub-regional org (ECOWAS) have established conflict resolution mechanisms.

Emmy Simmons (USAID):

Mentioned how we had come a long way in thinking about NRM in a broader context and gave 3 examples:

1. Woodlots: This was a single intervention with not much reflection at all. All the questions came up later. And those questions are the questions that people were talking about at this last session. We are integrating our understanding of NRM into an understanding of how we think about things. The fear is that FRAME needs to continue but could become overwhelmed by complexity.
2. State Ownership: Use to just blindly accept state ownership. There is a need for stakeholders not only to have access but to have some measure of ownership. There is the question of ownership and rights to resources - how exactly stakeholders are to be identified. Environmental rights need more clarity. We have now said that government needs to enter into the process of thinking about NR and who owns NR and who can be the best owner/manager/most sustainable manager of those resources.
3. View that poor are powerless and therefore have no options other than to mine soil, chop trees, pollute water, etc. Working with the poor is important. Conflict arises when they perceive their interests might not be met. It is important to empower them with knowledge. What can poor bring to the picture themselves? Knowledge, practices.

A lot of new ideas were presented here today and we are moving this important dialogue forward but there are still a lot of questions and issues that need to be tested.

Musa Mbenga (CILSS):

Shared a couple of insights. His first observation was that why is a country like South Africa able to get where it is—with all its diamonds—unlike countries like Angola, Sierra Leone, and DRC. South Africa uses these resources for development. Also, given the document on NWP and the triangle, we see that the issues are linked, but are the arrows all the same breadth and depth? Everything isn't always monolithic. It's important to identify resources that are of national and international strategic importance—these are the resources that whenever they are mismanaged will lead to more violence than other resources that are more provincial in nature. The conflicts that arise from the more local or provincial resources are much more easily resolved. The link with governance is key because one can have resources, and they might have wealth but not necessarily power. The authorities that are regulating resources need to come together to establish rules and to which all players (stakeholders) would abide.

Hesphina Rukato (NEPAD):

1. First of all, she mentioned that the issue of infrastructure is critical to the development of agriculture. She mentioned that what the colonialists did first was build roads but since then none of the African countries have done anything more to what was left behind. Everyone is looking for easy options: capacity-building, training, research...nothing gets delivered on the ground and poverty is increasing. Africa is the only continent in the world where poverty is increasing.
2. Next, she spoke of the linkages between NRM and conflict. She concluded that African countries are fighting over gold, diamonds—that is true—but that they aren't fighting alone and that they do have partners in crime. The private sector is involved and the private sector needs to be more transparent regarding the exploitation of natural resources in Africa.

3. On the technical level, she brought up the question of scale. What scale are we talking about and where are we targeting our interventions? She added here that we need to understand the bigger picture before we design interventions. She gave the fish story example about teaching someone how to fish....they then have the skills but what if there are no fish?

She concluded with the question of what we do with success stories and how can this group use their collective knowledge to affect development in Africa

Moustapha Soumare (UNDP):

Spoke of NWP and explained how he believed having these 3 issues together was key for sustainable development. The concept is action-oriented and implementation is key for sustainable development. The key is that development is a 2-way street—need to work at both the local and national levels. The question he had about the NWP was about transboundary resources and how they apply those issues on the model. The concept should be brought at the attention of civil society, in particular Parliamentarians. To do so there is a need to get champions into parliament to spearhead the concept.

Peter Hazell (IFPRI)

Usually the poor are blamed the most for the amount of degradation. While poor people are suffering the most they are not the sole reason for the degradation. Poverty is not the only cause of resource degradation. What we need to do is work on why people degrade resources and what the incentive issues are. It's not always a win-win situation. There are inherent trade-offs. For instance, crops that give bigger yields are a form of capital and for the poor the mining of capital is a way of getting ahead. What countries do is to use at first resources but then re-invest in resources. At first you degrade and then invest back in resources but you have to accept the trade-offs. Where there is degradation let's focus efforts on irreversible degradation. Participatory local solutions are cat's whiskers but they are not enough. Many environment externalities have a negative impact way beyond the immediate community. Local solutions do not provide impact way beyond the community. Different incentives are needed. It is easy to talk about integrating all these things but it is hard to do. There is a lot of top-down stuff that is necessary in addition to the bottom-up stuff. We have to find a way of balancing top-down decisions with participatory bottom up approach. IEHA is building a strategic knowledge support system—and there is the investment in building up data and knowledge systems about the rural sector for a similar undertaking.

Hilary French (Worldwatch Institute and UNEP)

Tied in NWP with what UNEP is doing. Thought that they could complement each other. Mentioned that there has been a lot of emphasis at UNEP on the relationship between poverty and the environment but that the focus has been with environment ministers and an effort to work at the national level. UNEP has a poverty-environment roadmap that they have started to use in 5 pilot countries. Thinks they could use NWP model at these ministerial levels.

Wade Warren (USAID):

He said the Africa Bureau is a big fan of NWP and thinks it could be applied/used around the world, but agrees the model could be improved. FRAME is a good model as a virtual community

and thinks it could be used for other sectors. He appreciated the recommendations of the workshop. He noted that USAID is already doing many of them. He wondered if the workshop felt USAID should be doing more, should be doing what it does better, or should be implementing a different mix of activities. He ended by saying that he would like to hear more from the group on scale, mix, and priorities.

Jonathan Lash (WRI)

Speaking of the NWP model, he said that all three components were of course woven together but the question is whether we are capable of responding. The statements were so clear and compelling and of course they are important drivers with regards to peoples' well being - but then why is it so hard? Is it a lack of understanding or is it the difficulty? There is a natural human preference for simple answers and the status quo is not an accident. Some people are enriched so changing the arrangement is not easy or in the best interest of all the stakeholders. Thought that it was important to address NWP to respond to threats and opportunities of globalization. Information tools are available now that weren't available years ago and allows enormous improvements on a number of levels. NRM is a very good place to begin to apply principles of effective governance. (cited Rio Declaration) There is reason to say we can advance in this area. Governance is the theme to which people are responding.

This session was followed by a Plenary Q&A:

Q: There was a question to Hespina about NEPAD and the organization of its clusters. Wanted to know what the core objective was in the agriculture cluster.

A: The agriculture focus was on specific activities that were meant to trigger development in Africa—looking at it as a strategy for poverty eradication.

A comment was made that the CG should be more ambitious about applying FRAME and use it as a lens. The group has so much knowledge and should not be confined to a local scale. With regards to S&T, the issue isn't just using it more but a different type of S&T—and FRAME could help establish the research priorities.

Q: Question was asked about donors re-creating the wheel—how can they work without overlapping?

A: Donor coordination is easier said than done. USAID makes efforts at senior levels and the country-specific missions try to coordinate in country also. It depends on the players. Someone added the comment that donor coordination should also be done by the governments. If the government is in the driver's seat it will work.

One of the panelists mentioned that in addition to the micro-level work being done it is also important to aim towards higher levels of analysis—the regional and national levels.

Closing by Michael McGahuey and Jeff Brokaw

Appendix B. Workshop Agenda

	Monday, June 9	Tuesday, June 10	Wednesday, June 11	Thursday, June 12		Friday, June 13
	Thematic Discussions			Mainstreaming NRM		FRAME Business Meeting (CG and USAID/ LRM Team)
9:00	<p>Welcome- Mike McGahuey (USAID) and Carl Gallegos (USAID)</p> <p>Meeting objectives</p> <p>Context –Keynote address by Emmy Simmons (USAID/EGAD) and Wade Warren (USAID/AFR)</p> <p>Introductions</p> <p>Nature, Wealth, and Power (NWP)- Introduction: Jon Anderson (USAID); Asif Shaikh (IRG); Peter Veit (WRI)</p>	<p>Opening</p> <p>Feedback from virtual participants</p> <p>Addressing Knowledge Management (KM) Needs</p> <ul style="list-style-type: none"> • <i>KM overview.</i> Tony Pryor (IRG) • KM discussants by: <ul style="list-style-type: none"> Joe Rabenstine (USAID) George Abalu (Agrosearch); Webster Whande (Univ. Cape Town) & Edouard Bonkougou (CNRST) <p>Plenary questions and Answers</p> <p>NRM and Rural Economic Growth (Agriculture)</p> <ul style="list-style-type: none"> • <i>Agricultural development strategies and NRM.</i> Ruth Meinzen-Dick (IFPRI); Tom Hobgood (USAID); Chris Kosnik (USAID) <p>Questions & Answers</p> <ul style="list-style-type: none"> • <i>Experiences integrating agriculture and NRM.</i> Chris Reij (Vrije Univ.) 	<p>Opening</p> <p>Feedback from virtual participants</p> <p>NRM, Governance, and Conflict, cont.</p> <ul style="list-style-type: none"> • <i>Conflict strategies and NRM</i> Sharon Morris (USAID); Scott Bode (USAID) • <i>Experiences integrating Conflict and NRM.</i> Dieudonné Musibono (Univ. of Kinshasa) • <i>Regional NRM governance commentary.</i> Fidele Hien (INERA) <p>Plenary Q&A</p>	<p>Opening</p> <ul style="list-style-type: none"> • <i>USAID's Agriculture Strategy and President's Initiative to End Hunger in Africa (IEHA).</i> Jeff Hill (USAID) • Q&A period • <i>NEPAD and its Structures.</i> Hespina Rukato <p>Q&A Period</p> <p>Continue preparation for presentations</p>	9:00	<p>Opening</p> <p>Past, Present, Future of FRAME</p> <p>Led by CG members</p>
					9:45	

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	<i>Thematic Discussions</i>			<i>Mainstreaming NRM</i>		<i>FRAME Business Meeting (CG and USAID/ LRM Team)</i>
10:30	Coffee break	Coffee break	Coffee break	Coffee break	10:30	Coffee break
11:00	Nature, Wealth, and Power- Discussion Discussants Steve Johnson (Research Dynamics); Ndey Njie (UNDP) Participants' reactions to NWP Purpose of the working groups and guidelines for the recommendations	<i>Experiences integrating agriculture and NRM cont.</i> Mituku Haile (Mekelle Univ.); Paul Tchawa (Univ. of Yaounde) <i>Regional NRM-agriculture commentary</i> (Ann Stroud, ASARECA) Plenary Q&A Working groups		Continue preparation for presentations	10:45	Stage Setting FRAME and Communities FRAME beyond Africa Role of the Contract Group and Steering Committee
12:15					Lunch break	Lunch break
12:30	Lunch break	<i>NRM and Spatial Analysis</i> (Peter Freeman and WRI)	Lunch break Video session and table-top discussion	Lunch break	12:15	Lunch break
						1:15

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	Thematic Discussions			Mainstreaming NRM		FRAME Business Meeting (CG and USAID/ LRM Team)
1:45	NRM and Poverty Reduction <ul style="list-style-type: none"> • <i>Poverty reduction strategies and NRM.</i> Tim Mahoney (USAID) • <i>Experiences integrating Poverty reduction and NRM in Uganda.</i> Frank Turyatunga • <i>Regional NRM-poverty reduction commentary.</i> Musa Mbenga (CILSS) • <i>Experiences integrating Poverty reduction and NRM in Tanzania.</i> George Jambiya • Plenary Q&A • Working groups 	Working groups cont. Report outs on NRM and Agriculture recommendations; plenary discussion	Working groups Report outs on NRM and governance and NRM and conflict recommendations and plenary discussion (60 min) Preparation for Mainstreaming Recommendations <ul style="list-style-type: none"> • Objectives • Plenary decision on how to proceed • Working groups to refine recommendations • Review conclusions and complete plan for the Presentation Session 	Recommendations for Mainstreaming NRM and Next Steps George Jambiya (REPOA); Chris Kosnik (USAID), Co-Chairs <ul style="list-style-type: none"> • <i>Introduction and Linkages between themes.</i> Asif Shaikh (IRG) • <i>Presentation of recommendations</i> • <i>Panel of Respondents:</i> Amb. Diatta (Niger); Emmy Simmons (USAID); Musa Mbenga (CILSS); Hespina Rukato (NEPAD); Moustapha Soumare (UNDP); Ruth Meinzen-Dick (IFPRI); Peter Hazell (IFPRI); Hilary French (Worldwatch Institute & UNEP); Jonathan Lash (WRI), 		
					2:00	Discussion groups Round 3
					2:45	Next Steps and Closing Remarks
3:00		Coffee break	Coffee break	Coffee break		

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	Thematic Discussions			Mainstreaming NRM		FRAME Business Meeting (CG and USAID/ LRM Team)
3:30	Coffee break	<p>NRM, Governance and Conflict</p> <ul style="list-style-type: none"> • <i>Governance strategies and NRM.</i> Don Muncy (USAID); Peter Veit (WRI); Jesse Ribot (WRI) • <i>Experiences integrating Governance and NRM.</i> Godber Tumushabe (ACODE); Tidiane Ngaido (IFPRI) 	Continue preparation of recommendations	<p>Plenary Q&A</p> <p><i>Thank you and closing.</i> Jeff Brokaw (USAID); Mike McGahuey (USAID)</p>	3:30	<p>Optional</p> <p>Simplify Editors Training</p>
4:00	Report outs on NRM and Poverty recommendations; plenary discussion					
4:30		<p>Knowledge Management and FRAME: Cyber Cafe</p> <p>(Participants choose Tuesday or Wednesday)</p> <ul style="list-style-type: none"> • FRAME and Simplify overview • Hands-on experience with Simplify (guided intro with as much time as people like to play afterwards) 	<p>AFR/NRM Knowledge Portal</p> <p>Tony Pryor. Two back-to-back presentation on Symplify</p>			
5:00						
5:45	Reception					

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85	Winterbottom	Bob	IRG Senegal, Chief of Party, AG/NRM "Wula Nafaa" Program	Programme AG/GRN "Wula Nafaa", s/c PGCRN - Direction National des Eaux et Forets, Parc Forestier de Hann Dakar, Senegal Tel. (221) 832 33 45, 832 00 45, 221-566-6388	bobwinter@sentoo.sn

Appendix D. Selected Participant and Presenter Bios

Steve Johnson: Born of farming parents in Zimbabwe, he grew up with a passion for the outdoors and nature, which was translated into extensive adventure hiking and climbing the vast mountain ranges around Cape Town, where he attended university between 1972-74. He returned to Zimbabwe and joined the Department of National Parks, rising in the ranks to eventually start and develop the Zimbabwe Natural Resources College as its founder principal. Moving to the North West Parks Board (formerly the Bophuthatswana NPB) he started one of South Africa's first CBNRM programs, and eventually became the Chief Director of the Department of National Parks, Conservation and Environmental Affairs. Having left that in 1996 he joined IUCN ROSA and was seconded to SADC/USAID RCSA as the southern African regional Advisor on Natural Resources Management, coordinating the various CBNRM programs in the region. After the completion of this program in 2001, he consulted to IUCN, WWF etc. on NRM and strategic management processes, finally completing a one year contract with USAID RCSA/OFDA managing their Disaster Management Training Initiative for Southern Africa, and other Biotechnology related projects. He is currently the Vice Chair of IUCN's Southern African Sustainable Use Specialist Group, as well as a member of IUCN Commission on Ecosystem Management. *Contact information:* Resources Dynamics Africa. P. Bag BO 185 Gaborone, Botswana. Tel: (267) 397 7080; cell: (267) 71 455 455, or South Africa cell: (27) 83 229 4258 (full roaming); Email: sjohnson@it.bw

Mitiku Haile: Professor of Soil Science with more than 20 years of teaching, research and development activities. Jointly coordinated ISWCII project in Ethiopia. Currently the President of Mekelle University. Undertook several studies on NRM with particular focus on the role of natural resources in improving livelihood in drier environments. Enclosures as common pool resources are also of interest. Land tenure with reference to sustainable land management is a current study where he is involved in. *Contact Information:* Mekelle University, P.O. Box 231, Mekelle, Ethiopia; Tel: 251-4-409228; Fax: 251-4-409304; Email: mekelle.university@telecom.net.et.

George Abalu: A Freelance Consultant managing a small agricultural policy and sustainable development consultancy firm based in Abuja, Nigeria with an outpost in Addis Ababa, Ethiopia. Until becoming the Managing Consultant of the firm, he was the Principal Regional Adviser on Food Security and Sustainable Development at the United Nations Economic Commission for Africa in Addis Ababa, Ethiopia for fifteen years. An Iowa State PhD in Agricultural Economics, he was formerly Head and Professor of Agricultural Economics at the Ahmadu Bello University, Zaria, Nigeria and past President of the Nigerian Association of Agricultural Economists. He has worked in most African countries where he provided advisory and technical consultancy services and worked closely with policy makers, academics, intergovernmental officials and members of the private sector and civil society from divergent disciplinary backgrounds on policies and programs for poverty reduction and improved livelihood systems with special emphasis on food security and sustainable development. He has served as consultant on many occasions for the African Union, the World Bank, the FAO, the Kellogg Foundation, the Rockefeller Foundation, UNDP, and USAID. *Contact Information:* Tel: (882)-165-420-0902; E-mail: abalu@agrosearch.com

George Jambiya: He comes from Tanzania and is a senior lecturer in the Department of Geography, University of Dar es Salaam, Tanzania. He is currently working as the Research and Training Coordinator, with an organization called Research on Poverty Alleviation (REPOA), a Tanzania based NGO doing research, training and policy work related to poverty alleviation. He has also worked as a consultant and trainer in the general areas of Natural Resources Management and Urban development. With REPOA he is coordinating research and training, providing advisory and technical consultancy services and working with policy makers, academics, intergovernmental officials, the donor community and members of the private sector and civil society on policies and programs for poverty reduction and sustainable development. Meanwhile he is also doing his research on the Poverty-Environment nexus. He has been with FRAME since its inception. *Contact information:* Tel: 255-222700083; 255-744 771058. Email: jambiya@repoa.or.tz, gjambiya@hotmail.com

Dieudonné Musibono: He is a professor at the University of Kinshasa and teaches several classes including NRM and SD; Ecotoxicology and EIA; and Integrated Aquatic Ecosystem Management. He has substantial experience on NRM in the DRC. Currently he is also working with IRM/CREDP as focal point for the Congo Basin Biodiversity Management and Conservation. He is one of the founders of the new department of Environmental Sciences at the University. He is also the founder of Environmental Resources Management and Global Security (ERGS), a University-based technical assistance provider. He received his PhD from the University of Cape Town on Toxicology and Ecosystem Quality. He holds two Masters degrees in Environmental Resources Management (1987) and in Water Quality Management (1990). He has a number of postgraduate certificates from American, African and European Universities. *Contact information:* ERGS, Department of Environmental Sciences, Faculty of Science, Room C33 University of Kinshasa, DR Congo Attn: D.E. Musibono, PhD. Tel: (243) 815011210; E-mail: musibono@yahoo.fr

Fidele G. Hien: An ecologist, senior researcher in the Department of Natural Resources Management and Farming Systems of the National Institute of Environment and Agricultural Researches (INERA) of Burkina Faso. He graduated in 1984 in forestry at the *Institut Supérieur Polytechnique* of the University of Ouagadougou, Burkina Faso. After 3 years working in applied research in agroforestry, he was promoted (1986--1988) as National Director of forests, soil conservation and fisheries in the Ministry of Environment and Tourism. Then, as Regional Director of forests, soil conservation and Tourism in the *Sanmatenga* Region (1988-1990), he managed a Dutch founded rural forestry project (*Bois de Villages*). The environmental conditions of the *Sanmatenga* Region and the experience with the Dutch Project resulted in a research proposal on soil and water conservation for sylvo-pastoral lands rehabilitation in the Sahel, submitted to the *Wageningen Agricultural University*. He received a PhD in agricultural and environmental sciences in March 1995. From 1995 to 2000, he joined the INERA and was appointed in 1997 as national coordinator of a participatory research Program on Indigenous Soil and Water Conservation in Africa which links, in eight African countries, researchers, extensionists and farmer innovators. In November 2000, he was appointed Minister of Environment and Water of his country until June 2002. He is since that date, a MP (member of the parliament) of Burkina Faso, member of the *Economic Development and Environment Commission* and president of his parliamentary group in the Parliament of Burkina Faso. Dr. Hien made several publications and performed several consultation missions in NRM field, both at national and international level. He is married, with 2 children. *Contact information:* Chargé de Recherches au Département Gestion des Ressources Naturelles et Systèmes de Production (GRN/SP) de l'Institut de l'Environnement et des Recherches Agricoles (INERA). Centre National de la Recherche Scientifique et Technologique du Burkina

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Chris Reij: his original background is in human geography. He started working in Burkina Faso as a regional planner in 1978 where he became fascinated by land degradation and all efforts to do something about it. He returned in 1982 to the Vrije Universiteit Amsterdam, initiated a small consultancy group in the field of NRM with a focus on drylands in Africa, but with occasional opportunities for work in Central and South Asia. During the last 10 years the key themes of his work include: the dynamics of traditional SWC practices, farmer innovation in African agriculture, long-term area development on the Central Plateau of Burkina Faso, and success stories in Africa's drylands. *Contact information:* Resource Development Unit, International Cooperation Center of the Vrije Universiteit/CIS De Boelelan 1105-2G. 1081 HV Amsterdam, The Netherlands; Tel: 31 20 444 9078; Fax: 31 20 444 9095; Email: CP.Reij@dienst.vu.nl.

Webster Whande: He coordinates a Southern Africa Community-based Natural Resource Management program based at the Program for Land and Agrarian Studies, School of Government at the University of the Western Cape. This program is being implemented in partnership with the Centre for Applied Social Sciences at the University of Zimbabwe. Until becoming the Coordinator for this program, Webster worked with the Africa Resources Trust on a regional communications program that used theatre and the arts as a means of communicating government policies to resource users and getting their responses. He has also worked with the World Commission on Dams based within the Stakeholder Consultation and Communications Unit. Webster is currently completing an MPhil in Land and Agrarian Studies where his research looks at contested notions of authority over land and natural resources in rural South Africa. His interests are in land rights and biodiversity conservation and particularly the changing narratives in nature conservation and their impact on access to, and use of, natural resources. *Contact information:* CBNRM Program Coordinator, School of Government, Program for Land and Agrarian Studies (PLAAS), University of Western Cape, Private Bag X17, Bellville 7535, South Africa; Tel: (27) 21 959 3733; Email: wwhande@uwc.ac.za

Paul Tchawa: He studied Physical Geography at the University of Yaounde (1980-1984) and at the University of Bordeaux (1984–1991). After his PhD (1991), he was recruited as lecturer at the University of Yaounde. He taught different subjects related to Natural resources management (Soil degradation, natural risks, soil conservation, hydrology, cartography...). From 1998 to 2002 he was the National Coordinator of the Dutch funded program called Indigenous Soil and Water Conservation (ISWC). He was advisor at the National Program of Agricultural Extension. He organized many training sessions on Participatory Development Technology, attended many seminars on participation and NRM. He received training dealing with environment in Europe and the USA. He is author and co-author of more than twenty scientific papers dealing with NRM in Africa. He recently (Feb. 2002) defended in Bordeaux (France) a second thesis on the topic: "Participation Issues and Development in the South: The case of Cameroon". He works with some donors for the Monitoring and the Evaluation of African NGO. *Contact information:* Assistant Professor University of Yaounde PO Box 12831 Yaounde, Cameroon. Tel: (237) 231 05 81 / 780 97 10; Email: ptchawa@yahoo.fr

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and environmental economics methodology; analysis of incentives systems and pricing policies; and quantitative analysis techniques. Proven experience in managing multidisciplinary teams for development projects. As President & CEO of IRG, an international consulting firm in natural resources, environment, energy, and relief and reconstruction, he manages a company of 200 professionals in the United States, Asia, Africa and Latin America. Throughout his career, he has participated in major short- and long-term programs for USAID, the World Bank, and other clients. With professional experience in over 35 developing countries, he is an internationally respected lecturer on topics such as sustainable development, environmental policy, economics, and natural resources. With four years of university teaching experience; he has taught numerous workshops, seminars and short courses, and lectured extensively throughout the world. A graduate of Columbia University (New York) in Economics and of Yale University (New Haven) in Political Sciences. *Contact information:* President and CEO, International Resources Group, 1211 Connecticut Avenue, NW, Suite 700, Washington, DC 20036. Tel: 202 289 0100; Fax: 202 289 7601; Email: ashaikh@irgltd.com

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Frank Turyatunga: He is currently working as a freelance consultant in the area of Environment and Natural Resources management. He was responsible for setting up the Uganda National Information Center, and pioneering Environmental Reporting (State of the Environment reports at national and sub-national level), and the use of GIS and Remote sensing in Environmental monitoring in Uganda. He was instrumental establishing the Uganda National Environment Management Authority (NEMA), where he became the Acting Executive Director, and later the Director for Information and Monitoring. In 1996, Mr. Turyatunga left NEMA to work with a USAID-funded project in two rural districts of Western and Central Uganda. The project was promoting the integration of Environmental Protection and Economic Development in communities living in the larger buffer zone of Murchison Falls National Park, and other rangeland areas. The project ended successfully in June 2002. He is a Board member of EIS-Africa, a pan-African organisation that is promoting the use of environmental information in decision-making. He is also a member of the World Resources Institute/USAID Information Working Group. He is a graduate of the University of Edinburgh, Scotland (Natural Resources Management). *Contact information:* Plot 27, Clement Hill Road, Suite A Kampala. Tel: 256-41-77-448-838 (Office), 256-41-530142 (Residence); Cell: 256 77 44 88 38. Block 4, Flat B3, National housing and construction. Estate, Wandegeya. Kampala, Uganda; Email: frankT@infocom.co.ug.

Rod de Vletter: A Swaziland citizen, is a tourism and environment specialist working for the World Bank since 1993. He is the owner of two nature reserves and an ecotourism lodge in Swaziland, and the founder of Swaziland's environmental NGO, Yonge Nawe. He is one of the originators of the Transfrontier Conservation Areas (TFCA) Initiative and has been working on Coastal Zone Management, Biodiversity and Tourism Corridors, and Tourism and Conservation policy and program development. His working experience covers Mozambique, Zimbabwe, Swaziland, Malawi and Uganda. Recently, he has been working with the International Finance Corporation to design the South East Africa Tourism Investment Program (SEATIP) and with the Government of Mozambique to design its Sustainable Tourism and Conservation Program. *Contact information:* Phophonyane Falls Lodge and Nature Reserve Pigg's Peak Swaziland. Tel: 268 437 1409 (Office), 268 437 1429 (Reception); Fax: 268 437 1719; Email: rod@africaonline.co.sz, rod@realnet.co.sz; Web: www.phophonyane.co.sz. World Bank: 1224 Avenida Kenneth Kaunda Maputo. Tel: 258 492841 (office), 258 82 301 286 (cell); Fax: 258 492893; Email: rvletter@worldbank.org.

Musa S. Mbenga: He was born in The Gambia where he was raised and educated up to the High School. After High School, he worked in the Department of Agriculture for three and half years as a pest control operator and as a research assistant before going to college. For college education, he did his Bachelors Degree in Crop Science at Texas Tech University in Lubbock, Texas where he graduated Cum Laude in 1983. He returned to The Gambia and was appointed as a Research Officer in the Department of Agricultural Research. He served for 2 years and earned a scholarship for a postgraduate degree. He attended Cornell University and completed a Masters degree in Plant Breeding and Biometry in 1989. He returned home to take up his duties as a research officer. In 1990, he was promoted to Principal Research Officer and in 1992 he was promoted again to Acting Assistant Director of the Department of Agricultural Research. During this time he was Station Manager of a research station called Sapu in the countryside. From 1994 to 1999, he was the Minister of Agriculture and Natural Resources of The Gambia. His portfolio included: Ag extension, research, livestock, planning, forestry, water resources, fisheries and wildlife and park management. Between 1999 and 2000, he was a private consultant and worked mostly for a US NGO called CRS. Since 2001, he is the Executive Secretary of CILSS, the Permanent Inter State Committee for Drought Control in The Sahel based in Ouagadougou, Burkina Faso. He is married with 3 children. *Contact information:* CILSS, Secrétaire Exécutif, Secrétariat Exécutif du CILSS, 03 BP 7049 Ouagadougou 03, Burkina Faso; Tel: (226) 37 41 25 a 30; Fax: (226) 37 41 32; Email: musa.mbenga@cilss.bf, cilss.se@cilss.bf, musambenga@hotmail.com; Web: www.cilssnet.org.

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Ann Stroud: She has been working with the African Highlands Initiative (AHI) since 1996, and as a regional coordinator since 1998. In this capacity she leads and manages a 5-country program that has expertise provided from African and international research partners as well as NGO, ministry of agriculture staff who contribute to improving agricultural productivity and natural resource management in this ecoregion. She is an employee of the World Agroforestry Centre (ICRAF), which as an organization hosts AHI on behalf of the Association for Strengthening Agricultural Research in East and Central Africa (ASARECA). Ann is from the USA, born in California. She received her MSc and PhD from Cornell University in 1982 in Agronomy from the Vegetable Crops Department, where her thesis research was on weed management. She left for Africa in 1982 and has resided there up to date living in Kenya, Ethiopia, Tanzania and now Uganda. Her professional career has been within the agriculture sector where she has been involved throughout the East African region working within research and development with a number of organizations. She has worked in multiple modes: training, thesis supervision, advising, research and working with extension systems. Her interests have migrated from weed science into farming systems research, and now into social and institutional dynamics related to improving NRM and agriculture. She has a family who reside with her in Uganda. *Contact information:* AHI Coordinator Plot 13, Binyayomba, Off Luthuli, Bugolobi P.O. Box 26416 Kampala, Uganda. Tel: 256-41-220607 or 220602; Fax: 256-41-223242; Email: a.stroud@cgiar.org or ahikamp@infocom.co.ug.

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Peter Veit: A Senior Associate and WRI's Regional Director for Africa, is an environmental governance expert who has worked to strengthen institutions in Africa—public and private—for more than 20 years. He has expertise and experience in environmental subsidiary (public administration decentralization, community-based resource management); strengthening independent policy research, environmental advocacy and public interest environmental law

organizations; strengthening the role of the legislature and judiciary in environmental management; broadening and guaranteeing environmental procedural and due process rights; and promoting African and sub-regional instruments on environmental governance. Veit helped establish, supports, and has long-term partnerships with some of the most influential policy-focused NGOs in East and Southern Africa and has supported several African fellows throughout his 15 year tenure at WRI.

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Scott Bode: He serves as Natural Resources Advisor at USAID in the Bureau for Economic Growth Agriculture and Trade in the Office of Environment and Science Policy. His main role is working with the Consultative Group on International Agricultural Research Center's (CGIAR) that focus on natural resource management issues. He holds a BA in Anthropology from Beloit College and an MS in Forestry from North Carolina State University. His interests are wide: agroforestry, community based natural resource management, sustainable agriculture, applied anthropology, agriculture and forestry extension, African environment and land use history, environment, governance and conflict issues. Mr. Bode lived and worked in Sierra Leone for the Peace Corps as an agroforestry extension agent, and most recently has worked and consulted in a number of countries in Africa and Asia: Cape Verde, Cameroon, Kenya, Tanzania, Uganda, Malawi, Zambia, Mozambique and the Philippines. He served as the Africa Program Coordinator for an NGO, Trees for the Future (2000-2001). He also worked as a research associate (1995-1999) for various institutions, including: US Forest Service RTP, North Carolina; Water Resources Research Institute, Raleigh, NC.; and North Carolina State University. *Contact information:* Natural Resources Advisor USAID/EGAT/ESP/IRB, Room 2.11-074 RRB 1300, Pennsylvania Avenue, Washington, DC 20523-2110; Tel: 202-712-5079; Email: sbode@usaid.gov.

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Boubacar Thiam: He has several years of professional experience in natural resources management in Sub-Saharan Africa. His work includes forestry program evaluation; environmental impact assessment of forestry program; forest co-management, development of community-based organizations, land use planning; land tenure systems and property rights. He has worked as a consultant for FAO on the final evaluation of Forest Trees and People Programs. Currently he works for International Resources Group (IRG) as Consultant, FRAME Program Outreach Advisor. His work with IRG has also included conducting a programmatic environmental assessment for reserved forest in Guinea; moderating an e-dialogue among practitioners on NRM policies in Africa; and analyzing the evolution of NRM policies in Sub-Sahara Africa. In Guinea, his work included facilitating the co-management process around Nialama national forest; conducting

research on land tenure systems and local NRM practices for the Land Tenure Center (LTC); facilitating the settlement of local people around a hydroelectric dam project for Guinea Ecology. He has also conducted research with LTC and the Environmental Science Institute of Senegal on land tenure and the management of the Samba Dia biosphere. He holds an MS in Natural Resources Management from Ball State University in Indiana in 2000, USA and BS in Rural Sociology from Guinea in 1992. *Contact information:* International Resources Group, 1211 Connecticut Avenue, NW, Suite 700, Washington, DC 20036; Tel: 202-289-0100; Fax: 202-289-7601; Email: bthiam.tdy@irgltd.com.