CBNRM is not new in Zambia. For over a decade various projects have supported efforts to develop community responsibility for managing and benefiting from natural resources. While the overall paradigm for CBNRM is generally well understood, namely that communities will collectively protect natural resources if residents derive sufficient benefits, convincing evidence to support this assertion is often elusive. Factors commonly cited for this are:

1) policy environment constrains resource benefits or resource use rights for local land owners,
2) poverty and food security not adequately addressed, and
3) institutional organizations limit household participation.

This paper focuses on the third factor and examines the different approaches adopted by five major CBNRM initiatives in Zambia for involving community members in the CBNRM process. The paper avoids making value judgments on their relative influence or success, since they all represent different scenarios and conditions for adopting CBNRM. It is safe to say, however, that none are without fault, yet all provide valuable lessons and experiences on improving rural livelihoods through community-based approaches for managing natural resources. The paper, therefore, offers an analysis of the institutional organizations adopted by these CBNRM initiatives. From this analysis, recommendations are made to help strengthen “next generation” approaches for developing community institutions that support CBNRM.

The five CBNRM projects selected for this analysis are summarized in the Table below.

<table>
<thead>
<tr>
<th>Project/Program</th>
<th>Orientation</th>
<th>Community</th>
<th>History</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADMADE¹</td>
<td>Natural resources</td>
<td>Entire community</td>
<td>1979-current</td>
</tr>
<tr>
<td>CARE/LFSP²</td>
<td>Food Security</td>
<td>Entire community</td>
<td>1996-current</td>
</tr>
<tr>
<td>CLUSA/RGBP³</td>
<td>Rural agri-businesses</td>
<td>Rural business groups</td>
<td>1996-current</td>
</tr>
<tr>
<td>UNDP/NRMP⁴</td>
<td>Natural resources</td>
<td>Resource user groups</td>
<td>1998-current</td>
</tr>
<tr>
<td>SLAMU⁵</td>
<td>Natural resources</td>
<td>Entire community</td>
<td>1998-current</td>
</tr>
</tbody>
</table>

Criteria for project selection included accessibility to project practitioners, contact with participating communities, and availability of published materials. Effort was also made to select CBNRM projects that were focused on improving rural incomes, increasing food security as well as managing natural resources. This provided useful comparative data on institutional structures for strengthening linkages between these CBNRM objectives.

The paper first provides a summary of the different structures used by each project and then consolidates common lessons for helping generate new insights for possible “next generation approaches”. From these results, specific recommendations are made for advancing CBNRM in Zambia and in particular continued development of the ADMADE program.

I. ADMADE

ADMADE’s first institutional structure was centered on traditional rulers, who appointed a committee, called Wildlife Management Sub-authorities, to direct the sharing and use of revenue benefits derived from wildlife and to help guide household involvement in resource management. Concentrating too much authority in traditional rulers flawed this design. Households were unable to express their views freely and were in most cases divorced from CBNRM activities and its benefits. As a result, most households demonstrated little interest or support in ADMADE. In hind-

¹ Administrative Management Design for Game Management Areas  
² Livingstone Food Security Project  
³ Rural Group Business Project  
⁴ Natural Resource Management Project  
⁵ South Luangwa Area Management Unit Project
sight, ADMADE should have committed more resources to the training and modernization of traditional rulers with more democratic approaches to their rulership.

Through a process of participatory workshops with a broad cross-section of community members, Zambia Wildlife Authority, then National Parks and Wildlife Service, helped facilitate a new institutional structure that was two-tiered: Community Resource Boards (CRB) and Village Area Groups (VAG). This gave rise to a community organization that delegated much of the resource management and community needs to decision-making processes at the VAG level. The CRBs, whose members are elected from each of the VAGs, provide overall community leadership in terms of VAG compliance to accepted norms of leadership, financial management and resource management, as defined in a community constitution. For both CRBs and VAGs, members are democratically elected, and unlike the previous leadership structure appointed by the local chief, these elected leaders are among the most educated and respected members in the community.

Within two years, significant improvements in CBNRM performance were achieved, resulting in substantial increases in household cooperation and involvement in public meetings, resource management activities, and project selection. Issues affecting household concerns were publicly debated and elected leaders became accountable to their electorate. However, the increase number of public meetings was still not sufficient to allow households to effectively gain access to community funds and have meaningful input into project identification.

Using adaptive management research tools, community members resolved this problem by forming household groups based on non-elected household members who shared common needs and interests. These groups formed at will and created forums where members were free to discuss their respective needs and select their own spokesperson or group leader. As they became established, they began brokering for inputs and other forms of assistance from their VAG-level leaders. In this way they became conduits for VAG funds appropriated by the CRBs as community shares from their ADMADE annual profits. These funds served as critically needed loans or grants to help initiate a group business or activities that would more directly benefited the households involved. These special interest groups became in essence “household lobbies” for individuals whose voices previously were not heard and whose needs were not addressed.

Another important step for increasing household representation on the CBNRM organization structure was giving membership on the VAG committee to representatives of these household interest groups. This allowed each group’s leader to attend VAG committee members and participate in decisions regarding how funds would support community needs. Schematically, the ADMADE institutional structure that encompasses these recent changes in representation and elected leadership is illustrated below:

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VAG committees through increased representation of household interest groups help make the CRB leadership more responsive to household needs. This is facilitating increased support of CBNRM objectives, as measured by increased attendance at public meetings to discuss CBNRM issues, reduced levels of illegal resources use activities, improved practices of good governance, and more varied uses of
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CBNRM revenues at a household interest group level. To ensure these linkages are supported and maintained by the elected CRB and VAG leaders, constitutions that spell out procedures for decision-making and revenue sharing as well as responsibilities of office-bearers are ratified by the community as a whole through VAG public meetings. The dynamics of these linkages are illustrated in the diagram below.

II. CARE LFSP

CARE’s approach to building CBO institutional structures is rooted in a participatory, livelihood approach developed through the USAID-supported Livingstone Food Security Program (LFSP). Designed to respond to household food security threats in the Southern Province as well as reduce the impact of drought on water sources, people and livestock, the resulting structure has shown flexibility and adaptability in meeting these livelihood needs.

The approach starts with four to seven individuals coming together to form a cell group or farmer group. The members of this cell group are self-appointed, based on trustworthiness, and feel comfortable to meet and discuss issues among themselves. Cell groups provide a unifying and supportive function for the program participants. Several cell groups in a village then federate into a Village Management Committee (VMC). This representation ensures that group concerns and suggestions are heard and addressed at a village level. The role of the VMC is to collect information from cell groups on seed demands, distribution of seed to the groups and recovery of seed loans from the groups and accounting to the Area Management Committee. The VMC also monitors group performance and facilitates formation of new groups as well as conduct meetings and resolve conflicts. Over time, cell group members expand their development interests and use the VMC to promote additional activities in support of their needs and interests.

At the next and highest level, several VMCs then federate into an Area Management Committee (AMC), which manages the developmental activities affecting more than one village. The AMCs are also responsible for initiating and implementing development activities in their respective areas. They draw up a constitution for the running of the committee and strive to register it as a legal institution. AMCs hold regular meetings with VMCs and farmers to discuss the progress of their development activities and identify new areas of interventions. They are also responsible for accessing resources and assistance from relevant institutions.

The LSFP project has implemented a range of activities through this structure, which has proven to have numerous advantages. These advantages include increasing the efficiency of service provision such as training, information dissemination, and distribution of inputs. The CBO approach has also extended the reach of project activities, improved accountability and enhanced farmer-to-farmer information exchange.
The capacity building aspect that comes with group formation brings benefits such as improved planning abilities, local governance and confidence in addressing development issues.

The basic design of the LFSP CBO structure is illustrated below:

III. CLUSA/RGBP

CLUSAs approach to developing CBOs is to form rural business groups varying in size from 15 to 25 farmers capable of producing commercial yields for sustaining inputs and group business growth. The approach provides a more collective responsibility for managing farmer inputs and outputs as well as reduces the risks of groups defaulting on micro-credit agreements. CLUSA’s groups are not subsets of the entire community nor do they try to represent the interests of the entire community. Instead, they represent individuals of both sexes who seek increased incomes and food security by developing a marketing approach to farming.

The group business model adopted by CLUSA provides important advantages for economies of scale by increasing the volume of inputs and outputs to attract commercial partners to trade with these groups. This becomes critical for stimulating rural business linkages with commercial markets. An important way CLUSA achieves this is by farmer groups consolidating their purchasing power to manage and run an agricultural depot used for storing agricultural inputs and outputs for facilitating trade transactions. This level of organization, provided that group members have effective negotiating skills, increases market value of crops to individual farmers while reducing input costs and also improves market stability by maintaining reliable partnerships with traders.

The CLUSA model is designed to work best where agricultural potential is high, groups have access to large agribusinesses, and communities have a positive history of loan repayment. Such communities tend to be in more densely populated areas than the more traditional CBNRM interventions that focus on wildlife. However, CLUSA’s experience show an increased opportunity for rural communities adopting their model to begin managing and conserving forest resources as more households become income secure through agri-group businesses.

IV. UNDP/NRMP

The UNDP approach to developing CBO institutions is in some ways similar to the CLUSA model in terms of its emphasis on income generation and use of small business groups, but greater focus is placed on non-farm natural resource products. It also represents an interesting example of program overlap with another
CBNRM program; in this case, ADMADE, where it has demonstrated flexibility to work within the ADMADE community organization while providing an additional level of CBNRM organization linked to the District Council.

Within its project area, communities form Natural Resource Management (NRM) committees. These represent a specific set of villages in the community. In ADMADE areas, VAG committees take the place of these NRM committees. Providing technical leadership for these committees is a District Natural Resource Management Team, consisting of Government officers representing the different natural resource sectors at the District Council level. This approach makes explicit use of District Government officers as part of the community organizational structure. The function of the District Team is to provide technical stewardship for resource use management and commercial enterprises as well as to administer grants to the NRM committees to finance income-generating activities through resource use groups in their respective area. To receive these grants, the NRM committees facilitate the formation of household groups linked to a land use plan that recognizes specific resources found in their area and their income earning potential. Group members represent an interest group in a natural resource use activity identified from the land use plan.

The overall approach assumes that the District Team will be an effective part of the community organization to help administer the NRM committees and their respective enterprise groups. Project results, however, are beginning to question the efficacy of this arrangement and to raise the importance of another role for the District Team as facilitators of residents as trainers or skills providers within the community. This would reduce the level of leadership by the District Team to sustain the CBNRM process and would shift greater emphasis on community members and their leaders to maintain community commitment to CBNRM. It would also likely reduce the recurrent costs of implementing the program.

V. SLAMU

SLAMU’s approach to community organization places great emphasis on small village groupings called Village Action Groups, which loosely function as independent bodies responsible for resource management and community development in their respective areas and which consist of about 100-150 households. These groups are recipients of annual revenue shares from SLAMU wildlife revenue earnings.

Leaders of these Action Groups are democratically elected and are responsible for developing their own by-laws to govern leadership, financial management and resource management practices. Initially these groups were not federated into any higher-level institutional structures. Without a clear higher authority structure mandated to help resolve misunderstandings or conflicts between the Village Action Groups and their local Chief, traditional rulers are free to make decisions that over-ride Village Action Group decisions. At the time this paper was written, elections for a Community Resource Board in the SLAMU project area were being conducted.

Village Action Groups provide an optimum group size for making decisions at public meetings and disseminating information regarding CBNRM activities or opportunities. Lower-level structures like household interest groups are not a significant part of the SLAMU structure, though they are free to form and seek funding from their Village Action Groups. Higher-level structures, such as the Community Resource Board, until recently did not exist to resolve community-wide land use conflicts or resource use practices. Instead, SLAMU project management staff has provided much of this management and leadership role, including dispersing funds, skills training, and coordinating meetings and group activities.

Given that SLAMU’s primary project area is in one of the most populated game management areas in Zambia, there is valid reason to question how its decentralized structure of Village Action Groups mitigates large-scale land use conflicts in a rapidly growing commercialized area. SLAMU’s approach to date has been to rely on project management staff and allow the Village Action Groups to concentrate on more localized needs and activities. For a CBNRM area that is vulnerable to large-scale movements of people, including non-resident marketers, this arrangement may prove appropriate for controlling incipient resource use disturbances. It is certainly providing Zambia with a living experiment for studying CBNRM solutions to such a situation. It will also represent an important opportunity to monitor how local institutional structures respond to resource management challenges and their level of flexibility to discard non-workable approaches in favor of new and perhaps more adaptive solutions.

VI. LESSONS THAT HIGH-LIGHT SHARED EXPERIENCES
Emphasis on household-level group activity

Organizational structures adopted by all five CBNRM initiatives supported an active involvement of resident households, primarily through the formation of groups whose members know one another and share common needs and skills. In most cases, these structures allowed household groups to advocate for decisions that favor their livelihood needs by pressuring elected leaders through a vertical structure of representation. This also helped to integrate community actions at different scales of land use and economic opportunity. Common reasons suggested for this emphasis on household groups as an important building block for a successful CBNRM institutional structure are as follows:

1) Creates a strong basis for a bottom-up governance for driving decisions by elected leaders.
2) Encourages CBO advocacy of household needs and community resource-use rights
3) Encourages households to identify and more effectively respond to market opportunities.
4) Provides a practical way of involving households for an entire chiefdom.
5) Provided there are linkages between groups and vertical linkages with higher community leadership structure, it increases community cohesions.
6) Facilitates the sharing of skills and experiences within a community
7) Provides low-cost ways to develop local trainers for group extension training.
8) Adapts local resource use opportunities to the particular skills and interests of a given community.

Spatial characteristics

Larger communities tend to rely more on agricultural activities for livelihood needs, due in part to the degraded state of natural resources in their area and the greater access to inputs and markets. The smaller, more fragmented settlements have greater access to natural resources and are more dependent on them for their livelihood needs. They also have less access to legal markets for the products they produce.

These spatial differences give rise to a continuum of livelihood strategies that, without adequate planning, can give rise to conflicts and lowered resource use opportunities for the community as a whole. An institutional structure capable of responding to both extremes of this continuum, however, offers a more uniform approach to maintaining controls on key causes to environmental degradation affecting large ecological landscapes. Based on the review of these five CBNRM initiatives, such an institutional structure requires higher-level group structures, possibly based on a federation of smaller household groups that are associated with geographic areas. This type of structure also facilitates community planning of appropriate land use strategies and economic opportunities.

Developing markets to improve resource use practices

CLUSA/RGBP, CARE/LFSP, and UNDP/NRMP were designed to improve natural resource production through improved market linkages. Insights on how their institutional structures facilitated this process are presented below:

1) Higher level institutional structures can negotiate on their behalf of household group to help facilitate commercial partnerships, commodity transactions or joint venture relationships.
2) Higher group structures also provide practical ways of disseminating information on improved technologies, market prices, input costs, etc to household group members.
3) Higher group structures can also offer credit facilities to support nascent enterprise groups in need of start-up capital and in this way can also help direct and promote land use activities that favor sustained use practices.
4) CBNRM success in building commercial markets for rural communities can contribute to increased immigration and land use conflicts. In a such cases, community organizations need to have a high authority within its organization structure legally capable of implementing and enforcing land use plans that prevent such conflicts.

Sustaining training needs for rural communities

In the the five cases reviewed, community organizational structures played an important role in facilitating the transfer of CBNRM skills, especially to household groups whose members may be relatively uneducated and illiterate. This approach contrasts with efforts that depend on external trainers, whose visits to the community may be infrequent and limited to relatively few livelihood skills. They are also expensive to support because of frequent transportation and allowance costs. Hierarchical organizational structures, as sited for ADMADE, CARE/LSFP and CLUSA/RGBP, offer an effective and low-cost way of using local
community-based trainers to sustain training needs in a CBNRM program. Illustrations for this are provided below:

1) Higher-level authorities in the community tend to be the most educated in the community and can often mentor and advise on developmental issues affecting activities at a lower level of a community’s organization.

2) Intermediate-level structures that represent household groups, like VAGs or Village Management Committees, consist of people who are in frequent contact with resident household groups. Leaders or active members of these intermediate groups tend to be relatively well educated and are suitable for learning specific livelihood skills to help pass on to group members.

3) Members of intermediate-level structures often know community members who have a basic understanding of certain livelihood skills and can go for further training to help extend these skills to others.

4) Intermediate structures who administer funds to support household groups can invest in training to promote new markets and increase revenues from existing enterprises. This in turn can help sustain on-going training initiatives for the community as a whole.

VII. RECOMMENDATIONS: ADVANCING CBNRM IN ZAMBIA WITH SPECIFIC REFERENCE TO ADMADE

Considerable effort in comparing national CBNRM programs supporting wildlife conservation in the Southern African region is relatively well documented. Such comparisons, however, often ignore historical, cultural and political realities that can cause divergences in approach and make such analyses mis-leading and prone to unfair criticism. Within a national level, comparative studies of CBNRM allow experiences to be viewed in a more uniform environment, where differences in approach will more likely be a function of design and thus more easily adjusted. A simple analysis of institutional structures used by five different CBNRM initiatives in Zambia in this study provides such an opportunity to question possible design flaws and make recommendations. From this analysis, specific proposals are made to help strengthen organizational structures currently used by the ADMADE program:

1) Household interest groups, sometimes called enterprise groups, engage Village Area Group (VAG) leaders to help ensure decisions are transparent and accountable to community members. A potential weakness is that they lack a formal relationship with their Village Area Group committee, whose members may be inclined to overlook the views or needs expressed by households experiencing livelihood problems. Various remedies to this problem exist. Community constitutions, for example, could require VAG Committees to register enterprise groups that exist in their area and that they have full membership on the VAG Committee. Group by-laws would help guide group activities and perhaps provide a criteria for registration and access to VAG credit. Specific leadership roles of the VAG Committees could also be more clearly defined in the community constitutions and capture such important services as facilitating credit facilities, developing local trainers to promote group success, and facilitating market links.

2) Hierarchical leadership structures allow vertical movement of information and ideas that can greatly benefit the overall result of a CBNRM organization, provided community needs are identified through “bottom-up” approaches. This implies that higher-level structures exist to primarily support lower level groups by offering technical oversight, impartial judgments when conflicts arise, and a range of services, such as support of local trainers to assist enterprise groups, advocating for improved policies that enhance resource use opportunities and so forth. While ADMADE has such a vertical organization, these concepts for making the “whole” greater than the “sum of its parts” is not well developed. This will likely require a sustained effort of promoting leadership skills at all levels to more clearly understand roles and responsibilities for promoting household needs through appropriate use and management of natural resources.

3) Population size of a community will influence its hierarchical institutional structure in order to maintain an active level of household involvement. In most of the CBNRM initiatives examined, an organizational leadership structure representing 100 to 150 households to promote the activities of household groups seemed to work best. This allowed households to choose leaders they knew, increased the level of social cohesion with the group, and increased the likelihood of households having common needs and interest.

With communities whose populations are relatively large, possibly exceeding 15,000, the institutional structure may require additional organizational levels. For the CARE/LFSP area, where single...
communities as defined by traditional boundaries of local chiefs exceed 40,000, the CBNRM structure has four structural levels. This organization is hierarchical but maintains household groupings of about 200 with their own leadership committee for representing their needs at higher level structures. Given that ADMADE areas vary considerably in population size, it is recommended that their institutional structures be flexible to accommodate the possible need to adopt additional levels to ensure households are effectively represented.

4) An important “glue” that helps keep a CBNRM hierarchical structure together and functioning is the unifying need to develop and benefit from markets. Currently illegal markets of wildlife products have the interest of many of the rural poor and a growing number of informal trade links and partnerships are helping keep urban centers well supplied with unlawful game meat. Unless CBNRM can develop alternative legal markets and provide far greater incentives, the threat that natural resources will be exploited for illegal gain will continue to undermine these resources. It will therefore become increasingly important for the ADMADE organizational structure to incorporate elements of market development and diversification.

A possible approach for pursuing this objective is to ensure each level in the structure has clearly defined roles for reinforcing each others efforts to promote resource use markets in their area. In addition, elected leadership that comprise the leadership structure would use community accepted land use plans to help support these efforts so as to avoid possible resource use conflicts and to optimize market values. A suggested framework for such a structure with possible roles and responsibility are provided in the illustration below.

5) As communities diversify market opportunities through such CBNRM structures as the one illustrated below, appropriate alliances of people will likely emerge to support specific market opportunities from community resources. These opportunities will also allow economies of scale to increase the level of benefits at the household level. For instance, a tourist operator may wish to engage the community with a service contract to control bushfires over a large area. More that one VAG would likely be involved as a “commodity group” to provide this service and to help negotiate the exact terms of responsibilities and benefits, the CRB or AMC might facilitate with the negotiations. For a different opportunity that requires less land, such as gardening, households may combine their interests to help provide water for dry-season farming to members of their “commodity groups”. To seek financial support for possible inputs on loan, this group would appeal directly to its VAG committee. Such flexibility in using the CBNRM structure to enhance household market opportunities is an important way for ADMADE to diversify revenue benefits and to significantly add value to its wildlife revenue to support conservation and rural livelihoods.
Community Resource Board
- represents 3-5 VAGs (or AMC, depending on population), covers entire GMA
- democratically elected from VAG (or AMC) membership
- legally recognized
- oversight for VAG (or AMC) activities
- responsible for GMA level issues such as forestry and wildlife concessions, land-use plans, monitoring
- provide institutional support to commodity groups

Area Management Committee (for GMAs with large populations, exceeding 15,000)
- federation of 3-6 VAGs
- democratically elected from VAG membership
- employ and supervise community facilitator-trainers
- manage social infrastructure projects such as dams, road rehabilitation, etc.
- receive bulk of safari hunting revenue through CRB
- provide institutional support and subgrant financing to commodity groups

Village Area Group Committee
- represents a village or collection of village of 100-150 households
- officers democratically elected
- maintain household-level community self-monitoring records
- facilitate housegroups to form as potential commodity groups
- members include representative of VAG-level commodity groups

Household Groups
- comprise 5-15 households
- manage small, general welfare projects such as community seed bank scheme, vaccination of poultry, water sanitation, etc.

Commodity Groups
- enterprise based
- less formal structures
- focus of most training and income generation activities

AMC Level Commodity Groups
- Focus: AMC level outrigger schemes, land management contracts with safari operators, timber, grading milling, etc.
- receive support from AMC and CRB in contract negotiation, conflict resolution, start-up funding, etc.

VAG Level Commodity Groups
- Focus: micro-enterprises such as curio, beer brewing, honey production, sewing, leatherwork, gardening, etc.
- Target point for community facilitator-trainer technical training

Households
- May belong to more than one commodity group
Acknowledgements

This paper was inspired by the collective efforts from a number of colleagues who contributed to a CBNRM funding proposal requested by USAID. In particular I wish to express gratitude for the many helpful ideas and comments provided by Mark Vander Vort, Geoffrey Miti, Andy Lyons, Regis Mwale, David Wilkie, John Heerman, Helen Gichohi, and Peter Tilley. Acknowledgement is also extended to all the research and training staff at the African College for CBNRM for providing their views and contributions to this paper.

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