



# US Forest Service Guide to Integrated Landscape Land Use Planning in Central Africa



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## 1. Introduction

This document aims to provide practical guidance on the development of integrated landscape land use (LU) plans for the 12 landscapes of the Central African Regional Program for the Environment (CARPE). These 12 landscapes were chosen and delineated across the Congo Basin as CARPE areas of focus due to their particular importance and unique value to forest and biodiversity conservation.

The program focuses on the larger, landscape unit in order to maximize impact, promote improved natural resource management over larger areas, and to broaden stakeholder involvement in land management activities. A landscape-focused program can assess broader, wide-ranging trends, influences, and impacts in order to more adequately assess ecological sustainability and identify the appropriate management strategies to maintain these resources for the benefit of all.

These landscapes contain many different uses and are overseen by multiple management authorities depending on the location within the landscape. CARPE implementing partners are to collaborate, complement, and promote in-country capacity, and the institutions, processes, and activities involved in the land management of these landscape areas. CARPE's aim is to make the necessary linkages with land management authorities and other stakeholders at the national, regional and local levels in order to improve land management capacity and therefore, positively influence resource condition, social benefit and economic opportunities.

Landscape land use plans, addressed in this guide, represent one of several products that are to be developed by CARPE implementing partners in conjunction with their stakeholders. Landscape land use planning is an integrated process composed of discrete parts (land management plans, macro-zone plans, annual work plans) joined to form a rational, logical management approach. CARPE landscape land use planning prioritizes three types of zones to be delineated within the landscapes: Protected Area (PA), Community Based Natural Resource Management (CBNRM), and Extractive Resource (ERZ) use zones. These are referred to as macro-zones and are fundamental components of the landscape land use plan. Each of these macro-zones will, in turn, also be zoned for differing uses and levels of resource protection, reflecting site specific challenges as well as articulating how they will address and support landscape desired conditions and objectives. Planning guides are also available to assist in the development of management plans for each of these macro-zones.

In addition to guiding the overall process of creating a landscape land use plan, this document outlines certain minimum standards that will be expected of CARPE implementing partners and which USAID/CARPE Management will be using to assess progress toward the development of landscape land use plans by the partners. This document standardizes certain plan elements as required by USAID/CARPE. These minimum standards are highlighted under each section below as "Tasks" that need to be completed throughout the process.

There is no shortage of information and published documents available on the topic of land use planning. In this series of planning guides we attempt to adapt the expertise gained by the US Forest Service (USFS) in managing large forested, multiple-use landscapes in the United States, which include, for example, wilderness areas (complete protection zones), extractive use areas, and recreation areas, and tailor this guidance to the specific context of Central Africa and the needs of implementing partners and government agencies in the region. This adaptation of lessons learned and processes utilized in the United States to a Central African context is being performed through partnerships and direct technical assistance provided in the region by the USFS International Programs (IP) office to CARPE implementing partners and host country government agencies charged with the management of these resources.

Chapter 2 explains the purpose of planning and outlines key concepts central to the landscape planning process. Chapter 3 describes the process for writing the Integrated Landscape Land Use Plan. Finally, Chapter 4 provides a framework of landscape land use plan components; it suggests approximate section headings to use and provides explanations regarding concepts to consider and items to include when developing each section.

## 2. Key Integrated Landscape Land Use Planning Concepts

### 2.1 Purpose of an Integrated Landscape Land Use Plan

Planning is the process in which stakeholders (community members, scientists, government representatives, private businesses, traditional authorities, etc) come together to debate and discuss how to manage lands for the benefit of current and future generations and to ensure ecological sustainability of lands and resources. The purpose of planning is to develop management and governance strategies that respond to scientific understanding of natural and social systems as well as changing societal conditions and values. Effective planning processes promote decisions that are informed, understood, accepted and able to be implemented.

Planning can be complex depending upon the number of issues internal and external to the planning area. Planning requires risk assessments and forecasts about anticipated and uncertain future events and conditions. Consequently, even the best plan will need to be altered to adjust to improving data and information; changing social, economic or other conditions; evolving threats; or feedback from monitoring efforts. Therefore, plans are **adaptive** in nature and amendments or entire revisions will be an outcome of monitoring for those factors named above.

Central to planning is the recognition that in most cases not all desired data on the landscape and its resources will be available in any detail. This is true around the world, regardless of the financial and human resources available to the management authority. Nevertheless, landscape planning must proceed with the view that the plan can call for specific data collection and be revised with that newly acquired data to make better informed decisions. Therefore, it is important to not delay Plan development due to a perceived lack of data.

Plans around the world -- whether landscape, PA, CBNRM or other types -- vary substantially in their content and level of detail and complexity. When working through the planning process, it is important to keep in mind that, often, simpler plans are more effective plans. The likelihood that the plan will be more widely read and understood by local stakeholders, as well as the likelihood of their engagement in the process, will increase if the plan is relatively concise, focuses on what is important for resource conditions, and is light on jargon, both scientific and legal. Such an approach will ease plan implementation.

#### ***Adaptive Management:***

Management plans should be considered 'living' documents, able to evolve to changing information, environmental conditions, and monitoring results. Systematic plan revisions should happen on a periodic basis, usually after the current plan has been in effect for 5-10 years. During a plan revision, the entire plan is revisited, allowing for major revisions and changes to the content and objectives of the plan. Adaptive management, on the other hand, allows individual components of the plan to be amended or altered at any time due to changing resource conditions, social values, improved data, or in response to results of monitoring activities.

Landscape level planning differs from macro-zone planning in that it plans at a larger, spatial scale and can assess broader, wide-ranging trends, influences, and impacts. A broad, wide-ranging perspective is needed to adequately understand and assess ecological sustainability and to adequately identify resource use opportunities that contribute to economic and social sustainability. Experience has demonstrated that planning for ecological sustainability requires larger areas. For example, wide-ranging or key wildlife species often do not confine themselves to particular geopolitical boundaries so in order to plan for the conservation of such species, a broader analysis of impacts, trends, and influences is needed which provide a more sufficient understanding of ecological health. Using broader landscapes will enable not only the development of comprehensive plans for the conservation of species and ecosystems, but also the ability to measure the cumulative effects of current and future management actions.

## ***2.2 Desired Condition Planning***

Desired condition planning describes the ecological, economic, and social attributes that characterize the desired outcome of land management.

Many CARPE implementing partners and others operating in the Congo Basin are familiar with the ‘threat based’ approach to planning. The threat-based model addresses only current threats or those future threats that can be predicted by managers in designing management direction. It is limited in its ability to react and consider unforeseen future threats that may evolve and does not account for non-threat based targets and objectives.

The ‘desired condition and zoning’ model used by the USFS for their multiple use planning on National Forest lands, outlines overall goals and objectives for the landscape, describing how stakeholders want the landscape to look and what resources the landscape should continue to offer as well as more specific objectives within each macro-zone, to guide all future management decisions. ‘Desired Conditions’ describe the compositional and structural characteristics of the biological and physical features desired across the landscape; it also accounts for the social and economic needs of stakeholders that depend on landscape resources, outlining what social and economic objectives are to be achieved over the long term. Barriers or threats that may limit the ability of resource management to achieve or move toward the desired condition are specifically addressed in objectives, guidelines, regulations, and zoning concepts. This guide promotes the ‘desired condition’

### **Desired Condition vs. threat based planning example**

*Problem:* Seasonal movements of elephants are being hampered by illegal timber exploitation along the migration corridor.

*Threat based response:* Increase enforcement to end illegal harvesting operation.

*Desired Condition:* “Maintain corridors and linkages which will provide for seasonal movements of elephants between key habitats”

By maintaining the desired condition, other potential threats to elephant corridors, such as road building or expansion of villages, will also be addressed, not just the current threat.

approach to planning as it is flexible and adaptable, allowing the plan to address not only existing threats, but unforeseen future ones, as well as non-threat management targets.

### 2.3 Zoning

There are two levels of planning involved in the CARPE landscape land use planning process: the broad landscape level scale which assigns macro-zones across the landscape, and the finer, more site-specific scale, which designates micro-zones within a macro-zone. CARPE landscape land use planning prioritizes three types of macro-zones to be delineated within the landscapes: Protected Areas (PA), Community Based Natural Resource Management (CBNRM) and Extractive Resource Zones (ERZ). Each of these zones will require a management plan to dictate resource use and conservation objectives within these areas. Micro-zoning will occur as a part of the process of creating these macro-zone management plans. This site-specific zonal planning will determine the mix of activities and projects specific to that site that are needed to move the planning area toward desired conditions.

The objectives of the three macro-zones of a CARPE landscape should be harmonized, and should not conflict, with the objectives of the overall landscape. PA, CBNRM and ERZ management plans are more detailed than the overall landscape plan as they outline the specific set of permissible and non-permissible activities within a macro-zone and identify in the annual work plans the specific actions needed on the ground. These plans are components of the overall landscape plan and must articulate how they reflect, support and will contribute to the landscape desired conditions and objectives, as well as how they will address site specific issues and needs.

The landscape plan will also describe the inter-relationships among the macro-zones,

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##### Macro-zones defined

**Protected areas** are zones whose predominant purpose is the conservation of the natural state of the flora, fauna and other natural resources existing within their boundaries. PA's therefore restrict human intervention for consumptive purposes. Limited extractive activities may however take place (e.g., harvesting medicinal plants, collecting "dead" firewood and sustainable subsistence fishing) as long as their impact on biodiversity and the natural state of the environment is negligible. These areas typically include national parks and nature reserves.

**CBNRM Zones** are lands in which communities have property rights over natural resources, utilizing them for community benefit through a variety of traditional and modern management systems. Productive activities may include agricultural as well as subsistence and artisanal levels of hunting, fishing, timber harvesting and extraction of non-timber forest products.

**Extractive Resource Zones** include forest concessions, large-scale private plantations, mining and safari hunting zones, and energy and transportation infrastructure. Forest concessions are state lands that have been leased to private companies for the purpose of harvesting timber or other forest resources, and large-scale private plantations are similar concessions made for the purpose of industrial agricultural production of crops, including tree crops.

describing how macro-zones may be linked in terms of transportation (roads, trails, and rivers), wildlife habitat and wildlife population sources, access to economic centers, etc.

#### ***2.4 Management Authority and the Role of Consensus Building***

CARPE landscape leads do not, and will not, hold the power of any governance authority. This authority lies with national government ministries, local governments and community authorities within each country. However, government capacity and presence on these landscapes varies widely throughout the region. Without true legal governance authority, the only authority landscape leads have to create and implement improved governance and management plans is that which they obtain through consensus, by working with local communities, government agency representatives, concession holders, and other stakeholders. This will need to be achieved over time by working closely with these groups, and clarifying, or in some cases providing, the incentives for each of them to accept restrictions on the use of the resources they would otherwise utilize in an unsustainable manner.

#### ***2.5 Setting Priorities***

While it is ideal to put a great deal of effort into each step of the planning process, as well as into implementation and monitoring activities across the entire landscape, the reality of limited financial and human resources will prevent planning teams and authorities from meeting ideal levels of action. Therefore, it is important that the planning team undergo a prioritization process. Honest assessments of available funds and costs of specific activities must be carried out to determine what the planning team can truly afford to accomplish. The planning team, in conjunction with stakeholders, must decide what processes, as well as implementation activities, need to be addressed first. The planners must also evaluate what other stakeholders are, or could be, doing to complement actions taken by CARPE implementing partners. Key steps requiring effective prioritization of resources include data gathering, plan implementation, and monitoring.

### 3. Landscape Planning Process

The following sections outline important components of the landscape planning process and the landscape plan itself. Below we offer some guidance on what to consider as you move forward in the planning process; what elements to include in the development of the landscape plan; how to develop those elements; and other considerations of the planning process and plan development. Additionally, many of these sections contain “Tasks” which will be required actions on the part of CARPE implementing NGOs and used as monitoring tools by the USAID CARPE management.

#### *3.1. Landscape Planning in the CARPE Context*

Integrated landscape land use plans developed for the CARPE program are to demonstrate how CARPE implementing partners have 1) assessed and analyzed activities, resources and uses on the entire landscape; 2) developed and formulated long term desired conditions and objectives for the landscape; 3) identified current planning and resource protection priorities and future trends; 4) consulted, collaborated, and integrated stakeholders in plan development; and 5) focused management activities to achieve desired conditions and priority objectives. These plans are required as part of the CARPE program activities and are meant to promote collaboration across the landscape, focus efforts on priorities, and stimulate planning processes throughout the region. These plans have only as much authority as agreed upon by government representatives and landscape stakeholders. The guidance and activities outlined in the landscape plans and the subsequent macro-zone plans aim to contribute to the long term management, benefit, and sustainability of forest resources in the region and thereby contribute to the development of sustainable livelihood strategies and economic development activities for those dependent upon these resources.

Each landscape consortia submitted a Strategy Document to USAID as part of the USAID 2006 RFA process. Each Strategy Document was to describe how CARPE implementing partners would develop a landscape plan, what is needed to develop the plan, and how much time and resources it will take. The elements and analysis needed to develop the Strategy Document are part of the landscape planning process (see steps 1-3 in section 3.2 below). CARPE implementing partners’ activities to develop a landscape plan should reflect their submitted Strategy Document or alert CARPE management to any significant changes. Some of the items required in the Strategy Document are included below as they are part of the overall landscape planning process. The following section describes the steps required in the landscape planning process, outlining the important elements and concepts.

*Task: After analyzing the landscape planning processes outlined in this guide, review your respective Strategy Documents and ensure the proposed work follows the process below. If not, determine what changes need to be made and discussed with CARPE Management.*

### ***3.2 Landscape Planning Process Steps***

The following steps form the basis of the landscape land use planning process:

1. Identify planning team members and define individuals' specific roles
2. Identify existing and needed ecological, social and economic information on the landscape
3. Create a Public Participation Strategy
4. Landscape Plan Development
  - a. Describe the Landscape's unique value
  - b. Describe characteristics of the Landscape
    - i. Analyze existing information, current conditions, and future trends on the landscape (this step involves a synthesis of existing knowledge on the landscape and its surroundings; description of the landscape should be limited and focused, the Plan is not a research document).
  - c. Develop landscape desired conditions
  - d. Develop landscape objectives which reflect and address the desired conditions for the landscape
  - e. Develop macro-zones, taking into consideration already legally designated areas, concessions, and contracts, and map them
  - f. Define landscape wide guidelines (optional)
  - g. Outline plan implementation schedule (e.g. annual workplan)
  - h. Create a monitoring and evaluation schedule

As information improves, conditions change, and monitoring results come in, the plan should be revised and updated.

### ***3.3 The Planning Team***

It will be important to define the roles and responsibilities of the planning team early in order to reduce confusion, focus staff time, avoid duplication of effort, and ensure that all aspects of the planning process are addressed. The landscape planning team may be a different group of individuals as those working on individual macro-zone plans. Macro-zone plan development may see more specific expertise in team composition than at the broader level of planning. If this is the case, any alteration in roles of team members when working on the various plans should be expressed.

Identify the skills needed for successful landscape plan development. The necessary skills may vary depending on the types of stakeholders, data needs and primary issues associated with the landscape; the size of the team will vary depending on available resources, however, some of the commonly required skills for a planning team include:

- Team leader / program manager
- Biologist(s)
- Hydrologist(s)
- Social scientist(s)
- Economist(s)
- Forester(s)
- Mineral/mining specialist(s)

It may not be necessary to have all of these specialists on the planning team throughout the entire process; rather some could be brought in as needed to advise on certain issues.

Assign responsibilities and tasks to each planning team member, and hire new staff or consultants to fill voids. It is important to recognize both the abilities and limitations of the existing planning staff and adjust accordingly.

**Tasks:**

- 1) *List planning team members; define the skill set of each individual on the team and what their roles and responsibilities will be throughout the planning process.*
- 2) *If any necessary skills are missing, explain how those gaps will be filled and when.*
- 3) *Identify any short term expertise that will be brought in to assist with the planning process.*

### **3.4 Stakeholder Participation**

The planning team needs to develop a strategy for effective stakeholder participation in order for the plan and the landscape concept to be successful. The team must also understand landscape trends; integrate national, regional, and local level perspectives in zoning decisions; promote the implementation of landscape activities; seek adoption of macro-zone plans; and finally, lay the ground work for building in-country resource management capacity.

The overall public participation strategy identifies:

- those stakeholders that must be included in the landscape planning process;
- the link these stakeholders have with the landscape;
- how and when these stakeholders will be involved;
- the methods of working with these stakeholders; and finally,
- the communication tools used to successfully promote stakeholder participation.

**Who are the Landscape Stakeholders:**

Landscape planning is broader in scope than more site-specific planning and therefore requires a wide range of stakeholder perspectives in order to assess and develop landscape priority strategies.

Stakeholders of a landscape could include:

- Government representatives at the national, regional and local levels
- Government Ministry representatives that have authority over lands within the landscape
- Traditional leaders
- Extractive industry representatives operating in or near the landscape
- Local and international NGO representatives operating on the landscape
- Marginalized groups that may not have a voice as part of the above groups
- Military leaders
- Individuals claiming ancestral rights to lands
- Community members that are able to represent resource users
- Local hunters, fishermen

Sound strategies for landscape planning will incorporate multiple opportunities for involvement and concurrence by local communities, government, relevant industry, and other stakeholders. Creating a sense of ownership among local community members and a wider audience of stakeholders by involving them in planning discussions and decision-making, improves the likelihood that the plan will be supported and its implementation will be successful. To be successfully implemented, landscape plans must have the understanding, acceptance and support of the stakeholders.

### ***3.4.1 Stakeholder identification***

The stakeholder participation strategy will identify the list of stakeholders that will be involved in the landscape planning process. The following ideas will assist in effectively identifying those stakeholders that should be involved:

- Assess the different groups overseeing, operating, or living on the landscape
- Identify those groups that are central to land use decisions, impact the landscape, or benefit from resources within the landscape.
- During the identification process, expand your outreach to those working in a non-natural resource related field that may contribute useful information or know of other individuals or affected stakeholders (e.g. Health care worker or teacher that may know of individuals or organizations that could greatly contribute to the landscape planning process).
- Include stakeholder representatives from the central and provincial governments, and traditional leadership.
- Consider including ethnic and religious groups, timber companies, tourist companies, mining companies, NGOs (local, regional, and national), government agencies, civil societies, hunters, fishers, loggers, farmers, water users, researchers or other groups with potential interests in the landscape.
- National or Ministerial government representatives: these authorities may or may not be part of all technical discussions or planning operations, but their involvement early in the landscape process will be crucial and necessary to landscape plan development and its corresponding macro-zone plan development, adoption and implementation.
- Consider activities outside of the landscape that may impact landscape resources, identifying the necessary groups or individuals overseeing these activities.
- Is development or infrastructure proposed on the landscape such as road re/construction? Who oversees these activities and makes decisions on road placement?
- Given landscape priorities and trends, decide which stakeholders are essential to addressing landscape priorities and making landscape planning decisions. Do certain stakeholder groups threaten key resources on the landscape? Is there potential conflict with certain stakeholder interests in proposed macro-zones? Are there authority figures with strong influence operating or living on the landscape? What stakeholder interests may conflict with macro-zoning decisions? These questions may help identify and prioritize the engagement of certain stakeholders.

**Task:** Document the considerations that went into the development of the stakeholder list: identifying and listing the interests on the landscape; potential groups or individuals to represent those interests; and prioritizing the engagement of the identified stakeholders.

### **3.4.2 Stakeholder participation approaches**

The landscape planning process will involve a wide variety of stakeholders, each with a different level of involvement. Different strategies for different stakeholders may be necessary. The stakeholder participation strategy should identify the methods of information exchange. The following should be included or considered in engaging the different stakeholders:

- Determine how the planning staff will interact with the stakeholders (e.g., individual and/or group meetings on the landscape and/or a central location) and specify which, if any, stakeholder groups will be treated differently and why.
- Consider if all stakeholders are able to spend adequate time participating in the landscape planning process. If they are not able to participate in organized group sessions, and their involvement is critical to the success of the planning process, consider keeping them informed through personal communication.
- Explain the manner in which information will be exchanged and how concepts will be delivered to the different stakeholders. This is particularly important for local inhabitants, many will have limited or no access to maps, data, and reports, and some may have low levels of literacy.
- Define the overall purpose of each stakeholder communication; e.g.: information sharing, data gathering, decision making, etc.
- Consider how representatives will coordinate between the landscape planning team and their respective groups in order to ensure information and viewpoints are conveyed and received accurately.
- Develop specific talking points for each stakeholder group and for delivering concepts to the group as a whole.
- Include well-defined terminology to reduce confusion in the planning process.
- Describe what languages will be used for written documents and oral communication and how the planning team will provide for adequate translation.
- Ensure that all participants have an accurate picture of the process and their role in the process.

**Tasks:**

- 1) *Identify stakeholders that will participate in the development of the landscape plan, how they will participate; and their level of participation.*
- 2) *Describe why you have chosen to work with these stakeholders vs. others on the landscape.*
- 3) *Prioritize stakeholder engagement and describe the reasons for the prioritization.*
- 4) *Describe the approaches used to engage the various stakeholders.*

## 4. Landscape Plan Components

The following section outlines the main elements to include in a landscape plan. Below we offer some guidance on what elements to include in each section, how to develop those elements, and other considerations of the planning process. Again, each subsection below contains a list of “Tasks” which will be required actions on the part of CARPE implementing partners and used as monitoring tools by CARPE management.

### 4.1 *Unique Value of the Landscape*

As an initial step, identify and describe why this particular landscape is unique. This description should remain brief and focus on key features of the landscape that contributed to the reasons it was designated as a priority landscape. The landscape plan is not the place for in-depth descriptions of the resource. Rather, this section should provide the name, location, size, and other brief, important features (e.g. endemic or rare species, heritage sites) of the landscape.

Explain the unique combination of attributes that warrant managing within the landscape vs. areas outside of it (e.g. diverse species populations, touristic potential). Consider an interdisciplinary approach to assess a landscape’s particular values, as different stakeholders will value different aspects of the landscape. To adequately describe the landscape’s role in the context of the larger region, the planning team should look beyond the landscape boundaries.

Defining the unique value of the landscape provides a focus for the planning process. By identifying and then in later landscape planning steps, focusing on what are the unique landscape attributes, the planning team can concentrate on what is most important, in light of limited time and money. That focus helps define what information is critical for the development of the landscape plan to address the special attributes of the landscape.

*Tasks: Identify and describe the unique value of the landscape. This will serve as an introduction to the landscape plan and should remain brief and concise. This section should quickly and clearly answer why this area was designated as a priority area.*

### 4.2 *Characteristics of the Landscape*

In this section, describe with more detail the various attributes of the landscape. Outline the existing uses on the landscape and the different groups involved in those uses; describe the legal boundaries delineated within the landscape; include a general inventory of the resources and any information regarding their condition. Analyze the demographic, political and governance situation on the landscape, as well as the physical, biological, and ecological conditions to determine current condition and future trends.

The landscape plan is not the appropriate document for extensive discussions on all research accomplished on the landscape. This section should be direct and concise, listing features, resources, and their importance and impact on the landscape. This information will assist the planning team to define landscape vision and objectives, help inform zoning decisions and management strategies, and identify any key knowledge gaps.

Data gathering includes asking stakeholders to identify their existing resource use and interests on the landscape. Ask stakeholders why and how the landscape is important to them; include threats, opportunities, or conflicts related to the landscape.

In addition to information within the landscape, planning teams should look at influences outside the landscape. Examine what is occurring outside the landscape that could affect the important values of the landscape. For example, are there plans to develop any infrastructure (roads, dams, etc) that could affect values within the landscape? Is there potential for immigrants settling in the landscape due to displacement from another area?

An important step in the landscape planning process is identifying and evaluating existing applicable laws or any existing management plans associated with the landscape. Understanding legislation applied to any land unit in the landscape will help guide management decisions. It is important to monitor legislative changes throughout the landscape planning process so that adjustments to the planning process can be made if necessary. Some governance situations may evolve during the landscape planning process and it is important that planning processes remain flexible enough to respond to those changes. For example in DRC, landscape planning teams will need to monitor the forest concession conversion process, since it can affect both the landscape land use plan and the subsequent macro-zone management plans. The DRC focal point should also be involved in monitoring the conversion process.

This section should include data on the following (to the extent it is known and available):

- Existing maps/satellite imagery
- Delineate and describe landscape boundaries, using natural features to the extent possible
- Explain any legal boundaries designated within the landscape such as logging or mining concessions decreed by the government; protected areas or reserves and their categorization both nationally and internationally; declared community based natural resource areas as defined in the forest code.
- Topography, watercourses, unique physical features
- Key ecosystem processes and functions
- Vegetation cover
- Wildlife (abundance, location, occurrence, corridors and migration routes, etc)
- Subsistence areas; existing uses
- Village and town location, ancestral lands
- Existing uses of the resources within the landscape (agriculture, logging, mining, hunting, fishing)

- Major transportation routes, facilities, and infrastructure
- Commercial extractive activities (concessions, large-scale private agriculture)
- Land uses outside of the landscape and possible impacts
- Known threats to the resources named above and known trends impacting them
- Anticipate any future challenges and new or changing influences on the landscape
- Assess government, traditional, and/or local management authorities operating on the landscape and the authorities' capacity to manage.
- What laws apply to lands within the landscape?
- Interrelationships among the macro-zones

**Tasks:**

- 1) *Characterize landscape resources, conditions, and trends, keeping the descriptions objective and brief. Use tables and maps as much as possible to describe the physical, ecological and socio-economic conditions.*
- 2) *Identify influences outside the landscape that could affect the important values of the landscape.*
- 3) *Identify and evaluate applicable laws within the landscape.*
- 4) *Identify key information gaps*

### 4.3 Desired Conditions

Landscape desired conditions should describe what the landscape will look like and represent in the future. How do planners and stakeholders want the landscape to look ecologically? What economic opportunities should the landscape resources provide? How should the landscape contribute socially to the region and its inhabitants? What resources need to be maintained or protected? Desired conditions should reflect the landscape's unique qualities and how the landscape can contribute to meeting stakeholder needs and CARPE's goals *to establish sustainable natural resource management practices throughout Central Africa, thereby promoting sustainable economic development and alleviating poverty for the benefit of the people of the region and the global community (State of the Forest report 2005 p 2)*. Landscape desired conditions will provide context and direction for the rest of the planning process.

#### Desired Conditions

Desired Conditions set the broad direction for the landscape over an extended period of time. Desired conditions set idealized goals of what the landscape should be, what it should protect, and who it should benefit.

Some examples of Desired Conditions are:

- 1) Maintain diversity and population of tree species on the landscape to ensure ecological function and social and economic long term benefit.
- 2) Support and maintain stable populations of bonobo and elephant, well distributed over their habitat within the landscape.

Developing desired conditions can start with a brainstorming session with the landscape planning team, but their further development requires the involvement and perspectives of landscape stakeholders. Seek to develop desired conditions that reflect social and

economic considerations, as well as the landscape's distinctive roles and contributions to ecological systems.

Most projects and activities are developed specifically to achieve or maintain one or more of the desired conditions and objectives of the plan. It should not be expected that each project or activity will contribute to all desired conditions or objectives in every instance, but only to a selected subset. Landscape management plans should articulate what desired conditions are being addressed by what activities and whether these conditions and objectives are being advanced.

Desired conditions may only be achievable in the long term. If desired conditions cannot be achieved or are no longer valid or relevant to the long-term multiple-use management of the plan, the plan should be amended or revised.

***Tasks:***

- 1) Convene landscape planning team and stakeholders for development of desired conditions for the landscape.*
- 2) Develop widely shared desired conditions that aim to maintain the landscape's unique features and significance, improve resource conditions on the landscape, and promote livelihood opportunities for those that depend on landscape resources.*
- 3) State who was involved in developing the desired conditions so as to clarify whose desired conditions they represent.*

#### ***4.4 Landscape Objectives***

Landscape objectives describe the focus of management activities over an extended period of time, i.e., 5 years. The timeline should be determined by the planning team and stakeholders. Objectives are important because they describe what will be done to achieve the desired conditions for a given element, attribute, or condition on the landscape. For example, if your desired condition is to maintain bonobo and elephant populations as outlined in the Desired Condition text box above, example 2, then one of your objectives may be to increase monitoring capacity of these two species in order to closely track population numbers. Or if you know their numbers are decreasing from illegal hunting, then another objective may be to increase enforcement capacity in certain areas known to be subject to hunting.

Objectives should be unambiguous, measurable, and have a time line. Objectives of a plan are the means of measuring progress toward achieving or maintaining desired conditions. It is essential to involve stakeholders in the development of objectives as different stakeholders may disagree about which objectives are or are not compatible with the landscape vision. It will not be possible to please all stakeholders, but the planning team should accurately gauge the objectives of the different stakeholders and should develop responses to contentious or conflicting stakeholder views.

If the objective is no longer appropriate or relevant to achievement of desired conditions, the plan may need to be amended or revised as necessary.

Where possible, objectives should be listed in order of priority. The objectives for the landscape plan could be based on the following topics but will be specific to the site in question:

- habitat and species (faunal and floral) conservation
- promoting scientific research
- preserving social and cultural features
- education and training
- community participation and development
- income generation
- ecotourism development
- ecosystem services

For each objective explain the challenges and opportunities related to achieving it.

**Tasks:**

- 1) *Convene landscape level stakeholders for development of objectives. Multiple objective setting meetings may be necessary.*
- 2) *Draft the objectives of the landscape and, if possible, list them in order of priority.*
- 3) *Describe the opportunities and challenges to achieving each objective.*

#### **4.5 Macro-Zones**

Zoning decisions are often considered the heart of a land use plan and can be contentious. Decisions should be based on information gathered, including inventory information, legally designated concessions, areas and contracts already established across the landscape, stakeholder interests, as well as professional judgment. After data gathering is complete and macro-zoning begun, the planning process should include a validation step to confirm the proposed location for each macro-zone reflects on-the-ground reality.

An iterative approach to zoning the landscape is likely the most applicable to the CARPE landscape land use planning situation. In this approach, the planning team develops an initial macro-zoning proposal, based on synthesizing information from the data-gathering step as well as professional judgment. As data is gathered and stakeholder interests identified, the planning team refines or changes macro-zone boundaries to come up with a configuration that best responds to the vision, objectives, and priorities of the landscape.

Initially it may not be possible for landscape planning teams to completely macro-zone the landscape. In that situation, there would be blank spaces on the landscape map, where no zones were designated for the time being. The advantage of this focused approach is it invests the limited planning time and money on the areas considered critical within the landscape. As information is gathered and new trends or needs emerge, additional macro-zones can be designated. To add macro-zones, use an abbreviated approach to the landscape planning process, primarily focusing on stakeholder involvement.

It is at the landscape level where attention needs to be paid to issues that occur between or across macro-zones. Macro-zone management plans can address these issues or concerns only partially. Landscape level assessments for example, should look at transportation routes and their impacts, wildlife corridors and their locations, infrastructure development, and population trends. Examples such as these require a larger frame of reference that the landscape scale can provide to demonstrate overall trends and possible future impacts.

It is important to keep in mind that, as with the other sections of the plan, macro-zoning is an adaptive process. Even after the plan is finalized and adopted, the boundaries of each macro-zone may be altered to adjust to local needs, unforeseen threats, improved data, or other changing factors.

**Tasks:**

- 1) *Delineate boundaries for macro-zones reflecting landscape vision, objectives, and information gathered; provide a justification for each zone created (e.g. this area is delineated a ERZ zone because three logging concessions are present).*
- 2) *Involve stakeholders to develop, respond and refine zoning options.*
- 3) *Develop a landscape scale map showing the delineated boundaries of each macro-zone.*

#### **4.6 Guidelines (Optional)**

Guidelines can be thought of as a set of rules or regulations describing permissible or prohibited activities across a landscape or zones within a landscape. Guidelines help achieve objectives that certain aspects of a landscape maintain their integrity and that various activities occur, or are prohibited, in such a way as to not harm valued attributes. Guidelines generally prohibit or permit specific activities or actions.

Guidelines are more often used at the macro and micro zone level. However, at the landscape level, there is an opportunity to develop standard guidelines to apply to all similar macro-zones. Guidelines for any one type of macro-zone may have applications that can be used across all zones of the same type within that landscape, making planning more efficient. The planning team along with stakeholders will need to assess whether such an approach makes sense for their landscape.

If any exceptions to a guideline are to be granted, the guideline should explicitly describe the circumstances under which such an exemption would be granted and who has the authority to grant it. It is also important to note that pre-existing laws in the country where the landscape is located may address issues or activities to be outlined in a guideline. Where appropriate, these laws should be referenced in the guideline, however, the guidelines may set more stringent guidelines in addition to pre-existing regulations.

### **Guidelines that may apply across all macro-zones in a landscape**

**Example:**

Guidelines that will apply to all macro-zones of a certain type within a landscape will usually focus on some attribute of the landscape that transcends any one given zone. For example if the landscape contains a particular forest type which is rare and under-represented, yet scattered across the landscape, an over-arching guideline could be created which states that no road construction shall bisect this resource in order to protect its integrity.

### **Guidelines that may apply to all macro-zones of the same type in a landscape**

**Example:**

Due to the particular sensitivity of a species of interest in a given landscape, the Protected Areas in that landscape may be especially important for the long term survival of that species. Therefore a landscape level guideline can be written to prevent that activity – be it road building, hunting, the collection of particular plants, etc. – in all PAs in that landscape.

**Tasks:**

- 1) *Develop any standard guidelines for each of the three macro-zones, i.e. guidelines that would apply and be incorporated in each PA, CBNRM, and ERZ.*
- 2) *Describe any exemptions to the guidelines, as well as to whom and under what circumstances they can be granted.*

#### **4.7 Plan Implementation Schedule**

In this section of the plan, action items will be prioritized into a work plan with a timeline and a budget to accomplish the work. This section should specify what action items will be accomplished, by whom, when and how much it will cost. It is appropriate to include a description of how stakeholders will be involved. Most actions will be concentrated within the macro-zone management plans, however, important cross-zone issues and current condition and future trends are better identified at the landscape scale. All implementation activities should be linked back to one or more of the landscape objectives. If it does not relate to a landscape objective, why is management spending limited resources to do the work?

These activities and further identification of macro-zones need to be itemized and prioritized within the implementation schedule. Prioritization is extremely important in the implementation schedule as financial resources are always limited and it will not be possible to accomplish every task desired.

**Task:** *Throughout the planning process, prioritize activities to focus on those management actions that are most critical to achieving the landscape vision and objectives. This task is ongoing and the prioritization process should be utilized when evaluating what data to gather, what management activities to implement and what monitoring activities to undertake.*

#### ***4.8 Monitoring and Information Needs Assessment***

The purpose of monitoring and assessment is to determine if the landscape plan and the macro-zone plans under it are effectively contributing to the achievement of the landscape vision and objectives. Monitoring will provide the feedback loop for evaluation of the plan. Not everything can be monitored, particularly at the landscape level. Landscape-wide monitoring is typically conducted to evaluate condition and trends of specific resources on the landscape. Monitoring will allow observation of the impacts of management and suggest changes to management actions accordingly. Where implementation runs into problems, monitoring can be used to signal needs for re-deploying management resources to improve implementation of the plan.

Monitoring should determine if key aspects of the plan are working as intended or if changes need to be made to the plan. Indicate the type and frequency of monitoring, as well as who is responsible for carrying it out and reporting on the monitoring. Specific monitoring activities will depend on the objectives that have been identified for the landscape, and may include, but are not limited to:

- Development of local communities
- Species of concern
- Human disturbances
- Wildlife corridors
- Infrastructure impacts
- External threats to the landscape
- Ecological function and condition

In addition to landscape wide monitoring items, the planning team may want to identify standard monitoring items that should be included in each macro-zone plan. Those standard monitoring items would contribute to the evaluation of progress in meeting landscape's vision and objectives or for upward reporting for the State of the Forest report.

Upon completion of the planning process the planning team should evaluate what information about the landscape was missing as they went through the process. The team should then prioritize the needs for collecting this information in order to improve the plan when it is revised in 5 – 10 years. Based on this prioritization, targeted studies and research activities which will yield data useful to the planning process should be undertaken.

#### ***Tasks***

- 1) *Identify landscape wide monitoring items.*
- 2) *Identify any standard monitoring items that should be included in each macro-zone plan.*
- 3) *Identify missing information about the landscape which would improve the planning process if it were available during the plan's revision in 5-10 years and prioritize research activities to gather that information.*