

**FINAL REPORT:**  
**MANYARA RANCH, TANZANIA**  
**STRATEGIC PLANNING ASSISTANCE**  
**Greg Schenbeck – U.S. Forest Service**  
**USFS Technical Support Mission**  
**September 11 – 28, 2005**

This was the second technical support mission to support and assess strategic planning at Manyara Ranch. Itineraries for both support missions are attached (Attachments A and B).

Manyara Ranch and peripheral lands are a critical wildlife migration corridor and dispersal area between Lake Manyara and Tarangire National Parks, but increasing cultivation, immigration and human settlement is incrementally closing the corridor. In addition to the impacts on the exceptional biodiversity and wildlife resources of this area, the traditional pastoral Maasai communities are struggling to maintain sustainable pastoral livelihoods in this rapidly changing environment. Strategic planning for Manyara Ranch and peripheral communities needs to be significantly ramped up to address these human issues and environmental threats and to realign and expand ongoing human interventions. A sense of urgency is certainly warranted given the ongoing environmental deterioration and depletion around the periphery of the ranch and the direct link of these changes to the long-term sustainability of traditional Maasai livelihoods and wildlife in this area.

This report documents observations and provides recommendations to the African Wildlife Foundation and Tanzania Land Conservation Trust concerning logistics and a framework for future strategic planning for this priority area. Additional related tasks were completed during the support missions but are not reported in this document. These tasks included reviewing eco-tourism concession proposals and providing technical assistance on eco-tourism contract specifications. There was also considerable information exchange on strategies for managing livestock grazing and grazing associations; there are striking similarities in the issues associated with managing livestock grazing and grazing associations on the national grasslands in the United States and management of livestock grazing and the steering committee on Manyara Ranch in Tanzania.

## **PLANNING LOGISTICS**

The interrelationships linking traditional pastoralism, human settlement, land use conflicts and natural resource management are very complex, and as evident here and elsewhere in Maasailand, effective land use planning associated with these issues is a significant, long-term and challenging undertaking. Strategic planning for Manyara Ranch and the peripheral communities will require a significant infusion of additional expertise and funding over an extended period of time, possibly a year or more intermittently, just to develop the initial strategies and to prepare a draft strategic planning document. The current difficulties integrating the Manyara Ranch Community Steering Committee philosophies with the mandates established in the trust deed for management of the ranch are evidence of the level of inputs that will be required for success. Just engaging the peripheral communities in the short-term management of Manyara Ranch remains an overwhelming and challenging task for the current ranch management team. Given the current lack of a full-time experienced ranch manager and fractures beginning to develop within the remaining ranch team, it would be extremely problematic to assign and add significant strategic planning responsibilities to the ranch staff at this time.

Another logistics consideration is that effective strategic planning is an ongoing process and extends well beyond the development of an initial strategic planning document. This environment is especially dynamic, and strategic planning is about appropriate and timely responses and adjustments to a rapidly changing environment. Implementation of the initial strategies and the follow-up adaptive management, while working with the peripheral communities, will require significant long-term, focused and skilled staffing.

Effective strategic planning, implementation and adaptive management also require ongoing monitoring and evaluation. Some of the monitoring workload could be met with existing ranch staff, given appropriate capacity building and training. This training should include addressing proper monitoring techniques, data collection, documentation procedures, and information storage.

The main challenges facing strategic planning at this site seem obvious. First, management facilities and administrative support systems at Manyara Ranch need significant modification and upgrading to enable meaningful implementation of future strategic planning interventions and adaptive management. This includes ongoing development of revenue streams for the ranch. Secondly, much of the socio-economic issues with the Maasai revolve around a model of traditional pastoralism that is no longer working and is beginning to fail in sustaining both the people and the land. What is less obvious is where to place future strategy development and implementation emphasis: trying to modify and fix the existing pastoralism model; abandoning or ignoring it; or pursuing a blend of modifying and improving the existing model while developing new strategies to build sustainable livelihood alternatives. The latter is probably more realistic,

recognizing that the difficulties with pastoralism will likely only intensify as population density continues to increase in the project area and pastoral movements of herders and their livestock become more limited and confined in localized areas.

On the more positive side, a significant amount of progress and success in initiating, completing and documenting effective strategic thinking and planning for Manyara Ranch has already occurred:

Manyara Ranch Zoning Concept Plan. December 2000,

The Manyara Ranch: a reality check: recommendations for immediate management implementation. June 2002,

Defining a Strategic Vision for Manyara Ranch and the TLCT. January 2003,

Workshop Report on the Formation of a Community Based Organization (CBO) for the Esilalei and Oltukai Communities. February 2004,

Strategies Underpinning Community Engagement in the Manyara Ranch. September 2004.

Observations made during the 2004 and 2005 support missions confirm and validate many of the observations and findings reported in these earlier planning documents. These documents also demonstrate that considerable engagement of the peripheral communities and community steering committee has already occurred, and it would be advantageous to maintain this momentum by timely ramping up of strategic planning. In fact, the peripheral communities appear to be expecting it.

### **SUGGESTED FORMAT OUTLINE**

A format outline (Attachment C) is provided to serve as a framework for future strategic planning for Manyara Ranch and the peripheral lands. It represents a “state-of-the-art” model that closely follows AWF’s conservation site-level planning guidance, presented in their Heartland Conservation Process (HCP). Some updates and refinements from the Conservation Measures Partnership (CMP) have been integrated into the HCP framework; AWF is one of the international partners in CMP. It is recommended that the following format outline, along with AWF’s HCP and CMP’s open standards for the practice of conservation, serve together as the foundation and framework for future strategic planning.

Specific strategies are identified in the format outline but remain undeveloped. Planners working with all stakeholders need to identify the specific interventions, actions and details of each strategy, and hopefully additional strategies will also be identified and developed by the stakeholders.

## ATTACHMENT A

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### **Itinerary – 2004 Technical Support Trip Manyara Ranch Strategic Planning Assistance**

**(Greg Schenbeck – U.S. Forest Service)**

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September 4-5 (Travel to Tanzania)

September 6

Introductions and briefing at AWF in Arusha

September 7

Introductions at Manyara Ranch  
Visited headquarters facilities

September 8

Field review/tour of northern portion of Manyara Ranch  
Visited commercial livestock herd facilities  
Visited Manyara Ranch School  
Visited new site for school  
Reviewed safari concession prospectus/proposal

September 9

Discussed safari concession contract proposal with Clive  
Toured Manyara Ranch with safari concessionaire

September 10

Met with Manyara Ranch staff and reviewed operations  
Returned to Arusha

September 11-12 (in Arusha)

Drafted preliminary zoning and strategies proposal

September 13

Presented zoning and strategies proposal to AWF/FS staff  
Preparations for Community Steering Committee workshop  
Travel to Mto wa Mbu

September 14-16 (at Mto wa Mbu)

Workshop

September 17 Close-out with AWF staff in Arusha

## ATTACHMENT B

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### **Itinerary – 2005 Technical Support Trip Manyara Ranch Strategic Planning Assistance**

**(Greg Schenbeck – U.S. Forest Service)**

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September 11 and 12, 2005

Travel to Tanzania

September 13

At African Wildlife Foundation's Arusha Conservation Center (ACC)  
with Clive Jones strategizing and planning work schedule

September 14

ACC working on planning format  
Reviewing Lake Manyara NP and Ngorongoro CA Plans

September 15

Reviewed historic Masai Range Project reports with AWF staff  
ACC working on planning format

September 16

ACC documenting final planning format

September 17

Travel to Tarangire N.P.

September 18

At Tarangire N.P. with Dr. Charles Foley of Tarangire Elephant Project  
discussing elephant ecology and eco-tourism impacts on elephants  
and other species.

September 19

Travel to Manyara Ranch (MR) and attended afternoon staff meeting  
Field tour and discussion in late afternoon on north half of ranch

September 20

MR field review of water harvesting project and south half of ranch  
Interviewed individual staff members for strategic planning

September 21

Visited new MR primary school construction site  
Discussed range and livestock disease management issues with Richard Hatfield of AWF's Nairobi office  
Return travel to Arusha

September 22-23

ACC working on draft strategies

September 24-25

Days off

September 26

ACC working on draft strategies

September 27

ACC documenting final strategy recommendations

September 28

Close out with AWF staff:  
Clive Jones, Director of Land Management  
Dr. James Kahurananga, Program Director

## ATTACHMENT C

### FORMAT OUTLINE

#### I. INTRODUCTION

##### A. Landscape context

1. Introduce Manyara Ranch and peripheral lands as a priority conservation site identified in AWF's Maasai Steppe Landscape Strategy (**MSLS**)
2. This will demonstrate step-down conservation integration.

##### B. Scope and size of Manyara Ranch project area and migration corridor (include general & vicinity maps, including demarcation of migration corridor)

1. Manyara Ranch
2. Peripheral communities
3. Peripheral village and communal lands
4. Kwa Kuchinja migration corridor
5. JKT Saburi estate

##### C. Manyara Ranch establishment history (brief)

##### D. Identify stakeholders (this may be a difficult task)

##### E. TLCT's mission statement (from trust deed)

1. "To conserve the natural resource values and services provided by the ranch as part of a critical wildlife corridor and dispersal area"
2. "To benefit partner communities from the ranch activity base – both directly and indirectly"

##### F. TLCT, BOT, CSC and ranch management team's uniform vision statement (needs articulated through participatory process; example follows)

1. Manyara Ranch and the peripheral lands are under long-term management as a functional conservation area with the Kwa Kuchinja wildlife migration corridor and dispersal habitat being protected and restored.
2. Concurrently, peripheral communities are receiving tangible benefits from new and expanded conservation enterprise, sustainable livelihoods, benefit sharing and educational opportunity, and ranch revenue streams are sufficient to support ranch maintenance, operations and implementation of priority interventions.

##### G. Site-level strategic planning approach

1. Heartland Conservation Process (HCP) and Conservation Measures Partnership (CMP)

2. Livelihood driven (ENR SO)
  3. Community and participatory conservation
  4. Adaptive management (experimentation context)
- H. Current status of strategic planning (steps already initiated or completed)
1. Assessments (Lake Manyara watershed assessment, etc.)
  2. Manyara Ranch zoning concept plan, 2000
  3. Manyara Ranch short-term strategic plan, 2002
  4. Participatory conservation planning workshops
- I. Guiding principles (examples)
1. Strategic planning will be conducted and implemented in an open, honest and transparent manner with all stakeholders.
  2. Strategic planning will be conducted and implemented in a manner that recognizes the governance and authorities of peripheral communities in management of village lands.
  3. Strategic planning will be conducted and implemented in a manner that demonstrates the capability and willingness to adapt to changing conditions.

## **II. CONSERVATION SITE DESCRIPTION**

- A. Environmental setting
1. Location and access
  2. Geology, soils and ecological zones
  3. Physical features
  4. Water
  5. Climate
- B. People and livelihoods
1. People
    - a. Maasai (include discussion on poverty and marginalization)
    - b. Immigrants
  2. Land tenure
  3. Land use in project area
    - a. Pastoralism (include ecological and economic significance)
    - b. Commercial ranching
    - c. Settled agriculture / cultivation (agro-pastoralism)
    - d. Wildlife management and eco-tourism
    - e. Wood-cutting (construction materials and charcoal burning)
  4. Discuss the conservation and development implications and challenges of the wildlife, livestock and human interface
    - a. Explain the “one health” perspective (Osofsky 2005)
    - b. Briefly review the wildlife health, domestic animal health and human health triangle (Osofsky 2005)

C. Wildlife

1. Biodiversity (total number of native vertebrate species per taxon)
2. Migratory species
3. Resident species
4. Endemic species
5. Rare species
6. Exotic species

D. Vegetation

1. Overview of plant communities or habitats (cover type)
2. Rare or unique plant communities
3. Exotic species

E. Administrative Infrastructure

1. Manyara Ranch
2. Primary school

F. Situation analysis (current conditions and trends)

1. Biological / Ecological
  - a. Include findings from Manyara Lake Watershed Assessment
  - b. Borrow from Manyara Lake NP General Management Plan as appropriate.
  - c. Check on status of recent assessment information for Tarangire NP General Management Planning process.
  - d. Biodiversity and health assessment (TNC 2003a and 2003b and page 83 in Osofsky 2005)
2. Socio-economic
  - a. Stakeholder identification assessment may be very helpful
  - b. Borrow from Manyara Lake NP General Management Plan as appropriate.
  - c. Check on status of recent assessment information for Tarangire NP General Management Planning process.
3. Infrastructure
  - a. Manyara Ranch
  - b. Primary school
  - c. Current waste management practices

### **III. CONSERVATION AND LIVELIHOOD TARGETS AND GOALS**

A. Core TLCT targets and goals

1. Migration corridor and dispersal habitat
2. Peripheral partner communities

B. Targets and goals in Section III of **MSLS** stepped down to this site

1. Elephant

2. Large predators
3. Wild dog
4. Locally endangered ungulates
5. Migration corridor and dispersal habitat
6. Baobab-acacia-grassland mosaic
7. Conservation enterprise

C. Additional targets and goals (developed through participatory process and need to be compatible with or supportive of core TLCT and targets and goals; some possible examples follow)

1. Food security (see Osofsky 2005)
2. Community based wildlife management
3. Community based animal health care and delivery systems
4. Ecological integrity

#### **IV. THREATS AND OPPORTUNITIES**

A. Major threats to livelihoods and the conservation and protection of wildlife and the migration corridor and dispersal habitat in the project area

1. Threats identified and prioritized through participatory process as described in HCP and CMP
2. Threats need stepped-down from **MSLS**, as appropriate
3. Threats mapped (as appropriate)
4. Examples (use of the CMP proposed threat taxonomy is not recommended at this time – needs work)
  - a. Threat – Habitat loss and fragmentation (reduced habitat connectivity & isolation of populations / subgroups)
    - (1). Source – cultivation
    - (2). Source – human settlement
    - (3). Source – roads
    - (4). Source – utility lines (encourage ribbon development)
    - (5). Source – a model of traditional pastoralism that no longer works and a current lack of alternative sustainable livelihoods
    - (6). Source – weak governance and a model of traditional village land use planning that no longer works
  - b. Threat – Habitat degradation
    - (1). Source – livestock grazing at unsustainable levels (loss of herbaceous wildlife food and cover; accelerated soil erosion; substantial loss and downward trend in rangeland productivity)
    - (2). Source – wood-cutting (excessive gathering of material for construction & charcoal)

- production resulting in loss or reduction of important wildlife trees & shrubs)
        - (3). Source – a model of traditional pastoralism that no longer works and a current lack of alternative sustainable livelihoods
        - (4). Source – weak governance and a model of traditional village land use planning that no longer works
        - (5). Source – marginal management and administrative support systems (infrastructure, staffing, funding) at Manyara Ranch
      - c. Threat – Wildlife displacement (probably not an issue at Manyara Ranch)
        - (1). Source – vehicle traffic (eco-tourism at excessive and unsustainable levels)
        - (2). Source – non-motorized recreation (eco-tourism at excessive and unsustainable levels)
        - (3). Source – hazing to reduce livestock, crop and food storage damage
      - d. Threat – Direct wildlife population reductions
        - (1). Source – bush meat consumption
        - (2). Source – commercial poaching
- B. Major threats specific to elephant (excluding migration corridor protection)
1. Threats identified and prioritized through participatory process as described in HCP and CMP
  2. Threats mapped (as appropriate)
  3. Example
    - a. Threat – Wildlife population depletion
      - (1). Source – poaching
      - (2). Source – hazing and killing to reduce livestock, crop and food storage damage
      - (3). Source – improper waste disposal and management (Salmonellosis risk)
    - b. Threat – Habitat degradation
      - (1). Source – excessive utilization by elephants
- C. Major threats specific to African hunting dog
1. Threats identified and prioritized through participatory process as described in HCP and CMP
  2. Threats mapped (as appropriate)
  3. Example
    - a. Threat – Wildlife disease
      - (1). Source – distemper
- D. Major threats to livelihoods

1. Threats identified and prioritized through participatory process as described in HCP and CMP
2. Example
  - a. Threat – Extreme forage and water shortages for pastoralists each dry season
    - (1). Source – land alienation
    - (2). Source – increasing stock densities
    - (3). Source – in-migration
    - (4). Source – poor dam management and maintenance
  - b. Threat – Lack of sustainable livelihood alternatives
    - (1). Source – low skills and capacity pools
    - (2). Source – inadequate infrastructure and management support systems
    - (3). Source – inadequate financial backing
    - (4). Source – human health, nutrition and food security issues (wildlife, livestock & human health triangle)
    - (5). Source – weak governance
    - (6). Source – gender equity issues

E. Opportunities ripe for harvesting

1. Synergies of combining with other partnerships and initiatives with similar purposes
  - a. VETAID
  - b. KEEP
  - c. AHEAD
2. Open business niche for high end safari and lodge
3. New land law for village zoning
4. New opportunities through upgrading and relocation of primary school

**V. CONSERVATION AND LIVELIHOOD STRATEGIES**

A. Identification and prioritization of strategies (interventions) for each threat or opportunity using the participatory process as described in HCP

1. An option is to follow the CMP open standards process that also includes an intermediate step of developing quantitative objectives for addressing each threat & opportunity, followed by strategy development. The additional intermediate step of developing objectives can significantly expand and complicate planning inputs when done in a participatory environment with low capacities.
2. The applicable zoning classification should be specified for each strategy. For example, some strategies may apply ranch-wide to all zones while others pertain only to one or a few zoning classifications. The example strategies below are “zoned” and integrate strategies with the ranch zoning classification.

3. Some of the strategies that relate to “administrative and management support systems” dealing with infrastructure, equipment and staffing may be more appropriate for a separate strategic business planning process, rather than a conservation strategy planning effort.
4. Strategies that relate to the primary school may not be appropriate for this conservation strategy planning process.
5. Research and assessment (ecological or socio-economic) strategies should be included as appropriate
6. Strategies in MSLS that apply to Manyara Ranch need to be stepped down to the conservation site.
7. Strategies identified in the 2002 “reality check” for Manyara Ranch need to be revisited and those that still apply brought forward.

B. **“Conservation Strategy”** examples that could apply to one or multiple threats.

1. Administrative and management support systems (including conservation finance and internal & external capacity building)
  - a. Facilities and structures zone
    - (1). Ranch headquarters relocation strategy
    - (2). Upgraded veterinary center strategy
    - (3). Ranch & community center strategy
    - (4). Road and travel management strategy
    - (5). Steering committee re-engagement strategy
    - (6). Solid and liquid waste management strategy
    - (7). Ranch security and access strategy (including fire suppression)
  - b. Transportation and utilities corridor
    - (1). Scenic quality strategy
2. Ranch livestock (extension and conservation finance)
  - a. Ranch commercial livestock zone
    - (1). Upgraded veterinary center strategy (improved disease diagnostic capabilities)
    - (2). Enhanced livestock marketing strategy (including livestock disease and health strategy)
    - (3). Water development and maintenance strategy
3. Eco-tourism (conservation finance)
  - a. Wildlife emphasis zone
    - (1). Exclusive high-end eco-tourism concession strategy
    - (2). Maintaining scenic quality strategy
    - (3). Road and travel management assessment strategy
4. Peripheral communities (governance, education and capacity building)
  - a. Peripheral communities
    - (1). Facilitating village land use planning strategy
  - b. Facilities and structures zone
    - (1). Upgrading Manyara primary school strategy

5. Systems (ecosystem services & watershed health)
  - a. Community shared use zone
    - (1). Grassbank and waterbank strategy
  - b. Ranch-wide (all zones)
    - (1). Road and travel management strategy
    - (2). Livestock grazing and invasive plant strategy
6. Systems (wildlife migration corridor & dispersal habitat)
  - a. Wildlife emphasis zone
    - (1). Road and travel management strategy
    - (2). Livestock grazing and invasive plant strategy
  - b. Peripheral communities
    - (1). Easement strategy
    - (2). Native seedbank strategy
    - (3). Shamba reclamation strategy
    - (4). Facilitating village land use planning strategy
    - (5). Community based wildlife management strategy
7. Systems (korongo habitat)
  - a. Korongo zone
    - (1). Restricted development strategy
    - (2). Livestock grazing and invasive plant strategy
8. Systems (baobab-acacia-grassland habitat)
  - a. Ranch-wide (all zones)
    - (1). Ranch security and access strategy
    - (2). Livestock grazing and invasive plant strategy
  - b. Community shared use zone
    - (1). Grassbank and waterbank strategy
    - (2). Livestock grazing and invasive plant strategy
9. Species assemblages (large predators)
  - a. Ranch-wide (all zones)
    - (1). Ranch security and access strategy
  - b. Wildlife emphasis zone
    - (1). Predator and predation response strategy
  - c. Ranch commercial livestock zone
    - (1). Predator and predation response strategy
  - d. Community share use zone
    - (1). Predator and predation response strategy
10. Species assemblages (locally endangered ungulates)
  - a. Ranch-wide (all zones)
    - (1). Ranch security and access strategy
11. Species (elephant)
  - a. Ranch-wide (all zones)
    - (1). Ranch security and access strategy
  - b. Peripheral communities
    - (1). Secure community food storage strategy
12. Species (African wild dog)
  - a. Ranch-wide (all zones)

- (1). Ranch security and access strategy
- b. Wildlife emphasis zone
  - (1). Predator and predation response strategy
- c. Ranch commercial livestock zone
  - (1). Predator and predation response strategy
- d. Community share use zone
  - (1). Predator and predation response strategy
  - (2). Domestic dog strategy
- 13. Archeological and Paleontology Resources
  - a. Ranch-wide (all zones)
    - (1). Ranch security and access strategy

C. **“Livelihood Strategy”** examples that could apply to one or multiple threats.

- 1. Peripheral communities (conservation enterprise)
  - a. Peripheral communities
    - (1). Native seedbank strategy
    - (2). Eco-tourism support services strategy
- 2. Peripheral communities (benefit-sharing)
  - a. Community shared use zone
    - (1). Steering committee re-engagement strategy
    - (2). Grassbank and waterbank strategy
    - (3). Water development and maintenance strategy
  - b. Outside Manyara Ranch
    - (1). Human health delivery system strategy
- 3. Peripheral communities (pastoralism improvement)
  - a. Outside Manyara Ranch
    - (1). Veterinarian extension strategy (including community based animal health delivery system strategy)
    - (2). Livestock predation response strategy
    - (3). Livestock breed improvement strategy
    - (4). Enhanced livestock marketing strategy (including livestock disease control and animal health strategy)

**VI. MEASURING CONSERVATION AND LIVELIHOOD DEVELOPMENT SUCCESS**

- A. Monitoring and evaluation (participatory process; consult monitoring and evaluation section in USAID 2003)
  - 1. PIMA measures stepped-down to the conservation site, as appropriate (includes measures of conservation enterprise development)
  - 2. Monitoring of the conservation target goals and indicators listed in the **MSLS**, stepped-down to the conservation site, as appropriate
  - 3. Additional monitoring to consider
    - a. Eco-tourism impacts (consult Convention on Biological Diversity 2004)
      - (1). On target wildlife displacement (may not be an issue)

- (a). Example = change in flight distances
      - (b). Example = change in animal behavior
      - (c). Example = change in number of sightings of selected species per unit of time, distance or circuit
    - (2). On visitor / client expectations and experience
      - (a). Example = maximum PAOT (people-at-one-time on designated concession trails or roads)
      - (b). Example = number of daily concession trips or circuits per day (24 hours)
      - (c). Monitoring completed by concessionaire
    - (3). On ability to meet maintenance standards on designated concession routes / trails
    - (4). On road and trail accretion (due to off-road use, braiding, cut-across, etc.)
      - (a). Example = change in meters of actively used road/trail
      - (b). Remote-sensing or ground monitoring
  - b. Livestock
    - (1). Herd size, performance and marketing indicators
    - (2). Disease detection and monitoring
  - c. Community livestock grazing cooperation
    - (1). Measures of annual compliance with grazing agreements
    - (2). Measures of CSC disciplinary committee actions (or inactions)
  - d. Range health (to document excessive use areas)
    - (1). Bare ground and erosion indicators
    - (2). Invasive plant species
    - (3). Consult USDI BLM 2000
  - e. Wildlife health
    - (1). Disease
  - f. Population demographics and human health in peripheral communities
- B. Adaptive management and learning
- 1. Identification of thresholds for triggering modifications (adaptive management) to those interventions associated with experimentation or uncertainty
- C. Report monitoring and adaptive management results annually or semi-annually to stakeholders on conservation and community success measures.

## VII. KEY REFERENCES

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## **VIII. APPENDICES**

- A. Zoning descriptions and map (to be further developed through community and stakeholder participation; initial draft map completed during Mto wa Mbu community steering committee workshop in September 2004)
- B. Proposed 3-5 year implementation plan & schedule (to be developed through community and stakeholder participation)