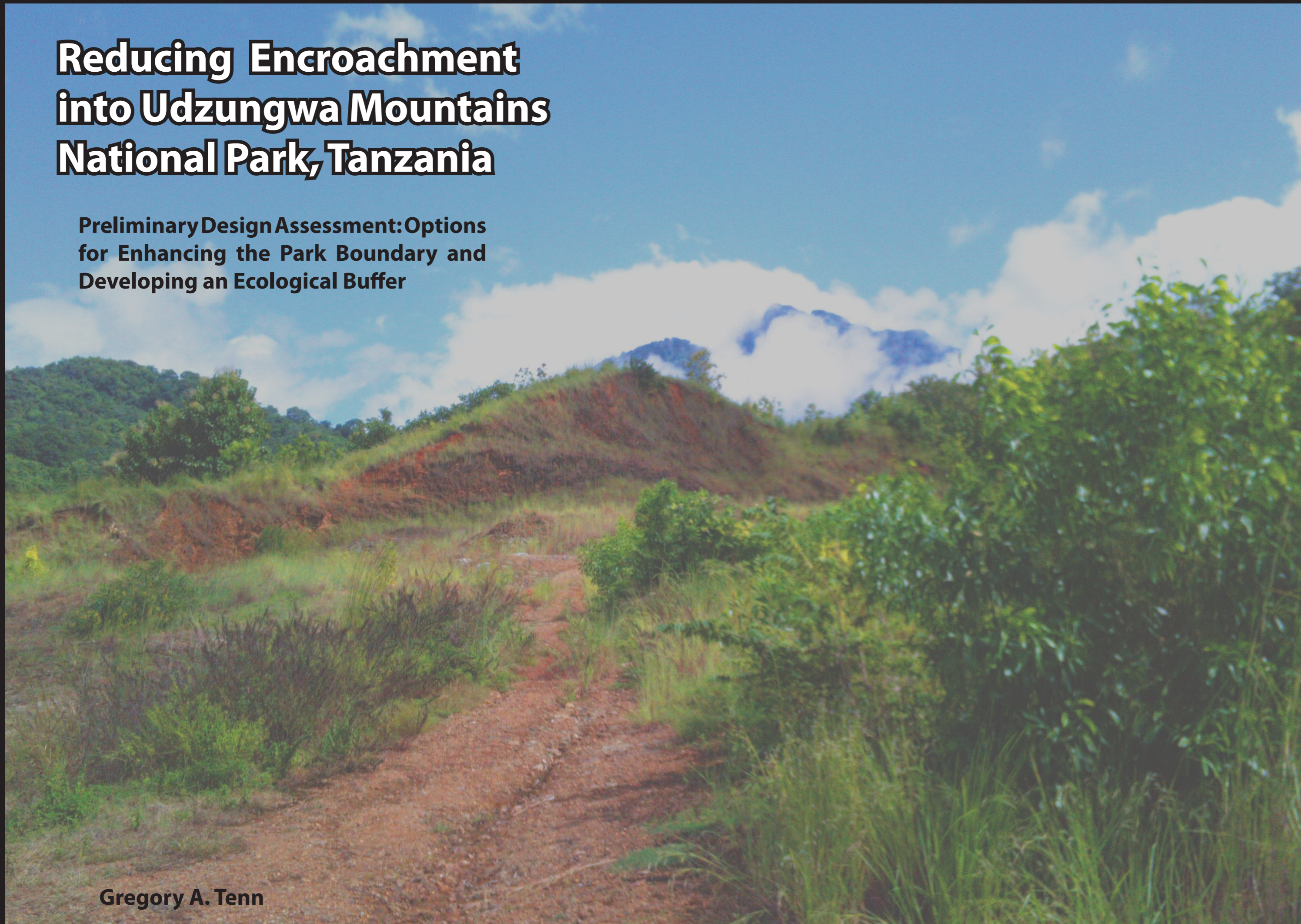


Reducing Encroachment into Udzungwa Mountains National Park, Tanzania

**Preliminary Design Assessment: Options
for Enhancing the Park Boundary and
Developing an Ecological Buffer**

Gregory A. Tenn

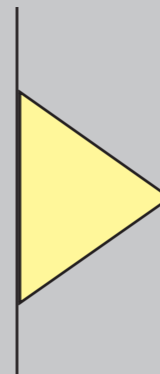


PROJECT ORGANIZATION

Design Concepts

Sections

1. Forward
2. Residential Encroachment
3. Public Lands
4. Agriculture
5. Recommendations



**Conditions
Design Considerations
(Preliminary & Primary)**

RESIDENTIAL ENCROACHMENT

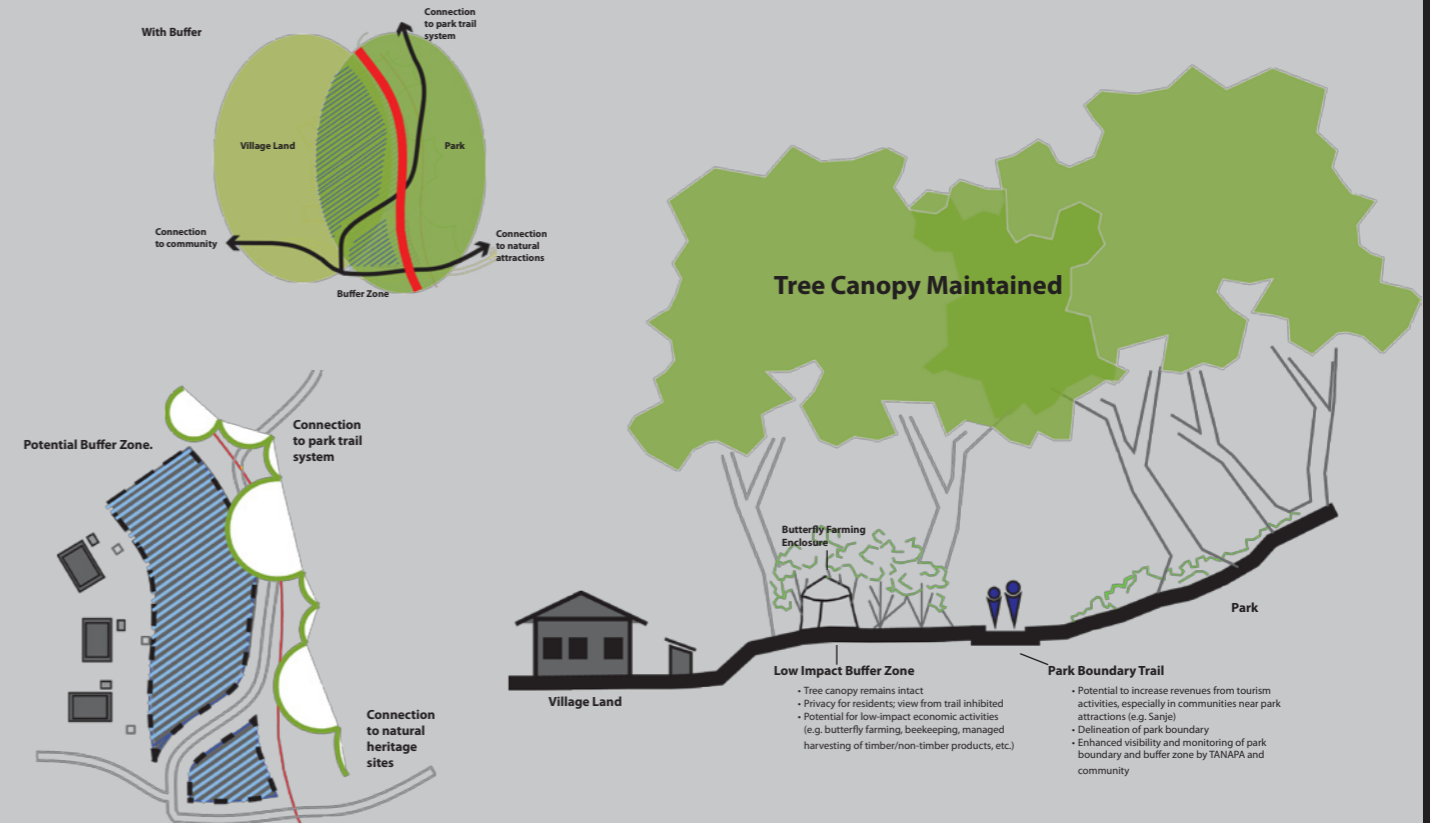
Conditions

- **Urbanization** in villages
- Increasing **land use conversion** (residential, subsistence ag)
- Expansion of **commercial agriculture**
- Large number of **economic immigrants**
- Little or no room to expand except into **UMNP**
- Direct threat to conservation



Design Considerations

- Lack of **physical space**
- **Movement** of established residences and structures **undesirable** even with economic reimbursement
- Balance socio-economic and conservation considerations
- Negate or **minimize land use conversion** within present park boundary
- Park **boundary as economic resource**
- **Strengthen delineation** of the park and village land
- Improving **visibility** and **monitoring**



PUBLIC LANDS

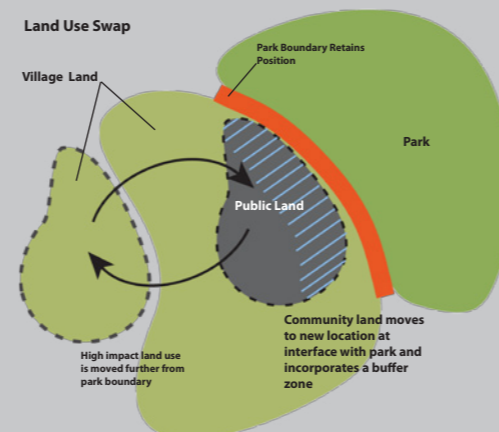
Conditions

- Growth in populations should coincide with growth in social services and infrastructure
- Land use conversion (e.g. roads, **schools, hospitals/clinics**, etc.).
- Public land is a **highly regarded asset**
- **Stable** and/or **lower impact** uses
- Higher **potential** for **open space**
- prior **NGO success**

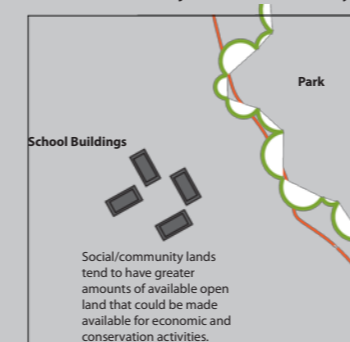


Design Considerations

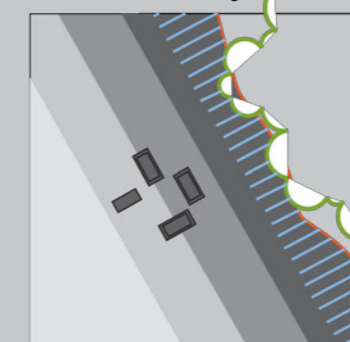
- Creation of **public park boundary** zone
- **Community based** resource management
- **Schools** and **agroforestry**
- Environmental **education**
- **Recreation** facilities
- **Government**/administrative



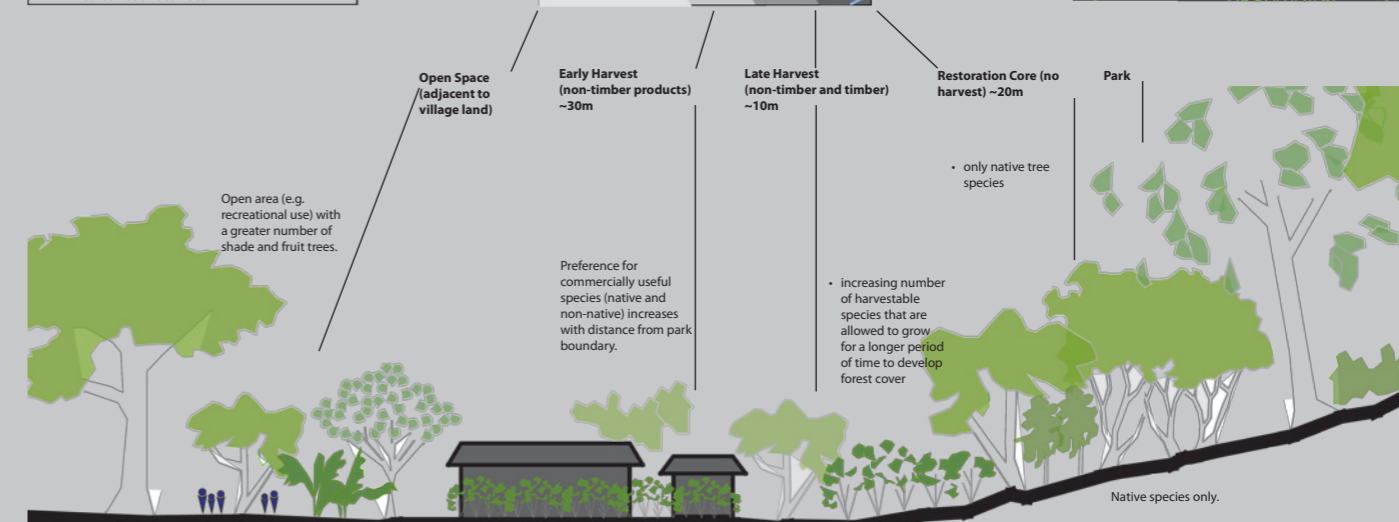
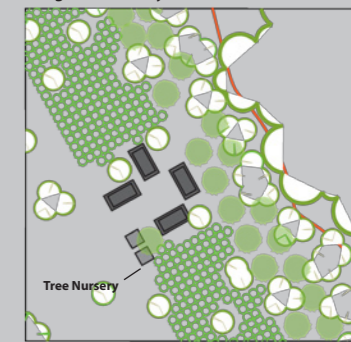
School Land (2 ha) adjacent to Park Boundary



Transitional Buffer Zone Diagram



Integrated Forestry Plan



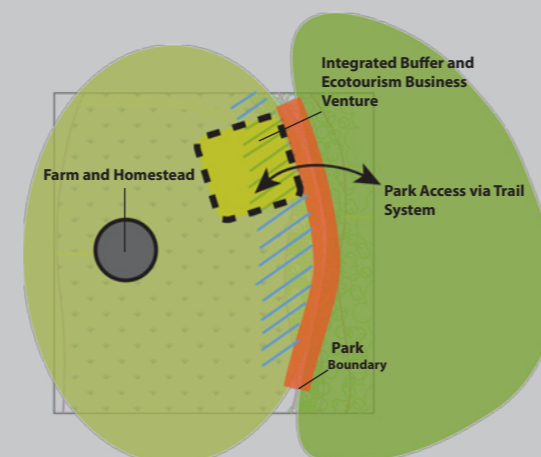
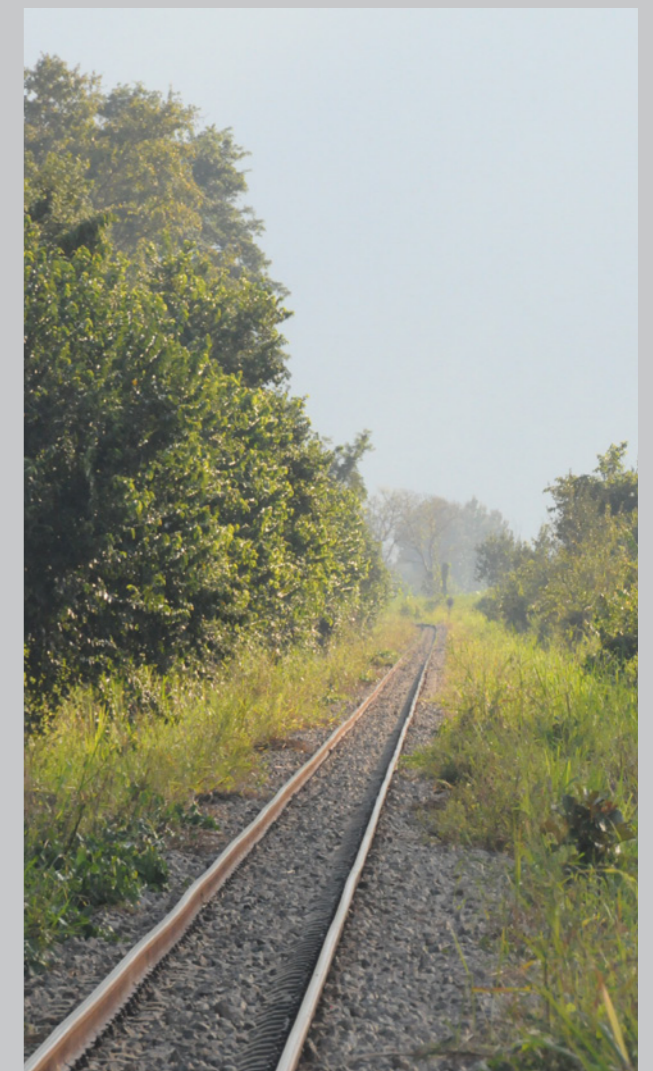
AGRICULTURE

Conditions

- Existing/maintained open space
- High economic value
- Food security
- Human-wildlife conflicts

Design Considerations

- Development potential (public lands, tourism)
- Buffers might not resolve human-wildlife conflicts
- Crop selection/heterogeneity
- Balance economic realities of production, marketing, and sale.
- Sustainable forestry



Farm and Homestead (4ha) Adjacent to Park

Conceptual Land Use Diagram

Conceptual Plan

