**Supplemental Resource**

**Risk Mitigation Analysis**

How to Use this Resource

This resource accompanies Phase 2, Task 2, Step 4 of the Model Guidebook for Business Enterprises. The results of the ESIA will likely reveal potential risks to the community that the business will have to address and mitigate before proceeding with the investment. When analyzing potential risks created by a prospective investment, begin by considering the categories of land uses included in the far-left column. Although some elements may not pertain to all investments, considering each will help the business identify a broad range of potential risks.[[1]](#endnote-1)

|  |  |  |  |
| --- | --- | --- | --- |
| **Type of Land Use Element** | **What is the investment’s effect on the land use element?** | **If the land use element is affected, what is the impact on community livelihoods?** | **How could we mitigate these potential impacts?** |
| **LAND TENURE**  **Ownership and Use**  Ownership and use by who? (women, men, pastoral communities)  Type of ownership: formal owners (titles), jointly owned by both women and men; informal owners; renters; squatters; etc.  **Settlements**  Homesteads with and without title deeds  Average size of homestead  Individual farms with and without title deeds  Average size of individual farms  Access to land for new settlement development  Types of houses  Construction materials  Toilet facilities  **Access to Land**  Who is able to access land?  Allocation by community leaders, family members, etc.  Inheritance  Purchase |  |  |  |
| **COMMUNITY FACILITIES AND INFRASTRUCTURE**  **Education**  Nursery, Primary, Secondary schools etc.  Location, acreage and level of service  **Health**  Dispensary, Clinics, Health center  Location, acreage and level of service  Major diseases, Status of HIV/AIDS  **Communication and Transportation**  Type and condition e.g. road, railway, water etc.  Availability of telephone services and networks  Location and level of service  **Energy**  Energy sources e.g. wood, charcoal, gas, electricity, fuel etc.  Accessibility and costs (affordability)  **Other Community Facilities**  Religious, Play grounds, Recreation, Cemetery, Commercial, Industrial, Judiciary etc.  Location, acreage and level of service |  |  |  |
| **AGRICULTURE**  **Main Agriculture Crops**  List main agriculture crops in the village (food and cash crops)  + average farm size per household  **Agriculture Areas and Acreage Estimates**  Location, names and areas for agriculture (under cultivation cycle)  **Farming System**  Mixed cropping (e.g maize/mtama)  Types of crops that are mixed and not mixed  Technology used  **Agricultural Calendar**  Agriculture seasons and crops grown in each season  **Use of Agricultural Inputs**  Type of agricultural inputs (artificial fertilizers, farm yard manure, compost manures, crop seeds, pesticides for controlling plant diseases and pest attack)  Average rate used per acre (rates used)  Price and availability for agricultural inputs  **Farm Implements and Technology**  Extent of use of hand hoe, draught animals, tractors, and other modern farm implements  Use of big tractors and small tractors “power tillers”  Rate/percentage of number of households that use farm implements  Which farm activities are done using different types of farm implements? (e.g tractors used for tilling only, hand hoe used for all farm activities)  Price and accessibility of farm implements (hand hoes and modern farm implements)  Farming (production) cost estimates per acre (major crops)  **Extension Services**  Availability of Extension Officers  Establishment of Farmers Field School – Class Farms (Mashamba Darasa)  **Agriculture Crops Production**  **Crops Storage**  Storage facilities for farm produce/ type of storage facility  Pest control for stored crops  **Market and crop prices**  Main buyers (for every crop)  Internal market  Market outside the village, region and country side  Establishment of Government Receipt Advance System |  |  |  |
| **LIVESTOCK KEEPING**  **Types and Number of Livestock**  Types present in the village  Indigenous breeds  Exotic breeds |  |  |  |
| **Grazing Areas and Livestock Water Points**  Grazing areas during rainy and dry season  Source of water for livestock and its areas in terms of acres/hactors  **Livestock Keeping Systems**  Zero grazing  Extensive grazing  Small ranching  Type (breed) and total number for each for every system mentioned above  **Livestock diseases**  Common animal diseases  Seasonal animal diseases  **Livestock Extension Services and Infrastructure**  Availability of Veterinary shops and medicine prices  Livestock extension workers/advisors  Livestock routes  Dipping troughs  Livestock market/auction  Availability of livestock treatments  **Livestock products and Markets**  Meat  Milk and rate of production per animal  Skin and hide  Prices for animal products |  |  |  |
| **FORESTRY**  **Types of Forests**  Natural forest and their acreage (Species and names)  Planted forests and their acreage (Species and names)  Reserved Forests (Species and names)  **Ownership and Uses of Forests** Who owns and use the forests? Types of possible use: Hunting,  Beekeeping, Wood, lumbering  Firewood, Charcoal, Building materials, Conservation, Sacrifices  **Harvesting of Forest Products**  Harvesters from within (households) the village  Harvesters from outside the village  Rate of forest products (firewood, timber, charcoal etc.) harvested  Forest production capacity (potentiality/survival/adaptation to climatic change)  Market and prices for forest products |  |  |  |
| **Village Physiography and Drainage System**  Physiographic appearance e.g. mountains/uplands, valleys, wetlands  Drainage  Existing rivers (seasonal or annual)  Where do they drain their water |  |  |  |
| **WATER SOURCES AND SUPPLY**  Water sources and bore holes  Rivers and other water bodies (permanent/seasonal)  Location and acreage  Use, capacities and ownership  Management measures of water sources  Water supply and distribution |  |  |  |
| **FISHING**  Fishing and fish processing areas  Location and acreage  Type of fishing (fishing gear)  e.g., fishing nets, fish hook (net size and type of fish hooks)  Types and harvest size of fishes  Number of households engaged in fishing  Fish markets and prices |  |  |  |
| **MINING**  Mineral types and areas/sites  e.g. Sands, stone quarries, pebbles/gravel, gold, etc.  Number of households engaged in mining activities  Ownership and management of mining blocks  Market and prices  Use of minerals (within and outside the village) |  |  |  |
| **WILDLIFE**  Wild life areas  Types and species  Wildlife protected areas neighboring the village  Use and management of wild life animals |  |  |  |
| **TOURISM**  Tourism sites within the village  Business related to tourism  Revenue from tourism activities  Social and cultural effects due to tourism |  |  |  |

1. Information was adopted from: National Land Use Planning Commission, *Guidelines for Participatory Village Land Use Planning, Administration, and Management in Tanzania: Second Edition* (Dar es Salaam: Ministry of Lands, Housing and Human Settlements Development: 2013). [↑](#endnote-ref-1)