

**INVESTMENT FOR THE  
MAHEL  
CATTLE/GAME  
RANCH**

***Document Prepared to  
Solicit Investment Bids  
from Business Parties***

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## 1. INVESTMENT DOCUMENT

### 1.1 Background

The communities in the Mahel Local Authority of the Magudu District, Mozambique, were awarded a land tenure certificate covering approximately 36 000 hectares of communal land in January 2002. The tenure award was based on the "right of occupation" provisions of the 1997 Land Law of Mozambique. The community will utilise a portion of this land for their own purposes, however they intend to make 12 980 hectares available to an investor. Their intention is to enter into some form of a contractual/business relationship with a private third party to develop the area for cattle and game production. Their intention is *to earn income from the project, attract investment, create jobs for people of the area, and improve their skills through the training and development of at least some members of the community.*

To achieve this, the community has embarked on this tender process to solicit bids from interested parties. To evaluate the bids the communities require more information from potential investors. The community has therefore delegated to a committee the tasks of facilitating and expediting all their dealings with any investor, and all liaisons must take place through this committee. Site visits may be arranged through the project team for investors to view the property, and to fully acquaint themselves with all the issues relating to the project. The community committee, or their representatives, will also be available to answer any questions.

## **2. DESCRIPTION OF THE AREA**

### **2.1 Natural resources**

The proposed project area was used for cattle grazing in the past, although both cattle and game numbers are very low at present. The area has very little infrastructure at present and this is limited to a few small dams, none of which hold water throughout the year especially in low rainfall years. The vegetation can be described as predominantly *Mopane* veld (77% of the area), although the southern areas consist mostly of *Acacia-Euclea* thickets (13,6%), and there are small patches of riverine vegetation (3,6%) and sandveld (5,8%). A more comprehensive report on the area has been completed by Estes (2002) which describes the vegetation in detail, and the recommended carrying capacity for the area.

There is some game in the area, but it is limited to a few resilient species such as bushpig, grey duiker and steenbok. Although some kudu and impala, as well as other species, may be in the area, their numbers, if any, are not known and can be considered to be extremely low and certainly insufficient to form founder populations. Any game would therefore need to be introduced if harvesting was to be pursued as an option. It is assumed that all game on the property, if game is introduced, will be 'owned' by the investor, unless an initial census is undertaken by the community. The details of this census would need to be agreed to between the community and the investor to ensure agreement on game numbers. Compensation for game present would also need to be agreed, prior to any census.

### **2.2 Water**

Surface water in the area is generally only available in the wet season, although a few pans maintain water for longer periods. However, this supply of water must be considered as unreliable and generally insufficient for cattle and most game species. Additional water would need to be supplied, and this is most likely to be available from underground sources. Utilization of this water source would require boreholes and pumps for extraction, but as there are no boreholes in the area at present, these would need to be drilled. No detailed survey has been undertaken of water sources, and the investor would need to evaluate these and provide for their own requirements. Additional information is available in the Estes (2002) report. The community has no objection to the drilling and equipping of boreholes in the area for use by the project. Recommended species and stocking levels.

### **2.3 Infrastructure**

The project area has no infrastructure. All facilities required for the project would therefore need to be brought onto the site, erected and maintained at the investor's risk and cost. There are a number of very rudimentary tracks traversing the area, but these would need to be upgraded and improved. The construction and development of any fixed infrastructure on the property will require the written consent of the community. These plans must detail what will be erected, its location, estimated cost, list of materials and a maintenance plan. In this regard, any developments that are planned for the property must be detailed in the tender submission, and those identified at a later date must be submitted to the community for approval. It is essential that the successful bidder should at least erect a fence around the property to secure their stock, and to prevent community livestock from accessing the property.

Any infrastructure erected on the property must remain on the property at the end of the agreement, and must also be maintained in working order for the duration of the contract. Proposals, which seek compensation for infrastructure erected, are unlikely to be accommodated.

### 3. PERMITTED ACTIVITIES

It is the Mahel community's intention to allow an investor to utilize the area for the operation of a cattle/game project. All activities must therefore be related to this enterprise.

#### 3.1 Game

The introduction and use of game is an option, which the investor may exercise. However the species must be limited to non-dangerous game and only the following species are deemed as being suitable, i.e. impala, warthog, nyala, kudu, zebra and giraffe. If additional species are to be introduced, permission must be obtained from the community, but these introductions must be limited to species which originally occurred in the area, and do not pose a threat to livestock, crops or human life. All game movements in and out of the project area must comply with veterinary and other legal or policy requirements, which may be applicable from time to time in the district. A register of all game movements, as well as census records or other activities, must be maintained and available for inspection. Copies of all permits and other documentation must be kept on site at all times. Game must be stocked according to the overall stocking plan and carrying capacity rates (including cattle) for the entire property.

#### 3.2 Cattle

Cattle may be introduced and managed within the project area. However, cattle must be fenced out separately from the community areas, and may not graze or wander away from the project boundary at any time. The management practices must comply with any veterinary restrictions, and/or procedures and policies, which may be applicable from time to time within the region, district or country. All cattle must be marked (brands or tattoos), identified and registers must be maintained or records kept on all the animals. Information recorded in the register must include inoculations and vaccinations etc. The community or their representatives may inspect these registers from time to time. In addition, a diary must be maintained of all herd management activities, including inoculations, dipping, branding etc. Stocking limits must be adhered to and the stocking rate must not be exceeded at any time (see point 3.1 above.)

#### 3.3 Length of fence

The perimeter of the proposed project area is 45.8 km. A boundary fence of at least this length will therefore be required. However, it is probable that diversion around terrain features and management considerations will necessitate in the total length of fence, thus cost estimates should be based on a 50 km fence line. For instance, it may be necessary to change the line of the fence at river crossings so that water flow is perpendicular to the fence line. It also may be desirable to build a small seclusion camp within the project boundaries for veterinary reasons, and to enclose management structures.

#### 3.4 Animal management

The stocking limits for the area have been calculated by Estes (2002) and further details can be found in the report. However, for purposes of clarity, a brief discussion of stocking rate is necessary:

The stocking rate for the property has been estimated at **8,39 ha to 1 Animal Unit (AU)**. This implies a total stocking of 1 547 AU for the area where an AU is equal to:

$$M^{0,75} \text{ divided by } 450^{0,75}; \text{ where } M \text{ is the mass of an animal in kg.}$$

Hence a 450 kg animal would be the equivalent of 1 AU, while a 225 kg animal would equal 0,5946 of an AU.

For the purposes of the calculations in determining the stocking rate for the area, the following assumptions have been used:

1. Of the total AU available, not more than 862 AU may be allocated to browsers, and not more than 685 AU may be allocated to grazers.

- a. The following ratios will be used to allocate graze and browse proportions between the different species:

Species	Graze percentage	Browse percentage	Average mass per head (kg)
<b>Cattle</b>	70	30	Actual mass, see below
<b>Zebra</b>	100	0	216
<b>Warthog</b>	100	0	30
<b>Impala</b>	50	50	41
<b>Nyala</b>	20	80	73
<b>Kudu</b>	0	100	140
<b>Giraffe</b>	0	100	828
<b>Sable antelope</b>	100	0	185
<b>Roan antelope</b>	100	0	220
<b>Blue wildebeest</b>	100	0	182
<b>Waterbuck</b>	100	0	160
<b>White rhino</b>	100	0	1500

- For determining the actual AU equivalents, the weights used in the table above will be applied to game species. Note that these are average weights of individuals from a 'representative herd' of the respective species and are not necessarily for an individual. For the cattle population, the actual weights of the individual animals will be used to determine their AU equivalents. The community and the investor will do this on a per head basis at least every quarter, or as agreed to. The total biomass, or live weight, of the cattle population will be obtained, and this will be determined from actual scale readings. The scale will need to be checked, and if necessary calibrated from time to time. Community members may request to be present at the cattle weighing.
- Game numbers will be determined at least every two years, this will be done by applying the technique described by Estes (2002), or by any other method which the community may agree to from time to time.

### **3.5 Vegetation management**

Wild herbivore populations will have to be monitored on an annual basis in order to determine population trends, and age: sex ratio data, which forms the basis for determining the following year's harvest. Estes (2002) recommends a combination of aerial and ground census techniques.

A fire management programme will form an essential part of the management practices of the project. Fire is a natural part of the savanna ecosystem, and portions of the land will require controlled burning from time to time according to the determined vegetation management objectives. Such a programme will require the delineation of land into blocks to be burnt periodically, and a system of firebreaks to prevent unintended fires will need to be maintained. Suitable spatio-temporal records of fires will have to be maintained to inform fire management decisions, and to prevent unsound burning practices. Fire must not be completely excluded from the project area as herbivore grazing, combined with an absence of fire, will ultimately lead to bush densification and a reduction in carrying capacity. A suitable burning programme is recommended by Estes (2002), and this must be followed at least as broadly defined. The total exclusion of fire for a period exceeding five years should not be permitted.

The structural and compositional status of both the herbaceous and woody plant layers of the project area must be monitored on a one- to three- yearly basis. This is necessary to determine the impact of herbivore management practices on the condition of the vegetation.

A controlled system of bush thinning is permissible if it meets management objectives, and has no lasting negative impacts on the health of the ecosystem. However, such an intervention is only

permissible where it meets herbivore management goals. It is recommended that any bush thinning be undertaken in a manner that first takes cognisance of the community's fuel and building timber needs. If there are any disputes over vegetation or game management practices, then the community and the investor must jointly agree on engaging the services of an expert(s), whose costs will be shared equally, and whose decision will be final and binding on both parties.

### **3.6 Other land use practices**

No other land-use activities must be permitted in the project area except those outlined above. Arable agriculture, either through dryland or irrigation, is not permitted. A small vegetable garden not exceeding 5 000 m<sup>2</sup> is permitted for household use only. Use of any of the natural resources for building purposes on the property is permitted, but only after written permission is obtained from the community. No other natural resources may be removed or sold from the project area without the community's written consent. The community may harvest wooden poles from time to time for building purposes, however this will be limited to less than 15% of the total area in any one year, and agreement must first be reached with the investor.

Control and use of all herbicides, pesticides, medicines and the like must comply fully with the manufacturer's specifications, and with the laws applicable from time to time in Mozambique.

### **3.7 Infrastructure**

Additional infrastructure may be erected on the property to facilitate the farming activities envisaged in this document. This can include (but is not limited to) the following: fences, cutlines, roads, houses, water points, dips, cattle handling facilities, workshops, stores etc. Any item, which is required, must be specified in the bid submission, with supporting details which must include the exact location, building plans and quantities of materials to be used. Any extensions or additions to these items of infrastructure will only be permitted thereafter with the written approval of the community.

## **4. SUBMISSION REQUIREMENTS**

All bidders must submit the following documents before the project deadline:

### **4.1 Business profile**

A brief resume of relevant experience in this industry. This must include at least five years experience in operating and/or owning an extensive beef cattle enterprise, preferably with game, in the Southern African environment. If the applicant has not operated such a facility, they must provide the details of a manager who will operate the project and such a person must have at least five years experience as described above. Experience in a similar environment will be an added advantage, as will the ability to speak Shangaan and/or Portuguese.

### **4.2 Investment requirements**

The business or individual must provide proof via a recognized banking institution of the following:

1. That they have sufficient financial resources, either directly or from secured loans or equity, to invest in a project of this nature.
2. That the banking institution is satisfied with their business plan, and their ability to either make the investment as set out in their business plan, or to service any loans which may be acquired through the bank.

#### **4.2.1 BUSINESS PLAN**

Full details of the business plan must be provided and these include the following:

1. Full and accurate costs of all developments and infrastructure including their timing must be submitted. All stock (cattle and game) must be itemized and costed.
2. A breakdown of the source of all funds must be included, and documentation must be supplied fully supporting the sources of funding. Own funds require supporting statements from banks.
3. A budgeted income and expenditure statement for the first five years must be supplied. This must be sufficiently detailed to supply information on the different sources of income, including

a stock flow model indicating calving and weaning percentages. Expenses must be sufficiently detailed to ensure that all the items required to secure projected income are adequately costed. Provision must be made for interest payments, taxes, and rentals or payments to the community. This must also include any assumptions that were made in the drafting of the business plan.

4. A stock flow model is required that will indicate the age and sex of the cattle production system, and including assumptions such as weaning % and cull mass. A game model must also be supplied indicating the numbers and costs of any introductions, expected growth rates and harvesting ratios and strategies.
5. A brief description of the type of enterprise that will be operated. This must include details of how the system will be managed, and should include the envisaged mating system, weaning policy and how the grazing will be managed etc.
6. The projected staffing requirements, including the number and grade of staff, salaries and other staff related costs.
7. A source list of supplies, i.e. those which will be sourced within Mozambique and those which will be imported.
8. Full details of any business partners and their relationship with the business.
9. Any specific conditions of the tender or bid submission. Generally these are not accepted and should be clarified before submitting a bid or tender.
10. Bidders must sign their proposal, and agree to the tender requirements and standard conditions of tender.

### **4.3 Community 'payments'**

Proposals must be submitted on how the arrangement with the community will be structured. ICC (2002) have proposed any of the following options:

- i) *"...limited company joint ventures bound by memoranda of understanding (the partners retain separate corporate/legal/asset holding identities);*
- ii) *limited companies with split shareholding (partners merge a portion of their respective assets)*
- iii) *limited companies with preference share options for one or both parties;*
- iv) *limited companies with buy-back, or buy-in options;*
- v) *joint-venture trusts;*
- vi) *direct concession agreements;*
- vii) *leasing agreements;*
- viii) *management contract arrangements;*
- ix) *supply, purchase and/or marketing management agreements;*
- x) *supply, purchase and/or marketing agreements;*
- xi) *ad hoc service and/or trading arrangements."*

The bidder must submit detailed plans as to how they wish to structure their involvement with the community. Any plans should be discussed with the project team, or with the community first, to ensure that proposals are acceptable. Specifically, if payments are to be made, or shares issued, any amounts must be clearly stated and quantified, and the timing of the flows is critically important.

The structure of the relationship with the community will influence the type of contract agreement that is entered into between the community and the investor. The investor must therefore prepare a draft, and submit this for discussion and possibly negotiation before the tender submission deadlines.

Alternatively, the community must state their preference for certain agreements, and should have draft agreements completed for these, and this may be the preferred route to follow.

## **5. REFERENCES**

**ICC.** 2002. Mozambique Transfrontier Conservation Areas Pilot and Institutional Strengthening Project: Creating the Framework for Private Sector Involvement in the Transfrontier Conservation Areas. International Capital Corporation, 31 page report.

**Estes, L. D.** 2002. Ecological and Technical Feasibility Analysis of the Proposed Mahel Game/Cattle Ranch. Management Systems International Report.