

EXAMEN DE LAS PROPUESTAS DE ENMIENDA A LOS APENDICES I Y II

Otras propuestas

A.Propuesta

Transferencia anotada de la población de Botswana de *Loxodonta africana* del Apéndice I al Apéndice II, presentada en cumplimiento de la Resolución Conf. 7.9, con un cupo de exportación y un período limitado de tiempo con arreglo a la Resolución Conf. 9.24, (4) (d), a fin de autorizar el comercio de existencias registradas de marfil de origen botswanés con un asociado comercial que no procederá a su reexportación, junto con la continua exportación de trofeos obtenidos en la caza deportiva.

La transferencia de la población de Botswana de *Loxodonta africana* del Apéndice I al Apéndice II tiene por finalidad únicamente permitir:

a) la exportación directa de las existencias registradas de colmillos enteros no trabajados a un asociado comercial (Japón), sujeto a los siguientes cupos de marfil:

1998:12,68 t

1999:12.68 t

b) el comercio internacional de trofeos de caza

c) el comercio internacional de animales vivos a destinatarios apropiados y aceptables.

B.Autor de la propuesta

Botswana, Namibia y Zimbabwe.

C.Justificación

1.Taxonomía

1.1Clase:Mammalia

1.2Orden:Proboscidea

1.3Familia:Elephantidae

1.4Especie:*Loxodonta africana* (Blumenbach, 1797)

1.5Sinónimos científicos:Ninguno

1.6Nombres comunes:Español:Elefante africano

Francés:Elephant d'Afrique

Inglés:African elephant

Setswana:Tlou

Herero:Ondjou

1.7Número de códigos:CITES:A-115.001.002.001

ISIS:5301415001002001001

## Observaciones

### Botswana se adhiere decididamente a la CITES

La Ley sobre la conservación de la vida silvestre y los parques nacionales, 1992, tiene como su quinto anexo, la Convención sobre el Comercio Internacionales de Especies Amenazadas de Fauna y Flora Silvestre, lo que hace la que Convención forme parte de la legislación nacional y, por ende, las disposiciones de la Convención están vigentes en el marco de la legislación de Bostwana.

### Declaración unilateral de Botswana

A continuación se enumera una lista de medidas cautelares que deberán tomarse en consideración al transferir una especie al Apéndice II a las que se ajusta Botswana en cumplimiento de lo dispuesto en la Resolución Conf. 9.24 (4) (d):

#### **a) Exclusivamente la población de Botswana**

Esta propuesta versa exclusivamente sobre la población de Botswana.

#### **b) Retiro de reservas**

Botswana retirará la reserva que formuló sobre *Loxodonta africana* en el curso de los 90 días a partir de la fecha en que las Partes en la Convención acepten la transferencia al Apéndice II.

#### **c) Un cupo para las existencias registradas de marfil en bruto únicamente**

El cupo de exportación se referirá únicamente a las existencias de colmillos enteros de marfil conservadas en un almacén central, registrado y administrado por el Departamento de Vida Silvestre y Parques Nacionales (DWNP), que proporcionará a la Secretaría de la CITES un registro de todos los artículos que figuran en dicho almacén al 10 de enero de 1997.

No se exportará marfil alguno de origen desconocido o de marfil que proceda de otros países.

#### **d) Marfil marcado mediante un sistema normalizado**

Con arreglo a la Resolución Conf. 9.16 (g), todos los colmillos enteros destinados a la exportación deben marcarse con punzones y las marcas deben corresponder con las que figuran en el registro (base de datos) donde se indica el lugar de origen.

El marfil de origen desconocido o procedente de otros países se mantendrá aparte de las existencias de Botswana para facilitar la inspección de la Secretaría CITES.

#### **e) Venta en un solo centro**

Todas las ventas de marfil y el empaquetado y envío ulteriores se efectuarán en una sola tienda de marfil de gobierno en la Sede de la Oficina del Departamento de Vida Silvestre y Parques Nacionales.

#### **f) Limitación del número de envíos de marfil**

Para facilitar la supervisión y el control se autorizarán únicamente dos envíos de marfil en el período de transferencia a un Apéndice de protección menor.

#### **g) Exportación directa de marfil a un solo país importador (Japón)**

En los permisos de exportación sólo se autorizarán los envíos a un país importador (Japón) y los embarques se efectuarán directamente sin tránsito salvo cuando sea imposible por consideraciones de orden geográfico.

#### **h) Controles internos y acuerdo de no reexportación del país importador**

El Grupo de expertos ha examinado los controles de comercio interno en Japón, así como su compromiso de que no procederá a su reexportación.

#### **i) Supervisión independiente**

El personal encargado de la observancia de la Secretaría CITES, o las Partes que de común acuerdo hayan designado Botswana y la Secretaría, podrán estar presentes en cualquier momento del proceso de venta, empaquetado o envío, a fin de supervisar el inventario y todos los detalles necesarios. Se podrá proceder a una inspección semejante cuando se descarguen los contenedores y se distribuyan los colmillos en el país de importación. Se garantizará a la Secretaría de la CITES el acceso al almacén central de marfil.

#### **j) Utilización de los ingresos derivados de la venta de marfil**

Todos los ingresos derivados de la venta de marfil se destinarán a las actividades de conservación, a saber, supervisión, investigación, aplicación de la ley y otras actividades pertinentes, así como a los programas de desarrollo de la conservación destinados a las comunidades rurales.

#### **k) Supervisión de los efectos de la transferencia a un Apéndice de protección menor**

Botswana desea hacer hincapié en el hecho de que no se conocen a ciencia cierta los efectos de una inclusión en el Apéndice I y, por consiguiente, es imposible determinar con cierto grado de confianza si la inclusión del elefante en el Apéndice I ha tenido efectos positivos o negativos para la conservación de la especie. De igual modo no es fácil determinar cuales serán los efectos de una transferencia al Apéndice II. De ahí que las Partes deban acordar el establecimiento de un mecanismo independiente para supervisar dichos efectos, con el fin de que en el futuro puedan adoptarse decisiones contando con mayor información.

#### Justificación de la presentación de esta propuesta

Es importante transferir la población de Botswana al Apéndice II para permitir el comercio controlado de productos ya que:

#### **a) La transferencia al Apéndice II redundará en favor de la conservación del elefante en Botswana**

El elefante africano está en competencia con la población humana a lo largo de Africa Meridional y las áreas protegidas son inadecuadas para garantizar la supervivencia del elefante, concretamente en las zonas áridas y semiáridas, donde los elefantes están a la merced de los recursos y espacio utilizados también por el hombre. Las variables climáticas y ambientales obligan a los elefantes a desplazarse y a aprovechar cualquier ocasión favorable, y por ello su confinamiento a las reservas es poco práctico y perjudicial para su supervivencia.

En la Política de Conservación de la Vida Silvestre de 1986 (Anexo I) se reconoce claramente que si no se asigna un valor a los recursos silvestres, los imperativos de otros usos de la tierra se opondrán categóricamente a la continua existencia de los recursos silvestres en números razonables. Si la población de elefantes de Botswana sigue aumentando, los conflictos entre el hombre y el elefante se agudizarán y serán contraproducentes para el propio elefante si las comunidades que comparten sus recursos con la especie estiman que su sustento se verá mitigado por un "recurso" que no les aporta beneficios directamente. Esta política, así como otras políticas gubernamentales, como la Política de Turismo (Anexo II) y la Estrategia Nacional de Conservación (Anexo III), está a favor de la utilización sostenible de los recursos naturales del país, inclusive el elefante, con miras a fomentar beneficios a largo plazo para Botswana. Tomando ésto en consideración y con arreglo a la política gubernamental, Botswana desea transferir su población de elefantes al Apéndice II.

Si las comunidades tienen el sentimiento de que la conservación no les aportará beneficio alguno, y nuestras comunidades son cada día más partidarias de esta opinión, será prácticamente imposible obtener su colaboración para lograr los objetivos de la conservación.

## **b) La transferencia al Apéndice II para ayudar a las comunidades rurales y fomentar programas de conservación rural en Botswana**

No sólo el comercio de productos de elefantes es fundamental para la conservación del elefante, sus hábitat y otras especies, sino que también lo es para satisfacer las necesidades humanas básicas en muchas zonas de África meridional. Como ya se indica anteriormente, los conflictos entre el hombre y el elefante se están agudizando y las comunidades comienzan a ver el elefante como una plaga.

Los programas de conservación basados en el desarrollo comunitario, como el Proyecto de gestión de los recursos naturales de Botswana, la conservación comunal en Namibia y CAMPFIRE en Zimbabwe constituyen la mejor solución para la conservación de la vida silvestre. Con la caza de elefantes realizada en 1996 en las zonas comunitarias se obtuvieron considerables beneficios para las comunidades. Una mayor utilización de los productos de elefante, como el marfil recogido en las zonas comunales, podría revalorizar al elefante a los ojos de dichas comunidades y modificaría su apreciación del mismo. Con estos beneficios devengados directamente a las comunidades, haría que éstas tomaran conciencia de que es importante que los elefantes sigan existiendo en número razonable.

## **c) Imperativos políticos de la transferencia**

Al transferir al elefante africano al Apéndice I, las Partes en la CITES consideraron la especie como un recurso y patrimonio mundiales. Ahora bien, las Partes, que se han arrogado las prerrogativas que incumben a la conservación del elefante, no responden ante nadie de su decisión ni de las consecuencias de su actuación. La responsabilidad a este respecto recae en los Estados del área de distribución, por ejemplo, Botswana, el cual corre a cargo de todos los gastos de la conservación del elefante en su país.

Conviene señalar que Botswana es un país democrático donde los ciudadanos eligen al gobierno y éste ha de responder de su actuación ante sus electores y atender a sus exigencias. El tema del elefante es una cuestión que ha ocasionado gran preocupación a los funcionarios elegidos, debido a las quejas a que ha dado lugar entre la población. Esta preocupación no obedece únicamente al temor a no ser reelegido, sino también a la situación de este recurso natural, en un momento en que los habitantes de Botswana están expresando claramente su insatisfacción con respecto a los actuales programas de conservación (véase el Anexo V). Hay que señalar que para que la conservación sea un éxito, esto debe suscitar la aceptación general de la población. Con esto en mente, el Gobierno de Botswana ha propuesto la transferencia de la población de elefantes al Apéndice II, con el fin de que los ingresos derivados del comercio controlado de productos de elefante puedan beneficiar a las comunidades y a la conservación de la especie.

En el Programa 21 y el Convenio sobre la Diversidad Biológica se señaló que todos los países tienen el derecho de utilizar sus recursos naturales para atender a sus intereses. Por consiguiente, Botswana solicita en su propuesta que se le conceda dicho derecho en lo que concierne a la población de elefantes del país.

## **d) Transferencia a efectos de control y fiscalización**

La actual prohibición del comercio de marfil no impedirá que prosiga el declive que se está registrando en las poblaciones de elefantes. De hecho, un comercio de marfil legalmente controlado contribuiría esencialmente a la sobrevivencia de la especie. Con la excepción de unos cuantos estudios de caso, no se han evaluado los efectos de la inclusión en el Apéndice I y se desconoce si dicha inclusión es la causa de la reducción de la caza furtiva. Huelga decir que después de la imposición de la prohibición en varios países disminuyó la caza furtiva, pero muchos aducen que la inclusión en el Apéndice I no ha tenido nada que ver con esto, señalando al respecto que muchos de los países más afectados adoptaron por primera vez medidas de fiscalización eficaces antes de la prohibición y que dos de los principales mercados de marfil desaparecieron antes de dicha prohibición, debido a una serie de eficaces campañas para el comercio de marfil emprendidas en Europa y Estados Unidos.

Aún cuando la inclusión haya tenido efectos positivos, cabe predecir que a largo plazo la situación se modificará. Es de esperar que la caza furtiva se reduzca, una vez que los participantes en el comercio ilegal ajusten sus prácticas a las nuevas circunstancias. Por otra parte, sigue habiendo comercio ilegal y demanda para el marfil, por lo cual la inclusión en el Apéndice I sólo sirve para frenar el comercio legal en beneficio del ilícito.

La propuesta presentada por Botswana para transferir su población de elefantes al Apéndice II viene acompañada de controles comerciales estrictos para tomar en consideración las preocupaciones de otros Estados del área de distribución. Por ejemplo, para impedir el "blanqueo" del comercio ilegal por medio del lícito, Botswana no venderá marfil a ningún país que no haya sujetado su comercio interno de marfil a estrictos mecanismos de supervisión y control. Asimismo, solo se considerará la comercialización de marfil del que se sepa que procede de Botswana.

#### **e) Imperativos económicos que aconsejan la transferencia**

Es indispensable desde el punto de vista económico reintroducir el comercio legal controlado de productos de elefantes, porque en caso contrario esta especie desaparecerá paulatinamente del continente africano. Todo recurso, incluso los animales silvestres que viven en poblaciones poco numerosas, se pueden beneficiar del comercio, si éste constituye un incentivo para invertir en la conservación de dichos recursos a largo plazo. La teoría económica demuestra que los recursos de muy elevado valor y bajo coste de la recolección, así como elevadas tasas de amortización, pueden consumirse hasta su extinción. Esto es lo que sucede con el marfil en muchos países que no invierten, como Botswana ha hecho, en la conservación del elefante. En efecto, fue este problema el que llevó en última instancia a la comunidad internacional a prohibir el comercio de marfil.

Dicho más simplemente, el problema constituido por la caza furtiva de elefantes en Africa obedeció en gran medida al hecho de que los elefantes eran valiosos, pero no lo suficiente para la población rural. En la actualidad, la población de Botswana está en condiciones de beneficiar de una parte significativa de los ingresos derivados de la utilización consuntiva del elefante, y estos beneficios podrían ser mucho mayores si esta especie se transfiriera del Apéndice I.

Como la compra y venta de marfil obedece a las fuerzas del mercado y si el aumento del precio del trigo o la carne de vaca o de pollo estimula la producción de estos artículos, cabría preguntarse por qué el caso del elefante sería distinto. Para que este fenómeno se registre en el caso del elefante, habría que establecer un régimen de propiedad con respecto a este recurso y dar a la población la posibilidad de beneficiar de su valor económico. En la mayor parte del continente africano los elefantes pertenecen al Estado y son considerados por la población rural como un recurso libre. En resumen, los elefantes ocasionan grandes costes, pero, como resultado de su inclusión en el Apéndice I, generan pocos beneficios.

Los costes directos que entraña la convivencia con el elefante, incluyen los daños a las cosechas y las lesiones y muertes de seres humanos que ocasionan. Entre los costes indirectos, hay que citar los costes de oportunidad que suponen los usos alternativos de la tierra y el daño que los elefantes infringen al medio ambiente. A estos costes, habría que añadir la pérdida de ingresos derivada la inclusión del elefante en el Apéndice I. Aparte de los usos consuntivos, es posible obtener ingresos del turismo a que da lugar el elefante, pero este ecoturismo no es posible en todos los casos y con frecuencia es perjudicial desde el punto de vista ecológico y social. Los usos consuntivos y la venta de productos derivados del elefante suelen ser preferibles por varios motivos.

La prohibición del comercio de cualquier producto para el que existe demanda, lleva al surgimiento de mercados alternativos. En consecuencia, es esencial restablecer un comercio legal controlado.

## 2. Datos biológicos

### 2.1 Distribución

#### **Histórica**

Campbell (1990) informa que Botswana contaba con una cantidad mayor de recursos hidrológicos superficiales en el pasado que en nuestros días, lo que explica que la distribución del elefante fuera mucho más uniforme (Figura 1), ya que esta especie depende de tales recursos. Basándose en los relatos de los primeros exploradores europeos, Campbell llega a la conclusión de que el nivel de uniformidad en la distribución del elefante llegó a un máximo a fines del siglo XVIII. El agotamiento de las fuentes de agua de Kgalagadi, ha expandido los asentamientos humanos, y en particular, la caza excesiva de elefantes para procurarse su marfil en el siglo XIX, contribuyeron a reducir a un mínimo la uniformidad de la distribución del elefante hacia 1890. Durante este período, se ha señalado que las poblaciones de elefantes se redujeron a una serie de pequeñas concentraciones integradas por unos cuantos miles de animales, que podían verse en la zona aledaña al Delta del Okavango, Chobe occidental y los ríos Linyanti-Kwando en el norte del país y el Bloque Tuli en el suroeste.

Child (1968) y Sommerlatte (1976) describieron a mediados de los años sesenta concentraciones de elefante a lo largo de la sección oriental del río Chobe y hacia el sur en el Distrito Chobe. Estos sugirieron que los elefantes reocuparon partes de su antigua área de distribución en Botswana septentrional, que habían abandonado a finales del siglo XIX.

#### **Actualmente**

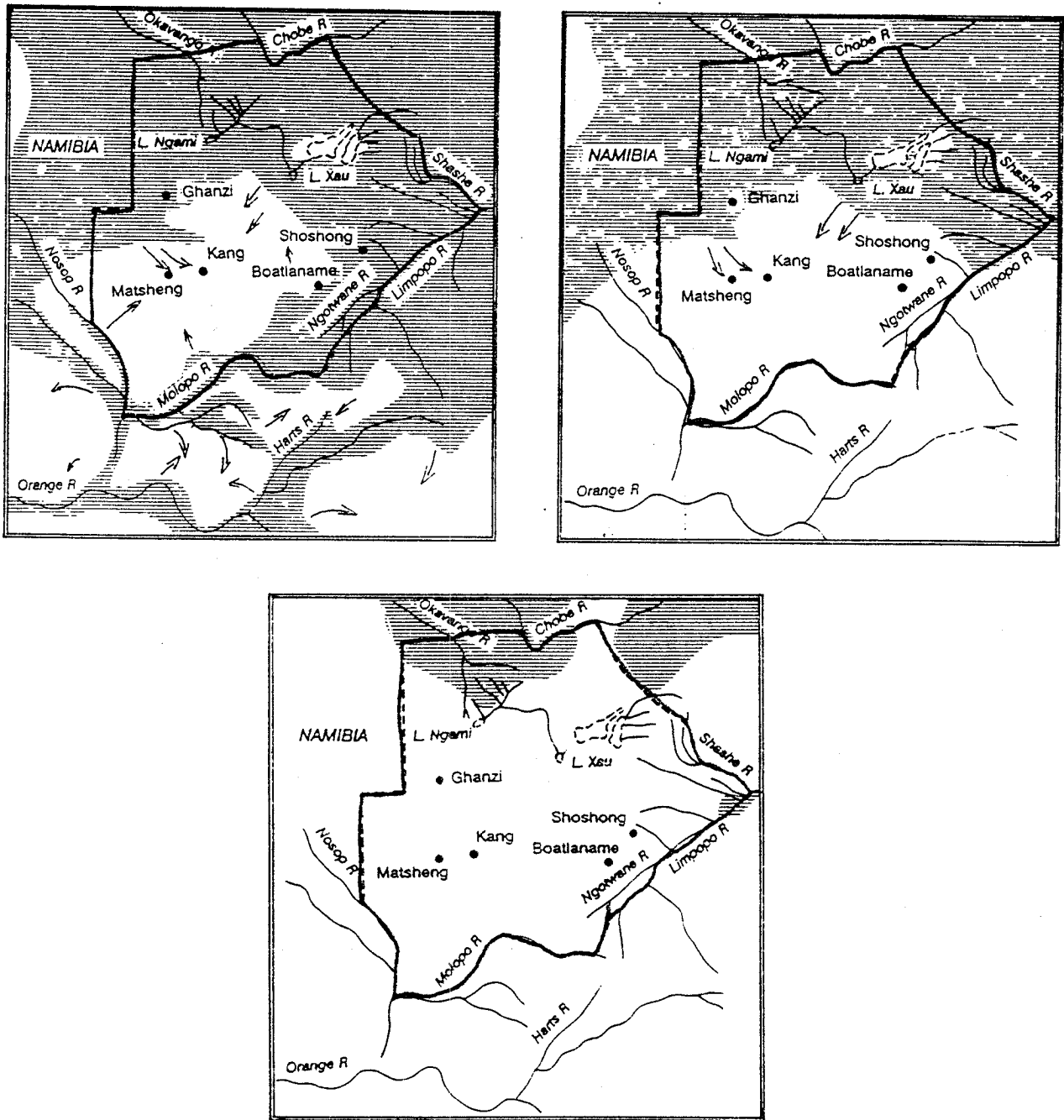
Las actuales pautas de distribución y estimaciones demográficas se han establecido, basándose en los reconocimientos aéreos que forman parte del programa nacional de censo de animales del Departamento de Recursos Silvestres y Parques Nacionales (DWNUP). Este programa se inició en 1987 y se ha ejecutado desde entonces. Estos estudios se han revisado bianualmente en el área de distribución del elefante hasta el presente año (1995), fecha en que se decidió que los estudios en la estación de lluvia se efectuarían cada tres años o en caso de que hubiera necesidad manifiesta de efectuarlos, ya que no proporcionaban información adicional.

Los reconocimientos realizados en los primeros años en el marco del programa de supervisión consistían en censos de muestras no estratificadas, recurriendo a vuelos de reconocimientos sistemáticos con una intensidad de muestreo de un 4% aproximadamente, anchuras de franja de observaciones de 200 m y espaciamiento transeccional de 6 pies de longitud. Este era el método que se empleaba para garantizar que la información de distribución no se sacrificara concentrándose en las partes más densamente pobladas del área de distribución del elefante. Por otra parte, es sabido que la densidad demográfica del elefante varía mucho en cortas distancias y períodos de tiempo. Antes del inicio del actual programa de supervisión no se contaba con información suficiente sobre distribución para realizar una estratificación significativa.

Con el tiempo se recogió suficiente información que permitió estratificar la zona objeto de estudio y obtener estimaciones de la poblaciones más precisas.

La distribución del elefante en la extensa parte septentrional de su área de distribución viene determinada por la disponibilidad de aguas superficiales. Durante la estación húmeda, los animales pueden beber en puntos de agua estacionales a lo largo de la totalidad de su área de distribución. Durante esta época del año, la distribución de estos animales es más uniforme (Figura 2). Esto no quiere decir que sea perfectamente uniforme, ya que existen ciertos puntos con mayores concentraciones de esta especie.

Figura 1



**Mapas de distribución de la población de elefantes**

Arriba, izquierda:

Distribución probable a fines del siglo XVIII

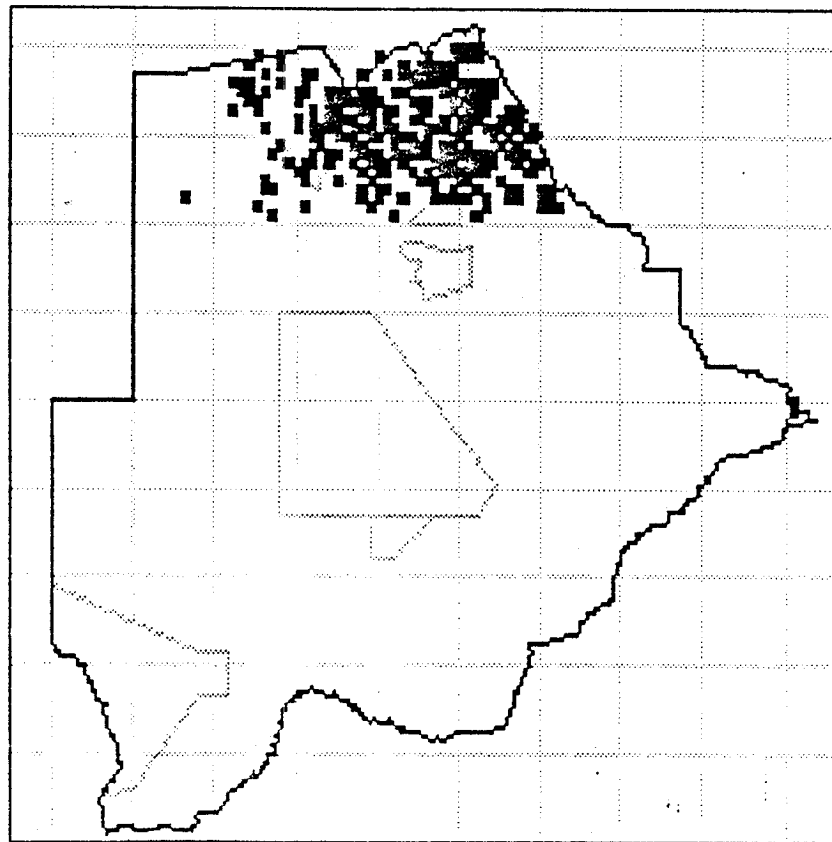
Arriba, derecha:

Distribución probable hacia 1850

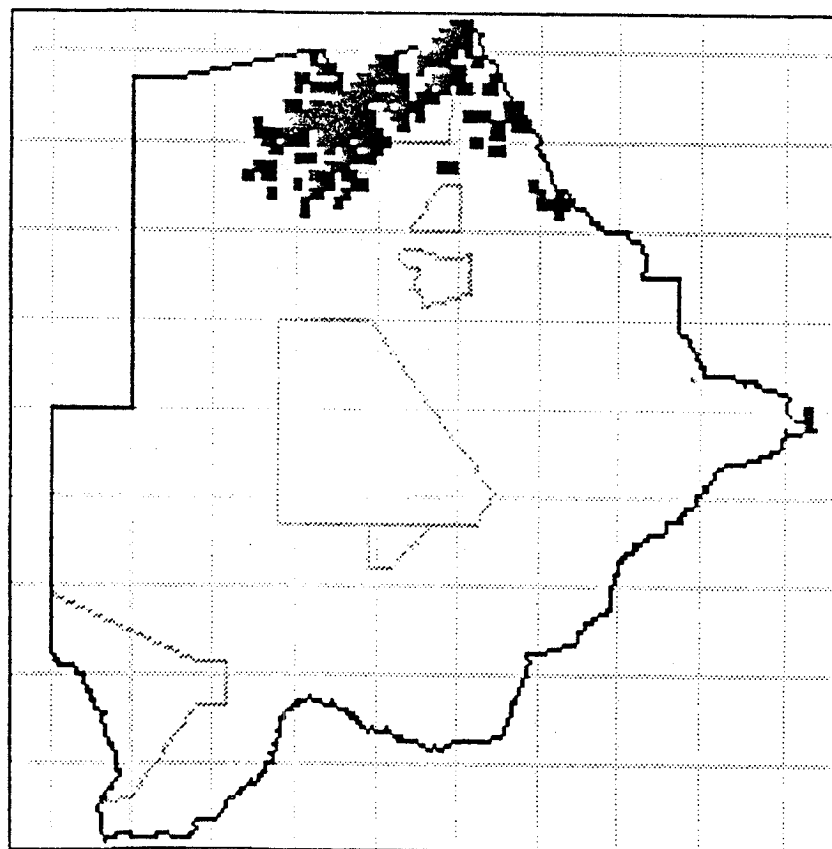
Abajo:

Distribución probable hacia 1890

Estos mapas se basan casi exclusivamente en los libros, documentos y diarios escritos por los primeros visitantes blancos de Botswana. Los límites de la distribución no son bastante precisos, ya que se sabe que una serie de pequeñas poblaciones de elefantes sobrevivieron en el Bangwaketse hasta después de 1890 y cerca de Shoshong hasta los primeros años del siglo XX. Sin embargo, las principales concentraciones se encontraban generalmente en las zonas indicadas.



**Figura 2** Elefantes, estación húmeda



**Figura 3** Elefantes, estación seca



Figura 4 Densidad de la distribución del elefante

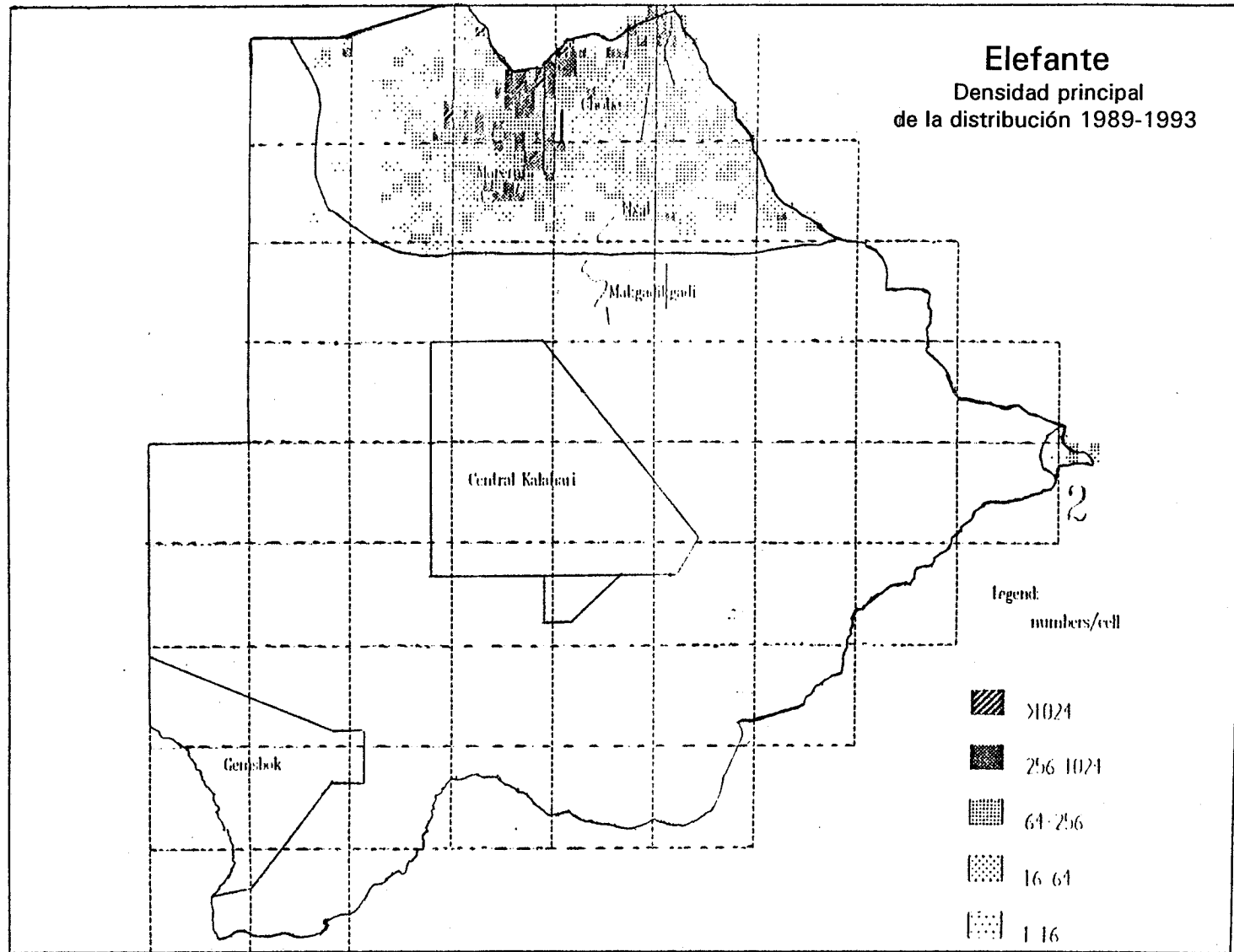
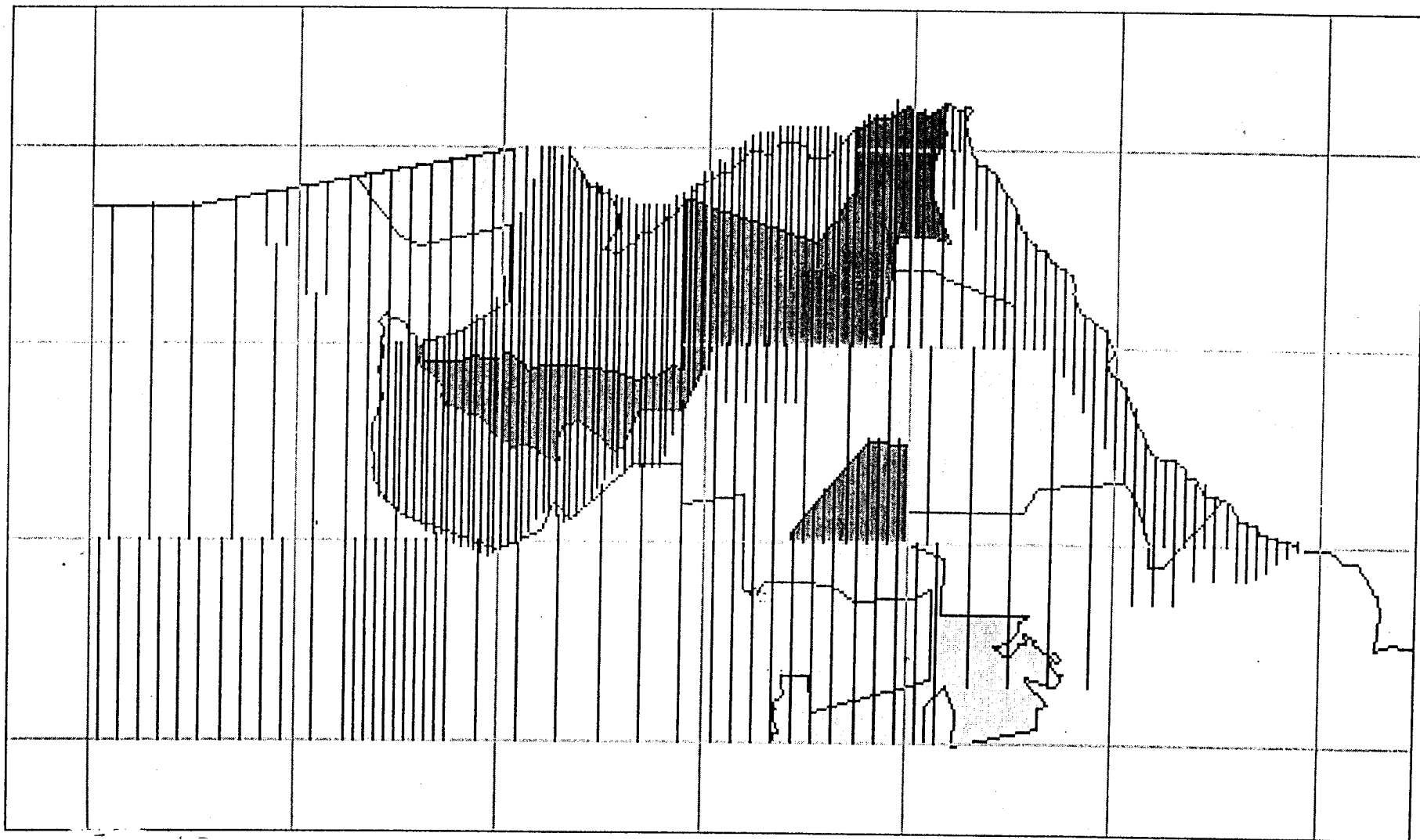


Figura 5 Estratificación en los reconocimientos en Botswana



De la distribución en la estación seca (Figura 3) se deduce claramente que los elefantes se encuentran concentrados en las fuentes de agua perennes de las cuencas hidrográficas del sistema hidrográfico Kwando-Linyanti-Chobe en la frontera con Namibia. Dicha concentración debe solaparse con la de Namibia actualmente. Hay pequeñas concentraciones a lo largo de la frontera con Namibia que probablemente se solapan con las poblaciones de ese país, ya que no hay realmente obstáculos contra el movimiento de dichos animales. Las demás concentraciones se encuentran en los límites occidentales del Delta del Okavango. Los elefantes se encuentran presentes en la Reserva de Caza de Tuli septentrional durante todo el año, aunque unos cuantos animales se desplazan regularmente al Círculo de Tuli de Zimbabwe, situado cerca de la Reserva.

En la Figura 4 se indica la densidad media para el período comprendido entre 1989 y 1993.

#### **Area de distribución del elefante**

Es difícil delimitar el área de distribución del elefante, ya que las tareas de distribución de los animales suelen contener en su periferia grandes zonas escasamente pobladas. Este fenómeno es difícil de medir, ya que se cuenta con muy poca información en materia de distribución en dichas zonas. Es probable, pues, que una serie de cálculos ligeramente diferentes den lugar a interpretaciones un tanto distintas.

El grueso de la población de elefantes de Botswana se encuentra al norte de los 20 grados de latitud sur y al oeste del margen oriental del sistema del Okavango. Durante los últimos años se ha informado de lo que parece una expansión hacia al oeste del área de distribución del elefante en el Delta del Okavango, fenómeno que se está estudiando en la actualidad. El área de distribución septentrional total se calcula en unos 80.000 kilómetros cuadrados. Este área incluye las zonas protegidas constituidas por el Parque Nacional de Chobe, la Reserva de Caza de Moremi y Parque Pannacional Nxai. Hay que añadir que las zonas protegidas se encuentran rodeadas por Areas de Administración de la Vida Silvestre (WMA), en que los recursos silvestres constituyen la utilización primaria de la tierra, y reservas forestales.

En la Reserva de Caza de Tuli septentrional, con una extensión de unos 550 kilómetros cuadrados, situada en Botswana sudoriental, existe una pequeña población. No obstante, se encuentran elefantes también en muy bajas densidades en una zona mucho mayor (10.000 km<sup>2</sup>) del subdistrito de Bobirwa, adyacente a Tuli septentrional. Esta última zona se descarta generalmente cuando se habla del área de distribución del elefante en Botswana sudoriental.

## **2.2 Poblaciones**

### **Estimaciones de la población de elefantes**

Tras la prohibición de la caza del elefante en 1983 (medida que se adoptó debido a la incierta situación jurídica de los trofeos de animales, ya que el tamaño de estos trofeos presentados para su registro por los cazadores se reducía, al parecer, con el tiempo) se han realizado estudios aéreos para supervisar la población de elefantes del país. En un principio, en estos estudios participaban investigadores privados junto con biólogos del gobierno. Desde 1987 a nuestros días el Departamento de Vida Silvestre y Parques Nacionales estableció un programa de supervisión más intensivo. Como se ha señalado antes, hasta 1995 este estudio se efectuó bianualmente durante las estaciones secas y de lluvia. A partir de 1996, se decidió que los estudios se efectuarían únicamente durante la estación seca, con un censo en la estación seca y de lluvias cada tres años o, en caso necesario, efectuar un reconocimiento durante la estación de lluvias antes del intervalo de tres años.

Como se señalara anteriormente, los estudios consistían en un principio en investigaciones de reconocimientos sistemáticos no estratificados. Una vez que se dispuso de mayor información sobre la distribución y densidad de la especie, el análisis de la población de elefantes se estratificó (Figura 5), lo que permitió muestrear un mayor número de zonas con mayor densidad de elefantes y permitió obtener intervalos de confianza más precisos para las cifras demográficas.

Como se ha dicho también antes, Botswana comparte ciertas poblaciones de elefantes con los países vecinos, Namibia y Zimbabwe, lo que ha despertado en ciertos medios la sospecha de que los tres países, especialmente Botswana y Zimbabwe contaban los mismos elefantes dos veces. Por esta razón, se ha aducido que las cifras demográficas de ambos países son artificialmente elevadas. Para responder a estas críticas y en un espíritu de transparencia, así como con el deseo de hacer reposar nuestros programas de administración en una sólida información científica, Botswana y Zimbabwe coordinaron sus estudios durante una serie de estaciones secas. Durante la estación seca en 1996 los dos países y Namibia efectuaron un censo coordinado en el marco del proyecto ELESMAF. Los resultados de estos estudios realizados de manera sincronizada despejan cualquier duda acerca de la validez de los resultados obtenidos en los tres países, ya que las cifras son conformes con otras estimaciones recientemente obtenidas.

### **Estado y tendencias de la población**

Según los cálculos realizados, la población de elefantes de Botswana está integrada actualmente por 79.471 +/- 12.715 animales, en comparación con 54.600 +/- 8.400 en 1990 (véase la Figura 6). La regresión de las cifras relativas al elefante a lo largo de los años se obtiene de la ecuación  $\ln y = 0,05582X - 100,177$ . La tasa instantánea de crecimiento es de 0,0572 +/- 0,0533. Esto significa un crecimiento de la población a un ritmo de aproximadamente 5,9% al año, pese a que el intervalo de confianza puede ser muy bajo, por ejemplo 0,42%. Pese a ello, se trata de un aumento significativo.

En consecuencia, la población de elefantes de Botswana no responde a los criterios biológicos necesarios para su introducción al Apéndice I, como se señala en la Resolución Conf. 9.24. Hay una clara tendencia ascendente en la población de elefantes del país y habría que señalar una vez más que el área de distribución de este animal en la parte septentrional de Botswana se ha ampliado hacia el oeste y cubre en la actualidad ciertas zonas del Okavango donde no se han visto elefantes en muchos años. Esto hace que ese área de distribución tenga en la actualidad una extensión aproximada de 80 000 kilómetros cuadrados. Aparte de su extensión, el área de distribución se caracteriza por su continuidad. No se trata, pues, de un área fragmentada con arreglo a los criterios biológicos del Anexo 5 de la Resolución Conf. 9.24.

### **2.3 Hábitat**

Dentro del área de distribución del elefante en la parte septentrional del país existen cinco tipos de hábitat generales, definidos por la especie arbórea dominante, a saber: tierras boscosas ribereñas (incluidos los ríos Chobe/Linyanti y el sistema del Delta), tierra boscosa de *Acacia*, tierra boscosa de *Colophospermum mopane*, tierra boscosa de *Terminalia/Burkea* y tierra boscosa de *Baïkeaia plurijuga*. Hay también una serie de diferentes combinaciones de estos tipos, aunque en ellos predomina una de dichas especies vegetales.

Desde la década de 1960 varios investigadores han expresado su preocupación acerca de las repercusiones del elefante sobre estos hábitat, en particular el ribereño (Child 1968, Sommerlatte 1976, Simpson 1978 y Moroka 1984). En la actualidad se está estudiando la interacción del elefante y su hábitat en Moremi y el Chobe. Como parte de su tesis doctoral un estudiante analizó el impacto de los elefantes en la vegetación de la Cuenca de Chobe y estamos en espera de sus conclusiones.

Como se ha observado que las elevadas concentraciones de elefantes durante la estación seca están modificando drásticamente la estructura de la vegetación ribereña, en el plan de gestión del elefante, que tiene el título oficial de "Conservación y gestión de los elefantes en Botswana" (Anexo IV) y que se aprobó en el Parlamento del país en 1991, se disponen entre otras medidas de administración, el establecimiento de puntos de agua artificiales con la idea de promover una distribución más uniforme de los elefantes. Asimismo, se emprenderá una entresaca de estos animales, para mantener su población al nivel de 1990 (54.600 individuos), en el marco del plan de administración precitado. La idea subyacente a estas estrategias es mitigar las repercusiones de los efectos del elefante para la vegetación.

**AERIAL SURVEYS SPECIES= Elephant northern population**

	X	x2	Y observed	@ ln (Y obs ln Y ^2	ln reg	Y calc	x*lny
Sep-89	1989.75	3959105	59896	11.00037	121.00803	10.8988	54111.61
Sep-90	1990.75	3963086	55834	10.93014	119.46792	10.95463	57218.24
Sep-91	1991.75	3967068	68771	11.13854	124.06702	11.01045	60503.23
Sep-92	1992.75	3971053	54627	10.90828	118.99065	11.06628	63976.81
Sep-93	1993.75	3975039	73033	11.19867	125.41014	11.1221	67649.82
Sep-94	1994.75	3979028	79304	11.28104	127.26195	11.17792	71533.7
Sep-95	1995.75	3983018	79480	11.28326	127.31197	11.23375	75640.57

!!!! NOTE !!!! \*\*\*Z=sum; S=stat. func.\*\*\*

!!!! NOTE !!!! \*\*\* n=number of surveys and needs to be updated each time \*\*\*

AVG	1992.75	AVG	11.10576
Zx2	27797396	Zy2	863.5177
(Zx)2	13949.25	(Zy)2	6043.554
Sxx	27795403	Syy	0.152885
n	7		
Zx	13949.25	Zy	77.7403

Sxy	1.610627
s2	0.030577
Zxy	154918.6

s= 0.174863

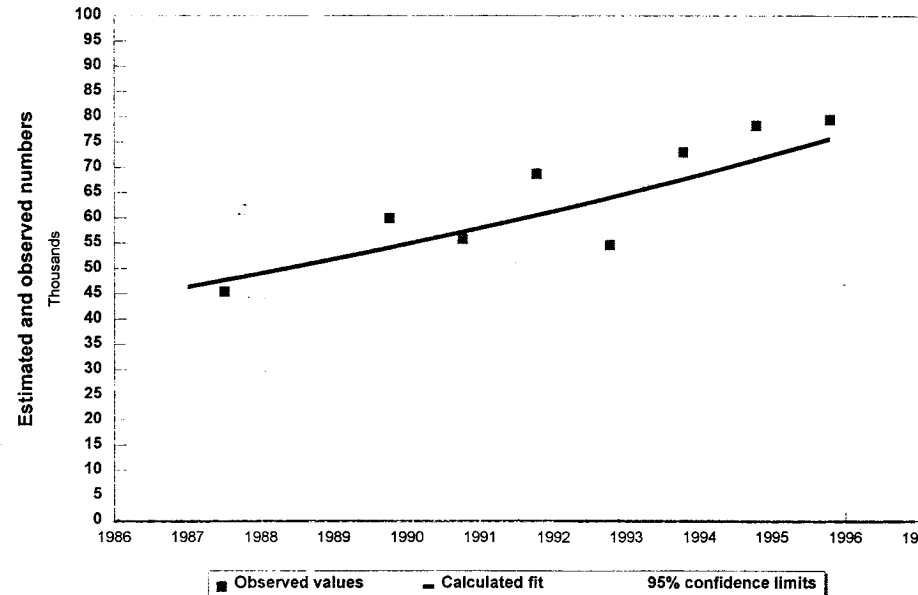
Regression Output: ln Y = 0.055824 X - 100.177

Constant	-100.177
Std Err of Y Est	0.133127
R Squared	0.48523 R:
No. of Observations	15 0.696585 p<0.05
Degrees of Freedom	9

X Coefficient(s)	0.055824
Std Err of Coef.	0.019166

x for graph	y for graph	ln y	CONFID	lower cl	upper cl	y obs
1987	46410.82	10.74529	0.149501	39966.12	13928.63	
1987.5	47724.49	10.7732	0.1495	41097.38	14322.88	45449
1987.75	48395.2	10.78716	0.1495	41674.96	14524.16	
1988	49075.34	10.80111	0.1495	42260.65	14728.28	
1988.5	50464.43	10.82902	0.1495	43456.85	15145.16	
1989	51892.83	10.85694	0.1495	44686.91	15573.84	
1989.5	53361.67	10.88485	0.1495	45951.78	16014.65	
1989.75	54111.61	10.8988	0.1495	46597.58	16239.71	59896
1990	54872.08	10.91276	0.1495	47252.46	16467.94	
1990.5	56425.25	10.94067	0.1495	48589.95	16934.06	
1990.75	57218.24	10.95463	0.1495	49272.83	17172.05	55834
1991	58022.38	10.96858	0.1495	49965.3	17413.38	
1991.5	59664.71	10.9965	0.1495	51379.58	17906.27	
1991.75	60503.23	11.01045	0.1495	52101.66	18157.92	68771
1992	61353.53	11.02441	0.1495	52833.89	18413.1	
1992.5	63090.15	11.05232	0.1495	54329.36	18934.29	
1992.75	63976.81	11.06628	0.1495	55092.9	19200.39	54627
1993	64875.93	11.08023	0.1495	55867.17	19470.23	
1993.75	67649.82	11.1221	0.1495	58255.87	20302.72	73033
1994	68600.56	11.13606	0.1495	59074.59	20588.05	
1994.5	70542.31	11.16397	0.1495	60746.7	21170.8	
1994.75	71533.7	11.17792	0.1495	61600.42	21468.33	78304
1995	72539.03	11.19188	0.1495	62466.15	21770.05	
1995.5	74592.26	11.21979	0.1495	64234.26	22386.26	
1995.75	75640.57	11.23375	0.1495	65137	22700.88	79480

**Population trends of Elephant in Botswana**  
northern population



Sin embargo, la entresaca no se efectuó nunca debido a la inclusión del elefante africano en el Apéndice I de la Convención, que se opone al comercio internacional de productos de este animal. En efecto, Botswana considera que si ha de emprender actividades de entresaca, debe permitírsele vender los productos derivados de dicha entresaca. Hay que señalar, además, que a los actuales niveles de población, el objetivo de llegar a 54.600 animales ya no es viable.

El suministro de agua se inició en 1995 con la perforación y dotación de 10 pozos en Savuti (y equipamiento de 10 pozos en las zonas de Savuti (2 pozos) y Nogatshaa (8 pozos) del Parque Nacional de Chobe. Estas perforaciones han suscitado opiniones divergentes. Se dice, por ejemplo, que se trata de un desastre ecológico. Para responder a estas críticas se ha emprendido un programa de supervisión, con el fin de revisar la estrategia de perforaciones, si se observa efectos adversos. Huelga decir que se plantea la posibilidad de que se produzca un rápido cambio de los hábitat en torno a los nuevos puntos de agua en zonas cubiertas esencialmente por arenas Kalahari. Otro factor que contribuye a la fragilidad general del hábitat del elefante es la naturaleza semiárida de Botswana. Se ha señalado que un elefante adulto consume durante 18 horas al día 70 kg de vegetación y 200 litros de agua. Esto explica que a largo plazo una población de elefantes creciente y muy densa pueda no solo poner en peligro su sobrevivencia sino también la fauna existente y la vegetación de los medios semiáridos de Botswana.

La actual densidad de elefantes es de unos 0,99 individuos por kilómetro cuadrado, pero durante las estaciones secas, el 75% de la población se concentra cerca de los puntos de agua en el 16% de la zona en que habita, por lo cual la densidad media pasa a ser de 4,65 animales por kilómetro cuadrado. En un medio similar de Zimbabwe se ha calculado que para preservar la cubierta vegetal madura de los bosques, habría que mantener la densidad total de elefantes en 0,25 animales por kilómetro cuadrado o menos de 1 por kilómetro cuadrado en las zonas secas (Martin y otros, 1989). Si bien en Botswana esta cifra no se ha calculado aún, en el futuro se obtendrá debido a las investigaciones en curso. Entre tanto, se aboga por la aplicación de un enfoque de administración adaptable en el marco del plan de administración del elefante.

En el Bloque Tuli, situado en la zona central oriental de Botswana, en la que las densidades de elefantes oscilan entre 0,75 y 1,0 animales por kilómetro cuadrado y son comparables a las registradas en Botswana septentrional, *C. mopanei* es la especie predominante en dichos hábitat. En consecuencia, preocupa el hecho de que las tierras boscosas se conviertan en zonas de matorral espeso.

#### 2.4 Tendencias geográficas

El área de distribución del elefante en Botswana se ha ampliado en los últimos años, fenómeno que se ha registrado especialmente en Botswana septentrional en que dicha área se encuentra aún en expansión, ya que los elefantes se están desplazando a zonas donde no vivían anteriormente, por ejemplo el Delta occidental del Okavango. En el área de distribución del norte del país hay muy pocos asentamientos humanos, motivo por el cual los elefantes pueden desplazarse sin problemas a nuevas zonas. Además, el establecimiento de puntos de agua artificiales ha contribuido a dicha expansión. El 99% de la población de elefantes de Botswana vive en una superficie de aproximadamente 80.000 km<sup>2</sup> en el norte del país. Esta zona es extensa y continua.

Hasta el momento no se han descubierto grandes cantidades de ganado en la zona de distribución de esta especie, se asiste, sin embargo, al fenómeno inverso, ya que los elefantes están penetrando en zonas destinadas a la ganadería, con los consiguientes conflictos. El establecimiento de proyectos de administración de recursos naturales por parte de las comunidades en zonas en la que ganadería es una actividad marginal sería de gran provecho para la conservación. En efecto, si las comunidades rurales se benefician como recurso de este animales, podrían admitir el hecho de compartir sus tierras con el elefante.

#### 2.5 Papel de la especie en el ecosistema

Los elefantes desempeñan una importante función a nivel de ecosistema y son capaces de modificar en gran medida su propio hábitat y, por tanto, el de otras especies. Los elefantes pueden desplazar rinocerontes y ungulados como el antílope roan cuando la cantidad de agua es limitada, ya que los elefantes dominan totalmente los puntos de agua durante las sequías.

En bajas densidades, los elefantes promueven la riqueza de las especies y la biodiversidad. Así, por ejemplo, en las zonas boscosas, estos animales (en bajas densidades) despejan matorral y abren veredas para otras especies, además de promover el crecimiento de hierbas. Ahora bien, en densidades más elevadas, estos animales destruyen el sotobosque y derriban árboles, lo que se traduce en un crecimiento desmedido de hierbas y modifica la composición de especies del ecosistema.

En el pasado la concentración excesiva de elefantes en las zonas protegidas ha afectado adversamente la biodiversidad de dichas zonas, razón por la cual habría que reducir dicha densidad adoptando medidas de administración tales como, entresaca, traslado, fuegos y suministro de agua en otras áreas, como se ha hecho en el Parque Nacional de Chobe.

En el norte de Botswana hay una sobrepoblación de elefantes lo que ha dañado considerablemente a la vegetación y ha redundado en la desaparición de ciertas especies vegetales. Por lo que hace al impacto adverso de los elefantes con otras especies, hay que señalar un arbusto raro que crece en Chobe (*Tragelaphus scriptus ornatus*) cuya situación es motivo de preocupación debido a los rápidos cambios que está experimentando su hábitat cada vez más reducido. El Parque de Chobe alberga también dos especies raras: *Hippotragus niger* y *H. equinus*. Se cree que el elefante, que tiene una gran área de alimentación, compite con estos animales en lo que concierne al forraje. Así, pues, una elevada población de elefantes puede menoscabar la situación de estas especies y de otras. Las aves, especialmente las que anidan en árboles, pueden quedar también afectadas por la transformación de los bosques en matorrales. Como la población de elefantes se recupera mucho más de prisa que los árboles y sobre la base del principio de precaución, es mejor reducir la población de elefantes que perder árboles maduros.

### 3. Utilización de elefantes

#### 3.1 Utilización nacional

La principal forma de uso del elefante en Botswana es la caza recreativa o deportiva. En 1996 se estableció un cupo limitado de 80 animales, que aprobó la CITES, y en 1997 éste pasó a 87 ejemplares. Esto se produjo después de una prohibición impuesta por el gobierno a la caza de elefantes, que entró en vigor a partir de 1983. La captura representa menos del 0,01% de la población total, razón por la cual no tendría ningún efecto para dicha población. La caza de elefantes es una fuente de ingresos considerables para las zonas de vida silvestre administradas por las comunidades. Este es un factor importante debido a que son esas comunidades las que soportan la carga de vivir en vecindad con estos animales. Los cazadores conservan como trofeos el marfil procedente de la caza recreativa.

Los colmillos de elefante disponibles en el almacén del Departamento derivan principalmente de las muertes naturales, así como de las administradas en el marco del control de animales problemáticos (PAC) y la confiscación practicada a cazadores ilegales. En la actualidad dicho almacén contiene existencias evaluadas en 29.432,5 kilogramos de marfil. De estos, 4.162,57 kilogramos, integrados por unos 1.543 colmillos y piezas de marfil, son de origen extranjero o desconocido. El marfil originario del país representa 25,27 toneladas.

Antes de la inclusión del elefante en el Apéndice I de la Convención, el marfil se vendía en subastas públicas y los ingresos obtenidos ingresaban en las arcas del Estado. Hay que señalar también, que la industria de caza en Botswana adquiría también una cierta cantidad de marfil y que no se importaba de otros países o reexportaba éste de Botswana.

#### 3.2 Comercio internacional lícito

La última subasta pública que se celebró en Botswana se realizó en 1985. En el Cuadro I *infra* se indica el marfil exportado de Botswana después de 1985 con arreglo a las estadísticas nacionales.

**Cuadro I.** Marfil exportado o reexportado por Botswana en 1986-89

Año	Cantidad
1986	14 colmillos
1987	20 colmillos con un peso de 233 kg
1988	0
1989	37 colmillos 27 piezas de marfil 1.538 kg de marfil

Desde la inclusión de la población de elefantes en el Apéndice I por la Conferencia de las Partes, Suiza, 1989, Botswana no ha vendido marfil en bruto en el mercado internacional.

### 3.3 Comercio ilícito

En la región se sigue registrando comercio ilegal de marfil, pero en pequeña escala. Los datos relativos a los casos descubiertos de caza furtiva de elefantes en Botswana de 1989 a 1995 se incluyen en el siguiente cuadro.

**Cuadro II.** Captura ilegal de elefantes en Botswana

Año	Número de personas detenidas
1989	92
1990	48
1991	23
1992	21
1993	20
1994	10
1995	16

El declive de la cantidad de elefantes capturados por los cazadores furtivos después de 1989 debe atribuirse al establecimiento en 1989 de la Unidad de Lucha contra la Caza Furtiva (APU) que es una dependencia muy especializada y capacitada del Departamento de Vida Silvestre y Parques Nacionales. La Unidad cuenta actualmente con 85 funcionarios y unos 18 vehículos y tiene acceso a dos avionetas Cessna 206 del Departamento y hasta fecha reciente a un helicóptero, que, desgraciadamente, se estrelló después de una misión contra la caza furtiva. En áreas tales como la Cuenca Hidrográfica del Okavango la APU dispone de barcos.

Se asigna un gran número de otros recursos a la APU para convertir a ésta en un órgano eficaz de fiscalización del Departamento. Está programado aumentar el personal y el equipo de la Unidad en el próximo período de planificación que se ha iniciado en 1997. Aparte de la APU, el Departamento cuenta con personal, en otras dependencias, que lucha contra la caza furtiva, aparte de desempeñar otras funciones. Esto hace que sean más de 300 funcionarios los que participan en las patrullas contra la caza furtiva en el área de distribución del elefante.



Los esfuerzos de la APU han sido y siguen siendo complementados por las actividades de la Fuerza de Defensa de Botswana (BDF), esto es, la policía del país y sus unidades de inteligencia. La BDF ha desplegado entre 400 y 600 agentes para combatir la caza furtiva en todo el país, y la mayoría de este personal se concentra en la zona de distribución del elefante. En una estrecha cooperación con otras dependencias de fiscalización extranjeras, por ejemplo, la Unidad de Protección de Especies Protegidas (ESPU) de la Policía de Sudáfrica ha contribuido a reducir la caza furtiva y el tráfico de marfil.

Se han impartido y siguen impartándose cursos para los Departamentos Interesados, por ejemplo el de Aduanas y Migración, para informar a sus funcionarios acerca de los trofeos de animales que pueden exportarse o importarse sin permisos. En estos cursos se proporciona también información sobre los diferentes aspectos de la CITES. Aunque es claro que esta formación puede mejorarse, no tenemos la menor duda de que contribuía a que los funcionarios de estos órganos estén más capacitados para afrontar el problema del tráfico de productos de animales, incluido el marfil.

Los esfuerzos combinados de los organismos de fiscalización del país han contribuido en gran medida a frenar la caza furtiva o mantenerla a nivel muy bajo, especialmente en el caso de especies como el elefante.

#### 3.4 Efectos reales o potenciales del comercio

Consideramos que la ausencia de comercio de productos de elefantes es la mayor amenaza que pesa sobre la sobrevivencia de este animales en Africa meridional. En Botswana las poblaciones de elefantes han aumentado, pasando de 34.000 a 79.000 animales, desde la prohibición de la caza de elefantes en 1983. Dicha prohibición tenía por objeto demostrar que Botswana era consciente de la conservación de su medio ambiente, al tiempo que se realizaron estudios en el país sobre la situación de este animal. Hoy se conocen las características de dicha situación y, además, se sabe que ha entrado en conflicto con el hombre, debido al continuo crecimiento de su población. Como se señalaba anteriormente, el área de distribución del elefante se está expandiendo hacia el Delta del Okavango, fenómeno que ha ocasionado la depredación de cultivos e incluso pérdidas de vidas humanas en dicha zona - las últimas noticias recibidas sobre el fallecimiento de una persona por estas causas en las afueras de la aldea de Samochina, mientras se encontraba recogiendo leña, es del 13 de agosto de 1996 (Anexo V). Las "Estadísticas" indican que únicamente en los años 1996 y 1997 siete (7) personas fueron muertas por elefantes. Asimismo, debe amputarse la pierna izquierda a una persona después de sufrir el ataque de un elefante. Hay que indicar, por otra parte, que durante ese período se mataron 85 elefantes que eran animales problemáticos y que se han abonado grandes cantidades en concepto de compensaciones debido a grandes daños ocasionados a los bienes. La población rural está perdiendo paciencia y es frecuente que acusen en los periódicos al gobierno por preocuparse más por los recursos silvestres que por los seres humanos. Es esta manera el sentir la que llevará inevitablemente a una actitud intolerante con respecto a la vida silvestre por parte de la población, pese a los esfuerzos desplegados por el gobierno para que la población los aprecie. Huelga decir que esto menoscaba la conservación a largo plazo.

Un gran número de personas considera que el comercio legal alentarán el ilícito. Ahora bien, el comercio ilegal sigue efectuándose y en caso de no ser reemplazado por el lícito, aumentará, lo que supone una amenaza real.

Los cuatro países de la Convención sobre la Administración de los Recursos Silvestres de Africa Meridional (SACWM) comprenden y apoyan a los Estados del área de distribución cuyas poblaciones de elefantes están justificadamente incluidas en el Apéndice I, razón por la cual dichos Estados desean mantener sus poblaciones en dicho Apéndice. De ahí que esta propuesta contenga las medidas necesarias para garantizar que los productos del elefante obtenidos por los cazadores furtivos no pasen a engrosar el comercio de Botswana.

#### 3.4.1 Especímenes vivos

En Botswana no se efectuó prácticamente ningún comercio nacional o internacional de elefantes vivos. No obstante, hace unos dos años se pidió información sobre la posibilidad de trasladar unos 100 elefantes a una reserva privada de Sudáfrica y en fecha reciente se recibió otra solicitud en este sentido en relación con el mismo número de elefantes. Hay que señalar, sin embargo, que hasta el momento no se ha trasladado a ningún espécimen vivo.

#### 3.4.2 Partes y derivados

Véase el párrafo 3.2 de este documento.

#### 3.5 Cría en cautividad o reproducción artificial con fines comerciales (fuera del país de origen)

En Botswana no hay ningún programa de cría en cautividad de elefantes.

### 4. Conservación y gestión

#### 4.1 Situación jurídica

##### 4.1.1 Nacional

Los elefantes viven en dos grandes regiones del país, a saber la que se denomina comúnmente el área de distribución en Botswana, y el Bloque de Tuli, esto es la Reserva de Caza Mashatu y sus alrededores. La población septentrional representa el 99% aproximadamente de la población total, mientras que la restante se encuentra en el Bloque de Tuli. El área de distribución septentrional tiene una superficie de 80 000 kilómetros cuadrados e incluye dos parques nacionales, una reserva de caza, varias zonas de administración de recursos silvestres y reservas forestales. Esta zona se encuentra dentro de lo que se denomina comúnmente la barrera del búfalo, que es una zona carente de ganado. Los parques nacionales proporcionan el nivel más elevado de protección legal, ya que en éstos no se matan elefantes, excepto en el caso en que los animales amenacen vidas humanas. Puede darse el caso, aunque hasta el momento no se ha hecho, de que se maten elefantes en los parques y reservas por razones de administración.

La Ley de conservación de la vida silvestre y parques nacionales de 1992 protege la población del elefante y, sin duda alguna, de otras especies silvestres. Se imponen penas muy estrictas a las personas que cacen ilegalmente elefantes. Todo indicaría que no hay necesidad de tomar más medidas que las ya adoptadas para proteger la población de elefantes del país, excepto en la esfera de la administración para cerciorarse de que el área de distribución del elefante no se ha destruido por la proliferación de este animal.

##### 4.1.2 Internacional

El elefante es una especie muy protegida, ya que se encuentra incluida en el Apéndice I de la Convención. Países de Africa meridional tales como Botswana, Malawi, Namibia, Zambia y Zimbabwe han formulado reservas contra dicha inclusión.

#### 4.2 Gestión de la especie

##### 4.2.1 Supervisión de la población

Como se señalaba en el párrafo 2.2, tras la prohibición de la caza del elefante (1983-94) se emprendió en el país un programa para supervisar la población de elefantes. Este programa fue ejecutado por un equipo muy calificado de 1987 a 1995 dos veces al año, durante las estaciones húmeda y seca, en toda el área de distribución del elefante al norte del país. En el marco de dicho programa se siguieron realizando estudios, aunque sólo una vez cada tres años durante la estación seca, a menos de que por circunstancias concretas se haga la necesidad de realizar algún que otro estudio adicional.

El proyecto ELESMAF contribuyó a la coordinación de estudios en zonas de distribución contiguas en Botswana, Namibia y Zimbabwe. Con anterioridad a dicho proyecto, el primero y el último de los países mencionados coordinaron censos en las estaciones secas para responder a las preocupaciones planteadas por el hecho de que la misma población de elefantes pudiera haberse contabilizado dos veces. Los resultados a los que se llegó eran plenamente conformes con los obtenidos antes de dicha coordinación, lo que indicaba que el movimiento transfronterizo de estos animales no permite dudar de la exactitud de los resultados de los estudios.

#### 4.2.2 Conservación de hábitat

Con arreglo a la Ley de conservación de la vida silvestre y parques nacionales de 1992, se declaró que el objetivo de los parques nacionales era "la propagación, la protección y la preservación de la vida animal silvestre, la vegetación y los objetos de valor geológico, etnológico, arqueológico, histórico o científico en beneficio, provecho y goce de los habitantes de Botswana". En un intento de conservar el hábitat del elefante y mantener la biodiversidad, el Gobierno de Botswana adoptó en 1991 una serie de medidas en el marco de una política denominada "Conservación y Gestión de los elefantes en Botswana". Uno de los objetivos de administración de dicha política fue mantener la población de elefantes en el norte del país a los niveles que había alcanzado en 1990, debido a la inclusión del elefante en el Apéndice I.

Los incendios son otro importante factor en la transformación del hábitat de Botswana septentrional. Para mitigar la propagación del fuego se están construyendo barreras contra incendios y se espera que la población rural participe en dichas obras. Sin embargo, aparte de niveladoras, el DWNP no cuenta con equipo suficiente para construir dichas barreras.

#### 4.2.3 Medidas de gestión

Actualmente, la caza deportiva en el marco de un cupo controlado limitado es la medida de administración más importante que se ha adoptado en Botswana para controlar la población de elefantes. Hay que señalar, sin embargo, que dicho cupo es demasiado reducido para frenar en grado apreciable el crecimiento de la población, que en la actualidad se sitúa en un 5% anual. En las cazas deportivas sólo se cobran machos adultos.

El control de animales problemáticos es otra de las medidas de administración, que se ha comenzado a adoptar como resultado del crecimiento de la población de elefantes y, en consecuencia, del mayor número de conflictos de estos animales y la población humana. Los elefantes que constituyen una amenaza para la vida humana y los bienes son eliminados.

Aunque en la política de administración del elefante se ha previsto proceder a la entresaca anual de elefantes, esto no se ha hecho debido a la inclusión de dicha especie en el Apéndice I de la Convención.

### 4.3 Medidas de control

#### 4.3.1 Comercio internacional

Se han establecido los siguientes mecanismos para controlar el comercio de trofeos de elefante y otros productos silvestres.

En los puntos de exportación los funcionarios de aduanas verifican los permisos CITES y otros permisos de importación. En caso de duda, se ha encargado a las Aduanas que se pongan en contacto con los funcionarios del Departamento de Vida Silvestre y Parques Nacionales para procurarse asistencia e información especializada.

Se ha impartido un curso a los funcionarios de aduanas de todo el país sobre los procedimientos CITES. Durante el curso se señaló que los funcionarios de aduanas pueden confiscar trofeos para su ulterior identificación por el personal del DWNP. Se están organizando cursos similares para otros departamentos interesados.

La Oficina Central de DWNP, que tiene su sede en Gaborone, expide permisos en relación con el comercio de marfil en bruto. Tres dependencias locales del DWNP, situadas en Francistown, Kasane y Maun, están facultadas para expedir permisos de exportación con respecto a los trofeos procedentes de la caza recreativa de elefantes.

El Departamento de Salud y Producción Animal expide certificados de salud de veterinaria tras presentación por parte de los interesados de un permiso CITES válido de DWNP.

Está previsto establecer mecanismos de control regional con arreglo a las decisiones de la Comisión Sudafricana de Vida Silvestre.

#### 4.3.2 Medidas internas

Botswana marca su marfil con arreglo a las disposiciones de la Convención, utilizando un código de dos letras, al que se añade una tercera, que corresponde a un código interno que representa la región de origen del marfil dentro del país. Por ejemplo, BWJ y BWK, indican que el marfil procede de Maun y Kasane, respectivamente. El marfil se marca inmediatamente después de haber salido del almacén central y como máximo dentro de un plazo de dos semanas a partir de dicha fecha.

La estricta Ley de conservación de la vida silvestre y parques nacionales de 1992 impone sanciones estrictas para disuadir la delincuencia. Con arreglo a la legislación de Botswana, se impondrá una multa de 50.000 libras y una pena de prisión de hasta diez (10) años a cualquier persona condenada por el delito de posesión ilegal o comercio ilícito de marfil.

#### 5. Información sobre especies similares

El elefante asiático (*Elephas maximus*) es el otro proboscidea que sobrevive aún en el mundo. Este elefante está incluido también en el Apéndice I de la Convención. Los autores de la propuesta consideran que, habida cuenta de las medidas cautelares precaución adoptadas, no es probable que la transferencia del elefante de Botswana al Apéndice II menoscabe la sobrevivencia del elefante asiático.

#### 6. Comentarios de los países de origen

Comentarios de otros Estados del área de distribución, como resultado de las consultas celebradas.

Botswana, Namibia y Zimbabwe presentan conjuntamente la presente propuesta. 31 Estados del área de distribución africana se reunieron en Dakar, Senegal, para discutir la situación general del elefante africano. Durante dicha reunión, Botswana, Namibia, y Zimbabwe presentaron sus propuestas de transferencia de sus poblaciones de elefante con propósitos de información a los demás Estados del área de distribución.

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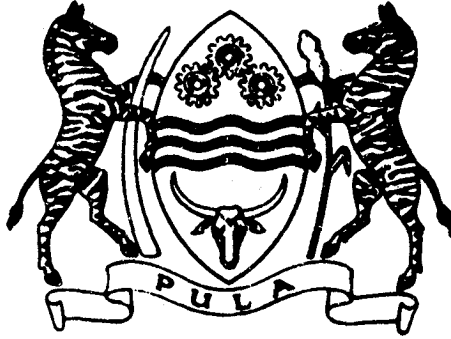
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# ANNEX I



**REPUBLIC OF BOTSWANA**

**GOVERNMENT PAPER NO. 1 OF 1986**

## **WILDLIFE CONSERVATION POLICY**

(A Paper on the Utilization  
of the Wildlife Resource  
of Botswana  
on a  
Sustainable Basis)

**JULY, 1986**

**(As approved by the National Assembly on 10th July, 1986)**

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## WILDLIFE CONSERVATION POLICY

### 1. INTRODUCTION AND BACKGROUND

1.1 Botswana, unlike most countries in the world, still possesses many species of wildlife in considerable numbers. This has come about largely because of the earlier decisions of Government to recognize wildlife as an important national resource that must be conserved. As a consequence, National Parks and Game Reserves covering about 17 percent of Botswana's total land area were established at independence.

1.2 In recent years Botswana has experienced increasing human population pressure. This has led to attendant developments such as a commercial livestock industry, arable farming and other activities that claim their share of the available land. The growth of population has particularly affected the mobility of wildlife. The absence of game in areas where it was once plentiful is apparent.

1.3 Traditional hunting for Botswana is no longer as readily available as it once was. To a considerable extent, hunting can now only be undertaken by the more affluent members of the population. They alone can afford the four-wheel drive vehicles and aircraft necessary to reach game. Large herds of game can, however, still be found in the National Parks and Game Reserves. Significant game populations can also be found in areas that have been identified or declared as "Wildlife Management Areas", a term that is defined later in this Policy Paper. In addition, there are freehold and lease hold farms that are perimeter fenced. These farms can provide suitable game camps for those owners who choose to use them for that purpose.

1.4 In periods of good rains there is usually an excessive build-up of herds, especially of the wildebeest, hartebeest and zebra species. Many of these animals die when periods of drought occur. This certainly was the case in the successive years of extreme drought that took place in the first half of the nineteen eighties. Even animals in National parks and Game Reserves were hurt by the drought. This has meant that a significant fraction of the wildlife stock has gone to waste. As a consequence, the country has not been securing the economic benefits from wildlife that would accrue from the proper management of the resource.

1.5 Research results indicate that Botswana could be deriving far more economic value and employment without depleting the resource. In fact, an efficient use of our wildlife could be the best way of ensuring its protection. A clearly defined and effectively implemented policy is needed that will encourage the proper management and better utilization of our wildlife.

1.6 The measures set forth in this Policy Paper are designed to ensure a continued harvest from Botswana's wildlife resource and a fair distribution of that harvest. The needs of rural people are given particular attention. The large herds of game found in the National Parks and Game Reserves are, of course, protected from hunting. Some of these animals, it must be recognized, filter into the surrounding areas where hunting is permitted. Some part of the resource is thus rendered accessible to subsistence hunters. This Policy Paper is primarily addressed to the issues involved in the utilization of the wildlife resource in these areas.

1.7 Wildlife conservation is, in the view of some, not without its disadvantages. It necessarily entails the introduction of restrictions on hunting. Poaching, both by traditional hunters and by those engaging in illicit hunting on a commercial basis, has been increasing in Botswana. To be effective, conservation measures must be both capable of enforcement and be fully enforced. These issues also fall within the ambit of this Policy Paper.

1.8 The objective of this Policy paper is therefore, to encourage the development of a commercial wildlife industry that is viable on a long-term basis. This will serve to create economic opportunities, jobs and incomes for the rural population in particular and the national economy in general. This can best be done by ensuring that the management of the resource on a sustained utilization basis forms an integral part of Botswana's Wildlife Conservation Policy.

### 2. THE PLACE OF WILDLIFE IN LAND USE PLANNING

2.1 Botswana's wildlife resource must be seen in terms of its potential contribution to the economic wellbeing of the nation as well as in terms of its heritage and aesthetic value. Land use planning must accord the wildlife resource a position that is commensurate with its considerable potential economic significance. Without this recognition, the imperatives of other programmes, such as the expansion of the livestock industry under the Tribal Grazing Lands Policy (TGLP), mineral development and the encouragement of arable farming, might inadvertently threaten the long-term survival of wildlife as a major resource.

2.2 This policy statement therefore emphasizes the role that wildlife utilization and the proper management of Botswana's wildlife habitats must play in the management of our land and range resources in the context of the country's national conservation strategy.

### 3. THE WILDLIFE AREAS

3.1 Botswana's still considerable reservoirs of wildlife are found not only in the National Parks and Game Reserves. As mentioned earlier, game is also found in some communal areas and on freehold and leasehold land where it has been able to proliferate by virtue of varying degrees of protection from interference by human beings and human occupations. It is the intention to establish another type of land-use, in what are to be termed Wildlife Management Areas, for some of these game rich habitats that lie outside the Parks and Reserves.



## 3.2 NATIONAL PARKS AND GAME RESERVES

3.2.1 Botswana has eight National Parks and Game Reserves (Chobe, Nxai Pan, Gemsbok, Moremi, Central Kalahari, Khutse, Makgadikgadi Pans and Mabuasehube). There are also small sanctuaries or educational reserves at Mogobane Dam, Bathoeng Dam, Maun, Gaborone and Otse. National Parks and Game Reserves total over 100,000 square kilometers or 17 percent of the national territory. The primary purpose of the Parks and Reserves is the total preservation, as distinct from conservation, of all resources. Their secondary purpose is to encourage tourism attracted by the abundant wildlife and wide range of scenic habitat.

## 3.3 WILDLIFE MANAGEMENT AREAS

3.3.1 The concept of Wildlife Management Areas (WMAs) arose from Botswana's Tribal Grazing Land Policy (TGLP). The TGLP Paper (Government Paper No. 2 of 1975) directed that there would be three zoning categories for land, namely: Commercial Farming Areas, Communal Grazing Areas and Reserved Areas. The Paper divided the Reserved Areas into two categories: areas reserved for future use by those with only a few cattle and areas reserved for alternative uses such as wildlife, mining and cultivation. The Wildlife Management Areas can therefore be considered as a form of zoning of land for wildlife utilization within the Reserved Areas category as differentiated by the TGLP.

3.3.2 Extensive consultations have and are being undertaken with various Land Boards, District Councils and other appropriate bodies such as the Natural Resources Technical Committee (NRTC), the Land Development Committee (LDC) and the Agricultural Resources Board (ARB). These consultations, which dealt with the concept and location of the Wildlife Management Areas, culminated in the enactment of enabling legislation as an amendment of the Fauna Conservation Act (Cap. 38:01). The inauguration and implementation of the concept of Wildlife Management Areas was incorporated in National Development Plans V and VI.

3.3.3 During NDP V, the zoning of some Wildlife Management Areas was undertaken. Certain areas were set aside as Wildlife Management Areas in some parts of the country such as in the Kgalagadi, Ghanzi, Ngamiland, Southern and Chobe districts. Some of these areas were approved by the respective Land Boards in consultation with the respective District Councils. The process of consultation continues in other areas.

3.3.4 The overall area identified at this stage as suitable for the establishment of Wildlife Management Areas constitutes about 20 percent of the land in Botswana. The National Parks and Game Reserves and the proposed Wildlife Management Areas together would constitute about 37 percent of Botswana's territory or over 200,000 square kilometers.

3.3.5 For those Wildlife Management Areas that have been identified and approved by the appropriate Boards and Councils the following steps are required:

- establish the legal status by publication of the boundaries in the Gazette;
- develop and legislate appropriate WMA Regulations;
- draft a management plan for each area;
- implement a policy of sustained wildlife utilization appropriate to each designated area.

3.3.6 As indicated in NDP VI and elsewhere in this Policy Paper, the wildlife utilization plans will include hunting, game ranching and farming, live capture and venison processing. Regulations will address themselves to such matters as the control within WMAs of hunting, capturing, photography, filming, research, entry, erection of buildings, grazing and the keeping of livestock.

3.3.7 Existing settlements and livestock grazing will be accommodated by defining their physical extent. This will be done in consultation and agreement with the appropriate district authorities such as the Councils and Land Boards. These organizations will be involved in the management of the WMAs in their respective districts.

3.3.8 The Wildlife Management Areas are still rich in wildlife. Some, such as those in the Okavango, are unique and important for tourism development. Wildlife utilization and management will be the recognised primary form of land use in these designated Areas. WMAs should, however, be allocated to land that has been determined to be marginal. In some of the WMAs the exploitation of wildlife, including tourism, may well yield a higher economic return to the nation than some of the more conventional industries, including agriculture.

3.3.9 As discussed in section 7.0, various forms of wildlife utilization will be encouraged, new forms will be introduced as appropriate, and the existing uses of hunting and tourism will be continued. The policy aims especially to promote commercial utilization of wildlife while at the same time assisting the poorer rural dwellers to increase their incomes and hence improve their standard of living. In many remote areas, wildlife is the only resource available.

## 3.4. RELATIONSHIP BETWEEN WMAs, NATIONAL PARKS AND GAME RESERVES AND CONTROLLED HUNTING AREAS

3.4.1 Wildlife Management Areas will differ from National Parks and Game Reserve in that Parks and Reserves are, as previously stated, primarily preservation areas: total preservation of the wildlife resource is practised. In WMAs, on the other hand, sustained wildlife utilisation will be actively encouraged. Some

WMAs adjacent to NPs/GRs will act as buffer zones to prevent conflicts between the latter and areas of more intensive agricultural uses. Others will provide protection to migrating wildlife by safeguarding migratory corridors.

3.4.2 The existing Controlled Hunting Areas (CHAs) will also differ from WMAs. While controlled hunting will, of course, be allowed in CHAs, there will be no control over other activities, even if they are detrimental to the wildlife populations. In WMAs, wildlife utilization will be the primary land use. Other land uses will be permitted only if they are compatible with it. Controlled Hunting Areas are not a form of land use. Wildlife Management Areas, on the other hand, are a form of land use as are Commercial Areas under TGLP, for example.

3.4.3 When WMAs are gazetted, some existing Controlled Hunting Areas boundaries may have to be realigned to correspond with WMA boundaries. In many cases, controlled Hunting Areas will fall inside WMAs. Quotas formulated for WMAs will be shared between CHAs falling inside any such specified WMAs. CHAs falling outside WMAs will continue to have independent hunting quotas. Government assistance in the development of wildlife utilization will be concentrated in the WMAs.

3.4.4 With all the Parks, Reserves and potential WMAs, there is a general problem of demarcation and identification of boundaries. This must be resolved if the areas are to be effectively protected and managed. Since some of the potential WMAs may overlap into existing hunting concession areas this, too, must be resolved. Demarcation on the ground (e.g. cutlines, and signposting) will be necessary to identify the boundaries of the various areas.

#### 4 WILDLIFE MIGRATORY PATTERNS

4.1 Our knowledge of wildlife movements and habitats has increased considerably over the past twenty years. Wildlife in Botswana is largely migratory: animals move in seasonal patterns and sequences. We now know that these migrations are essential because the parks and reserves are not self-contained units. They depend on "rest periods" created by outward migrations of some of the wildlife populations.

4.2 For instance, during the wet season zebra and buffalo move en masse out of the Chobe — Moremi area in the direction of the Makgadikgadi Pans. The zebra migrate the full distance; buffalo tend to spread out. Wildebeest and hartebeest tend to move into the depths of the Central Kalahari. In the dry season, animals move outward from the Central Kalahari towards the river systems of the North-east and the zebra and buffalo move back to the Chobe — Moremi.

4.3 Recent developments on the periphery of wildlife areas, such as human and livestock settlement, disease control cordon fences have had the effect of impeding the free migration of wildlife. Recent experiences from drought have also taught us that adverse climatic conditions are a factor to be taken into account in addressing the issues relating to wildlife migration patterns. It is clear that during the drought period water is not available in river systems which under normal conditions are sources of water for animals during the dry season. This results in very high wildlife mortalities. During the recent drought large numbers of animals were attracted into farms in neighbouring countries where borehole water has been provided for wildlife. This obviously constituted a loss for Botswana.

4.4 Four complementary methods of resolving these problems are envisaged:

4.4.1 Provision will be made for supplementary watering points at reasonable distances one from the other in the Central Kalahari Game Reserve, Gemsbok National Park and Mabuasehube and Khutse Game Reserves in order to reduce massive migrations out of these areas. To the North, watering points will be needed in other locations such as Savuti in Chobe and Mababe — Nxai Pan region. These will be included in an attempt to reduce elephant migration as well as to stabilise the movement of other species such as buffalo and zebra. The situation will require regular monitoring and management action to minimise possible adverse effects on the environment.

4.4.2 Protection will be assured of the most important routes, such as the Chobe—Makgadikgadi Pans routes, which are essential to the viability of the major wildlife populations. The designation of certain areas as Wildlife Management Areas will offer both the necessary support to wildlife and the prospect of an adequate economic return to local inhabitants. The research work necessary to establish the case for each migration route will be carried out.

4.4.3 In cases where the first two approaches are not sufficient or appropriate to provide support, wildlife authorities will initiate discussions with veterinary authorities with a view to adjusting the alignment of certain sections of some cordon fences. It will be a cornerstone of Policy that such fences not be erected without detailed consultations aimed at minimising any adverse impact on wildlife.

4.4.4 Government will promote a joint research programme by the wildlife and veterinary authorities to investigate critical aspects of wildlife-cattle relationships. This will include wildlife — veterinary research, integrated management and disease control. Research into the transmittability or non-transmittability of foot and mouth disease from wildlife to cattle is of particular importance. If the disease were proven to be non-transmittable, this would allow a great deal more flexibility with some of the cordon fences.

## 5. POTENTIAL ECONOMIC SIGNIFICANCE OF WILDLIFE

5.1 Commercial wildlife utilisation is big business. In Canada, for example, the fur trade helped support 40,000 trappers who sold about P25 million worth of pelts in the 1975—76 season. The USA alone imported more than P1 000 million worth of wildlife products in 1975.

5.2 Three economic benefits from wildlife relevant to this Policy Paper can be distinguished: game meat consumed for subsistence by Batswana; the commercial exploitation of game derived products such as trophies, skins and meat; the part of national income from tourism attributable to the viewing and hunting of game. Because another Policy Paper is being developed that deals exclusively with tourism, the benefits from wildlife derived through tourism are not dealt with here.

5.3 Estimates of the economic benefits derived from wildlife in 1983—84 (ignoring tourism) are shown in Table I. As the data indicate, about P350 thousand in government revenues were obtained directly from the commercial exploitation of wildlife. The actual or imputed (estimated value of own-consumption) income derived from wildlife in the private sector was, however, nearly P12 million. Virtually all of this amount arose from the estimated value of game meat consumed on a subsistence basis. Game meat is an important dietary source in many rural communities.

5.4 A set of illustrative projections of the benefits to be obtained from the adoption of the Wildlife Conservation Policy (excluding tourism) are also provided in Table I. These projections are based on a number of important assumptions: they are spelled out in the Notes to the Table. These assumptions do not purport to be realistic under current circumstances. The Wildlife Conservation Policy is a long-term policy. The benefits to be derived from its adoption must be considered in the context of the long-term trend in the growth of the wildlife population not on the basis of a particular deviation from the trend resulting from one of the long cycles in the annual rainfall.

5.5 As the illustrative projections suggest, at the end of an assumed transitional period of some seven years, and with some assumed annual growth rates (10 and 15 percent as the low and high estimates respectively) the annual value of game meat obtained for subsistence would increase from about P11,3 million to about P22 to P30 million. In the light of the projections of Botswana's future food supply made by the National Food Strategy Committee, this would constitute a major cost effective contribution to national nutrition. The fact that this increase would take place in remote rural areas where transportation and distribution pose major cost and other problems makes this contribution particularly important.

5.6 Larger increases (15 or 20 percent per annum) are assumed in the rate of growth of the value added in the commercial exploitation of game during the transitional period as a result of the implementation of this policy. The annual income generated by the commercial exploitation of wildlife (excluding tourism) is projected to increase from about P600 thousand to about P1,5 — P2,1 million. The substantially higher growth rates assumed during the transition period for commercial exploitation relative to the subsistence consumption of meat would seem to be warranted by the low base from which growth would take place in the case of the former. The available evidence suggests that the potential for the commercial exploitation of the game products, even without an increase in the offtake from the herds, is substantial.

### *Sources for Table I*

- (1) *Annual Statement of Accounts*, GOB, 1983—84 p7. Revenues from game licences include those paid by non-residents. As "tourist" related, these revenues should be excluded, given the focus of this paper.
- (2) CSO, National Accounts Division, Worksheet: "Hunting, Fishing, etc." For 1983—84 the current market value was estimated at P22,5 million. One half of this value was assumed to be attributable to game meat.
- (3) Estimated by MCI staff on the basis of information provided by a senior industry executive, 16 May, 1986. Includes wage bill and after tax profits. Processing includes production of trophies, tanning of skins and cutting up game meat sold in the local market. The value of raw materials, the output of hunting for commercial purposes, is also included. It is assumed that the estimated value added in commercial hunting is small (less than 15 percent) relative to the value added in processing these raw materials.

### *Notes for Table I*

- (a) The benefits to be obtained for tourism as a result of the adoption of this policy are ignored in these estimates.  
The size and condition of the wildlife stock in 1983—84 was greatly affected by the severe drought of that period. The estimates of benefits do not take this important factor into account: the projections assume that the stock in this base year was the average of a number of years that cover a complete drought/recovery cycle.  
The estimates relate to a hypothetical transitional period during which the wildlife herds are changed from one stable level to another lower stable level. For the sake of illustration, a period of 7 years is assumed. In reality, the length of the period would be determined on the basis of careful and continuing monitoring of the national herds under prevailing circumstances.
- (b) The average annual increase of 5 (low) and 10 (high) percent in the revenue from game licenses are assumed to be the result of the increase in the offtake from wildlife herds during the transitional period. Changes in the levels and structure of licence fees are ignored.

TABLE I: ESTIMATED POLICY RELATED CHANGES IN ANNUAL BENEFITS AT THE END OF ASSUMED TRANSITION PERIOD (a)

	Actuals 1983-84 (P000)	Assumed Percentage Point Changes in the Growth Rates Attributable to Policy Change		Projected Value 1990-91 (P000)		Increase Over 7 year Period (P000)	
		<u>Low</u>	<u>High</u>	<u>Low</u>	<u>High</u>	<u>Low</u>	<u>High</u>
<u>GOVERNMENT SECTOR</u>							
1. Game licences fees	229.5 <sup>(1)</sup>	5 <sup>(b)</sup>	10 <sup>(b)</sup>	332.9	447.2	103.2	217.7
2. Export tax for game trophies	58.4 <sup>(1)</sup>	NA <sup>(c)</sup>	NA <sup>(c)</sup>	159.6	215.0	101.2	156.6
3. Taxes on income to industry	60.0	NA <sup>(d)</sup>	NA <sup>(d)</sup>	159.6	215.0	99.6	155.0
Sub-total	<u>347.9</u>			<u>652.1</u>	<u>877.1</u>	<u>304.2</u>	<u>529.3</u>
<u>PRIVATE SECTOR VALUE ADDED</u>							
4. Value of game meat obtained for subsistence	11,250.0 <sup>(2)</sup>	10 <sup>(e)</sup>	15 <sup>(e)</sup>	21,923.1	29,925.2	10,673.1	18,675.2
5. Commercial uses of trophies skins and meat	600.0 <sup>(3)</sup>	15 <sup>(f)</sup>	20 <sup>(f)</sup>	1,596.0	2,149.9	996.0	1,549.9
Sub-total	<u>11,850.0</u>			<u>23,519.1</u>	<u>32,075.1</u>	<u>11,669.1</u>	<u>20,225.1</u>
<u>TOTAL</u>	<u>12,197.9</u>			<u>24,171.2</u>	<u>32,952.3</u>	<u>11,973.3</u>	<u>20,754.4</u>
<u>JOBS</u> Estimated jobs in private sector (line 5)	230			612	824	382	594
Value added per worker (Pula)	2609			2609 <sup>(g)</sup>	2609 <sup>(g)</sup>	2609 <sup>(g)</sup>	2609 <sup>(g)</sup>

- (c) Export tax revenues were about 10 percent of the estimated value added in the commercial uses of wildlife in 1983—84. The same percentage is assumed to obtain in 1990—91.
- (d) Taxes on income are estimated at 10 percent of industry income, line 5.
- (e) During the transitional period it is assumed that the game meat available for subsistence will increase by 10 (low) and 15 (high) percent per annum as a result of the intensified culling and cropping operations consequent upon the implementation of the policy.
- (f) Relatively rapid rates of annual increase (15 percent or 20 percent) have been assumed for the transitional period because the base, P600 thousand in 1983—84, was extremely low relative to the potential. For information on this point see, for example, L. Kaye, "Wildlife Market Survey Report", 1981, a study prepared for DWNP, for estimates of the potential increases.
- (g) The estimated value added per worker, P2609 in 1983—84, was obtained by dividing the value added in commercial uses of game, given in line 5, by the estimated number or person years, 230. Estimates of the increase in employment in 1990—91 resulting from the implementation of the policy were obtained by dividing the low and high projected values added in the industry in that year by the estimated value added per worker in commercial uses in 1983—84.

## 6. OVERAL AIMS OF THE POLICY

6.1 For a country in Botswana's stage of development, the allocation of 17 percent of its land area to wildlife is an impressive commitment. A commitment of this magnitude entails considerable expense and inevitably must compete for funds with the whole range of social and other developmental obligations of government. This Policy Paper not only recognises but also emphasizes the need to obtain a better 'yield' or economic return from land allocated for wildlife while at the same time ensuring the continuity of this resource. Rational and effective conservation and management programmes are, therefore, the essence of this Wildlife Policy. When the substantial flow of benefits of wildlife utilisation on a sustained yield basis begin to be realised the resource's value will be more widely appreciated. Conservation will then enjoy even greater national support.

6.2 The specific objectives of the policy in this context are:

6.2.1 To realize the full potential of the wildlife resource which, in periods unaffected by drought, is running far below its sustainable yield capacity. After several consecutive years of severe drought the resource is now seriously reduced. A higher level of sustained utilization is envisaged following the full recovery of the stock.

6.2.2 To develop a commercial wildlife industry in order to create economic opportunities, jobs and incomes for the rural population and to enable more rural dwellers to enter the modern wage economy. This will reduce the number of rural dwellers who rely on subsistence hunting.

6.2.3 To increase the supply of game meat as a consequence of the further development of wildlife commercial utilisation. The increased supply of meat can be directed to commercial use or to subsistence. In either case it will be a valuable contribution to national nutritional objectives established under the National Food Strategy.

6.3 The following three general guidelines will be applied in the pursuit of the overall aims of the policy:

6.3.1 *Rural Development* — The policy will provide the basis for the development of both an industry that is specifically rural and a source of nutrition (game meat both from subsistence hunting and as a by-product of the commercial wildlife industry).

6.3.2 *Citizen Participation* — It is an integral part of the policy that citizens will get maximum benefits from the sustained utilization of the wildlife resource. An education programme will assist and encourage citizens to take a more active role in wildlife conservation.

6.3.3 *Government Control of Development*: Government control will be assured by adapting existing legislation or by introducing new legislation to permit, encourage, and monitor development of the industry. The administration and management of the wildlife resource will also be upgraded and improved. In particular, the provisions of the Fauna Conservation Act with respect to such matters as controlling the number and types of hunting licences issued, the terms and conditions applicable to such licences, and the penalties for their infringement are important means for achieving our wildlife conservation goals. This legislation will therefore be reviewed from time to time by Government in consultation with interested parties and amended to reinforce the realisation of Botswana's wildlife conservation aims.

## 7. DEVELOPMENT OF THE WILDLIFE INDUSTRY

7.1 National Development Plan V called for the continued development of wildlife as a renewable resource subject to the principles of rational development. The objective of more intensive utilisation of the resource on a sustained yield basis will require measures both for promotion and control. In addition, investment by the private sector will require improved security of tenure and the reduction of uncertainty. These factors will be given due consideration in the evaluation of project proposals.

7.2 In all commercial utilisation projects, the highest priority will be placed on creation of job opportunities for rural dwellers. This will include programmes of training to prepare locals for positions of responsibility in the industry. Increasing the total net benefits from the wildlife industry will also help to fulfil the important objective of increasing income levels of rural dwellers. Access to game for subsistence hunters will also be improved.

7.3 Some of the policy implementation programmes will be undertaken by Government as promotional work. Opportunities will be identified through field work by the Department of Wildlife and National Parks. For instance, if gemsbok are determined to be in surplus in an area, or if drought conditions are imminent, the surplus game could be offered for culling or live capture for stocking of game ranches or for export. Government priorities for job creation, local participation and income generation will be fully reflected in assessing project proposals, tenders and lease arrangements.

7.4 Government will also actively encourage the development of Game Parks and Reserves. More and improved tourist facilities will be made available to the extent that this is consistent with accepted conservation practices. The Tourism Development Unit will be actively involved in this task. Our existing tourist industry is now unduly concentrated in only a small part of the total area available for tourism sites. This is detrimental to the ecology of the intensively used areas. Every effort will be made to spread the growing tourism load over a wider area of the Parks and Reserves. This will serve to minimize any adverse impact on wildlife and the ecology and to spread the economic benefits over a wider area involving more citizens.

7.5 The various wildlife utilisation activities that will be introduced or modified are outlined below:

7.5.1 *Non-Safari Hunting*: The special game and Small game licences will not be affected initially. They are primarily intended for the less well-to-do citizens who depend on subsistence hunting for their livelihood. These licences will continue to be made available to those in genuine need. In addition, a great deal more game meat will become available for either subsistence or commercial use as a by-product of an active commercial wildlife industry. Surplus animals may, for example, be harvested by making them available for licenced trophy hunting and the meat made available for subsistence consumption by local communities.

7.5.2 *Safari Hunting*: This type of hunting is practised mainly by non-residents, residents and some affluent citizens. Non-residents accounted for 74 percent of the revenue generated by hunting licences in 1984. Eight safari companies are engaged in this trade. Safari company hunting leases expire in 1987, and a general review of the industry will be carried out before that date. The review will focus on the need to increase the benefits to Botswana, in terms of participation in employment, management and ownership in the industry. The recording and handling of the foreign exchange earnings of the industry will be thoroughly examined as part of the review. Overall Government monitoring and control of the industry will be improved. Greater citizen participation in the safari industry will be an important objective, since it is consistent with other national policies for the development of economic opportunities for citizens. Some parts of the concession areas will be gazetted as Wildlife Management Areas as may be considered appropriate.

7.5.3 Single game licence fees for safari hunting will be regularly reviewed taking into account the value of the species and prices and/or licence fees applicable in neighbouring countries. Citizen licences will be maintained at a lower level than those for residents and non-residents. Landowners will be permitted to conduct safari hunting on their lands providing that the resource is capable of sustaining such an operation. Hunting quotas will be determined by Government.

7.5.4 *Culling and Cropping Operations*: Culling, the removal of some of the game population from areas where it is excessively dense given the prevailing or emerging range and/or weather conditions, and cropping, the harvesting of game on a sustainable yield basis, are necessary aspects of wildlife management. These operations will be carried out solely on the basis of regular area by area census of game populations. Permission may be granted to landowners to cull excess game in the interest of range management or to harvest game when there is evidence that this would be consistent with maintaining species yields within the area on a sustainable basis.

7.5.5 *Game Farming/Ranching*: Freehold and leasehold farmers who elect to farm in game instead of livestock will be allowed to do so. They will be required to practise the range management required to ensure the wellbeing of the game population on their farms. Both domestic and wild animals could be kept on the same ranch. Examples of game ranching are to be found on the Stevensford Ranch in the Tuli Block and the Department of Wildlife and National Parks project at Dithopo in Kweneng. Game farming, which differs slightly from open-ranching in that it often involves the actual physical handling of game, is already being practised. The crocodile farming near Maun and an ostrich and guinea fowl farm in the Tuli Block afford examples. Individual farmers may even "domesticate" some game if conditions permit.

7.5.6 *Live Capture*: At present live capture in Botswana is confined to commercial export to zoos, pet shops and scientific laboratories. Live capture is also potentially important for purposes of re-stocking of domestic zoos and scientific research stations. However, the fee structure for live capture will be a critical element. It can encourage or discourage the capture of live animals for approved purposes. The fee structure will be reviewed with the objective of encouraging registered Botswana-based live capture operations. The fee structure for capture will be influenced by the utility and/or rarity of a particular species.

7.5.7 *Tribal or Cummunal Areas Programme*: Areas that are depleted of game will be eligible for re-stocking. The basic "entry requirement" will be a request to the Department of Wildlife and National Parks for the imposition of a 'no hunting' ban for a specified period, say, three to five years. The period of ban will depend upon a particular game situation in an area determined by a range assessment carried out by the Department of Wildlife and National Parks. Areas now exist in Botswana which need an immediate assessment and possibly a ban on hunting because they have been subjected to heavy hunting in the past. For purposes of re-stocking, farmers with surplus game will be asked to release excess game to those who desire to operate game farms. Similarly, game may be captured from game reserves. Transplanting game from areas where they abound to where they are scarce will also supply the need of subsistence hunters in areas of scarcity.

7.5.8 *Game Viewing*: This is the main ingredient of Botswana's tourist industry. The main concerns of Government are that game conservation and the integrity of the country's ecology be assured. Rules and regulations designed to facilitate the effective management of the game reserves and national parks will be strictly applied. Co-operation of safari companies, tour operators and individuals visiting our tourist resorts also will be required to maintain strict observance of the rules of entry and conduct.

7.5.9 *Processing and Sale of Wildlife Products*: Raw materials such as skins are processed into mats and karosses; horns and skulls are made into capes and mounts; raw ivory is fashioned into earrings and bracelets. The main thrust of the policy is to encourage processing in Botswana to create jobs and enhance the value added to the products. The fees structure will be revised in order that export fees are relatively higher for unprocessed products. The export of unprocessed trophies may not be permitted in some cases.

7.5.10 The cottage industry is still largely in the hands of small independent trophy dealers. There is scope for a cooperative approach by citizen dealers. This will be encouraged by among other things, revising the regulations.

7.5.11 The issuance of permits will favour citizens. Citizen trophy dealers will be encouraged to form co-operatives. This will facilitate the penetration of export markets and widen the local market for trophies of local hunters. Permits will be renewable on an annual basis in order that the effectiveness of measures may be regularly evaluated.

7.5.12 Another measure will aim at processing game meat and other trophies especially from culling and cropping operations referred to above. These steps will be subjected to disease control regulations and the economic feasibility of operations such as mobile abattoirs. Tribal authorities will also be empowered to authorise where appropriate the killing of game and to direct and organise disposal of game meat. This will be carried out for the benefit of schools or other needy groups provided that health hazards are avoided.

7.5.13 *Exports and Imports*: Botswana's trade in live animals and animals products is controlled by means of standard international import, export and re-export permits. These have been designed to ensure that trade in any species poses no danger to that species. Furthermore, as a party to the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), Botswana observes the provisions of the Convention and the Convention's list of animals threatened or endangered by trade. For this reason Botswana strictly controls its trade in animals such as crocodiles, lechwe, leopards and cheetah.

## 8. STATUS AND USE OF WILDLIFE ON PRIVATE AND LEASEHOLD GAME FARMS

8.1 Wildlife is a national resource under present Government policy. Game on privately owned land remains, therefore, the property of the Government. This policy did not pose serious difficulties under the traditional forms of game utilization. Hunting for subsistence and recreation prevailed. Government simply established appropriate licence fees for the killing or live capture of game.

8.2 The advent of game ranching marked an important departure from traditional usage, however. Government now encourages these operations because they have a potential for the creation of jobs and income in rural areas. However, game bred on privately owned lands remains state property and its use is subject to Government approval.

8.3 Consonant with the policy objectives enunciated in this Paper, changes will be made to establish custodial rights with respect to game on private land. These changes will be designed to conserve wildlife and to safeguard traditional rights of Batswana while removing the impediment to the rational use of wildlife resources situated on private lands.

8.4 Game farmers who meet qualifying conditions will be registered. Those registered will be appointed custodians of the wildlife situated on their farms, whether private or leased. (Game farmers will not be subject to a custodial fee for the game already situated on their lands at the time the scheme goes into effect.) The custodians will be given certain qualified rights to dispose of the game within their properties. The fees established for culling and cropping will be based on the profitability of the venture. Initially at least, fees for capture for restocking purposes will be set at incentive levels. Such operations in Wildlife Management Areas will be given special encouragement as a means of providing another source of income and employment to rural dwellers.

## 9. BENEFITS AND COSTS

### 9.1 *Present Situation:*

9.1.1 The Ministry of Commerce and Industry has made an analysis of the potential benefits and costs of the adoption of the Wildlife Conservation Policy, ignoring the favourable impact on tourism. In interpreting the results of the analysis several words of caution are in order. The Wildlife Conservation Policy is a long-term land use and wildlife management policy. The circumstances envisaged in the analysis are those that would prevail when the Botswana wildlife resource was neither being reduced by nor recovering from a drought. In essence, one should imagine the policy adopted when the wildlife stock was of stable size and condition. The results of the analysis, which are shown in Table II, should be interpreted as illustrative of the likely impact of the policy under favourable circumstances. They do not provide realistic estimates for the period 1983—84 — 1990—91.

9.1.2 Moreover, the assumed rates of increase of private sector benefits must also be thought of as transitional rates: they constitute estimates of the increases that are possible when the national wildlife stock moves over time from one equilibrium size to another smaller equilibrium size. For the purpose of the illustrative analysis, the time period assumed is seven years. The concept of sustained utilization envisages that by culling and cropping it is possible to obtain a substantial increase in the offtake from a smaller stock because the nutritional requirements of game are more readily met when there is less pressure on the environment.

9.1.3 The analytic results should therefore be interpreted as showing the benefits and costs in year X of a policy instituted seven years earlier (the actual number of years would be determined by monitoring the changes in wildlife herds) when the wildlife stock was of a stable size. It must be emphasized that in the period following year X, the end of the transitional period, the benefits obtained would not grow: however, they would become stable at a substantially higher level than prevailed prior to the adoption of the policy.

### 9.2 *Projected Benefits and Costs*

9.2.1 The Notes to Table I summarize the rationales for the assumptions underlying the estimated changes in benefits and costs shown in Table II. The principal source of additional benefits, it is assumed, would be the increase in the value of game meat obtained for subsistence. Alternative growth rates of 10 to 15 percent per year over the transitional period are assumed.

9.2.2 Growth rates of 15 or 20 percent are assumed for the value of the commercial uses of wildlife: trophies, skins and meat. This difference in the assumed growth rates reflects the low base from which the expansion would take place together with the view that there is a large, unused potential for commercial exploitation. It should be noted that about 15 percent of the total benefits derived from the expansion of the commercial exploitation of wildlife accrues directly to government in the form of export tax revenues derived from game trophies and from the taxation of income.

9.2.3 The additional costs of implementing the policy, estimated at P784 thousand per annum, are the recurrent costs involved in increasing the staff of the Department of Wildlife and National Parks by 100 person years. Not included in these cost estimates are any amounts involved in development (capital) projects and the recurrent costs associated with such projects. It is assumed that these projects would proceed in the absence of the implementation of the Policy.

9.2.4 The estimates of benefits and costs provided in Table II indicate that for every Pula of additional government cost the additional total benefit would be in the order of P15 to P26. The estimates also show that the benefits envisaged would largely accrue to the private sector. This is explained in large part by the fact that the increase in the subsistence consumption of meat would not be subject to tax.

9.2.5 It is also possible to provide a crude estimate of the potential increases in jobs that would result from the adoption of the Wildlife Conservation Policy. It is estimated that there are now about 230 person years of employment involved in the commercial utilization of wildlife products, as indicated in Table I. In 1983—84 the value added in this sector was approximately P600 thousand. This meant that the value added per worker was about P2,609. By dividing this number into the projected changes in the value added for the commercial sector (as shown in Table I) the additional jobs resulting from the implementation of the Conservation Policy can be roughly estimated. On this basis it is suggested that between 380 and 590 additional permanent jobs would be created in the commercial wildlife sector at the transitional period.



TABLE II: ESTIMATED ANNUAL BENEFITS AND COSTS OF POLICY IMPLEMENTATION  
AT THE END OF ASSUMED TRANSITION PERIOD

	<u>Low Growth Rate Assumption</u>	<u>High Growth Rate Assumption</u>
1. Annual recurrent costs to GOB attributable to adoption of policy	784.1	784.1
2. Change in annual benefits		
(a) Government sector (P000)	304.2	529.3
(b) Private sector (P000)	11,669.1	20,225.1
(c) Total (P000)	<u>11,973.3</u>	<u>20,754.4</u>
3. Estimated increase in benefits per Pula of additional annual GOB expenditures (1)		
Government sector (P)	0.39	0.70
Private Sector (P)	14.88	25.80
Total (P)	15.27	26.47

Sources: The projected changes in recurrent costs were estimated by MCI staff. The full costs of adding 100 DWNP staff are included. The projected changes in benefits are from Table I.

Notes: (1) calculated by dividing each of the estimated annual benefits [lines 2(a), 2(b) and 2(c)] by the estimated additional annual recurrent costs [line (1)].

# ANNEX II



REPUBLIC OF BOTSWANA

## TOURISM POLICY

### GOVERNMENT PAPER NO. 2 OF 1990

AS APPROVED BY THE NATIONAL ASSEMBLY ON THE  
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## SECTION 1

### INTRODUCTION

1.1 This statement constitutes the first tourism policy formulation by the Government of Botswana and is being issued for three reasons:

- a) in terms of government policies and priorities, the tourism industry has not been given due prominence in the past;
- b) the potential of the industry is growing at a rapid rate, so much so that it is now regarded by many as a possible generator of significant economic activity in many parts of the economy and the country; and
- c) Botswana are not likely to benefit from realisation of the potential unless a new framework of policy is put in place.

1.2 The paper is designed to describe the new policy framework and, hopefully, to do so in a manner that will command widespread national support.

1.3 There is need for a word or two about the definition of tourism. According to the World Tourism Organization (W. T. O.), a tourist is a temporary visitor staying at least 24 hours away from his or her place of permanent residence in order to pursue purposes related to leisure or business. It should be noted that this internationally accepted definition is broader than the conventional notion of tourism, which has to do with the recreational use of leisure time. It should also be noted that statistics pertaining to tourism are not always based on the W.T.O. definition or, indeed, on any other recognised definition.

1.4 Tourists may reside in other parts of the country (local tourists) or in other countries (foreign tourists). The latter may reside in neighboring countries (regional tourists) or in more distant countries (overseas tourists).

1.5 The organizations, both public and private, that supply services, facilities or amenities used predominantly by tourists constitute the tourism industry. There are several closely allied industries, transportation and communication being the most notable.

1.6 There is no doubt that, in Botswana, wildlife and the wilderness experience represent the principal tourist attractions -- and, for that reason, this paper will deal at length with the relationship between these resources and tourism policy. It should be understood, however, that there are other resources that are, or could become, important tourist attractions. The rock paintings on the Tsodilo Hills are one example, but many others could be given, including craft fairs, other cultural events, industrial activities, historical monuments and museums. Under the *Monuments and Relics Act* of 1970, the Government has the authority to declare sites to be of national importance and to protect them. But many of these sites require investments if they are to be preserved and made more accessible to the public. Steps should be taken by the tourism authorities, in co-operation with relevant institutions, to identify these sites and other tourism assets and to prioritise them for development and promotion. It should be noted that a serious programme of this kind could, among other things, make a significant contribution to the growth of "domestic tourism".

## SECTION 2

### BACKGROUND

#### Tourism and the Economy

2.1.1 Tourists visit an area for a combination of reasons. The area must possess certain resources, some mixture of relatively rare aesthetic, ecological, social or cultural attributes. It must be accessible at some affordable cost in terms of money, time and effort. It must provide the quality of facilities and amenities the visitor wants at prices the visitor is prepared to pay. It must afford a degree of protection to the person and property of the visitor consistent with the risks that he or she wishes to accept. And it must convey a spirit of hospitality that makes the visitor feel reasonably comfortable in a strange environment.

2.1.2 The first of these determinants can be looked upon as part of the country's endowment. Botswana has a resource base that is unparalleled, particularly with respect to the abundance and variety of its wildlife and scenic beauty. The remaining determinants are, however, largely man-made. The present situation in Botswana is favourable in some respects and unfavorable in others. In relative terms, Botswana offers a secure environment for tourists and Botswana are,

for the most part, well disposed towards visitors. Insofar as accessibility to tourist areas and the quality of facilities and amenities are concerned, the involvement of Government, aside from the massive contribution made through the designation of vast areas of Botswana as National Parks and Game Reserves, has been minimal. Government's investment in airports, landing strips, roads and similar infrastructure created primarily to serve the tourism industry has been modest. The quality of the amenities offered by Government campsites within the Parks and Reserves has been only fair, often poor or worse. However, this may have been fortunate, given that access to the Parks and Reserves has, until recently, been grossly underpriced. Had such low prices applied to high quality facilities, overcrowding would have been an even greater problem than it has been.

2.1.3 To a large extent, then, what is available to the tourist is what the unregulated private sector supplies. Some of the facilities and amenities offered are of the highest quality. Others have been far below international standards. Quality assurance is therefore an issue that must be addressed.

2.1.4 Like other industries, tourism can be described and analysed in strictly economic terms: it transforms inputs of local and imported resources into service outputs and thereby potentially generates incomes and employment for residents. The greater the actual contribution made by the tourism industry to the creation of domestic incomes and employment and to public revenues the better the material well-being of the country and its people. Other things remaining unchanged, the higher the rate of growth of Botswana's tourism industry the greater the diversification of the economy and the smaller its vulnerability to changing economic conditions elsewhere.

2.1.5 The domestically produced goods and services purchased by tourists, including accommodation, food and beverages, transportation and "extras", has been a relatively small but certainly not an insignificant component of the national economy. Estimates of the Bank of Botswana suggest that, in 1989, tourism may have accounted for some 2.5 per cent of the Gross Domestic Product (GDP), or approximately P 100 million. The percentage figure may be compared with the shares of GDP arising from the agricultural and manufacturing industries, which in the same year were about 3.5 per cent and about 3.2 per cent, respectively.

2.1.6 The geographical distribution of employment in the tourism industry is in keeping with objectives of the Government pertaining to rural and remote areas. Nearly 70 percent of employees are located "up-country". And nearly 40 percent of all jobs in the North can be attributed to tourism.

2.1.7 It is important to recognise that, to a large extent, the potential economic benefits of tourism to Botswana are far from being realised: only by the adoption of a carefully considered strategy will measured progress in that direction be made. The point can be illustrated. If there were a large number of regional tourists who brought with them all their provisions, camped on public grounds for which no charge was levied, purchased no services and paid no local taxes, their presence would simply impose costs arising from overcrowding of public facilities and degradation of the environment. The same would hold for overseas tourists, even though their out-of-pocket costs turned out to be much larger, if such tourists were to travel on foreign carriers, stay at facilities located on large tracts of land for which only nominal rents were being charged, and pay foreign owners for services obtained in such a way that incomes did not accrue to residents and tax revenues did not accrue to government. In these circumstances the land and wildlife "used" by such tourists might just as well be ceded to another country.

2.1.8 The government will formulate and implement strategies designed to correct these problems where they exist and prevent them from occurring where they have not yet appeared.

## The Market

2.2.1 Since World War II, people resident in developed countries have had large increases in their leisure time as hours of work have shortened, periods of paid vacation leave have lengthened and real disposable incomes have grown. The cost, in terms of time and money, of travel to distant destinations has also fallen rapidly in real terms with the advent of large jet aircraft in commercial passenger service. The result has been a phenomenal increase in world tourism. Although it is reasonable to expect that leisure time will increase more slowly in the future the rates of growth of real income are likely to continue to increase, albeit with fluctuations related to business cycles.

2.2.2 According to the World Tourism Organisation (W. T. O. ), travel to the African continent accounted for only about 3 percent of world travel in 1986. However, growth in the number of visits to the African continent grew in that year about five times as fast as world travel generally.

2.2.3 The available data suggest that, from 1978 to 1985, the total number of visits to Botswana for all purposes increased by over 200 percent. The same data show that although a high proportion of the visitors involved came from other African countries (74 percent in 1985) the proportions involving visitors from Europe, the Americas and other countries were increasing.

2.2.4 It has been estimated that, if returning residents are excluded, about 46 percent of those coming to Botswana in 1985 were coming for holiday purposes, whereas 54 percent were coming for business or other purposes. It has also been estimated that, in the same year, there were about 175,000 holiday trips to Botswana but only about 60,000 from overseas: the vast majority were from neighboring countries. Unfortunately, most of the regional holiday-makers were casual campers who contributed very little to the economy of Botswana.

2.2.5 According to a survey conducted by the Kgalagadi Conservation Society in 1984, as supplemented by field research done in 1986, only about 20 percent of the bed-nights spent in Botswana by tourists involved the occupancy of permanent accommodation in hotels, motels, lodges and permanent camps. Not surprisingly perhaps, the 20 percent occupying permanent accommodation accounted for over 80 percent of the expenditures by tourists in Botswana. The situation with respect to campers was, of course, the inverse: 80 percent of tourists were campers but they accounted for less than 20 percent of total expenditures.

2.2.6 Foreign tourists who spend much of their time but little of their money in Botswana are of little net benefit to the country. Indeed, they are almost certainly a net loss because they crowd the available public facilities such as roads and campsites and cause environmental damage.

2.2.7 One of the major issues that Botswana's tourism policy must address is therefore clear: it is important to shift the mix of tourists away from those who are casual campers towards those who occupy permanent accommodation. Encouraging the latter while discouraging the former through targeted marketing and the imposition of higher fees for the use of public facilities are obviously among objectives to be pursued.

### The Industry

2.3.1 It is useful to distinguish between urban hotels and motels that cater primarily but not exclusively to business travellers, and other lodges, permanent camps and motels that cater almost exclusively to tourists, including safari hunters and those visiting Botswana primarily for game viewing.

2.3.2 In 1988 there were about 24 urban hotels and motels in Lobatse, Gaborone, Francistown and Maun, together with others in smaller localities. They offered about 1,600 beds. The tourism policy issues affecting this segment of the industry relate primarily to quality control, staffing, transportation arrangements and tourism promotion.

2.3.3 Lodges and permanent camps typically are situated on small plots which are leased from the local land boards, or, in the case of plots situated in the National Parks, from the Government. In 1988 there were an estimated 40 such lodges and permanent camps with a combined capacity of about 800 beds. There were also a number of "temporary" camps located on hunting concession lands. Finally, there were mobile safari operators who, as the term suggests, offer to tourists a camping experience using rented equipment, supplies and services. Knowledgeable observers placed the number of such operators at about two dozen. The same observers believed that the number had been growing rapidly.

2.3.4 In addition to the policy issues that apply to the urban hotels, this sector of the industry poses several complex additional questions. These largely relate to the extent and location of the land that is to be leased for predominantly tourism purposes and the terms and conditions of leases to be made available to the operators.

2.3.5 Estimates for 1986 of the income and expenditure of tourism operators dependent on wildlife hunting or viewing have been derived from a sample of 31 companies. Although probably biased by under-reporting of income by tourism operators, these estimates point to a number of important conclusions.

- a) The estimated company tax paid by these operators was only slightly more than one percent of their estimated turnover (or gross income), which compares with slightly more than five percent in the case of urban hotels.
- b) The estimated total rents paid to local authorities by safari operators for hunting concessions, some of which covered large areas in the most beautiful parts of Botswana, amounted to only P 185,000 or about 3 percent of their gross incomes.
- c) A combination of company tax, rents, licenses and duties -- the total public return for the use of the concession lands and the wildlife situated on them - amounted to less than 11 percent of the gross incomes of the hunting safari operators. Low as this fraction was, it was higher than the public return generated by the mobile safari operators and the lodge, camp and motel operators whose clients are primarily attracted by the opportunities of game viewing.

2.3.6 The implications of this and the previous sub-section can be briefly stated. There appears to be a large and growing market for Botswana tourism. But, unless the mix of tourists can be substantially changed, with the proportion of tourists occupying relatively permanent accommodation increased and the proportion of tourists who are casual campers reduced,

and the public revenues derived from wildlife lands utilised by tourists substantially increased, expansion to exploit that large and growing market would be inadvisable. Assuming, however, that the policies needed to effect these changes can be put in place, and can be supported by an effective promotional campaign aimed largely at high-income countries, the pay-off for Botswana within a few years should be significant.

### SECTION 3

#### OBJECTIVES

3.1 In a paper meant to define policy, it is important to identify objectives. As stated in the National Development Plan VI, the objectives of tourism policy in Botswana are:-

- a) to increase foreign exchange earnings and government revenues;
- b) to generate employment, mainly in rural areas;
- c) to raise incomes in rural areas in order to reduce urban drift;
- d) generally to promote rural development and to stimulate the provision of other services in remote areas of the country;
- e) to improve the quality of national life by providing educational and recreational opportunities;
- f) to project a favourable national image to the outside world.

3.2 In addition to these objectives, the tourism policy will be designed to ensure that tourist activity is carried out on an ecologically sustainable basis. It will also be designed to provide local communities with direct and indirect benefits from tourism activities: it is only by doing so that the policy will encourage these communities to appreciate the value of wildlife and its conservation and the growing opportunities in rural areas for participation in wildlife-based industries, including tourism.

3.3 The objectives are to be pursued within the constraints imposed by other Government policies, two of which must be mentioned here.

3.4 The first is the "Wildlife Conservation Policy" of 1986, which calls for the practice of complete preservation in the National Parks and Game Reserves, which together account for about 17 percent of the total land area of the country. It also calls for the practice of conservation, meaning "utilisation on a sustained yield basis", in Wildlife Management Areas (WMA's).

3.5 Generally speaking, these preservation and conservation goals are consistent with the tourism objectives. However, there are potential conflicts, which could be exacerbated by increases in the number of tourists visiting Botswana, a possible consequence of increased tourism promotion. Policy implementation must therefore aim to minimise the situations in which conflicts occur.

3.6 The second related policy is the National Policy on Economic Opportunities, which makes it clear that economic activities like tourism must aim to increase the participation of Botswana in the ownership and management of tourism enterprises. Here too, conflicts may be unavoidable. It should be noted that any constraints on ownership and control are likely to have inhibiting effects on foreign investment in tourist facilities, and on the effective management of such facilities, until adequate training and experience in the management of tourism enterprises is available to citizens. An attempt must therefore be made to minimise any negative effects on foreign investment while at the same time ensuring that progress is made towards an orderly realisation of the localisation objective.

3.7 Government is in favour of the development of appropriate mechanisms whereby local communities would be enabled to share directly in the profits of tourism enterprises.

3.8 In brief, the general objective of this tourism policy is to obtain, on a sustainable basis, the greatest possible net social and economic benefits for Botswana from their tourism resources; scenic beauty, wildlife and unique ecological, geological and cultural characteristics.

**SECTION 4**  
**REGULATION**  
**OF THE INDUSTRY**

**Background**

4.1.1 Hotels, motels, lodges and permanent camps, as such, have not been licensed under the *Trading and Liquor Act* except as vendors of alcoholic beverages. Persons who could obtain land and zoning permission have been free to establish tourism business without adhering to any standards or codes of conduct.

4.1.2 In a market consisting of informed buyers this freedom of entry and egress would be laudable. However, when, as is the case with foreign tourists, the buyer is largely uninformed or ill-informed, the results can be pernicious. Unsuspecting tourists can, without recourse, find themselves in unsuitable accommodation or being charged exorbitant prices. Dissatisfied tourists are unlikely to return; they can also spread highly critical comments and drive away prospective visitors, to the detriment of conscientious tourism operators.

**Intended Approach**

4.2.1 Following the lead of its counterparts in most other countries that seek to encourage tourism, the Government intends to adopt a system of licensing, regulating and grading for hotels, motels, lodges, permanent camps and safari operations. It will also license and regulate tour operators and travel agents. The goals are to ensure that the operators:-

- a) are well qualified and equipped and have adequate financial resources, given the nature of their activities;
- b) provide a quality of accommodation and service that meets a known standard at a known price;
- c) conform to an acceptable code of conduct;
- d) provide Botswana with genuine opportunities for investment and employment, including employment in jobs with favourable career prospects;
- e) maintain adequate records designed to permit the Government, if need be, to monitor their performance for adherence to the laws and regulations of Botswana concerning such matters as immigration, taxation, foreign exchange and employment of labour;
- f) operate as companies that are incorporated and registered in Botswana;
- g) submit annual audited financial statements using auditors resident in Botswana.

4.2.2 Particular importance is attached to the provision of enhanced opportunities in the industry for Botswana. This is the subject of further elaboration in Section 8. Here, however, it should simply be noted that the Government will encourage joint venture arrangements designed to provide citizens with increased participation in the tourism sector.

4.2.3 The rules and regulations governing the licensing, grading and monitoring of suppliers of tourist accommodation will be set forth in and under a separate Act, tentatively named the Tourism Development Act, to be introduced by the Government in the near future. This Act will also spell out the powers and responsibilities of the Department of Tourism, the Tourism Licensing Board, and the National Advisory Council on Tourism, which are to be established within the ambit of the Ministry of Commerce and Industry to administer the Act and to advise Government with respect to all matters falling under the Act and this policy.

4.2.4 It is expected that the regulations governing the classification and grading of hotels and motels will be based on standards developed for Africa by the WTO, it being understood that any standards applied to other tourist facilities will have to differ from those used for hotels and motels. The WTO-based standards for hotels and motels would probably cover eight headings and a number of sub-headings.

**a. Qualitative and Aesthetic Requirements**

Applicable to buildings, furniture, fittings, installations and decoration of bedrooms and common areas.;



**b. Autonomy of Hotel Entrance**

As distinct from entrances to bars or restaurants;

**c. Room Capacity**

Minimum rental capacity of ten rooms;

**d. Common Areas**

Reception hall, public sitting rooms, etc.; bar, dining room, restaurant, breakfast room; banquet, conference hall, outdoor area; installations for entertainment; recreation; sports; sanitary installations for common areas; cloakrooms; thermal conditions for public rooms; public telephones; lifts; corridors; parking garage;

**e. Bedroom Requirements**

Minimum size; furniture and equipment; electrical equipment; windows and doors; thermal conditions and ventilation; communication system; audio-visual installations; drinking water; information available; stationery; soundproofing; sanitary installations; bed linen, towels;

**f. Service**

Food and beverages; drinking water; room service; front-desk services; reception; safety deposit; left-luggage facilities; foreign exchange; postal, telegraph and telex services; tourism service; shops, hairdressing, laundry, dry cleaning, ironing; medical service;

**g. Safety, Hygiene**

Fire fighting; electrical facilities conforming to established standards; safety facilities; adequate security; emergency power, food storage; refuse disposal; insect and vermin protection;

**h. Staff**

General qualifications; languages; staff uniforms; medical examination of staff; sanitary installations for staff.

4.2.5 Under these standards, rating would probably be done by means of the familiar "star" system.

## SECTION 5

### TOURISM CONCESSIONS

#### AND

### RELATED ISSUES

#### General Terms and Conditions

5.1.1 In order to achieve the maximum benefit for Botswana from the wildlife resources located on tribal or state land, the terms and conditions under which tourism lands are leased to qualified operators must harness the self-interest of the lessee to the public interest. That is to say, the terms and conditions should be set in such a way as to attract the highest rents while, at the same time, making it contrary to the interests of lessees to deplete the wildlife or despoil the environment.

5.1.2 There is a demand on the part of some citizens for physically smaller concessions; no lengthening of the short-term (typically four-year) hunting concession leases; no rights to renewal; more frequent renegotiation of rents; a requirement that a substantial fraction (say, 40 percent) of the shares in the safari companies be held by Botswana citizens; and the exercise of increased control over safari operations.

5.1.3 Understandable as these demands may be in the light of a number of factors, including the low return from the resource in the past, acceding to any of them would likely have the opposite effect to that intended. Short-term leases, for example, encourage the short-term exploitation of the resource rather than the practice of conservation necessary for long-term utilisation. Clearly, a lessee whose lease expires tomorrow is unlikely to invest in a bore-hole today. It is equally true that such a lessee is unlikely to protect the wild animals located on his leased land against poachers. Other things being equal, concession rents will be higher, and the motivation of lessees to manage prudently and well will be stronger, the greater:—

- the length of leases;
- the ability of the lessee to adapt the concession to the most appropriate form of single or multiple land use;
- the transferability of leases; and
- the exclusivity of the rights granted.

5.1.4 To this end, a number of provisions will be contained in all concession leases.

- a) Lessees will have the maximum flexibility consistent with basic policies of the Government including those governing land use and infrastructural development for the area. Lessees of concessions will have the right to transfer, cede or sub-lease, subject to the approval of the lessor. Subject to approval from the same source, and from the Tourism Licensing Board when necessary, changes of use, including those resulting in multiple use, will also be possible, when circumstances suggest such changes to be appropriate.
- b) The ban against permanent structures will be removed. The size, character and location of buildings and structures will have to conform, however, to the approved management plan for each area concerned.
- c) Leases will be offered on a long-term basis, with some provision for renewal.
- d) Leases will provide for a review of rents at specific intervals -- a review that will take into account the effects of inflation, among other factors.
- e) Lessees will be required to adhere strictly to all the laws and regulations of Botswana.
- f) Leases will be subject to termination for infractions.
- g) With the exception of those situations in which citizens are entitled to move and hunt on concession lands, and of those in which others may have legal or traditional rights to traverse or enjoy such lands, the rights conferred on lessees will be exclusive. Mobile safari operators and other tourism operators will not be allowed to make use of leased land except with the written agreement of the lessees.

5.1.5 Stringent monitoring of conformity by lessees to these terms and conditions and the certain application of severe penalties for infractions will achieve much more for wildlife conservation than stringent terms and conditions that are not enforced.

### **Rent Determination**

5.2.1 Unlike the situation with respect to mineral rights, rights relating to wildlife on tribal land are not assigned to the state by constitutional law. However, the state has been given authority under the *Fauna Conservation Act* to establish hunting licenses and quotas and to exercise other controls over the utilisation of this resource. Having obtained a licence to hunt from the state, the would-be hunter must, of course, obtain access to game. Aside from the Parks and Reserves where hunting is prohibited, the land on which the wildlife is situated is, for the most part, tribal land. Land Boards therefore have the right to exact a price from hunters for their use of the land. The Government of course, also has the power under the Constitution to tax individuals and companies and "transactions", including, of course, tourism operations.

5.2.2 As indicated earlier, there is evidence that the rents paid to the land boards or to the State for concessions and plots are significantly below market rates. This obviously reduces public revenues. It has, however, another less direct consequence.

5.2.3 The available information suggests that the actual utilisation of Botswana's wildlife resources, in normal (non-drought) times, has been low. Recent detailed estimates made with respect to individual safari companies operating on

concessions of optimal size show that, with improved utilisation *and no increase in wildlife stocks*, the annual contribution to the economy could be increased by nearly 12 percent in five to ten years.

5.2.4 One of the factors that have encouraged under-utilisation is the extraordinarily low rentals obtained from tourism concessions. The concession operators have been under no pressure to raise revenues because the "holding costs" (annual land rents) of vast areas of land have been close to zero. Had the operators been faced with substantial rent payments at the end of each year, they would have been under greater pressure to generate revenues to avoid cash losses. This applies, with some exceptions, not only to owners of hunting safari companies but to the owners of lodges and permanent camps.

5.2.5 Low rentals have meant that land boards have derived lower benefits than they could have from their wildlife lands. The under-utilisation of these lands has also had an adverse effect on state revenues because company profits have been lower than they otherwise would have been.

5.2.6 One way of overcoming low rentals would be the use of an auction system for concessions. However, although this approach would produce market value rentals, it would make it difficult to ensure that the "highest bidder" had the characteristics Government seeks in regard to such factors as professionalism, integrity and competence, financial resources, and commitment to local participation and training. It would also be difficult under the auction system to be fair to those current operators who have made investments, shown their commitment to Government policies, demonstrated their viability and established "goodwill".

5.2.7 It has therefore been decided to introduce a structured approach incorporating a number of components.

- a) Each concession will be advertised. The basic terms and conditions incorporated in a standard form of lease, together with a statement of the types of land use approved, will be made public at the time of advertising.
- b) The advertisement will request applications from those companies that pre-qualify under the licensing system. Only companies that have received conditional licensing approval will be allowed to submit applications.
- c) Applicants will be required to submit their operating and development plans with their applications.
- d) Applicants will also be required to make an offer of rent. The lessor will reserve the right to turn down, negotiate or re-advertise in the event that the rents offered are below an acceptable minimum.
- e) Assisted by an advisory allocation committee, the lessor will evaluate the applications, using an established set of guidelines. Other things being equal, the concession will be granted to the applicant offering the highest rent.
- f) Provided they comply with the requirements of allocation, and are competitive in their rental bids, existing operators will be given priority with respect to concessions they have had under lease.
- g) Unexpired leases will be allowed to continue until their expiry dates, unless of course the holders of these leases are able to negotiate earlier renewals.

5.2.8 Rents for concessions located on state land will continue to accrue to the Central Government. Rents for concessions on tribal land will accrue to the relevant land board. But all fees payable for permits or licences related to wildlife or tourism activity in particular districts, whether on state land or tribal land will accrue to the relevant district council, provided that all fees relating to National Parks, Game Reserves and other national wildlife activities shall accrue to Central Government.

### **Lodges and Permanent Camp Plots**

5.3.1 In the past, both the state and the land boards have entered into long-term leases with tourism operators under which plots (as distinct from concessions) have been made available in Parks and Reserves and on tribal lands for lodges and permanent camps. This practice will be continued. That is to say, outside the concession lands, only plots large enough to accommodate the lodge or camp will be made available. Lodge and camp operators who wish to have a hunting or game viewing area for the exclusive use of their clients will be required to lease or sub-lease or otherwise rent an area within a concession.

### **Tourism and Competing Uses of Land**

5.4.1 It has become increasingly apparent that the present system of allowing citizen hunting, safari hunting and photographic safaris in the same area can and does lead to conflict, misunderstanding and over-exploitation. In line with land use planning policy, such activities will now be related to specific zones. These zones may allow exclusive use for

subsistence hunting, citizen hunting, trophy hunting, game viewing, or game farming, or they may allow for multiple use, depending on the area and local circumstances.

5.4.2 Insofar as it is possible and in line with the policy of giving the tourism sector greater security of tenure, these zones will by and large fall within Wildlife Management Areas. However overlying these zones and continuing throughout the country will be a pattern of Controlled Hunting Areas which will relate as far as possible to land use and land tenure patterns. The Controlled Hunting Area designations are needed to manage hunting activities, as required by the Fauna Conservation Act.

5.4.3 With concurrent efforts in improving wildlife populations, restocking communal areas and increasing local revenues from concession rentals, it is felt that the zoning policy will enhance rather than diminish the returns to citizens and the country as a whole.

## SECTION 6

### TAXATION

#### Background

6.1.1 There is evidence that tourism operators generally, and safari operators in particular, have paid little company tax to Botswana in the past. The transactions producing the receipts and disbursements of these companies have frequently taken place outside Botswana. For this reason, and because in many cases the financial records of tourism companies operating in Botswana have been kept and audited outside the country, the Tax Department has found it difficult to verify company tax returns.

6.1.2 Given the fact that public revenues are one of the principal means whereby a public benefit is secured from Botswana's wildlife resources, this situation cannot be permitted to continue. A number of changes will therefore be introduced.

#### Land Rents

6.2.1 In section 5, mention has already been made of the intention to reorganise the system of concessions whereby land is made available to tourism operators. An important part of the reorganisation will change the method of rent determination involved, which will increase the level of rents paid and alter somewhat the distribution of revenues obtained.

#### Sales Tax

6.3.1 Consideration has been given to a number of new revenue-raising mechanisms. It has been finally concluded, however, that an existing tax, such as the sales tax, would be the best choice and could be simply extended to the tourism industry. It would of course result in a further increase in government revenue.

#### Corporate Income Tax

6.4.1 There will be no change, as such, in the corporate income tax, as a result of tourism policy. Every effort will be made, however, to ensure that companies in all industries pay the income tax for which they are liable.

6.4.2 As part of this effort, amendments to the Companies Act will be made. In addition, as indicated earlier in this report, tourism enterprises wishing to operate in Botswana will have to be incorporated and registered in Botswana and will be expected to pursue certain objectives, one of which will be to maintain records "designed to permit the government, if need be, to monitor their performance for adherence to the laws and regulations of Botswana".

6.4.3 All of these provisions will help to ensure a significant increase in the financial returns from tourism to the state and local authorities and, ultimately, to the people of Botswana.

## SECTION 7

### FEES

#### National Parks and Game Reserves

7.1.1 In the past, there have been many complaints lodged by tourists and others concerning inadequate facilities provided by the national parks and game reserves. Complaints of over-crowding in the campsites provided have also been common. Compared to what is offered by parks and reserves in other countries, many of these complaints have been justified. One cannot expect the users to take into account the severe staffing and budgeting constraints under which the Department of Wildlife and National Parks has been labouring.

7.1.2 The problem is, however, more fundamental. From the point of view of non-citizens, the admission fee to the Parks and Reserves, and the prices charged for the use of campsites, have been nominal. As a consequence, the facilities and amenities have been overcrowded to the point where the marginal users have obtained little or no benefit from them. Moreover, the ecology has been damaged, in some cases almost beyond redemption.

7.1.3 The answer is straightforward: a significant increase in admission and camping fees charged to non-citizens not only to finance the installation and improved maintenance of facilities but also to prevent overcrowding. Some increases have already been introduced. Other methods, including "booking" or reservation systems, will be considered as means of preventing overcrowding.

#### Hunting

7.2.1 The determination of hunting fees is a complex, judgmental process, in which at least three important factors must be taken into account. The first and perhaps the most obvious is the economic value of the animals killed, which unfortunately fluctuates constantly, species by species. Any result produced by an examination of this factor must be modified to take into account the fact that, in Botswana, unlike many African countries, subsistence and commercial hunting are a major source of food and income for a significant fraction of the rural population. Finally, there is the "user fee" concept, which says in effect that the costs of enforcing the regulations governing the hunting of wildlife should be borne by the hunters themselves. This concept is probably the most important determinant at the present time. It should be noted, however, that the fee schedule differentiates, and will continue to differentiate, among citizen hunters (and commercial hunters), resident hunters who are not citizens and all other hunters -- on the grounds that citizen hunters and commercial hunting establishments are paying through their Botswana taxes some part of the recurrent cost of the Department of Wildlife and National Parks while non-citizen hunters are not. Resident non-citizen hunters fall between these extremes.

7.2.2 The present quota system seems to work reasonably well from the point of view of controlling exploitation and maintaining a reasonable distribution of the benefits of the resource. The main features of the system will therefore be retained.

## SECTION 8

### LOCALISATION

#### Background

8.1.1 Because the expansion of the tourism industry in Botswana has been less than it could have been, the number of jobs created has been below potential. Furthermore, there has been a failure to employ Batswana in managerial jobs or even in those with a potential for promotion. There have also been limited opportunities for citizens to acquire shares in the industry. Batswana have consequently perceived tourism as an industry dominated by expatriates that makes little if any contribution to the nation and provides few attractive career or investment prospects.

8.1.2 It is the firm intention of the Government to bring about, as quickly as possible, an orderly increase in the participation by Batswana in the tourism industry as employees, investors and operators.

#### Employment and Investment Opportunities

8.2.1 Under the licensing arrangements to be established, tourism operators will be expected to pursue a number of objectives, one of which will require them to "provide Batswana with genuine opportunities for investment and

employment ....” As has been emphasised already in Section 4, the Government is determined to ensure that good progress is made in meeting this objective. Among other things, it will encourage joint ventures involving citizens.

8.2.2 Operators will be given adequate time to adjust to these new requirements and training assistance will be made available for the purpose.

### **Incentive Assistance**

8.3.1 The stage is set for the introduction and development of a number of “wildlife utilisation” industries, some of which will prove to be tourist attractions. These industries will qualify for the Financial Assistance Policy (FAP). As a service industry the tourism industry itself does not as yet qualify.

8.3.2 The Government will be willing, if the need should become apparent as the new policy matures, to consider the introduction of a modest package of industrial incentives to assist new ventures in the tourism industry get off the ground, particularly those in which ownership rests with Botswana or is determined by a joint venture arrangement in which Botswana have a significant interest. Such a package might emerge from a review of “productive services” to which FAP might be subjected.

### **Training and Upgrading of Staff**

8.4.1 There is a critical need to provide vocational training for Botswana who render the many types of services provided by the tourism industry to holiday-makers. Government believes that this need must be met and intends to establish professional training courses for new employees and for existing staff whose skills need up-grading. These courses will be funded from four sources: Government funds; tourism association funds; funds provided by donor agencies; and user fees to be paid by operators whose employees participate in courses.

8.4.2 A concerted effort will also be made to train and up-grade the skills of Government employees who are involved in the licensing and regulation of the industry and in offering the courses just described. A similar effort will be made to sensitise other officials, such as Customs and Excise and Immigration Officers, who are in a position to provide tourists, particularly overseas tourists, with early impressions of Botswana and its people. More effective use will be made of opportunities provided overseas for the training of officials.

8.4.3 In pursuit of these goals, consideration will be given to the establishment of specialised training facilities for tourism occupations. For example, the Wildlife Training School in Maun might be expanded for this purpose.

## **SECTION 9**

### **GOVERNMENT ORGANISATION**

#### **Background**

9.1.1 A number of Ministries have an interest in tourism and must play a role in the development and application of policy related to it. In this connection, mention might be made of the Ministry of Works, Transport and Communications, which has much of the responsibility for transportation infrastructure on which the spread of tourist activity is so dependent. Perhaps of greater importance is the Ministry of Local Government and Lands, whose mandate extends to the allocation of land, which has an obvious influence on the direction of tourism development. Finally, reference must be made to the Ministry of Finance and Development Planning, whose policies determine not only the framework of taxation within which the tourism industry is to function but the level of expenditures to be made on tourism-related facilities. These and other Ministries could be marginally affected by the new tourism policy set forth in this paper.

9.1.2 However, the central responsibility for the development of tourism and for the management of the wildlife resource that serves as its principal attraction rests, and will continue to rest, with the Ministry of Commerce and Industry. It is in this Ministry that the policy changes now contemplated, particularly those calling for the introduction of licensing and grading, will impinge on organisational structure.

#### **Ministry of Commerce and Industry**

9.2.1 As already indicated, the Ministry of Commerce and Industry will continue to bear responsibility for development of the Botswana tourism industry and for the administration and coordination of policies relating to tourism and the management of wildlife, among other things.

- It will therefore continue to have within its ambit the Department of Wildlife and National Parks, whose mandate will be essentially unchanged.
- To deal with the provisions of tourism policy and legislation that call for entirely new activities, such as the licensing and grading of tourism operations, the Ministry will be allocated additional manpower and financial resources and its existing Tourism Development Unit will be upgraded to the level of a Department.
- The Ministry will be assisted by, and associated with, a Tourism Licensing Board, which will report to the Minister of Commerce and Industry and which will have specific responsibilities relating to licensing, regulating and grading.
- The Ministry will also be assisted by, and associated with, a National Advisory Council on Tourism, which will be expected to advise the Minister on all aspects of tourism policy.

9.2.2 For the sake of greater clarity, each of these organisational elements require some elaboration.

#### **Department of Wildlife and National Parks (DWNP)**

9.3.1 This Department will continue to be responsible for all aspects of wildlife management in the Parks and Reserves and for the implementation of the Government's policy of wildlife conservation (sustained utilisation).

9.3.2 As manager of the National Parks and Game Reserves, DWNP will be primarily responsible for the provision of tourism facilities in these Parks and Reserves and will take the lead in recommending entrance and other fees and charges. It will also take the lead in recommending hunting fees and in setting annual hunting quotas for Controlled Hunting Areas.

9.3.3 In carrying out these responsibilities, DWNP will consult with the Department of Tourism. In turn, DWNP will be consulted about the aspects of tourism policy or administration that are likely to affect wildlife conservation or utilisation.

#### **Department of Tourism**

9.4.1 The Department of Tourism will be generally responsible for the promotion and development of tourism in Botswana and for the formulation and administration of policy relating to tourism.

More specifically, it will be responsible:

- a) for the formulation and execution of programmes designed to promote tourism in Botswana;
- b) for the provision to the National Advisory Council on Tourism of such information, advice and assistance as it may require;
- c) for the provision to the Tourism Licensing Board of information, advice and recommendations on the licensing and grading of tourism operators;
- d) for research and development, including the collection and analysis of statistical data;
- e) for the monitoring of tourism operators for adherence to the terms and conditions of licences, particularly with respect to progress made by the operators in pursuing the localisation and other objectives specified in the licences;
- f) for the development and implementation of plans for the training of Botswana in the various skills required to provide high-quality services to tourists;
- g) for the creation and maintenance of an up-to-date inventory of Botswana's tourist assets and of a system to ensure that these are prioritised development and protection.

9.4.2 Finally, the Department of Tourism will be expected to maintain effective liaison with representatives of the tourism industry, with ministries and departments and with local authorities having a direct interest in tourism policy.

#### **Tourism Licensing Board**

9.5.1 The Tourism Licensing Board will be established by statute and report to the Minister of Commerce and Industry,

who will be responsible for appointing both its members and an officer of the Ministry who will serve as its Secretary.

9.5.2 The Board will be authorised to formulate and apply a system of licensing, regulating and grading to hotels, motels, lodges, permanent camps and safari operations. It will also be authorised to apply the system of licensing and regulating tour operators and travel agents.

9.5.3 The Board will be required to submit an annual report to the Minister and to make public, at regular intervals, a list of licensed operators, indicating (where applicable) the grades allocated to each of them.

#### **The National Advisory Council on Tourism**

9.6.1 The National Advisory Council on Tourism will also be established by statute. It will report to the Minister of Commerce and Industry, who will be responsible for appointing both its members and an officer of the Ministry who will serve as its Secretary.

9.6.2 The Council will be expected to meet at least twice a year. Its members will be drawn in roughly equal proportions from the tourism industry, other elements of the private sector with a substantial interest in the development of the economy and appropriate agencies of government, with due regard for regional interests.

9.6.3 It will be authorised to provide the Minister with general advice and specific recommendations on all aspects of tourism policy and administration.

### **SECTION 10**

#### **CONCLUSION**

10.1 All those who have examined the economy of Botswana in recent years have agreed on one thing: the need for diversification. Many of the same observers have mentioned tourism as an industry that could help to meet this need. Hopefully, this policy paper has made it clear that tourism has the potential to contribute substantially not only to economic diversification but also to the economic welfare of Botswana, especially those living in the rural and remote areas of the country.

10.2 The paper has gone on to suggest, however, that unless a number of important policy changes are made, substantial growth in the number of tourists coming to Botswana would probably offer few if any benefits to the nation and its people and, indeed, could cause substantial depredation of the fragile ecology on which both the wildlife resource and the potential of tourism depend.

10.3 The Government intends to introduce the necessary new policy, the principal elements of which have been explained in the paper and are summarised in Appendix A. Among other things, the Government believes that the new policy will bring about positive change in the nature and pattern of tourism, in the incentive system that motivates the tourism industry, in the financial returns that come to the nation through its national and local governments, and in the opportunities for investment, ownership and meaningful employment that become available to Botswana as individuals.



**SUMMARY  
OF  
PRINCIPAL ELEMENTS  
OF  
TOURISM POLICY**

**General Objectives**

11.1.1 The main objective of this tourism policy is to obtain from the tourism resources of the country, on a sustainable basis, the greatest possible net social and economic benefits for Botswana.

11.1.2 Among the subordinate objectives, two stand out:

- a) to shift the mix of tourists away from those who are casual campers towards those who occupy relatively permanent accommodation; and
- b) to increase substantially the financial returns from tourism to the people of Botswana.

**Regulation of the Industry**

11.2.1 Under the provisions of a new Tourist Development Act, to be administered by a new Department of Tourism within the Ministry of Commerce and Industry and a Tourism Licensing Board associated with the Ministry, a system of licensing and regulation will be introduced for hotels, motels, lodges, permanent camps, safari operations, tour operators and travel agents. All of these entities, except the last two, will also be covered by a system of grading. The objectives of the new system of licensing and regulation will be to ensure that the operators:

- a) are well qualified and equipped and have adequate financial resources, given the nature of their activities;
- b) provide a quality of accommodation and service that meets a known standard at a known price;
- c) conform to an acceptable code of conduct;
- d) provide Botswana with genuine opportunities for investment and employment, including employment in jobs with favourable career prospects.
- e) maintain adequate records designed to permit the government, if need be, to monitor their performance for adherence to the laws and regulations of Botswana;
- f) operate as companies incorporated and registered in Botswana;
- g) submit annual audited financial statements using auditors resident in Botswana.

**Tourism Concessions and Related Issues**

11.3.1 Concessions on State or tribal lands leased to qualified operators will be governed by certain basic terms and conditions.

- a) Lessees will have maximum flexibility consistent with the basic policies of the government, including those governing land use and infrastructural development for the areas. To that end, subject to the approval of the lessor, and the Tourism Licensing Board, when necessary, lessees of concessions will have the right to transfer, cede or sub-lease and to arrange for changes in land usage, including those that would result in multiple use.
- b) There will be no ban on permanent structures. The size, character and location of buildings and structures will have to conform, however, to the land utilisation plan for each Wildlife Management Area, as approved by the Government.
- c) Leases will be offered on a long-term basis with some provision for renewal.

- d) Leases will provide for a review of rents at specific intervals -- a review that will take into account the effects of inflation, among other things.
- e) With the exception of those situations in which citizens are entitled to move and hunt on concession lands, and those in which others may have legal or traditional rights to traverse such lands, the rights conferred on lessees will be exclusive.
- f) Lessees will be required to adhere strictly to all the laws and regulations of Botswana.
- g) Leases will be subject to termination for infractions.

11.3.2 Lessees will be selected in accordance with a new process containing a number of elements.

- a) Each concession will be advertised in a manner that will, among other things, make public the types of land use that have been approved and the terms and conditions to be incorporated in a standard form of lease.
- b) Only companies that have received conditional licensing approval will be allowed to submit applications.
- c) Applicants will be required to submit their operating and development plans.
- d) They will also be required to make an offer of rent. The lessor will reserve the right to turn down, negotiate or re-advertise if the rents offered are below an acceptable minimum.
- e) Assisted by an advisory allocation committee, the lessor will evaluate the applications, using an established set of guidelines. Other things being equal, the concession will be granted to the applicant offering the highest rent.
- f) Provided they comply with the requirements of allocation, and are competitive in their rental bids, existing operators will be given priority with respect to concessions they have had under lease.

11.3.3 Rents for concessions on state land will continue to accrue to the central government. Rents for concessions located on tribal land will accrue to the relevant land board. All fees payable for permits or licences related to wildlife or tourism activity in particular districts whether taking place on state land or on tribal land, will accrue to the relevant district council. But all such fees relating to national parks, game reserves and other national wildlife activities will accrue to the Central Government.

### Taxation

11.4.1 To increase the public benefits received from Botswana's tourism resources, a number of changes affecting taxation of the tourism industry will be made.

- a) As already indicated, the system of land concessions will be reorganised and the method of rent determination that is a part of it will be modified in such a way as to increase the level of rents paid to both State and local authorities.
- b) An existing tax, probably the sales tax, will be extended to the tourism industry.
- c) No change in the corporate income tax is contemplated as a result of tourism policy. But every effort will be made to ensure that companies in all industries pay the income tax for which they are liable. As part of this effort various amendments to the Companies Act will be proposed.

### Fees

11.5.1 Admission and camp site fees for non-citizens using the National Parks and Game Reserves have recently been increased. Further changes will be considered, if necessary. In order to avoid over-crowding, other methods, including "booking" or reservation systems, will be considered.

### Localisation

11.6.1 Under the terms of their licences, tourism operators will be expected to pursue a number of objectives, one of which will require them to provide Botswana with genuine opportunities for investment and employment. Among other things, the government will encourage joint venture arrangements that will provide citizens with a means of increasing their participation in the industry.

11.6.2 If the need should become apparent as the new policy matures, the Government will be willing to consider the introduction of a modest package of financial assistance to help new tourism ventures get started, particularly those in which ownership rests with Batswana or with joint ventures in which Batswana have a substantial interest.

11.6.3 A concerted effort will be made to train Batswana in the skills required to provide high-quality services to tourists. The necessary courses will be financed from four sources: Government funds; tourism association funds, funds provided by donor agencies and user fees to be paid by operators whose employees participate in the courses. A comparable effort will be made to upgrade the skills of government employees involved in the licensing and regulation of the industry and in dealing directly with tourists entering the country.

### **Government Organisation**

11.7.1 Within the Ministry of Commerce and Industry (MCI), or in close association with it, a number of institutions will be substantially involved in implementation of the new policy on tourism.

- a) The Department of Wildlife and National Parks will continue to be responsible for all aspects of wildlife preservation and for implementation of the Government's policy on wildlife conservation (sustained utilisation).
- b) The present Tourism Unit will be upgraded to the level of a Department -- and will be called the Department of Tourism. It will be generally responsible for the promotion and development of tourism in Botswana and for the formulation and administration of policy relating to tourism. Among its specific responsibilities will be:—
  - the design and execution of programmes to promote tourism in Botswana;
  - the provision, to the Tourism Licensing Board, of information, advice and recommendations on the licensing and grading of tourism operators;
  - the monitoring of tourism operators for adherence to the terms and conditions of licences;
  - the provision, if and when authorised, of financial assistance to new tourism ventures, particularly those in which Batswana are owners or part-owners;
  - the development and implementation of plans for training in tourism skills;
  - the collection and analysis of statistics on tourism; and
  - the creation and maintenance of an up-to-date inventory of Botswana's tourism assets.
- c) A Tourism Licensing Board will be established by statute and report to the Minister of Commerce and Industry. It will be authorised to license and regulate all tourism operators and to apply systems of grading to hotels, motels, lodges, permanent camps and safari operations.
- d) A National Advisory Council on Tourism will also be established by statute. The Council, which will report to the Minister of Commerce and Industry, will be authorised to provide advice on all aspects of tourism policy and administration.



REPUBLIC OF BOTSWANA

**Botswana**  
**National Conservation Strategy**

**NATIONAL**  
**POLICY ON NATURAL RESOURCES**  
**CONSERVATION AND DEVELOPMENT**

**GOVERNMENT PAPER NO. 1 of 1990**

**As approved by the National Assembly**  
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## 1. INTRODUCTION AND BACKGROUND

- 1.1 In 1983 the Government of Botswana accepted the need for the preparation of a National Conservation Strategy (NCS). This need emerged from close co-operation between the Government and UNEP in the preparation of the Clearing House Mission Report. That Report reflected the importance attached to identifying policies and other measures, which would ensure, whenever and wherever possible, the sustainability of all future development.
- 1.2 The Government attaches great importance to the wide range of natural resources and features which exist throughout Botswana and especially in protected areas: National Parks, Game Reserves, Forest Reserves and the designated Wildlife Management Areas. These resources include fresh air, clean waters, vegetation, livestock, wildlife, soils, human, cultural, visual, archaeological and other related features. It is upon these resources that many people depend directly for their livelihood. Some of the resources are appreciated internationally for their unique values: the Okavango Delta and the Central Kalahari Game Reserve, for example.
- 1.3 There is clear evidence that many of these resources are under pressure. In some cases, this has given rise to concern about the ability of the resources to sustain the needs of future generations. The impacts of these development pressures are manifest by:
  - a) the depletion of fuelwood resources, groundwater resources, wildlife species and indigenous veld products resources;
  - b) land erosion;
  - c) urban and rural pollution; as well as
  - d) rangeland degradation.
- 1.4 The Government has long been committed to 'sustainable development'. It is one of the four main planning objectives of the National Development Plan. Sustainable development entails ensuring that:
  - a) present generations consume no more than the annual output or yield of those natural resources which are renewable; and that thereby
  - b) future generations have access to capital stocks of natural resources, at least similar to those presently available.

Achievement of sustainable development calls for comprehensive evaluation of environmental and economic implications before major new developments are undertaken. Consistent with this, the Natural Conservation Strategy is specifically geared:-

- a) at a minimum, to conserving the sustainability of the country's natural resources;
- b) at best, to improving the ways in which these resources are used, so that the environment is enhanced. This applies particularly wherever new developments, settlements and industries are involved.

The importance attached to 'sustainable development' in Botswana mirrors the experience in other countries where National Conservation Strategies have been prepared. The concept is supported by SADCC neighbours, as well as by many international donor agencies and conservation organizations; UNEP and the World Conservation Union, in particular.

- 1.5 Against this background the Government of Botswana has prepared a National Conservation Strategy, in full consultation with all levels of society in Botswana.

## 2. STRATEGY GOALS

- 2.1 The primary goals in formulating the Strategy are to pursue policies and measure which:-
  - a) increase the effectiveness with which natural resources are used and managed, so that beneficial interactions are optimised and harmful environmental side-effects are minimized;
  - b) integrate the work of the many sectoral Ministries and interest groups throughout Botswana, thereby improving the development of natural resources through conservation, visa versa.
- 2.2 A series of detailed Strategy goals has also been identified by Government. These specifically cover:-

### Development goals, namely:

- i. the development of new and better natural resources uses, which are sustainable;
- ii. the optimization of the existing uses which are made of all natural resources;

- iii. the development of multiple, rather than single purpose, natural resource uses;
- iv. the diversification of the rural economy so as to generate new jobs;
- v. the increased education of, and participation by, all members of society in improving the environment;
- vi. the development of links with neighbouring countries in conserving resources;
- vii. the establishment of a balance between population growth and the supply of natural resources.

Conservation goals, namely:-

- i. the conservation of all main ecosystems, wildlife and cultural resources;
- ii. the protection of endangered species;
- iii. the maintenance of stocks of renewable resources (e.g. veld products), whilst increasing their sustainable yields;
- iv. the control of the depletion of exhaustible resources (e.g. minerals) at optimal rates;
- v. the distribution of incomes and rewards more equitably, in the interests of conserving natural resources;
- vi. the cost-effective restoration of degraded renewable natural resources, including improved capacity for regeneration of the veld;
- vii. the prevention and control of pollution.

2.3 Fulfillment of these detailed goals entails designing development so as to minimize environmental costs and to enhance the quality of the environment. It likewise requires that, when 'trade-offs' have to be made involving the use of natural resources, full account is taken of the environmental and social costs as well as the economic costs.



### 3. MAIN ENVIRONMENTAL ISSUES AND OPPORTUNITIES

3.1 Extensive public consultations have been carried out by Government in identifying the main environmental issues and opportunities, which need to be addressed in formulating and implementing the strategy.

3.2 The main environmental issues/problems requiring solutions are as follows:

Issue (A) Growing pressure on water resources, resulting from increases in population, urbanization and development;

Issue (B) Degradation of Rangeland Pasture Resources, due to a variety of management and other factors. Quantification is difficult. However, two facts are generally recognized, namely that:

- a significant proportion of the national range is undergoing degradation; and
- such degradation cannot be ascribed solely to drought;

Issue (C) Depletion of wood resources both in commercial harvest of forests and as the main source of domestic fuel in most settlements. Wood harvesting has been largely undertaken in an uncontrolled manner. Insufficient regard has been paid to ensuring that yields are sustainable;

Issue (D) Over-use or exploitation of some veld products (natural products of the desert: fruits, fungi, tubers, etc.). This has damaged their regenerative capacities to provide for both subsistence and commercial needs;

Issue (E) Pollution of air, water, soil and vegetation resources. As a result human life support systems in both urban (including industrial) and rural environments are affected.

The Government of Botswana recognizes the dependence of all sustainable development upon water resources. Accordingly the need to pay priority attention to these resources is accepted. At the same time, both the restoration and conservation of rangelands are regarded as matters of particular significance, in view of the importance of the livestock industry to the nation.

- 3.3 The Strategy also addresses other issues which have an important bearing upon the conservation of natural resources and thus the quality of the Botswana environment. These include resource pressures due to the growth in human population; the depletion and conservation of wildlife resources; and the need for improving public awareness about natural resource problems and opportunities.
- 3.4 The main sustainable development opportunities based on natural resources, which require support from the Government and all interested parties are:
- a) Opportunities in the Livestock Sector through the restoration of degraded rangelands and the adoption of improved management techniques leading to increased offtakes;
  - b) Opportunities in the Arable Sector related in particular to the irrigated production of food and cash crops, in the interests of maintaining strategic food supplies;
  - c) Opportunities in the Forestry Sector for increasing its contribution to the national economy through improved management methods;
  - d) Opportunities in the Fisheries Sector for significantly increasing the annual sustainable harvest from both the natural waters of the country and several man-made dams;
  - e) opportunities for establishing and developing a Wildlife Utilization Industry, consistent with the Government's Wildlife Conservation Policy;
  - f) Opportunities for sustained development of both existing and new Veld Products, based on the results of research;
  - g) Opportunities for expanding the Tourism Sector, consistent with the proposed Tourism Policy;
  - h) Opportunities for developing the Manufacturing and Related Industries Sector. This requires that due regard be paid to the need both for the removal of serious development constraints and for the establishment of new initiatives. These were identified at the National Conference on Strategies for Private Sector Development, held in 1988.
- 3.5 Major aims associated with the realization of these opportunities are the generation of more jobs and the

improvement of both per capita and household income levels. Under this strategy the importance of developing the linkages between the different natural resources is recognized. This applies particularly in the cases of water and human resources; livestock, wildlife, water and vegetation resources.

#### 4. THE STRATEGY FRAMEWORK AND MEASURES

4.1 This White Paper outlines the Government's future strategy for the conservation of natural resources based upon the recommendations in the National Conservation Strategy Report. The Strategy provides an overall framework for the policies and measures, which will enable the key issues to be effectively addressed, as well as the opportunities to be realized.

4.2 The proposed framework involves the adoption of a blend of approaches. This is based upon continued, strong intervention by Government in the use and management of natural resources. The blend consists of three approaches:

first, a continuation of the existing interventionist approach under which a combination of laws, price incentives and fiscal reliefs in effect determine the dominant land uses;

secondly, the present system of resource allocation based on 'reasonable rationing' and zonation. This is manifest by the form of National Parks, Game and Forest Reserves, TGLP Ranches, Freehold and Leasehold Farms, mixed Farming Areas and designated Wildlife Management Areas (W.M.A.s);

thirdly, the multi-purpose (integrated) use and management of resources. In essence, this approach, wherever appropriate, calls for dual or multiple use to be made of resources. Combinations of enterprises are thereby sustained.

Just as in the past, a mixture of approaches has been adopted, so too a combination - albeit different in composition - is appropriate in formulating the Strategy. Whereas the first and second approaches have dominated in the past, it is felt that the third and second are likely to be particularly relevant in future.

4.3 In adopting this mixed approach, the importance of maintaining a strong livestock industry is recognized. At the same time, in view of the overgrazing problem, it is considered that there is a strong case for diversification. This entails developing market economies for resource uses

- additional to livestock and crop production.
- 4.4 Diversification, in effect, entails harnessing the many 'sustainable development' opportunities outlined in Section 3. It is well recognized, however, that these opportunities are by no means exclusive. Whilst they will undoubtedly help to relieve the pressure on the natural resources used by the Livestock Sector, expansion of the latter is not precluded. However, diversification is also sought through re-investment of Mineral Sector revenues; through developing a broader base of manufacturing and related industries; and through the establishment of a Financial Investment Services Sector.
- 4.5 Another main feature of the Strategy framework is to provide added support for the implementation of existing Government policies (e.g. The Wildlife Conservation Policy, F.A.P., T.G.L.P., etc.) where these have major significance for the achievement of NCS goals.
- 4.6 The Government also endorses the need for vigorous and carefully co-ordinated participation by all different groups within the community towards implementing the Strategy. These include village elders and members; District Councillors; Local Government, Central Government and Parastatal officials; members of the NGO Community; private sector companies; teachers and researchers, etc.
- 4.7 At a more detailed level the Strategy framework consists of four different types of measures. The Government is committed to these in the interests of achieving the NCS goals, diversification in particular. These measures are:-
- a) the provision of economic incentives and the use of disincentives. These are required respectively to stimulate sustainable development and to discourage over-utilization (exploitation) of natural resources;
  - b) the enforcement of existing laws/regulations and, where appropriate, the introduction of new legislation;
  - c) the improvement of planning and administrative procedures. This requires that full recognition is given to ecological needs, through the definition of resource use zones;
  - d) the expansion of facilities directed to improving environmental education, training and research activities, as well as to raising public awareness about environmental issues. It is envisaged that conservation education will be specifically included in school and teacher training college curricula.

4.8 In outline, six general types of incentives are envisaged, namely those which will:-

- i. promote good pasture management;
- ii. encourage rangeland restoration;
- iii. encourage diversification into new economic enterprises through an extension of FAP and other instruments;
- iv. provide annual awards to the winners of Environmental Improvement Competitions;
- v. encourage land tenure changes, especially in communal grazing which lead to improved management;
- vi. establish new forms of investment opportunities.

At the same time the Government intends to investigate in detail the design of appropriate disincentives for possible use in conserving the country's natural resources.

4.9 It is recognized that legislative reform can play an important role both in addressing most of the key issues and in supporting diversification. However, it is acknowledged that, in the short-term, there is a limit to the improvements which can be achieved through legislative measures. This applies to measures of all types: enforcement, reform and innovation. There is general recognition that:-

- a) too much reliance upon legislation should be avoided;
- b) high priority needs to be accorded to persuading and encouraging the public to act in ways which are environmentally benign.

Subject to these caveats, the Strategy calls for a series of improved enforcement measures and amendments to existing laws. These include improving the penal sanctions for 'law breakers', so that punishments fit the offenses, and encouraging the participation of local NGOs in enforcement activities. The laws and items for which amendments are proposed include the Forest Act, the National Parks Act, the Fauna Conservation Act, the Water Act, the Atmospheric Pollution (Prevention) Act, the dual grazing rights aspects of the Tribal Land Act, the strengthening of the Land Boards under the Agricultural Resources Act. Some of these

amendments are already in hand. In addition an Act, specifically in support of the NCS, is proposed. The objectives of this are outlined in Section 7.

- 4.10 The Government intends to use these four general measures in devising a series of 'solution packages' for addressing the issues and opportunities, summarized in Section 3.

## 5. STRATEGY FOR GOVERNMENT ACTION - INDIVIDUAL ISSUES

- 5.1 In devising the 'solution packages' for the key issues, prime consideration has been paid to:-
- a) the acceptability of the solutions to the main target groups;
  - b) the proven technical and financial feasibility of the solutions;
  - c) the availability of institutional capacities necessary for effective implementation;
  - d) the need to establish incentives, which will make the results of diversification into new rural enterprises as financially attractive as those obtained from livestock and arable production.

### Solution Package for the Pressure on Water Resources Issue

- 5.2 The solution package devised for dealing with this issue is necessarily wide-ranging. It includes improved planning and administrative measures in the interests of both protecting water resources against pollution and improving multi-purpose use. Gradual extension of the water tariff system into rural areas also features; likewise, the possible introduction of an incentive to encourage the collection of rain water. Most important is the role which the National Water Master Plan, currently under preparation, is expected to play as forming one of the essential cornerstones for implementation of the research measures, it is proposed that priority attention should focus upon: groundwater resources and their recharge rates; rainfall harvesting and water storage methods; recycling of treated effluent; pollution prevention; and inter-regional water transfers.

### Solution Package for the Rangeland Pasture Degradation Issue

- 5.3 Of all the issues, this is recognized to be the one which is the hardest to resolve. Whilst many of the solutions have generally been known for considerable time, they run counter

to traditional customs. Thus implementation progress is likely to be slow. However, there is general support for a number of practical initiatives which include:-

- i. strengthening the Range Ecology Unit within MOA;
- ii. extending the zoning and gazetting of land for use of livestock and wildlife;
- iii. developing a comprehensive water supply policy for all forms of livestock and wildlife;
- iv. improving the provision of information to livestock farmers concerning carrying capacities;
- v. improving livestock marketing infrastructure to improve offtake.

Price incentives are proposed towards improving rangeland management, thereby helping to reduce overgrazing and restore degraded rangelands. The Government intends to pursue those, which, following further study, offer the best prospects.

- 5.4 Legal reforms will inevitably continue to present problems. However, the Government is committed to continuing to devise legislation which will lead to improvements in the management of both rangelands and livestock. In addition, continued attention will be paid to finding politically acceptable ways of improving the enforcement of the Tribal Land Act and Agricultural Resources Conservation Act. The provision of professional and technical advisers in support of the Land Boards is recognized to be a crucial step forward, along with the introduction of further educational, training and research programmes.

#### Solution Package for the Depletion of Wood Resources Issue

- 5.5 In recognition of both the potential importance and expansion of the Forestry Sector, the Government intends to up-date its Forestry Policy and, most importantly, to provide a comprehensive National Forestry Management Plan. The purpose of both exercises will be to improve the management of existing resources; to establish additional woodland areas; and to develop an economically viable Forestry Industry in Botswana. Great importance is attached to ensuring that each community will have good access to 'insitu' woodland resources. Consistent with these objectives and initiatives, the Government intends to commission a study investigating the roles which financial incentives and other forms of Government assistance should

fulfil in conserving and managing timber resources. This study will include the incentives required to assist the effective establishment and management of windbreaks, woodlots and amenity tree plantations. The need to encourage the use of wood substitutes is appreciated by Government, along with the possibility of introducing subsidies to assist poorer sectors of the community in making the substitution. Legislative reform of both the Forest and Agricultural Resources Conservation Acts is proposed, specifically to make the replanting and associated protection of trees a mandatory responsibility for all communities. Inevitably the solution package includes an array of education, training and research programmes, to which Government will procure and allocate the requisite funds. The Government is considering setting up a multi-sectoral Forest Advisory Committee to implement the improvements required in the Forestry Sector.

#### Solution Package for the Overuse of Veld Products Issue

- 5.6 As part of its programme encouraging economic diversification the Government intends to foster the sustained development of a veld products industry. Efforts will be made to concentrate commercial production in specific farm or plantation areas, specially licenced for the purpose by the Land Boards. The selective introduction of price incentives and capital grants will be investigated for the commercialization of new veld products. Strenuous efforts will continue to be made to ensure that under the Agricultural Resources Conservation Act, veld product communities are both restored and protected against exploitation. A major public educational campaign is proposed as an important component of the package, covering all aspects of veld products: values, availability, harvesting techniques, storage and processing, commercial cultivation projects, the use of substitutes, etc.

#### Solution Package for Industrial/Urban Pollution and the Enhancement of Settlements

- 5.7 The Government intends to introduce a package of measures for the conservation of those natural resources, which are in jeopardy through the development of industries and settlements. As part of the anti-pollution initiatives, both the establishment of waste processing factories and the introduction of incentives to encourage recycling are to be investigated. Measures are already being taken and will continue to be taken to enforce and tighten existing legislation. These measures apply to the Atmospheric Pollution (Prevention) Act, the Water Act and the Public Health Act. Amendments will cover all aspects of licensing, registration, reclamation, waste disposal, industrial



discharge, the import and export of chemicals, emission/waste standards, and the siting and use of dumps for the disposal of hazardous wastes. All amendments will be based on the 'polluter pays' principle! In addition, for safety reasons, consideration will be given to the possible introduction of legislation concerning the use, storage, labelling and marketing of all agricultural chemicals. Again, a series of public awareness campaigns will be undertaken by Government concerning all aspects of pollution prevention and control.

5,8 In the interests of enhancing all new development, industries and settlements in particular, the Government intends to encourage the enforcement of all aspects of the Town and Country Planning Act. Special attention will be paid to:-

- a) conserving natural resources within the planning areas of all settlements;
- b) ensuring the improved provision, design and management of human settlements, including public open space and recreation facilities.

The Government appreciates the need to undertake these improvements in the interests of encouraging investment in diversified new enterprises on a joint venture basis.

Solution Package for the Conservation of Wildlife, Heritage and Cultural Resources

5.9 This package of measures has been devised in the interests of assisting both the wildlife utilization and tourism industries. The proposed planning, management and incentive measures include:-

- a) the gazettelement of the designated WMAs;
- b) the upgrading of some game reserves so as to extend the protection given to all forms of wildlife;
- c) the adjustment of some National Park boundaries to include a number of areas recommended in 1976 for gazettelement, on account of their botanical interest and to consider the Linyanti-Savuti triangle as part of the Chobe National Park of a WMA, as only some 10 km of river swamp frontage is presently protected in the Park;
- d) the preparation and implementation of management plans;
- e) the provision of increased anti-poaching controls; and

- f) the execution of wildlife cropping projects, primarily for the benefit of local communities.

Support is also provided for unification of the National Parks Act (Cap 38/03) and the Fauna Conservation Act (Cap 38.01) for the years 1967 and 1961 respectively. Accomplished in principle, this unification is now awaiting final approval.

## 6. THE EXPECTED BENEFITS

- 6.1 The 'solution packages' and initiatives proposed under the Strategy are expected to yield several benefits in both the short and longer term. Three main types of benefits are envisaged: conservation/protection of the environment; environmental development; and community gains.
- 6.2 The principal conservation and protection benefits include reductions in habitat losses; increases in the populations of both endangered and threatened wildlife species; the protection of all natural and cultural areas of outstanding value; and the restoration of degraded rangeland pastures and eroded areas. The changes will benefit the wildlife utilization, livestock and tourism industries, in particular. Improvements in the conservation and cost-effective use of water will benefit all sectors of the economy and community. The same applies in the case of the pollution prevention and control improvements.
- 6.3 Development, based on a policy of diversification, will help to enhance both the economic and physical environments. Not only will new enterprises, industries and investment opportunities be generated under the Strategy, but employment openings will grow.
- 6.4 Under the Strategy both rural and urban communities are expected to benefit; not just in economic and physical ways but socially also. Community participation - especially through Annual Environmental Award Schemes - is expected to grow.
- 6.5 Collectively these benefits are expected to be substantial. As a consequence, the Government is justified in making special provisions to implement the Strategy through new institutions and resource allocations.

## 7. PRE-REQUISITES FOR EFFECTIVE IMPLEMENTATION

- 7.1 It is generally agreed that successful implementation of the Strategy calls for close liaison. This involves all

Ministries and other interested parties: NGOs, the University, the private sector, etc. Thus, Government intends both to strengthen existing organizations and to provide new administrative structures. The latter include:-

- a) establishing an appropriate organizational authority, which will have prime responsibility for both co-ordinating implementation of the NCS and maintaining close links with the National Development Plan process;
- b) providing an extensive consultative framework within which such an authority can effectively operate. It will involve all levels of society in Botswana.

7.2 The three institutional measures which the Government proposes to take are to:-

- a) establish an NCS Advisory Board, under the chairmanship of the Minister of Local Government and Lands. The Board will report to Cabinet through the Minister. Membership of the Board shall include senior representatives of all relevant sectoral and other Ministries, as well as representatives of Local Authorities, the Chiefs, parastatals, NGOs, the private sector, the business community and special interest groups;
- b) establish an NCS Co-ordination Agency. The main functions of this will include servicing the Board, co-ordinating the execution of its decisions and liaising with other organizations to ensure that the NCS goals and objectives are achieved. The Agency shall initially be located in the Ministry of Local Government and Lands, until otherwise determined in consultation with the Directorate of Public Service Management;
- c) designate Environmental Liaison Officers (ELOs) within each of the Central and Local Government Ministries/Departments. They would be responsible for ensuring that their organizations comply with the NCS Act once passed, and for liaising closely with the NCS Co-ordination Agency. In the case of the relevant Central Government Ministries, the nomination of Environmental Liaison Officers may involve formalizing the representation of the organizations which attend the Inter-Ministerial Co-ordinating Environmental Sub-Group (ICES). It is envisaged that, at the District level, liaison officers will be designated. The importance of ensuring development of the necessary links and regular liaison between Ministries, Department and Local Authorities is well recognized.

The NCS Advisory Board shall have statutory advisory powers in so far as these are compatible with the responsibilities of Ministries.

- 7.3 The Government intends to submit to the National Assembly a Bill, which will cover the measures proposed under the NCS. This enabling legislation will be referred to as "The NCS Act". It will include the following:-
- a) the requirement that all sectoral Ministries, Departments, Local Authorities, parastatals, etc., shall, in the course of their work, show due regard for the conservation and enhancement of the environment in the interests of achieving sustainable development;
  - b) the need for the sectoral Ministries of Government, in particular, to work closely with the NCS Co-ordination Agency in discharging their environmental responsibilities;
  - c) the necessity for new development projects (public and private) to be accompanied by professionally prepared and approved Environmental Impact Assessments (EIAs);
  - d) the obligation for the NCS Agency to prepare annual/biennial State of the Environment Reviews;
  - e) the provision of necessary powers, whereby Planning and other Authorities can be required to prepare conservation and resource strategies at District/Local levels and to review them regularly;
  - f) the encouragement which Government intends to give to NGOs in sharing responsibility for both conservation and enhancement of the nation's environment.
- 7.4 The NCS Advisory Board is intended to play an important role in the operation of the NCS Act. In cases of doubt concerning the discharge of environmental obligations by organizations and individuals under the Act, the Board will provide guidance on how the obligations may best be met. The Board will similarly advise organizations where it believes that the environment is being compromised through either policies or activities which merit review. In addition, the Board will be responsible for presenting and annual/biennial State of the Environment Report and for co-ordinating reviews of environmental legislation.
- 7.5 It is envisaged that both the NCS Advisory Board and Co-ordination Agency will play major roles in helping to implement the EIA provision under "The NCS Act". The

purpose of the assessments will be to enable competent authorities to reach decisions on public and private development projects with the benefit of a full understanding of the environmental, as well as the economic and social, costs which will be incurred in both the short and longer-term.

- 7.6 There is general agreement that effective implementation of the Strategy will involve a range of additional tasks, including planning and co-ordinating policies, analyzing and executing research priorities, establishing educational and training programmes, overseeing promotional and information campaigns, etc.
- 7.7 One of the principal functions of the Agency will be to advise and support the existing line Ministries/Departments and Local Authorities in discharging their various environmental responsibilities. This will include co-ordinating and helping with, as appropriate, the work entailed in undertaking found main types of environmental projects, namely those:-
- i. undertaken at Village and District level, with NGO involvement;
  - ii. undertaken by other Ministries, Government Departments and parastatals, at national level;
  - iii. initiated and managed by the Agency itself, with inputs from other Ministries and organizations as appropriate;
  - iv. undertaken either jointly with or through NGOs.
- 7.8 In the undertaking of all the functions, the roles of both the NCS Advisory Board and the Co-ordination Agency will be to complement rather than duplicate the activities of existing organizations.
- 7.9 It is acknowledged that successful implementation of many of the Strategy proposals and projects will call for the continued support and involvement of NGOs. Most importantly, the implementation provisions outside of Government will involve the private sector: in particular, the leading commercial companies and developers, the hoteliers and safari companies, the banking, engineering and property development professions, etc. Such participation will be encouraged by Government.

7.10 It is recognized that implementation of the NCS involving all sectors of the community, will require the allocation and deployment of additional resources. Government accepts responsibility for providing the necessary lead by contributing resources to:-

- a) the formulation and execution of all policies directed to the sustainable development and conservation of all natural resources: water, rangelands, woodland and timber, veld products and wildlife in particular;
- b) the establishment of the proposed new institutions;
- c) the provision of 'solution packages' for environment problems and development opportunities;
- d) the formulation and execution of projects at national, district and village levels;
- e) the conduct of research and development programmes;
- f) the provision of conservation orientated extension services;
- g) the introduction of additional education and training facilities;
- h) the formulation and implementation of EIA procedures;
- i) the organization of promotional and information campaigns required in support of the NCS;
- j) the advancement of environmental data systems;
- k) the preparation of management plans for all National Parks, Game/Forest Reserves, WMAs and other important conservation areas and features;
- l) the ratification, where appropriate, of International Natural Resource Conservation Conventions;
- m) the provision of support and appropriate assistance to conservation NGOs and private sector organizations in the execution of their responsibilities.

7.11 Government accepts that implementation of the Strategy calls for the provision of significant additional resources, covering four specific requirements:-

- First, there are resources required for both the establishment and operation of both the NCS Advisory

Board and NCS Co-ordinating Agency. The role of the Co-ordinating Agency will be to co-ordinate a range of natural resource planning and managerial issues, EIA work and the co-ordination of environmental improvement measures.

In recognition of the fact that the potential agenda for change under the NCS is large, the Government endorses the appointment of highly experienced personnel to the NCS Advisory Board and to the NCS Co-ordinating Agency.

- Secondly, there are the additional funds required to cover the adjustments within existing Government organizations, in order that they can play their full part in the implementation of the NCS.
- Thirdly, there will be the need for resources to undertake the special training, R&D, data collection, monitoring and promotional programmes outlined earlier.
- Fourthly, a programme for the implementation of projects phased over a five year period, will need to be funded. In total 42 priority project proposals have been recommended by the respective Ministries, in the course of preparing their NCS Technical Reports.

It is recognized that, in implementing the Strategy, Government resources will need to be complemented by contributions from the private sector and the donors.

7.12 It is intended to implement the Strategy through an Action Plan, which will be monitored as part of the NDP process.

7.13 The Government is committed to ensuring the success of the Strategy and specifically the achievement of its twin goals: sustainable development through and with the conservation of natural resources.

# ANNEX IV



REPUBLIC OF BOTSWANA

MINISTRY OF COMMERCE AND INDUSTRY

## THE CONSERVATION AND MANAGEMENT OF ELEPHANTS IN BOTSWANA



DEPARTMENT OF WILDLIFE AND NATIONAL PARKS  
P.O. BOX 131  
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BOTSWANA

JULY 1991



# THE CONSERVATION AND MANAGEMENT OF ELEPHANTS IN BOTSWANA

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## 1. INTRODUCTION:

Elephants are a valuable, renewable natural resource and it is the intention of Government to utilize this resource on a sustainable basis in both consumptive and non-consumptive ways within an ecological framework which seeks to set and balance "limits to change" between present habitat, present species diversity and present elephant population.

Botswana's current elephant population is divided into two distinct geographical areas. The first zone lies north of latitude 20°S with a main range of approx. 80,000 km<sup>2</sup> containing 99% of the population. The second zone lies in the Tuli circle and the Tuli Block farms north of the Limpopo\Motloutse river junction, with a range of approx. 800 km<sup>2</sup> containing 1% of the population. In addition there is a small number of elephants utilising Bobirwa subdistrict.

For the northern Botswana zone, it can be stated with 95% confidence that the current population (1989\90 data) is between 46 500 and 63 000 (mean 54 600). Average elephant density over the entire northern range is 0.76 per km sq. Locally there is great variation about this figure, even in the wet season when elephants are most widespread, but this average value is useful for comparison with other areas. During the dry season elephant distribution becomes extremely uneven, 75% of the population withdrawing into 16% of the range. Within this 16% the average density is 3.6 per km sq. These dry season core areas also contain the rarest and most diverse habitats, i.e. the riverine woodlands of the Chobe, Linyanti, Kwando and Moremi areas, which are undergoing changes believed to be caused by elephants. In the Tuli Block elephant density and subsequent pressure on habitats is even greater. Management recommendations in Zimbabwe suggest densities of 0.2 per km sq averaged over the whole range or 1.0 per km sq in the dry season core areas as maximum densities if large scale elephant induced changes in woodlands are to be avoided. This scenario, if adopted, would translate into a population of 15 000 elephants in northern Botswana. Whilst such a scenario is unlikely to be pursued in Botswana, it serves to illustrate that active management of elephants is necessary if woodlands are to be preserved.

In 1986, the Government of Botswana introduced the Wildlife Conservation Policy, and in 1990, it introduced the Tourism Policy. Both these policies recognize the role that wildlife can play in providing economic diversification at the national level, and rural employment and income generation at the local level. Both policies recognize however that to fulfill this potential, wildlife utilization needs to include consumptive utilization albeit on a sustainable basis, as well as non consumptive utilization. Thus in addition to the protected areas covered by National Parks and Game Reserves, a considerable area of land has been zoned as Wildlife Management Areas wherein sustainable consumptive utilization has priority (in all, some 40% of Botswana's land surface is devoted to wildlife). It should be noted that in this context, elephants have as much potential as any other wildlife species.

Contrary to the stable or growing populations in Botswana, Zimbabwe and South Africa, East Africa, in particular, has seen

dramatic reductions in their elephant populations. It is well known that poaching has been a powerful force in causing these reductions. East Africa's solution to the poaching problem is to eliminate any profit in poaching by killing the ivory trade through a total world wide ban. This solution was taken up through the CITES forum and in November 1989, elephants and their products were removed from Appendix II to I.

Botswana on the other hand is committed to investigating the potential for creating a legal and clean trade in elephant products, which prevents the promoting and laundering of illegally obtained products, and stands up to any scrutiny. Botswana also believes that strengthening the bonds between local communities and their local resource through economic opportunities is the most effective way of preserving wildlife species. To create a better climate in which to explore these avenues Botswana would like to see the CITES resolution amended so that CITES adopts a regional rather than global approach.

2. POLICY OBJECTIVES

It is Government's policy to:

- 2.1 Manage elephants on a sustainable multiple use basis in accordance with the 1986 Wildlife Conservation Policy and the 1990 Tourism Policy.
- 2.2 Maintain elephant populations at their 1990 level by removing annual increment.
- 2.3 Maintain elephant occupied woodland in an acceptable state, subject to climatic influence.
- 2.4 Reduce elephant populations if research and monitoring indicate unacceptable changes to elephant habitat.
- 2.5 Maintain biodiversity and essential life support systems in the national parks and game reserves.
- 2.6 Reduce conflict between elephants and humans.
- 2.7 Support and undertake elephant population and elephant habitat research and monitoring programmes.

### 3. STRATEGY

- 3.1 Botswana will seek at the 1992 CITES meeting in Japan an amendment to the 1989 CITES resolution such that Botswana elephants will be restored to Appendix II.
- 3.2 Botswana will work with other member states on the implementation of the SACIM agreement.
- 3.3 Elephants will be utilised in terms of a detailed management plan which will be drawn up and reviewed by the Director of Wildlife and National Parks every three years. If not reviewed, the existing plan will stand. The Management Plan will require annual action plans.
- 3.4 Economic benefits will be optimised in favour of local employment, local income generation and local development.
- 3.5 The end products of consumptive utilization will be processed as far as possible before export. However consumptive elephant utilization options will operate in line with market forces.
- 3.6 The acceptable state of woodland will be defined for the time being as the 1990 state.
- 3.7 Management options will if necessary be preceded by a pilot phase.
- 3.8 Culling and cropping will be the principal methods for controlling elephant numbers.
- 3.9 Fees for sport hunting will reflect market value.
- 3.10 Sufficient protection will be provided to prevent elephants benefitting illegal operators.
- 3.11 The provision of artificial watering points will be pursued cautiously in order to prevent habitat degradation.
- 3.12 On freehold land, net revenues derived from consumptive utilization of elephants will be placed in a wildlife conservation trust fund. Such a trust fund can be utilised with the consent of the Director for wildlife management and research on such land, or elsewhere.
- 3.13 The current ban on consumptive elephant utilization will be lifted on final adoption of the management plan.
- 3.14 Policy objectives will be reviewed in response to research findings and other sources of additional information.

## MANAGEMENT PLAN

### A. RESEARCH

#### 1. Elephant numbers, distribution and population dynamics:

- (a) The number of elephants; their distribution; their seasonal movements; the numbers involved in such movement will continue to be worked on.
- (b) Recruitment rates, sex ratios and age ratios will be further researched.
- (c) Variations in herd sizes and movements will be studied, particularly in regard to habitat types, land tenure status and human settlement patterns.

#### 2. Habitat impact:

- (a) The mapping of the habitat/vegetation types within the elephant range will be improved.
- (b) The rate of elephant-induced structural change in woodlands will be studied with a focus on the effects of feeding on removal of mature canopy and growth of shrubs to the tree layer. The geographical distribution of impact in relation to elephant density will be surveyed.
- (c) The impact of factors other than elephants, such as fire and drought, on tree populations will be assessed.
- (d) Documentation of the adverse or beneficial effects of habitat change on plant and animal species in the elephant range will be undertaken.

#### 3. Artificial Watering Points:

- (a) Existing natural and artificial watering points will be mapped within the overall elephant range.
- (b) Changes induced in elephant/use densities and seasonal distribution patterns of individuals and groups by introducing artificial watering points will be monitored.
- (c) Changes to soils and plant communities, as influenced by elephants, by introducing artificial water points will also be monitored.

#### 4. Sustainable Harvesting:

- (a) The effects of culling, cropping and hunting on population size and growth rate will be monitored.
- (b) Disturbance effects of harvesting activities on distribution and movement patterns will also be monitored.

## 5. Modelling

- (a) Mathematical models of population dynamics and habitat interactions will be developed in order to integrate the research and to generate predictions of possible outcomes of management options as an aid to decision making.

B. PROTECTION

1. Anti Poaching:

- (a) DWNP will continue to develop and improve its anti poaching capabilities and efforts with particular regard being given to the elephants in northern Botswana.

2. Legislation:

- (a) Government will seek to introduce stronger legislative deterrents.



## C. GAME VIEWING

### 1. National Parks and Game Reserves

- (a) DWNP will give emphasis to the development and management of Chobe National Park and Moremi Game Reserve in order to increase the non-consumptive use of game viewing.
- (b) Such development will be controlled by management plans and will not jeopardise the wilderness element of these areas.
- (c) Elephant management in these two areas will be in harmony with preserving biodiversity and essential life support systems.
- (d) The existing woodland will be maintained in its 1990 state, subject to climatic influences and time lags in responding to research feedback.
- (e) Elephant numbers will therefore be reduced in these areas, if necessary.
- (f) Reduction, if undertaken in a National Park or Game Reserve will be done in a manner which minimises adverse impact on Tourism.

### 2. Private Game Reserves:

- (a) DWNP will encourage the Northern Tuli Game Reserve to manage the resident population for game viewing purposes on a sustainable basis but without further damaging the riverine woodland.

### 3. Artificial Water Points:

- (a) The existing boreholes in Chobe National Park will be serviced and then monitored by research in order to study their effect on possible habitat degradation; elephant distribution; and management implications.
- (b) Further borehole development will only be carried out if the findings of the monitoring and research programme indicate its appropriateness.
- (c) Nevertheless certain boreholes may be developed specifically for game viewing benefits in a few selected areas.

### 4. Wildlife Management Areas:

- (a) DWNP will encourage the development of game viewing in the Wildlife Management Areas within the framework though of the overall elephant management policies

D. PROBLEM ANIMAL CONTROL

1. Responsibilities:

- (a) It is the responsibility of the land owner or occupier as appropriate, or the relevant local authority to report any problem elephant directly to the most senior DWNP officer in the district. It is the responsibility of this officer to report these problems directly to the Director DWNP at head office.
- (b) It is the policy of DWNP that problem elephants will be encouraged to move away from the area. Where this is not possible, then Sections 49, 50 and 94 of the Fauna Conservation Act (Cap 38:01) will apply in regard to the destruction of the animal, subject to any changes introduced by the revision of the Act.

2. Prevention:

- (a) The electrification of the veterinary cordon fence running along the southern Nata Stateland boundary between Zimbabwe and Nxai Pan will be pursued.
- (b) The improvement and electrification of the fence running along the western and southern boundaries of the Northern Tuli Game Reserve will be pursued.
- (c) The permanent removal of elephants from the Bobirwa sub district tribal land followed by the electrification of the fence along the Shashe river will be pursued.

3. Disposal:

- (a) The trophies of any elephant killed, whether it was threatening to cause damage or did actually cause damage, will be the property of the Government.

4. Benefits:

- (a) Any revenues accruing from the sale of trophies obtained under problem animal control will be placed in a compensation fund for crop and fence damage. This fund will be administered by the Director, DWNP.

## CROPPING/ CULLING

## Control:

- (a) Cropping and culling will be controlled and supervised by DWNP.

## Responsibilities:

- (a) On freehold land, the owner or manager will submit an estimate of the elephant numbers in the area concerned and will detail the manner in which this estimate was obtained. The submission will also outline the management objectives for that area; the degree to which the owner or manager wishes to carry out any cropping or culling exercise; the proposed methodology and the research/ monitoring programme that will accompany such an exercise, having particular regard to stabilising the population/habitat interaction.

Once approved in principle, the owner or manager will notify the DWNP as to who is intended to carry out the exercise with supporting documentation in regard to experience and skill. In addition, the notification will detail how the elephant products other than ivory will be disposed supported by an economic analysis showing projected costs and profits. The actual conduct of the cropping or culling will require the presence of a DWNP officer. DWNP will also require the collection of biological data under proper research supervision.

- (b) On state and tribal land, DWNP will determine the offtake and location, using the findings of research and monitoring work. The actual cropping or culling will then be put out to contract through a tendering process. The tender will seek to optimise citizen participation without however jeopardising proper quality control. The contractor will be required to submit detailed proposals in regard to methods, equipment, source of labour, CVs of skilled personnel, disposal of elephant products other than ivory, obtaining biological data, and a projected economic analysis showing anticipated costs and profits. The actual conduct of the cropping or culling will require the presence of a DWNP officer.
- (c) Any cropping or culling undertaken will be done employing those techniques that minimise disturbance and disruption to the elephants.

## Timing:

- (a) Cropping and culling will be done in the shortest possible time during the winter period.
- (b) DWNP will be notified of the proposed dates at least 2 months in advance.

## 4. Target:

- (a) On freehold land, the owner or manager will determine the family groups to be cropped or culled, subject to the approval of the Director, DWNP.
- (b) On state and tribal land, the family groups to be cropped or culled will be determined by DWNP.

## 5. Disposal:

- (a) Elephant products will be utilised with as little wastage as possible.
- (b) Elephant products other than ivory should be processed using locally based labour, skilled employees and companies as much as possible.
- (c) Ivory will remain the property of the Government and will be controlled and marketed through SACIM.

## 6. Benefits:

- (a) On freehold land, any profits accruing will be placed in a wildlife conservation trust fund. Such funds may be used for wildlife management and research in the freehold area concerned or elsewhere, subject to the approval of the Director, DWNP.

## 7. Damage:

- (a) Any damage to property or crops caused by the cropping or culling operation, will be compensated by those persons actually carrying out the cropping or culling exercise.

## 8. Pilot Phase:

- (a) Recognising the current marketing constraint and lack of experience in DWNP, a pilot phase will be undertaken. 300-600 elephants will be culled with the following four objectives:
  - i) to determine more accurately the reproductive success rate of Botswana's elephants by collecting biological data from specimens. Such data will concentrate on determining age, fecundity, fertility and shoulder height.
  - ii) to determine through the tendering procedure what citizen companies or consortiums are available to undertake a cropping programme.
  - iii) to give DWNP experience in supervising and monitoring cropping and culling.
  - iv) to test the processing and marketing of elephant products without too much risk of wastage.

- (b) The tendering procedure should begin with a prequalifying process.
- (c) The evaluation of this pilot will determine whether it is necessary to conduct further pilot studies.

F. LIVE CAPTURE

1. Control:

- (a) Live capture will be controlled and supervised by DWNP.

2. Responsibilities:

- (a) On freehold land, the owner or manager will submit an estimate of the elephant numbers in the area concerned and will detail the manner in which this estimate was obtained. The submission will also outline the management objectives for that area; the degree to which the owner or manager wishes to carry out live capture; the proposed methodology; the intended destination of the caught elephants; and the research/monitoring programme that will accompany such an exercise.

Once approved in principle, the owner or manager will notify the DWNP as to who is intended to carry out the exercise with supporting documentation in regard to experience and skill. In addition the notification will detail how and where the elephants will be relocated with a supporting economic analysis showing the projected costs and profits. The actual capture and relocation will require the presence of a DWNP officer.

- (b) On state and tribal land, live capture will be considered when the need arises.
- (c) Elephants below an age that will be determined by DWNP may be considered for live retention under a cropping and culling exercise, should a market be readily available.
- (d) Any live capture exercise will comply with the laws of Botswana in regard to the use of drugs.
- (e) Any live capture exercise will comply with the laws of Botswana in regard to fees and export requirements.
- (f) Any live capture undertaken will be done employing those techniques that minimise disturbance and disruption and optimise the chances of survival.

3. Timing:

- (a) Live capture will be done in the shortest possible time during the winter period.
- (b) DWNP will be notified of the proposed dates at least 2 months in advance.

4. Target:

- (a) On freehold land, the owner or manager will determine which individuals or groups will be captured, subject to the approval of the Director, DWNP.

5. **Ownership:**

- (a) Since elephants in Botswana belong to the State, DWNP on behalf of the state will determine the terms and conditions in regard to ownership that will prevail for those elephants relocated outside the country.

6. **Benefits:**

- (a) On freehold land, any profits accruing will be placed in a wildlife conservation trust fund. Such funds may be used for wildlife management and research in the freehold area concerned or elsewhere, subject to the approval of the Director, DWNP.

## G. SPORT HUNTING

## 1. Who may hunt on freehold land:

(a) No hunting will be permitted.

## 2. Who may hunt on state and tribal land:

(a) Citizen hunting will only be permitted under the following conditions:

- i) a quota is available in relevant CHAs;
- ii) a market for ivory is available;
- iii) a fee will be paid as set forth in a schedule to the Fauna Conservation Act;
- iv) the citizen is accompanied by a member of DWNP;
- v) the citizen hunting card is endorsed for elephants or the citizen is otherwise accompanied by a licenced guide;
- vi) The citizen complies with Unified Hunting Regulation No. 18 of the Fauna Conservation Act, subject to any changes introduced by the revision of the Act;
- vii) there is no interference with any cropping/culling scheme;

(b) Resident and non resident hunting will only be permitted under the following conditions:

- i) a quota is available in relevant CHAs;
- ii) a fee will be paid as set forth in a schedule to the Fauna Conservation Act;
- iii) the resident or non resident is accompanied by a licenced guide and a member of DWNP;
- iv) the resident or non resident complies with Unified Hunting Regulation No. 18 of the Fauna Conservation Act, subject to any change introduced by the revision of the Act;
- v) there is no interference with any cropping/culling scheme.

## 3. Quotas:

(a) On state and tribal land, annual hunting quotas for elephants will be set by the Director, DWNP, for each or any CHA.

(b) Citizen quotas will be allocated by the raffle system.

(c) In the event of quotas being allocated in exclusively leased CHAs, that quota will not become available unless the lease rental reflects the value of that quota.

## 4. Export:

(a) The export of trophies will conform with relevant and current CITES regulations.



5. Ivory:

- (a) Any ivory not exported as part of a trophy, will conform to the control and disposal regulations set by SACIM.

6. Reporting:

- (a) Any person authorised to hunt an elephant must submit a return to DWNP in the prescribed manner within 7 days of finishing the hunt.

7. Benefits:

- (a) Revenues generated from sport hunting fees will be distributed in accordance with the 1990 Tourism Policy.

H. **MARKETING**

1. **International Trade:**

- (a) The Government of Botswana will strive to have Botswana's elephants restored to Appendix II at the 1992 CITES meeting in Japan.
- (b) The Government of Botswana will work on the setting up and successful implementation of the SACIM agreement.

2. **Added Value:**

- (a) DWNP will encourage the processing of elephant products in Botswana as much as possible.

3. **Economic Analysis:**

- (a) DWNP will continue to update the economics of utilisation options as trade and other factors change.

Tuesday August 20, 1996  
**Elephant kills man** No. 155  
 in Shakawe  
 Botswana Daily News

By Sentebale Maswe

Police in Shakwe village in the Okavango area are investigating a case in which 65-year-old man of Samochima settlement was killed by an elephant on August 13.

In an interview last week, the Shakawe police station commander, Inspector Parkie Pius said the deceased is alleged to have left his wife in the evening to collect firewood from a nearby field.

However, he said the wife of the deceased felt suspicious when her husband did not return and informed her neighbours who went to search for him.

The search party, he said, found the body of the deceased and noticed some elephant spoor.

Inspector Pius said the incident is the second of its kind in less than three months in the area, adding that in a similar incident a woman was killed by an elephant while also gathering fire wood.

He appealed to residents in the area to refrain from travelling at night since it is dangerous. However, residents on the other hand have expressed concern about the increasing number of elephants in the area.

BOPA

Elephants kill, chase people out of work  
 (Friday Sept. 6, 1996 No. 168)  
 Botswana Daily News

By Kabo Mokgoabone

Five people of Mathathane village were killed by elephants on different occasions in the recent past, the village's subordinate tribal authority, Mr Richard Serumola said this week.

He said people in the village have lost hope that they will ever get anything from their fields because of the elephants which ransack their fields when crops start growing, and that most people are now afraid to work on drought relief projects after elephants charged at them recently.

He said this when welcoming the Minister of Commerce and Industry, Mr George Kgoroba to the village on September 2.

Mr Serumola said

the uncontrolled movement of wild animals in the Bobirwa sub-district pose a serious threat to people's lives and is also a hindrance to developments because of the constant fear of being attacked.

He said drought relief workers lost some of their working tools left behind when elephants charged on them recently.

Mr Serumola also appealed to the government to see to it that elephants are seriously controlled before more lives are lost.

He said the number of wildlife officers in the area is disappointing, and regreted the fact that members of the Anti-poaching Unit are not allowed to kill animals that terrorise people.

BOPA

Tuesday Sept 17, 1996  
**Residents concerned**  
 about number of elephants  
 (Daily News)

By Boitshwarelo Mabeka

Nxamasere residents in the Okavango Sub-District say they are greatly concerned as the population of elephants increases around their area.

They raised their concern during a kgotla meeting addressed by their headman, Mr Moneaya Dibete, on September 9. The headman was briefing them about the oncoming Thirtieth Anniversary Independence Celebrations.

Residents disclosed that so far two people had been killed by elephants, while collecting firewood or cutting grass. They requested their headman to consult government on the issue, with the aim of reducing the number of elephants in their area.

They threatened to take the law into their own hands if no immediate action is taken, because they have lost their loved-ones due to these elephants. BOPA