Marketing Wildlife Products and Services

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The opinions expressed in this paper are those of the author and do not necessarily represent those of the Department of Agricultural Economics and Extension.
1. Introduction

Conventional wisdom designed to increase output and reduce desertification in Africa has not been successful. Whilst many factors are responsible, policies and technologies which are inappropriate to marginal lands and which do not give recognition to market forces intensify rather than alleviate the problems. The extension of the "green revolution" into Africa has concentrated on increasing the yields of exotic flora and fauna (conventional agricultural commodities e.g. maize, wheat, Hereford cattle) which, whilst suited to the higher rainfall areas, are unsuccessful in the semi-arid areas. Price policy measures to increase the introduction of the more drought resistant commodities have resulted in large surpluses of unsaleable commodities.¹

From a national development perspective, focus on wildlife utilisation holds the promise of increasing the value of output from marginal lands without, necessarily, increasing the ecological pressure. Whilst the emphasis of most development efforts relates to increasing supply and refining supply techniques, increasing demand and marketing efficiency can be essential to increasing returns to producers. Economic efficiency requires us to use our resources to produce the greatest possible benefit to society. Specialisation enables us to greatly increase the output from given resources but it relies on matching supply with demand. It is imperative that scientists and policy makers recognise the importance of investing in the demand side of the equation. Research into the development of more appropriate products and more efficient marketing technologies and institutions is essential.

This paper highlights some of the issues of wildlife marketing. The products and services are varied and specific and require marketing strategies which address the individual characteristics of the product or service. In addition the marketing channels which are developed for different countries have to be complementary to existing institutions and the socio-economic environment. There are, however, some characteristics and problems which are common to most wildlife products and services and it is these general areas which the paper addresses. It gives very little evidence and is, therefore, essentially a theoretical paper presenting several hypotheses which have yet to be tested.

¹ In Tanzania producer prices for sorghum were significantly increased in order to encourage production. Production increased by 620% in the 1970s and Tanzania was left with large unsaleable surpluses. A similar situation was evident in Zimbabwe in 1985/86 when price increases for finger and bullrush millet resulted in deliveries to the GMB of an estimated 205 years supply at current demand levels.
In most of Africa there is significant potential for increasing returns from wildlife. Kenya is the only country which has aggressively addressed tourism. Favourable publicity and effective promotion campaigns have been key components of Kenya's success. Reports indicate that after the release of the film "Out of Africa" visitors to Kenya increased by 50% from one to one and a half million per annum (Sunday, Mail, Harare 6.10.87). In Zimbabwe the market for plains-game hunting is completely undeveloped and that of big-game hunting could be increased. There is no promotion of commercial game meat marketing and little secondary industry has been developed from hides, horns and tusks. The potential of live animal sales locally and internationally needs to be investigated. Game-meat sales are still unusual in urban areas. International boycotts on trade with South Africa will give other African countries the opportunity to take advantage of markets already established for venison and live animal sales.

2. What is Marketing?

Marketing encompasses all the activities involved in the flow of products and services from the primary producer through to the final consumers. It includes not only physical transfer but also adding value to the products or services. Marketing is productive in so far as it creates utility - it adds time, form, place and possession utilities. The value added by marketing firms is often greater than that added by the primary producer. The exchange function is the most commonly recognised in a marketing system but the physical and facilitating functions are equally important. Because of the diversity of wildlife products and services it is not possible to develop a single marketing system or strategy e.g the physical functions required for marketing meat and curios are very different from those required for marketing photo-safaris. From the perspective of producers and producing countries, however, the goal is the same: to increase returns to wildlife utilisation.

A marketing system is efficient if the input-output ratio is maximised and this ratio can be expressed in either physical or monetary terms. Essentially we are simply considering the ratio of benefits to costs. A change in the marketing system which allows resources to be directed from lower to higher-value uses would reflect an increase in marketing efficiency. A new marketing practice which reduces costs but also reduces consumer satisfaction may decrease the efficiency ratio. On the other hand it is possible that cheaper refrigerated transport or a centralised processing plant may reduce the costs of the marketing inputs without reducing consumer satisfaction, in which case efficiency is increased.
To develop products and services from wildlife it is essential to determine the nature of the market. A behavioural systems approach would be most useful since this would characterise the participants and help them to determine the degree and level of demand for the different products. It would indicate those areas which would be most responsive to product development and promotion. No such study has been carried out for any of the markets or potential markets in Zimbabwe. Each market will need to be studied separately with different products and/or delivery systems required for each one.

Preliminary investigations into the game-meat market for Zimbabwe indicate that there are a number of very distinct markets for game-meat. A very brief analysis of those markets is given in Appendix 1. A much more detailed analysis of income and expenditure patterns, tastes and preferences is necessary if we are to know whether we are addressing negative, indifferent, latent or faltering demand. This knowledge is important for market development strategies. Thus the existence of taboos on game-meat means that packaging and selling will have to conform to consumer demands, with consumers convinced of the integrity of the marketing system. It does not mean that there is necessarily no demand for the products but that the produce are required in a different form.

Unlike most agricultural commodities, many wildlife products and services are luxuries and are, therefore, likely to be income elastic. Thus as international incomes increase, one can expect the terms of trade to move increasingly in favour of the wildlife industry. This has significant implications for marketing strategies and investment in the wildlife industry. On the other hand the price elasticities will vary for the different products and the different markets. It is possible that in some instances the Giffen-good principle may apply and that demand may actually increase with price increases. Preliminary evidence suggests that the American hunters are very price inelastic (i.e. they will not reduce demand for trophy hunting when prices increase). Whilst it is not important to determine precise co-efficients of elasticity, it is important to have some knowledge of the degree and direction of responsiveness to incomes and price.

Technological advances, especially in transport and storage, have reduced the cost of bridging the distance between producers and consumers and have opened access to markets which were previously closed. This is particularly important for the wildlife service industry where it is no longer only the extremely wealthy who can afford to travel.

3. The Problems Associated with Wildlife Product and Service Marketing

Some of the problems wildlife producers face in marketing are similar to those faced by conventional farmers. In particular the distance
from market and the relatively small production units which result in high cost marketing and a lack of bargaining power. In addition, as with many agricultural commodities, game-meat is perishable.

Poor institutions and lack of investment in infrastructure, research and marketing characterises most developing countries but are particularly inadequate for the wildlife industry. Poor co-ordination of wildlife producers and lack of bargaining power perpetuates the situation.

If peasant farmers are to be able to specialise in wildlife production and utilisation they will have to have access to reliable markets to purchase their food and other requirements. It is possible that some form of mobile, periodic market system, similar to the traditional markets in West Africa, would be the most efficient means of providing for the exchange function. This would give the farmers the opportunity to exchange their handicrafts and the meat and cash from safari hunting, for food, clothing and other consumer goods. It does not, however, overcome the problem faced by these communities of marketing the safari hunting and other recreational services. These issues will need to be addressed and institutions created before implementation of wildlife land-use systems can be encouraged. The CAMPFIRE programme (Martin, 1986) is one possible option.

The free range of the wild animals, whilst reducing management costs in production, increases harvesting costs and makes marketing difficult. It is not possible to drive the animals to centralised slaughter facilities which complicates processing, transport and control.

Game-meat in both Zimbabwe and on the world market must compete with heavily subsidised beef. Even where beef is not directly subsidised (in Zimbabwe the CSC receives approximately £40 million per annum) past investment and subsidies have firmy established market channels and tastes and have increased yields. If game-meat is able to compete with beef when virtually no investment in institutions and research exists, it is safe to accept, as potentially valid, the hypothesis that wildlife utilisation is a viable production option. There are still very few empirical studies indicating the comparative advantage of the wildlife industry (Child, 1984; Hopcraft 1986). The industry is, however, a high-value, low-bulk one and is therefore more likely to be a rational output for regions where conventional commodities are not both highly productive and efficient. The wildlife industry should, therefore, actively lobby to reduce the unfair marketing advantages which conventional agriculture (in particular beef) have obtained.

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3 Rural markets in Southern Africa are very poorly developed with most farmers fulfilling all their basic subsistence needs, relying on surplus production to provide cash for education and health.

4 This theme will be explored in more depth by Mr Graham Child when he speaks on the economics of wildlife.
4. Wildlife Products and Services

At this stage it is necessary to define our outputs and markets. We will divide the outputs into those which mirror the outputs from conventional agricultural production and those which are unique to the wildlife industry. Marketing strategies applied to the competing agricultural commodity will be applicable to the former and strategies for the recreation industry are more appropriate for the latter.

Product

1. Meat - High quality fresh venison
   Cheap-cut fresh game-meat
   Frozen meats? Frozen crocodile tails
   Frozen pet food
   High priced dried 'biltong'
   Cheap dried meat
   Canned vension and speciality meats (crocodile)
   Canned game-meat stews
   Canned pet food

2. Live animals - local for wild range stocking
   local for domestication
   regional
   international

3. a) Durable by-products (excluding ivory) - Hides, skins, horns, teeth, legs, tails: Finished high quality fashion products
   Curios for the tourist market
   Raw materials for export
   Cheap blankets, fashion goods and ornaments for the local market

   b) Ivory - raw
       carved

4. Recreation

   a) Hunting: Birds
      Plains game
      Specialised (e.g. bow)
      Big Game

   b) Photo-safaris - vehicle, horseback, walking, water;
      luxury hotels, moderate hotels, rest camps, camping;
      other sporting facilities and activities;
      package tours, specialised individual or group tours;

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2 This is a preliminary description based on 'common knowledge' and requires further research before a comprehensive classification can be given.
National regulations relating to the exploitation of game have prohibited hunting by many communities for several decades; tastes and habits have changed to substitute for wildlife utilisation.

Veterinary controls and health regulations also play a major role in restricting markets or increasing marketing costs. Whilst other animal commodities also face these restrictions they are usually more severe for wild animal products. In some cases game carcasses cannot be processed in the same abattoirs or distribution centres as domestic animal carcasses (Walker, 1979).

International concern with the conservation of individual species has also had negative impacts, through international restrictions and regulations, on the marketing of consumer durables and the establishment of wildlife farms and ranches. The CITES regulations were initially heavily influenced by non-governmental protectionist societies. The provision and administration of these regulations is costly and the possibility of new controls acts as a disincentive to investment in long term production and marketing enterprises. Regulating the export of game products does however make the marketing of illegally obtained trophies more difficult, reducing competition for legitimate enterprises.

In most African countries the Government plays a central role in the wildlife industry with most of the wildlife on land owned by the state. The Department of National Parks have usually received very little support from most Governments with development attention focused on agriculture and industry. The role of these Departments has primarily been a regulatory one with little or no emphasis on economics or development. Inefficient allocation of resources and conflicts with farmers, hunters and tour operators is the inevitable result.

Another major problem for the wildlife industry is the negative demand which appears to exist for many of the consumptive uses of wildlife products and services. The conservation and preservation of wild animals and environments has become associated with their non-use. This negative demand is usually associated with those segments of the population in Western Industrialised countries who could be the principal consumers. This has important implications when developing marketing strategies. In those countries where incomes are increasing, we are more likely to find an "indifferent demand" situation with consumers unaware of any need or desire for?

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5 In Surinam green turtle farming was established but despite representation at successive CITES meetings, they were barred from international trading (G. Child, 1978)
wildlife products and services. Promotional campaigns are particularly important in both these situations.

In common with other commodities in developing countries it would be preferable to try to develop secondary industries which would greatly increase the value of the exports. Brian Child estimated that if we invested in the production of high quality final articles the returns to elephant hide would increase by £6-8 million per annum in Zimbabwe. Investment in more sophisticated processing is made difficult by the lack of access to foreign currency for the necessary imported inputs, the shortage of skilled manpower, the deliberate secrecy of the technology (crocodile skins) and national regulations which protect home industries (Japan imports only raw elephant hide).

A problem which is peculiar to the wildlife service industry is poor international publicity. Media exposure for Southern Africa and Zimbabwe in particular concentrates almost exclusively on the negative - drought, war and rhetoric. Any reports of dissident activity or poor security has a very serious impact on demand for wildlife services.

5. Some Marketing Options for Wildlife Products and Services

The problems referred to in the previous section can be summarised as relating to:

- small scattered production units resulting in a lack of economies of size;
- poorly developed infrastructure, technologies and institutions;
- negative or indifferent demand

In order to overcome these problems we need to invest in market research and product and market development. Governments in developing countries are reluctant to invest in the unknown. Even where it may be possible to convince them of the returns to investing in both the wildlife and the tourist industry, this sector does not appear to have the lobby power to ensure continued attention. The balance of payments crisis is currently focusing attention on foreign currency earning industries and we must take advantage of the situation. The wildlife industry must establish its comparative advantage so that it can at least request the implementation of policies which promote the industry even if it is unable to attract direct Government investment.

It is imperative that all producers concerned with wildlife services and products are able to work together to lobby effectively to achieve Government support and international aid. Very few single operators are in a position to be able to afford to invest in either product
or market development. As with the agricultural industry, the wildlife industry must be organised in order to lobby for and to invest in research and advertising.

Collusion in the wildlife is necessary to obtain market or bargaining power. The recently organised Zimbabwe Wildlife Producers Association is a beginning. The interests of its members are different to those of the Hunting and Tour Operators and of the Department of National Parks, but they all have some complementary goals. A combined wildlife industry board established along similar lines to the Zimbabwe Tobacco Marketing Board may be a useful institution to help to promote and regulate the industry. It may also help to resolve some of the conflicts between government agencies and private producers. The principal objectives of such a body in any African country would be to lobby for the wildlife industry and to raise funds both through levies and from government in order to invest in market and product research and promotion. To be successful, the institution must have representatives from all producer groups and the relevant Government Department and must maintain a careful power balance. It must have legal authority to regulate the industry and raise funds. Providing all interests are equally represented, the danger of over-regulation should be avoidable.

The shortage of foreign currency makes it very difficult to adequately promote the industry on the international market even where there are private organisations prepared to make the investments. In the light of the wildlife industry's potential contribution to economic growth it should be possible to persuade donors to provide assistance. As most donors are more interested in directing attention to poor rural communities, it may be possible for the private sector to set-up a revolving fund similar to those operated for the importation of goods for commerce and industry in Zimbabwe. Thus some or all of the money spent by the donor on market research or advertising in the home country could be repaid within the recipient country, into a fund which would help to promote wildlife utilisation systems in appropriate peasant communities. Similar funds may be established to import inputs for more sophisticated processing plants and the necessary skilled manpower, where appropriate.

This is not the forum for a detailed discussion on the marketing requirements of individual products or services. In many instances group action is necessary to achieve these goals and although specific strategies are not put forward in this paper some caution is advised in establishing marketing institutions.

It should be noted that care must be taken when producers or operators consider using or forming a parastatal or co-operative to carry out the marketing functions. Agricultural marketing parastatals have been unsuccessful in most African countries where producers have been

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6The multiplier effects of the tourist industry are particularly significant where a nation is able to provide for most of the tourists needs with local commodities.
directly or indirectly taxed by these bodies. In Zimbabwe they have served to promote the interests of large-scale producers and for the most part have been operationally efficient even if economically inefficient. However, to achieve the same result for game-meat producers, there will have to be a direct or indirect commitment by Government to subsidise the industry.

The same economies of size could be achieved for game-meat marketing by the operation of a co-operative similar to Colcom (a pig marketing co-operative in Zimbabwe). In establishing such a co-operative it is important that an economic need for the co-operative is established. There are many factors which are important in the success of co-operative ventures, amongst the most important of which are that its benefits and goals must be realistic and they must be obvious to and desired by its members.

It is important that institutions are developed for the different products and services which will take cognisance of the particular characteristics of both the product and the different markets, whilst at the same time achieving the necessary economies of size and market power.

6. Conclusion

In the marketing of any products or services it is necessary to analyse the market and then devise strategies to meet or create demand. For most of the wildlife products there are few established institutions and in many cases the demand will have to be created after identifying consumer needs which the wildlife products can fulfill. For the recreational outputs, most of the institutions, services and infrastructure exist (especially in Zimbabwe) and what is required is a concerted promotional campaign. Producers are not necessarily specialists in marketing and promoting their services and it is usually necessary to employ experts. Where the markets are in the Western Industrialised nations it may be possible to obtain international aid to hire specialists to carry out market research and develop advertising campaigns in the donor countries.

There are many problems in developing markets and effective technologies, institutions and strategies for marketing wildlife products and services. If, however, this valuable natural resource, is to achieve its potential contribution to development and the economic welfare of our populations, it is essential that we invest human and financial resources into its promotion. Governments invest heavily in enterprises which have very much less potential to achieve the goals of growth, equity, employment and foreign currency earnings. An effective lobby is essential to ensure that they are aware of the potential of wildlife utilisation as an engine for economic growth. To achieve this it is necessary for all those active in the wildlife industry to act together to achieve the necessary bargaining power and economies of size.
I recommend that this Symposium requests the Conference of Ministers to:

1. Establish an inter-African agency to carry out research into and promote the wildlife industry.

2. Establish a national body in each country with representatives from all the private and public agencies involved in the industry. Such a body to have legal authority to raise funds and regulate the industry. The main functions of such a board would be to promote the wildlife industry; to establish research institutions and arrange international promotion campaigns.

3. To approach the Overseas Development Institute (U.K.) and request them to launch a Wildlife Utilisation Network similar to the Social Forestry, Agricultural Administration and Agricultural Research networks.
A Preliminary Description of the Game-Meat for Zimbabwe

Game meat marketing involves sales of fresh meat, offal, frozen meat, dried meat and canned meat. The potential customers for these products can be distinguished geographically and by income. Six markets\(^7\) have been identified:

The international market where distances and the costs of transport and storage require that commodities sold to these markets should be high value or luxury products. Veterinary and health regulations can be very restrictive.

The regional market is characterised by a deficiency of protein, particularly in meat form, but low levels of income and foreign currency effectively limits the market to low-cost dried meat. The incentives for promoting regional trade requires a closer investigation of these markets.

The national market appears to be the most important one to develop and exploit. It continues to absorb all the game meat produced at higher prices than appears to be feasible from exports. A more economically efficient exchange rate or export incentives may change this situation. The national market can be classified into four categories.

Subsistence farmers who in some areas rely on illegally poached 'bushmeat' for up to 40% of their protein requirements (Murindagomo, 1987). This sector are also the recipients of 'subsidised' dried meat sales from culling operations. Since these are the populations which are required to bear the costs of wildlife invading their farming environments, it is unlikely that cheap meat is adequate compensation from ivory sales even when the culling operations take place in the National Parks.

Rural communities who purchase fresh game meat from farm butcheries. Many of these consumers are low-wage workers who welcome any opportunity to purchase cheap meat. They are closely associated with the operations and are able to ascertain (without specific packaging) which meats they wish to avoid. As the game-meat market is developed elsewhere so supplies to this segment will decrease. It will always remain an important consumer of those meat products which cannot be easily processed, stored or transported.

High-income urban consumers who currently consume dried game meat in the form of 'biltong'. It has been estimated that only 5% of the game-meat sales in the high-income suburbs in Harare are from

\(^7\) These may increase with changes in marketing technologies, particularly transport and storage.
Fresh meat. The highly subsidised beef industry has influenced both high-income and low-income consumers. It would appear that urban Zimbabweans have a higher per capita beef consumption than most other countries. For high-income consumers, whose demand is relatively price inelastic, a change will require a vigorous campaign appealing to socio-psychological needs (status, affiliation etc). Canned meat, particularly in the form of pet food, is an area which needs investigation.

Low-income urban consumers are, perhaps, the most important segment for game-meat market development in Zimbabwe. These consumers are price responsive and will respond to beef price increases. A preliminary survey carried out in Chitungwiza indicates that very little game-meat is currently supplied to butcheries. Particularly in view of the shortage of the cheaper cuts of beef, both butcheries and consumers indicated a positive demand for cheap game-meat. Fresh meat was strongly preferred to dried meat, both because it is easier to identify the animal when the meat is fresh and because it is "not dried in a way desired by consumers" (Murindagomo 1984). Most respondents indicated that it was very important that they should be certain that they would not accidentally consume their "totem" and considered that packaging and labelling would be important. Most consumers preferred impala, kudu, steenbok, duiker, hare and buffalo. As respondents were asked to give their own preferences some of the animals may not be mentioned because they are unknown rather than indicating a taste preference. Some animals, however, will meet consumer resistance - particularly zebra, baboon and monkeys.

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8 The totem tradition is strictly adhered to and appears to include most animals found in Zimbabwe. Most families have an animal which they hold sacred but there does not appear to be any consistent pattern. It is an area which may require further research if consumers do not respond to adequate packaging and labelling.
References


Murindagomo, F. (forthcoming) "Preliminary investigations into Wildlife Utilisation and Land Use in Angwa, mid-Zambezi Valley" Unpublished M.Phil., Dept. of Agricultural Economics, University of Zimbabwe.
