Botanical Society – Cape Conservation Unit

Incentives for Conservation on Private land:
Options and Opportunities.

Summary Report 02/2001
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This report is the culmination of 3 years of research into the incentive needs and conservation context of landowners in the rarest and most threatened habitats in the Cape Floral Kingdom. Although the focus is on the Western Cape lowlands it will, wherever possible, provide guidelines and outline opportunities for the incentives required in other privately owned threatened habitats in South Africa.

Incentives for Conservation on Private land

SUMMARY REPORT

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Why we need Incentives

Biodiversity conservation does not enjoy political or funding priority, despite being fundamental to economic development. Government agencies are struggling to maintain existing reserves, let alone expand them. Most land, and particularly rare habitat, resides in private hands in South Africa. Acquisition of land for reserves is prohibitively expensive and its management costs, if borne solely by the state, would be huge. Therefore, any effort to conserve rare habitats must involve the landowners. We need to induce farmers and other private landowners to retain important elements of Biodiversity in-situ, effectively and cheaply, and incentives offer the best avenue to achieve this.

In the rare habitats of the Western Cape, the main threats to biodiversity are habitat transformation through ploughing (sometimes development), management neglect and alien plant invasions. Although these pressures apply to most of the country, it must be remembered that the incentives are developed to counter these threats specifically and may not be applicable to every situation.

Rare habitats remain only as fragments and require a subtly different approach from traditional conservation in largely contiguous habitat. They are relatively cheap for landowners to maintain but costly for agencies to manage, as they present no economy of scale and are vulnerable to a host of direct pressures. Conservation planning is therefore crucial to target priority sites and optimise the use of resources to protect them.

One of the most important considerations in pushing for the use of incentives is the **low level of compliance with regulations** that seems to be endemic to land management in SA. During interviews with farmers, many were unaware of their legal obligations and limitations, and several intimated that monitoring and enforcement were so low it was easy to ignore the tedious application procedures for burning and ploughing permits. Providing the correct incentives to modify behaviour may be far cheaper than beefing up enforcement and certainly more effective than elaborating on bureaucratic administrative requirements.

The biggest consideration of all is that, despite private landowners being responsible for by far the greater portion of our country's natural heritage, it is becoming increasingly difficult to make a living in rural SA. Economic hardships brought on by open markets and commodity fluctuations have pinched farming economies, reduced demand for wage labour and restricted cash available for conservation or sustainable land management.

To regenerate a vibrant rural economy, with stable labour patterns and a culture of conservation and sustainable use, we **need to employ incentives as a matter of urgency**.

What are incentives?

Confusing terminology is often used to describe incentives and the economic forces driving them. Consistency is important, and definitions will rely on simple language.

Incentives

Incentives are measures that *positively* influence the way people think or behave.

There are 5 basic types:

1. **Motivational** incentives underpin all others. They focus on education and communication and appeal to people's basic nature to conserve.
2. **Voluntary** schemes provide for recognition and emotive benefits of doing the right thing.
3. **Property** or **Rights-based** incentives grant added development- or use-rights in exchange for some commitment to conservation. **Price-based** incentives are similar and add value to property in return for a public-good benefit.
4. **Fiscal and Economic** incentives translate into a financial reward, direct or indirect, for a conservation service. This may take the form of tax relief (indirect) or cash grants and subsidies (direct).
5. **Regulatory** incentives are rules and laws guiding behaviour. They are usually precautionary standards to protect against biodiversity loss and provide an essential safety net.

Disincentives

A disincentive *discourages* a specified action or certain behaviour. To avoid confusion, the term must be qualified by putting it into context. A disincentive *to conserve* is one that penalises individuals who practice sound land management, for instance a lack of financial support or recognition for private alien clearing. Some authors use the term in reverse, calling for disincentives *that prevent biodiversity loss*. Regulatory incentives would fall into this category.

Perverse incentives

Perverse incentives inspire **inappropriate** conservation behaviour or **reward poor land management**, and act as opposing forces to disincentives that prevent biodiversity loss. They result from market failure to foster good stewardship or prevent biodiversity loss. A perverse incentive would be a subsidy ploughing virgin land, or a paying tax on natural veld that isn't used for production, thereby encouraging its conversion and loss of habitat. Perverse incentives are remarkably common, and often difficult to identify or predict their outcomes. Nonetheless, most biodiversity loss is caused by perverse incentives and these should be removed wherever possible.

What has been done before?

Several government reports, planning exercises and NGOs have called for incentives to assist private conservation over the past few decades. Few have developed proposals comprehensively, and fewer have been adopted in SA.
A President's Council Report (1984) was one of the earliest to call for appropriate incentives and provided initial suggestions to overcome legislative failings, including recommending financial benefits for set-asides and tax relief for donations.

In 1986 Jan Glazewski compiled a MSc thesis teasing out useful incentives for private conservation. He explained that **incentives and compensatory mechanisms were grossly neglected in South African law**, but needed robust **guiding principles** and a **national strategy for conservation of private land** and an advisory committee to oversee its implementation. His recommendations are still relevant today and will be reworked in this paper.

Glazewski determined that:

- Although controversial, "**compensation**" should be **made available** in certain circumstances where landowners must sacrifice development rights for conservation in the public interest. This could be waived in special, rare and threatened habitats, where a duty to conserve should be enforced.
- Environmental issues (**conservation**) are of special public interest, and should be **supported by appropriate tax and fiscal policy**
- A review of the objectives and roles of Heritage sites, conservancies, Nature Areas, Contractual parks and private Nature Reserves should be undertaken and appropriate incentives offered to each level they would fill in a national conservation strategy.
- An advisory committee must oversee incentive delivery.

In the only study focussed on rare habitats, Clive McDowell published a Ph.D. thesis on the types of incentives needed to motivate landowners and farmers to conserve the remnants of Renosterveld. He found that motivational incentives were crucial to change current behaviour and that tax breaks may not be effective, as they would be insignificant and targeted at ambivalent wealthy landowners anyway.
McDowell recommended that: (*updates follow in italics*)

- **Donations** of cash and private land for conservation be made **Income tax deductible** to encourage this practice.
- **Trust and Title deed restrictions** are made readily available and flexible tools for conservation minded farmers, to provide security during intergenerational transfer. This should also be used in place of expropriation. Unnecessarily high land prices should be avoided by continually monitoring private owner "willingness to sell".
- That **subsidies for private conservation** be included in the Conservation of Agricultural Resources Act. This is preferable to other incentives (especially rate rebates) in that they can be made economically more attractive and can be closely controlled.

- A **motivated and professional extension service** to be instituted (preferably in the Dept of Agriculture) to **identify priority private land** for conservation, **administer subsidies**, **promote** acceptable **conservation plans** and provide management advice.
- Subdivision of Agricultural Land be made easier for excising conservation worthy pieces. *This Act has now been largely repealed, but not necessarily to the benefit of habitat protection*.
- Extension and improvement of the "Nature area" concept. *Although the Protected Natural Environment designation was developed from this, its uptake has been slow. It is a conservation tool that could be more widely promoted and implemented*.

The Dept of Environmental Affairs & Tourism launched the Natural Heritage Program in the mid-eighties to encourage private landowners to conserve noteworthy features of the natural environment. It has over 300 sites registered, but few incentives are offered and long term security for biodiversity is lacking. Government has offered few other incentive programs for conservation.

The Department of Arts, Culture, Science and Technology has incorporated the provision of incentives from National, Provincial and Local Governments into their legislation concerning the conservation and maintenance of National Heritage Resources.

What is being done elsewhere – International perspectives

There is a growing international realisation that conserving private land is a crucial part of any national biodiversity strategy, and can often be achieved more efficiently than government interventions. There are many incentives, instruments and tools employed around the globe to assist conservation on private land, only those relevant to the South African context will be mentioned.

An exhaustive review of the international literature on mechanisms for protecting biodiversity was undertaken by Young et al. (1996) in *Reimbursing the Future*, an evaluation of motivational, voluntary, price-based, property-right, and regulatory incentives. Their general findings, which provide broad directives for effectively addressing biodiversity conservation, are complemented by invaluable recommendations and proposals for more detailed action. These findings have been incorporated with those of other authors to provide a broad framework for understanding and developing instruments for biodiversity conservation.

Two basic premises emerge. **First**, it is understood that conservation objectives (such as representation, comprehensiveness, adequacy, and private land stewardship) cannot be met in public reserves alone (Binning 1997). Furthermore, opportunities for reserve expansion are diminishing and whole landscapes, including areas allocated to both protection and production, need to be managed more strategically (Margules & Pressey 2000).

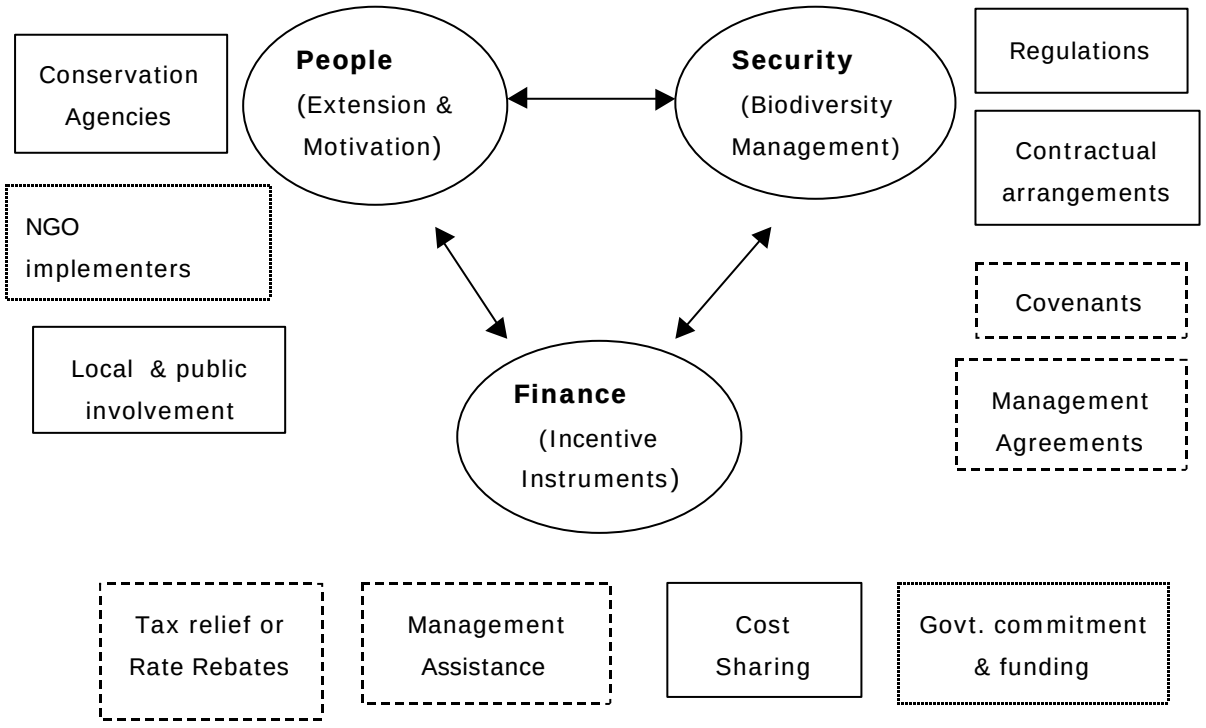
Secondly, it is understood that the instruments available for biodiversity protection are not alternatives to one another. Young and Gunningham (1997) point out that "no single instrument is sufficiently flexible and resilient to be able to successfully address all pressures on biodiversity values in all ecological, social, economic and institutional contexts." Therefore, designing an entire suite of complementary instruments is imperative to effective biodiversity conservation.

Ideally, an instrument package will draw from the five types mentioned earlier to create a policy mix that is tailored to the area of application and to counter the processes threatening biodiversity. By identifying specific threats, and formulating clear objectives to address them, a package will be more finely tuned and more effective (McNeely 1988). Young *et al*. (1996) recommend that *at least* one policy instrument be used to alleviate each threat and pursue each objective. They highlight the need for policy approaches aimed at reducing or removing the underlying causes of threatening processes, such as institutional failure, market failure or incompletely specified property-right structures, in addition to those that act directly on the threats.

The core components of successful policy development are characterised as:

- *People*: the instruments underlying institutions and strategies that can be used to motivate and retain landholder's support for biodiversity programs;
- *Security*: the mechanisms that can be used to provide secure adaptive management of biodiversity; and
- *Finance*: the incentives provided to share the costs of managing biodiversity.

Figure 1. Components of an effective policy mix for conservation. Those lacking in SA have dashed outlines. (Pence 2001, after Binning 1997)



Understanding the context in which these incentives are employed is crucial for their success. Press *et al.* (1996) introduce the concept of environmental "policy capacity". A government's policy capacity is a composite of five related elements: (1) past and present land-use policies, (2) the administrative capacity of local governments, (3) the nature of land ownership and use, (4) political culture and demographics, and (5) principal sources of funding.

The suite of instruments listed here are grouped by Young *et al.* (1996), into those that shape the institutional and community framework; then into mechanisms that make conservation happen; and, finally, mechanisms used to finance biodiversity conservation.

Building a Framework	**Making it Happen**	**Making it Pay**
Voluntary programs	*Tax policy*	*Charges and levies*
Motivational instruments	*Ownership and use rights*	*Off-setting*
Institution building	*Cross-compliance*	*Environmental funds*
Research	*Legal liability*	*Revolving funds*
International conventions and conferences	*"Safe" minimum standards*	*Debt-for-nature swaps*
Resource planning; national, regional, and local strategies	*Accreditation schemes*	*Biodiversity prospecting contracts*
Monitoring systems and information	*Acquisition*	*Commercialisation of wildlife*
	Management agreements	*International franchise agreements*
	Easements and covenants	*Environmental business*
	Compensation	
	Grants	
	Removal of perverse incentives	
	Protective legislation	
	Regulatory agreements	

No one incentive or instrument is going to be effective in all situations, and people respond to instruments differently. A mix of incentives, targeted at a range of threats or opportunities, will most effectively achieve the desired level of conservation action. To follow on from the categories above, it is important that Incentive policy address creating the appropriate institutions, provide suitable mechanisms to conserve, and ensure sustainable funding of private conservation action.

Each of the following is an example of a particular tool, or set of tools, that have proven to be successful internationally, followed by a brief discussion of why they have worked.

- Conservation easements (covenants) and financial incentives. In the United States conservation easements are used by private, non-profit land trusts at all levels (local, state, multi-state, and national), as well as by government agencies, as a general tool for conserving natural areas in the long term. Easements are well

integrated in US policy and in some areas they even permeate land-use plans, require special tax valuation, or are prerequisites for federal funding. Easements may also enjoy financial benefits in terms of property tax, federal and state income tax, and estate taxes (TNC 2000).

- Various forms of management agreements for remnants in the United Kingdom. Management agreements are now adopted as the basic instrument for environmental protection under Common Agricultural Policy of the European Union. In the UK they are voluntary and coupled with financial incentives such as reimbursement for costs incurred and compensation for forgone income. Originally management agreements were a solution for regulating Potentially Damaging Operations (PDOs) on Sites of Special Scientific Interest (SSSIs) (Bowers 1999).
- Motivational, educational and information programs in Australia. For example, the Land for Wildlife extension scheme involves networks of land managers making use of extension and facilitation services, and information on the best means of managing remnants. Land managers are offered recognition through signage, newsletters and regular field days (BushCare 2000)

Principles for bringing together the merits of different policy instruments and financing mechanisms (from Young *et al* 1996):

- Voluntary measures have the advantages of being non-interventionist, promoting positive attitudes towards biodiversity conservation and of having low ongoing administrative costs, but cannot be relied upon in isolation to provide adequate conservation levels.
- Transferable property-right mechanisms (e.g. purchased conservation covenants) offer efficient means to combine market and regulatory mechanisms.
- Property-right mechanisms in general may be an appropriate mechanism in circumstances that require the tailoring of measures to site specific problems in an administratively efficient manner.
- Biodiversity conservation can also be enhanced by indirect means, especially the removal of perverse incentives.
- Precautionary regulations and mechanisms provide an efficient means of making other mechanisms more effective; and regulations should be used as a way to provide certainty and prevent irreversible loss, but they also need to be joined with positive mechanisms, such as management agreements, which ensure ongoing conservation.

<u>Country Studies:</u>

Australia has been a leader in private conservation. It has well endowed trust funds and government programmes at commonwealth, state and local level, as well as well co-ordinated and motivated community group networks such as LandCare. Tax concessions and rate rebates are the norm in most states. Conservation has fallen under the purview of

Environment Departments as well as Agriculture and Research Institutes. Local Government has been co-opted and produced a Local Government Biodiversity Conservation Strategy outlining its role in encouraging and providing incentives to priority habitats.

Australian experience has shown that devolving decision making powers concerning conservation and incentives to the lowest level possible (usually local government) is by far the most efficient institutional arrangement. By encouraging initiative and inducing conservation-minded goodwill from NGOs and community groups, effectiveness has increased by as much as three times as government initiatives.

Most incentive schemes in the **UK and Europe** are subsidised by Agricultural Agreements, paying farmers to conserve rather than over-produce certain commodities. Although this also happens in the **USA**, there are several other notable Federal and State schemes that encourage private conservation. Donating land, cash or rights in land are all tax deductible, even if these are to Non government organisations. **The Nature Conservancy** is a non-profit organisation that actively engages landowners, draws up conservation plans, receives or purchases easements (servitudes or rights to land), re-sells properties with restrictions and implements several other creative incentives.

Costa Rica provides an interesting counter point to South Africa, and its lessons are possibly more relevant than that of Developed countries. Detailed research looking at current incentive programs and landowner incentive needs revealed some informative parallels with SA (Langholz *et al.* 2000). Basic incentives (appropriate institutional mechanisms, exemption from local taxes, technical assistance, and protection from land invasion) are offered to participants in a Wildlife Refuge program. Results show that developing countries can use incentive packages cheaply and effectively, landowner goodwill is easily mobilised, short term gains can result in long term protection for Biodiversity and that a range of incentives are best applied. Other experiences show that insufficient or intermittent extension or promotion hampers these programs from being effective, and this can result in under-utilisation of incentives offered. By assisting with protecting wildlife refuges from squatters and greedy local government taxes, conflict between National departments and local politicians arose. This has important lessons for SA in the devising and implementation of incentive schemes.

A checklist for incentives

Before embarking on a mission to implement any form of incentive it is wise to ensure that the context is appropriate. A few principles are derived from local and international experience should guide our development of incentives, and useful criteria to determine their effectiveness are summarised.

Principles for incentive development:

1- All incentive schemes must be based on strong communication and education. These 'motivational' incentives must underpin all other endeavours.
2- Incentives should focus on removing underlying causes, rather than on treating symptoms or acting on direct pressures.
3- Any incentive should only be made available in return for a public good or benefit to conservation. New laws that change a landowner's 'duty of care' should be accompanied by suitable incentives to ease their implementation.
4- There is no magic bullet. A diverse suite of incentives and instruments is necessary to cater to the needs of as wide a range of the target audience as possible.
5- There needs to be a balanced policy mix of regulatory disincentives, with incentives to conserve.
6- Know your target audience. You cannot use a carrot or stick on a bull.
7- Most incentive measures will require innovative partnerships between levels of Govt, NGOs and landowners. The costs of conservation are best shared between several different agencies and the owner.

Choosing the correct incentive tool

Useful evaluation criteria (in order of priority) are:

1- They must be a **dependable** and **dynamic**. Incentives must at least be consistent with and support wider conservation and development goals.
2- **Precaution** (low chance of negative consequences) and **equity** (no one group or future generation benefits or is disadvantaged unfairly) must prevail.
3- Economic incentives must be politically, economically and practically **acceptable** at all levels. This might be hard to achieve in a fractured society and struggling economy, but it is worth striving for.
4- They must avoid increasing dependency on handouts or perpetuating unsustainable land use practices.
5- They must be **simple** to implement and **minimise** the **costs** of transaction, enforcement and participation.

If Incentives fail:

Sometimes, incentives will not be sufficient to achieve the desired level of conservation or behaviour, and it is imperative that suitable legislative controls are in place to minimise biodiversity loss and regulate the recalcitrant few.

Obstacles; or Why are Incentives not commonplace in SA?

Although many attempts at understanding and promoting incentives have been pursued in SA, very few appear to have taken root. It is critical to determine and analyse this failure if future interventions are to be successful. Several possible reasons exist:

- There was no champion to carry them through, or motivators were driven by self-interest.
- The political climate has been apathetic and ever changing.
- The conservation establishment has been disinterested or more concerned with big five game parks, than habitat and ecosystem conservation.

We cannot ignore pressing environmental problems (of which conservation is a crucial part) while promoting upliftment. The arguments for conservation and private involvement (and the incentives to drive it) have to be made repeatedly, by authoritative institutions, and with economic and moral justification.

Landowner's needs and implicit requirements

Informal conversation was found to elicit landowner's needs and fears more accurately than a structured questionnaire. What follows are the major outcomes of many hours of discussion. These outcomes have been noted in several other studies (McDowell 1988, Heydenrych 2000).

- Strong ties to the land and its conservation were evident in more than three-quarters of people interviewed.
- Ignorance and misconception regarding the nature and value of biodiversity were the most common reasons for habitat loss. Lack of communication and motivational extension were the most commonly voiced grievances.
- The third most common request was for financial assistance, as farmers could now not afford to carry the costs of effective conservation.

An integrated summary of the voiced and implicit requirements is elaborated on below, under three headings. The order is based on removing threatening processes first, and employing the cheapest incentives before the most expensive.

1- Removing perverse incentives

Biodiversity loss is seldom the result of simple identifiable causes but rather a complex and diffuse set of circumstances. However, in order to focus our actions we must counter the two main threats and eliminate any perverse incentives that support them. Although urban and recreational development is a threat to some areas it requires a subtly different suite of inducements to change that won't be elaborated on here.

Agricultural pressures on pristine habitats are driven by a complex array of market and climatic factors, mostly beyond the farmer's influence. Currently, SA law curtails a farmer's right to respond to these forces effectively (by expanding cultivation), only if the proposed agricultural enterprise threatens agricultural resources (such as water and soil). It is crucial to add irreplaceable biodiversity to this list. The preferred incentive policy option is to correct markets (by for example green certification of sustainably produced commodities), but an inherent problem is that with rare and threatened habitats, the lag time is often too long, or the market too remote or fickle, for this to benefit conservation. Therefore, strong legislative control on the conversion of irreplaceable habitat needs to be in place, before accreditation schemes or other market-based incentives are pursued.

Alien plants may be the largest single threat to rare habitats in the Western Cape (and other provinces). At present there are few, if any, penalties for landowners who allow aliens to spread uncontrolled on their land. This is a ***significant perverse incentive*** encouraging poor resource husbandry by deferring true land ownership costs to future generations and inheritors. This has got to such a stage in some places that the cost of control far exceeds the actual land value and is beyond the capabilities of a single generation of landowners, encouraging a culture of resignation to the problem.
Drastic action is required to prompt immediate action and to remove the perverse incentive. Legislation should induce landowners to clear aliens subject to a **strategy** and within a **reasonable time** frame, motivate them to engage in the task and penalise dalliance. To ensure a **clear focus on biodiversity conservation**, the state now has the option of using incentives to assist landowners in clearing critical areas of rare and threatened habitat.

2- Incentive options

The levels of communication required to motivate desired behaviour and deliver any incentive measure are seriously inadequate. The first 2 incentive options address this directly.

Extension support/communication

A dedicated corps of trained extension agents is required to communicate regularly with landowners and provide the assistance needed to present conservation options. This would include negotiating suitable incentive packages, management agreements, liaison with neighbours on co-operative management, providing input into management plans, monitor conservation efficacy, and audit properties eligible for some kind of support.

New Private Reserve schemes

Another common complaint was the lack of clarity on the benefits and obligations of the various options for private conservation available to landowners. A further and more pressing need for a new reserve scheme is that in order to offer incentives, one must know the biodiversity worth of the property in question, what security it enjoys and how it would

fit into the larger conservation network. The current reserve scheme does not address this. A new scheme (table 1) would have to incorporate novel designations and mechanisms to provide for different landowner circumstances and financial incentives. It is also structured to encourage people to join in voluntary agreements and move to progressively greater levels of security and 'compensation.' (See CCU summary Report no 01/2001)

Table 1: A proposed new scheme of conservation options for private land - based on biodiversity value, landowner rights and possible incentives.

Designation	***Where applicable***	***Restriction of rights***	***Compensation***
1. Voluntary reserves	Any land may be suitable, but not recommended for rare habitats and important ecosystems, unless as part of a plan to progress to greater security	Very few, but need to retain natural character	None or symbolic. Emotive appeal of conserving. Easily and quickly approved, free management advice
2. Management agreement reserves	Small isolated areas or fragments of rare and threatened habitats	Partial, must be managed for biodiversity	Some direct assistance, possible rate rebates. Help with management plan
3. Contractual Parks/ reserves	Adjacent to statutory reserves or sufficiently large to be self-contained ecosystems. Need to complement reserves	Great, property bound for minimum 30 years	Substantial, assistance with management costs, rate exemptions and increased marketing, tourism incentives
4. Covenants (or 'easements' in the USA)	Donated to or bought by agency. Owners retain title, but property zoned for conservation in perpetuity. Critically important, threatened and irreplaceable sites	Total, except access and residence	Full estate tax/rate exemption, income tax deduction granted for value of donated covenant. Possibly improved market value with highest security

Fiscal & Economic incentives

Probably the most powerful motivators for achieving conservation goals are financial benefits, but they come at a cost to one or several levels of government. This should, however, be weighed up against the costs of state conservation agencies for equivalent habitat protection. The most common form of incentives offered internationally are exemptions from certain taxes, rebates from property or service rates and differential taxes for certain enterprises favouring biodiversity. Direct subsidies are offered in certain circumstances and may be more efficient (in terms of cost to the fiscus) if carefully targeted and audited.

1- **Exemption from tax and estate duty** should be the norm for gifts or bequests of conservation worthy property or real rights in land. This is an anomaly in SA tax law.
2- **Donations** of real rights in land, or property itself, or cash (see under covenants in table 1 above) should also be **income tax deductible** and be exempt from **Capital**

Gains Tax (if it is imposed and applicable). All **expenses incurred in managing irreplaceable habitat**, if secured for conservation through covenants, should be tax deductible.

3- **Property of high conservation value**, or identified as irreplaceable should be **exempt from** property **rates** provided it is secured in some way (i.e. not a voluntary reserve), is managed for biodiversity and regularly audited by a conservation agency.

4- **Voluntary reserves** and other land that is managed for biodiversity in the public interest should enjoy a **specific rebate** on any rates provided certain conditions are met.

Management assistance

Direct assistance with land management was a commonly requested incentive need. Many farms are seriously understaffed owing to labour legislation or social problems. Landowners need inducements to employ more people in environmental management. Assistance with alien clearing (by, for instance, providing half the wages for additional staff employed), fencing sensitive ecosystems, or rehabilitating degraded or unproductive areas threatening conservation worthy sites could be rendered by agencies or government departments. Provisos would be that support was temporary until the objective was achieved, or the workforce was incorporated into more stable employ, or that it did not derogate from a landowner's duty of care towards conserving biodiversity. Title deeds could be altered to reflect a landowner's continuing commitment to conservation maintenance if significant State funds are allocated to a particular property.

3- Disincentives

To underpin the aforementioned incentives, ensure compliance and provide a safety net (albeit fallible) to avoid irreplaceable biodiversity loss, a suite of regulatory disincentives must be introduced. It is widely acknowledged that regulation *alone* is insufficient to protect Biodiversity, because it depends on adequate budgets, political will and community support (none of which may be applicable in private conservation) for effective enforcement.

Alien clearing orders

Directives are a necessary tool to induce a landowner to clear conservation worthy areas of alien plants effectively and within a certain time period. These must be tractable, enforced and there should be significant consequences if neglected. All clearing orders should be issued in the context of a catchment management or conservation plan and should make recipients eligible for assistance.

Ploughing permits

Although permits have been required to plough virgin veld since 1984, these are issued on agricultural resource criteria (not Biodiversity conservation) and are rather widely ignored. Enforcement and prosecution has been very low for at least the last decade. These need to be made more stringent, and provision made only subject to the attainment of conservation targets. Targets could be set at regional (i.e. total extent of the habitat involved), local (municipal or small catchment scale) and farm scale (i.e. a specified portion of the farm must be retained as natural, free from aliens, rivers rehabilitated etc).

Habitat protection orders

Protection of vital remnants should made be mandatory if the extent of a specific vegetation type or habitat falls below set conservation targets. This would take the form of a directive to all landowners on whose land this habitat is located and would state that it may not be developed or allowed to deteriorate in any way. Exemption from this directive may be given on very specific grounds, such as the creation of a permanent reserve or the conservation of a larger portion of equivalent habitat. Areas subject to Habitat protection orders, or refused ploughing permits for biodiversity reasons, should be exempted from all rates and taxes.

Development restrictions

Strict Approval Conditions should become standard for proposed developments in rare and threatened habitats, if these are authorised in the first place. These would entail siting developments away from sensitive areas, providing long term security to all remaining natural areas, and developing a management plan that is regularly monitored and audited.

Property rights & price based measures

Possibly the hardest-hitting and easiest disincentives to enforce would be those aimed at limiting private property rights if landowners do not comply with legislation or directions. For instance, if a property has rare and threatened habitat that is being threatened by invasive alien plants, then that property may not be sold, leased, or otherwise disposed of until it is: *either* clear of aliens *or* financial guarantees (bonds or deposits) have been lodged with a conservation agency to clear it. Alternatively, properties over-run by aliens or suffering from over-grazing should not have their rateable market value reduced by these detractors.

Current Opportunities:

The most effective way to entrench incentives is to get them accepted as policy. Currently (2001) several opportunities exist to legislate for many different types of incentives. It is easier to influence new legislation while it is being developed, than to change existing legislation and its culture of acceptance. Opportunities are dealt with in their perceived order of importance.

Property Rates bill

This Act will allow all municipalities to collect rates from property under their control (i.e. almost all of SA) and creates 3 fantastic incentive opportunities (1-3) and removes a powerful perverse incentive (4):

1- A rate rebate or exemption for conservation-worthy land, or land that is critical to conservation success, or properties that contribute to sustainable land management or any other socially desirable goal.
2- Differential rating of sustainable (very low rates) versus extractive (high rates) land uses.
3- Providing a revenue basis for Local Government conservation activities (extension personnel, rehabilitation works, alien clearing, water source protection etc.)
4- Valuing conservation worthy property higher than poorly managed land, provided that rebates and exemptions are in place. This will prevent management neglect from benefiting a landowner, and rewards conservation minded landowners with higher market prices.

Biodiversity Bill

Legislation to give effect to the International Convention on the Conservation and Sustainable use of Biological Resources is being drafted. This should provide several positive incentives, and significant regulatory disincentives:

1- Acknowledgement (by inclusion in a national conservation strategy) of the role the private reserves play in the protected area network, with an accommodating framework for them (e.g. table 1).
2- The foundations, through careful conservation planning, of a system to implement tax breaks for private conservation and sound land use.
3- Habitat protection orders and alien clearing orders to support conservation plans and protect the efficiency of incentives
4- The entrenchment of a strong culture of motivational incentives, farmer support and education.

Agricultural Resources Bill

The Conservation of Agricultural Resources Act (no 43 of 1983) is being revised. This could provide reinforcing regulations to the Biodiversity Act and incentive schemes for sustainable land management. Agricultural permits cannot be peripheral to biodiversity conservation, and should include important provisions for conservation priorities to govern farm management.

Non-legal options:

Not all incentives have to be based in law. Many motivational and voluntary schemes can be initiated at no cost, and are a vital platform on which to build other schemes or develop

instruments. Some important components of this revolve around creating the right institutional arrangements and communication networks to enhance the success of other incentive tools.

Institutions

Co-operative management structures (especially Conservancies, Soil Conservation or Catchment Committees, and Fire Protection Associations) need to be **co-ordinated** (or streamlined) and **empowered**. These are crucial agents of conservation incentive implementation. Wherever possible, **funding** should be **devolved** to them to carry out important tasks such as alien clearing, rehabilitation, catchment and fire management, and to pursue conservation in their area of influence.

Networks

Conservation **agencies** and departments **need to be engaged and lobbied** by private landowners to be more responsive to their needs. Organised private conservation groups are too often parochial in their interests to enjoy widespread support. Although there are exceptions, significant work remains to ensure that credible associations emerge to negotiate with government and parastatal agencies. Conservation departments must be persuaded to adopt new schemes or re-deploy qualified personnel to assist in the implementation of incentives.

Delivery & Implementation

Strategy

Both Glazewski and McDowell recommended that any incentives offered be guided by a national strategy to focus action on the priority habitats, ensure government commitment (at all levels) and effectiveness of interventions. Any **legislation** aiming to **conserve Biodiversity** in South Africa would have to **include** such a **strategy** at its core. The strategy and its implementation would be the responsibility of a dedicated forum or committee that reports to a national structure or the Minister of the Environment.

In the USA, UK, Australia and New Zealand, **private NGOs** (certified by Government) drive the majority of private conservation action in partnership with state conservation agencies. These NGOs would have to follow and update the strategy regularly.

Government commitment

It is not easy balancing the needs of conservation and other socio-economic priorities and demands on the fiscus. But, if we are to meet our moral obligations under the Convention on Biodiversity, an effective private conservation network and sustainable land management practices must be put in place urgently. **Tangible** government **commitment is crucial** to the success of any incentive scheme that hopes to promote private conservation. Without it we stand to lose of a significant portion of our unique and valuable natural heritage and ecosystem functioning that supports our country's development. A

readily defendable **strategy for private conservation** must be made **irresistible to Government**. The champion for this task is not readily obvious in either the public or private spheres.

Conservation Agencies

Our long-suffering Conservation Departments and Parastatal Boards must be at the forefront of any plan to offer incentives and implement a representative protected area network. However, to do this they have to be sufficiently well resourced and staffed with qualified personnel to negotiate and audit the agreements and other conservation options. Agency personnel will in many cases need significantly better training, remuneration and job prospects.

In most countries where incentives have been successfully implemented, a **private conservation NGO** has been at the heart of the effort. South Africa has a long history of private organisation involvement, and many areas are currently protected through their foresight and fund raising efforts. However, there is a drastic need for a private agency to pioneer an Incentive approach to conservation that is more effective and financially efficient than current schemes, and to do this with the support of communities and formal Conservation departments. **This will be the key challenge facing South African conservation in the next decade.**

Outlook

Fortunately we still have several options open to meet our conservation targets in South Africa. If we are to exercise these options, we will have to act quickly and efficiently. Incentives are the best tool to accomplish this and will do so relatively cheaply. The alternative scenarios are too costly to contemplate: *either* outright acquisition of the required properties; *or* a steadily eroding natural capital base with unravelling ecosystems. A suitable legal framework is within reach but still needs intelligent and committed lobbying at local, provincial and national government levels.

Further reading

The CCU has a large amount of reference material on incentive options, both local and international. A full report will be produced if sufficient feedback is forthcoming. Contact the Cape Conservation Unit of the Botanical Society. We also anticipate producing information Booklets concerning (1) Private conservation options and (2) Alien clearing, getting it right.

Contact the Program Leader- Conservation Incentives at capeveg@gem.co.za or (021) 7972284

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