

August 2001

A Report Commissioned by the
Business Leaders Roundtable

Repairing The Country

Leveraging Private Investment

Summary Report

The Allen Consulting Group Pty Ltd
ACN 007 061 930

Sydney

3rd Floor, Fairfax House, 19 Pitt St
Sydney New South Wales 2000
Telephone: (61-2) 9247 2466
Facsimile: (61-2) 9247 2455

Melbourne

4th Floor, 128 Exhibition St
Melbourne Victoria 3000
Telephone: (61-3) 9654 3800
Facsimile: (61-3) 9654 6363

Canberra

Level 3, 60 Marcus Clarke St
Canberra ACT 2600
Telephone: (61-2) 6230 0185
Facsimile: (61-2) 6230 0149

Online

Email: allcon@allenconsult.com.au
Website: www.allenconsult.com.au

This report has been prepared for the Business Leaders Roundtable. —
Leveraging Private Investment for land and water repair.
The Roundtable is comprised of:

Australian Conservation Foundation

Southcorp

ABN AMRO

Berri

CSIRO

Elders

Macquarie Bank



Table of Contents

<i>Section One</i>		
SUMMARY		1
<i>Section Two</i>		
THE THREAT AND RESPONSE		3
<i>Section Three</i>		
FROM FUNDING TO INVESTMENT		5
<i>Section Four</i>		
INVESTMENT OPPORTUNITIES		7
<i>Section Five</i>		
IMPEDIMENTS TO INVESTMENT		8
<i>Section Six</i>		
ACTIONS AND POLICY MEASURES		10
<i>Section Seven</i>		
IDENTIFYING NEW LEVERAGE OPPORTUNITIES		12
<i>Section Eight</i>		
GAINING LEVERAGE		13

Section One

Summary

How can we mobilise the private sector's capacity for significant, long-term commercial investment in the repair and ecologically sustainable management of rural landscapes? What public policies and programs need to be designed to implement and leverage such investment?

This Study

This document is a summary of the key findings of a major study commissioned by the Business Leaders Roundtable to answer the key questions flagged above.

A group of leading businesses have joined with the Australian Conservation Foundation (ACF) and the CSIRO to take up the challenge of identifying how to mobilise substantial private sector funds to address salinity, biodiversity decline and related environmental problems in Australia. These business leaders recognise that problems like salinity, habitat loss, soil degradation, loss of biodiversity and river degradation and pollution are clear warning signs that landscapes are not being used or managed sustainably. They also recognise that these problems will inevitably touch all Australians and that Australian businesses have an obligation to act along with government and the community generally.

The current project responds to challenges identified in the *Repairing the Country* report, undertaken by the ACF, the NFF and with the assistance of the Land and Water Resources R&D Corporation (LWRRDC). This flagged a need for substantial private sector investment if Australia is to repair existing damage to our environment and place future activities onto a more sustainable footing.

The study was conducted through an extensive stakeholder consultation process, reaching out to more than 1,000 interested parties to obtain their

views and real world insight. Additional data was gathered through a national survey of farmers and other users of natural resources. Workshops were also held in selected locations to discuss approaches.

Key Findings

This is a large topic with many complexities. Key observations are as follows:

- Extensive consultations and additional survey evidence has added evidence to the compelling case that government, business and the community must take additional action now to address the threat which is of national significance.
- Business leaders are willing and able to play a larger role in finding solutions and to work with government, communities and the wide range of stakeholders that have an interest.
- Mobilising nation-wide action to stimulate investment in more sustainable activities that address many key threats is feasible if government policies are adopted that address significant market failures and other major impediments.
- Significant amounts of capital can be raised for investment to repair the country. With strong leadership from government it is estimated that business could be encouraged to invest amounts up to around \$12.7 billion over the next decade. This could be achieved through supporting government expenditure of around \$3.6 billion over the same timeframe. That implies a leverage ratio of 3.48 private sector dollars for every government dollar.
- Strong leadership would involve creating new institutions to raise capital, establishment of a fund to develop capabilities and accreditation arrangements to ensure that investments made for commercial purposes are firmly linked to emerging integrated catchment management plans and national priority setting.

-
- Substantial changes can be achieved within a voluntary framework. The offer is to engage in partnerships where farmers and other resource users obtain access to lower-cost capital and development assistance provided by or through government, in exchange for investing in more sustainable activities within a planning framework, as well as contributing information about the condition of the land that will be essential for future planning and policy setting.

There are many further implications and opportunities that arise from a stronger partnership between business, government, environmental groups and the community.

Taking this approach would be a force for stimulation of a rural and regional renewal. Assistance would be provided to ensure that this is founded on increased ecological sustainability. It would also be based on investment made for commercial reasons, with commercial returns in mind. Private sector financiers and businesses would be managing the risks, not government. Rewards will focus on success, driving strong incentives for innovation. This should provide a much more robust commercial and community environment that is able to accommodate change.

Surely it is better for government to invest in leveraging private investment, and rebuilding a more sustainable economic base in rural and regional Australia now, than to be paying for subsidies and relief packages for struggling communities and failing industries well into the future.

Strong leadership measures would also build a foundation for further policy initiatives. Through a proposed accreditation process required in order to access publicly-assisted finance, investors and policy makers would have access to much more information about land and natural resource use. This opens an opportunity to negotiate a process of regulatory change involving the States, local government and regional bodies. This could also accelerate progress towards more extensive and more efficient market-oriented approaches to conservation and a more sustainable economic base, within a context of increased public trust and support.

While Australia faces a significant threat to the underlying source of our wellbeing and prosperity, the ground on which we farm, it is clear that we also have an opportunity at hand. Where Australia once thrived off the sheep's back, it may be possible to re-emerge from this threat in a leading position in ecologically sustainable natural resource use.

The remaining sections of this summary outline the major findings of the main report.

- Section Two discusses the nature of the environmental threat and the response from governments, communities and land users.
- Section Three reviews the need for funds and how this may be met through investment.
- Section Four outlines the nature of the investment opportunities in land repair.
- Section Five outlines findings about the impediments to investment.
- Section Six discusses the actions and policy measures that have been applied or considered to address land repair. While there are many measures to choose from, this Section outlines why these measures have not in fact stimulated large scale investment to date.
- Section Seven reviews additional approaches that are expected to be more effective.
- Section Eight sets out practical plans for change that would assist in mobilising large scale private sector investment in activities that would help us to repair the country.

Section Two

The Threat And Response

The degradation of Australia’s natural resource base and environment is a national issue. Current responses are not sufficient. Survey findings and key themes from extensive consultation indicate that there is increasing alarm and that more must be done. It is crucial that we mobilise the full resources of the community and the economy to shift quickly to more sustainable landuse practices.

Business leaders, farmers, foresters, scientists, environmentalists and policy advisors stress that Australia faces a crisis. They point to alarming trends in the degradation of rural landscapes. A significant portion of the productive land currently in use in every state in Australia is under threat.

Major resource threats include increased salinity, reduced water quality (particularly excess nutrients and turbidity), soil erosion, acidification, loss of soil nutrients and soil structure. Major environmental threats include the loss biodiversity, fragmentation and loss of native vegetation communities and habitats, degradation of rivers and wetlands, coastal development, over-harvesting of key flora and fauna, and adverse environmental feedback.

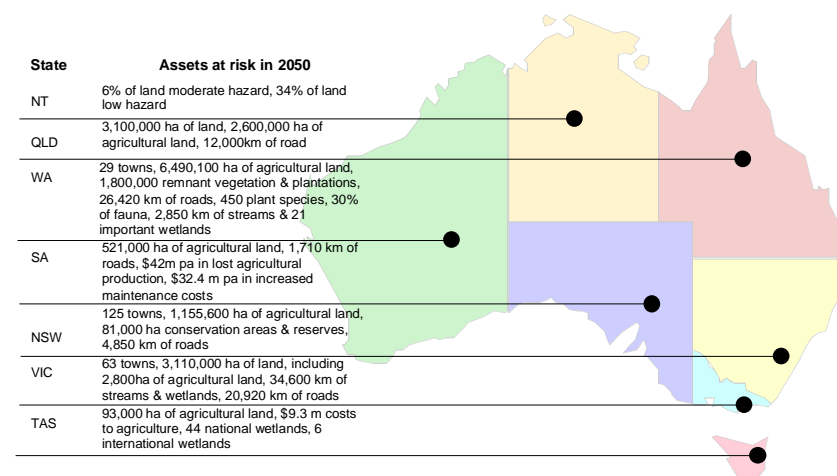
Dryland salinity is seen by many stakeholders as a key indicator of resource degradation more generally. There is increasingly compelling evidence that given current trends this problem would entail challenges and problems at least three levels:

- ecological — around 5.7 million hectares (over 80 percent of which is agricultural land) is affected by or at risk of dryland salinity. The National Land and Water Audit estimates that high risk regions may increase to 17 million hectares over the next 50 years;
- economic — CSIRO’s Land and Water Division estimate that dryland salinity, acidification and soil erosion impose direct costs of \$1.7 billion per year. Around two-thirds of land managers that

recognise environmental problems on their property report that they will suffer reductions in property values of up to 25 percent over the next three to five years from resource degradation; and

- community — some communities are battling increasing costs and declining productivity due to resource degradation. Reduced farm profitability, if not offset by other factors, will reduce the economic base of many rural communities by 2020.

Figure 2.2 — DIMENSIONS OF THE DRYLAND SALINITY THREAT BY 2050*



Note: * Information is not shown for the Australian Capital Territory as the dryland salinity problem is considered low .

Source: Refer to the full report.

Throughout this study evidence was tabled of environmental and resource degradation that threatens to affect all Australians. People that live in cities as well as those in rural Australia will face increasing difficulties in terms of fewer economic opportunities, poorer quality of life, dealing with the

unexpected problems that a degraded environment will bring, an increase in fractured communities and communities placed under stress.

Governments in Australia have made a start to address these threats. Key initiatives include:

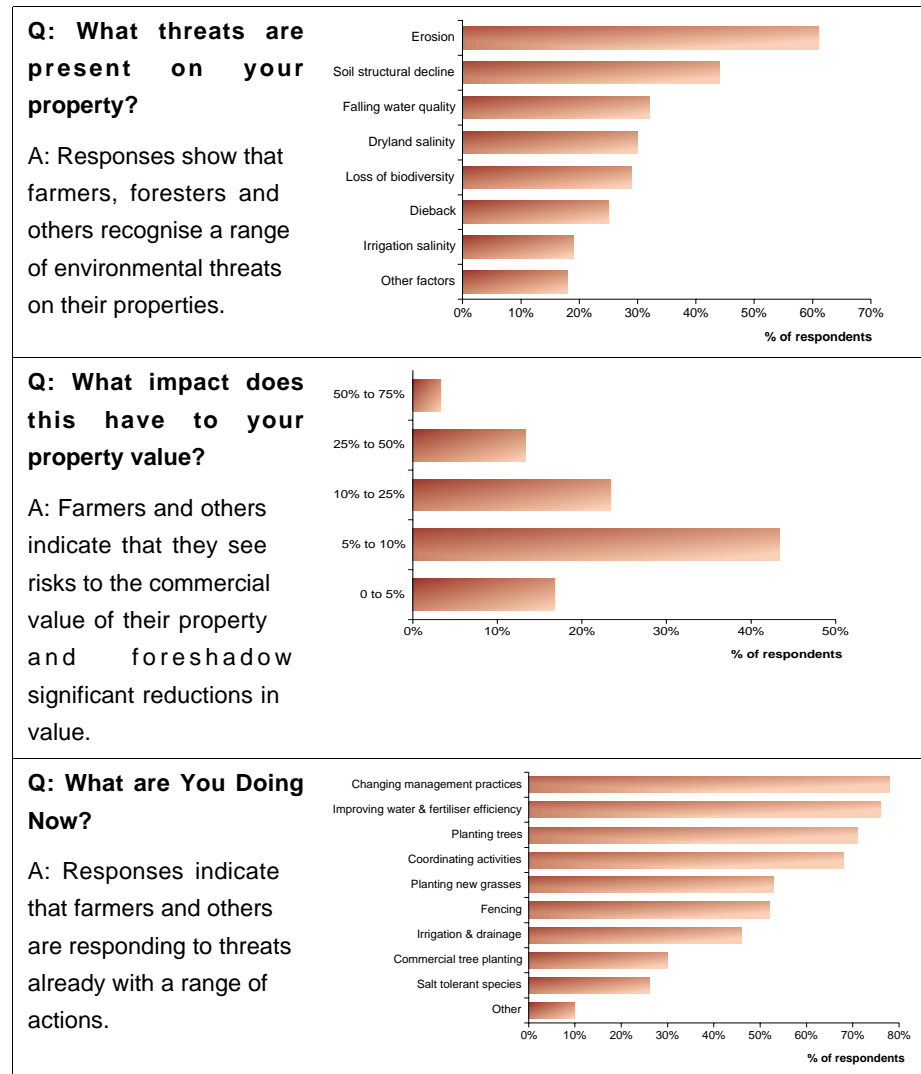
- The Commonwealth’s Natural Heritage Trust, established in 1997, is providing \$1.4 billion over six years for a broad range of environmental initiatives of which about \$200 million is focused on sustainable land and water use;
- All governments have endorsed a National Action Plan for Salinity and Water Quality backed by \$1.4 billion over seven years.
- State governments support a wide range of research, information and assistance through programs aimed at improving both agricultural productivity and environmental outcomes. Some are trailing innovative and market-based approaches such as Victoria’s use of auction-based systems for salinity mitigation and biodiversity conservation.

The point was made many times by stakeholders consulted for this study that while the amounts of funding and other measures seem significant at first, they suffer from the “vegemite syndrome”. Funding is smeared thinly across the landscape, trying to cover every corner. A further observation is that while there is often discussion of the role that the private sector can play, governments are still in the early stages of sorting out threshold issues about responsibilities and activities among themselves. Partnerships with the private sector involving activities that lead to genuine investments on a large scale are under developed at present.

This is not to imply that business, and private land and resource users are taking a passive stance. In fact the study provides evidence to the contrary that land managers and others have already made substantial progress.

Through consultations and additional survey data the researchers found that it was clear that farmers, foresters, businesses and many others are aware of the environmental threats. They also see that the threats will have significant impacts upon their commercial and economic viability.

Table 2.1 — Land Managers’ Views about Threats And Impacts



Source: ACG Land Managers Survey 2001

Section Three

From Funding To Investment

What is the role for investment in repairing the country?

The ACF and the NFF with the assistance of LWRRDC have prepared an investment scenario about what it would cost to *Repair the Country*. This found that in order to reach targets about sustainable natural resource use suggested in a Commonwealth Government discussion paper, an investment of \$65 billion over ten years would be required.

The earlier analysis also concluded that it would be extremely difficult to cover this funding need directly from public sector budgets. It was also assessed that there were many activities that could derive a commercial benefit and that these should be financed from private sector investment. A figure of \$28 billion of private sector investment was foreshadowed.

Comment regarding the investment foreshadowed in *Repairing the Country* was sought from stakeholders as part of the study. Comments revolved around three key themes:

- *Scale* — stakeholders were sceptical of the size of funding required and the ability to achieve the volume of funds, but had no better estimates about what was achievable;
- *Activities* — the range and prioritisation of activities was questioned; and
- *Balance* — whether there was an appropriate balance between funding sources, activities, locations and approaches such as repair versus prevention.

A broad observation made by the consultancy team was that most government programs and a good deal of current private sector involvement to date has focused on grant or funding arrangements. While investment is often discussed and the need to access private sector resources is frequently

recognised, there is very little analysis about how to obtain genuine investment in more sustainable landuse.

Discussion highlighted a need to be clearer about the differences between funding and investing. Funding is often in the form of non-repayable grants or in-kind support, generally from governments and with conditions attached. Given fiscal constraints the amount of money available is limited.

Investment, on the other hand, comes mainly from the private sector, where returns are commensurate with risk and maximising profits and hence returns is a key driver. The potential pool of resources available for attractive investments is very large.

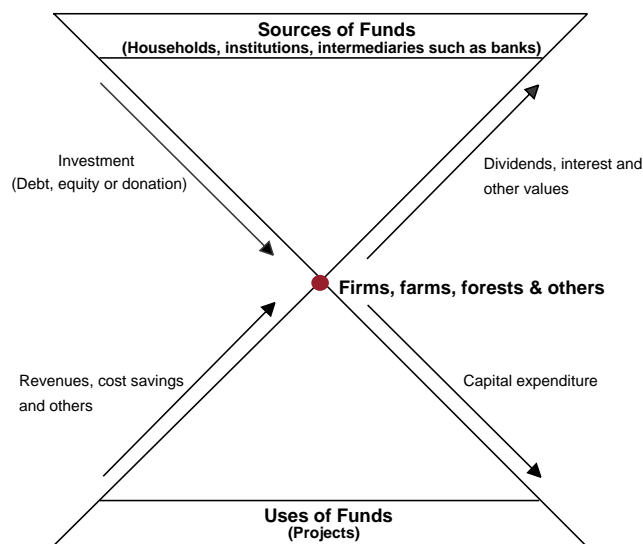
There are often calls for greater ‘investment’ in the environment when what is really meant is that governments should give away more public funds for this purpose. If large volumes of private sector funds are to be leveraged into repairing the country, institutional frameworks will need to be put in place to facilitate the establishment of investment vehicles capable of attracting such investment funds.

The private sector can add significant value in addition to simply being a source of funds. Strengths of the private sector include:

- greater flexibility and willingness to innovate;
- greater willingness to take risks if there are expectations of commensurate returns; and
- a general ability to take decisions and hence action more quickly than the public sector.

It is also important to take into account that investment activity occurs through a long chain involving differing roles by many participants. A shorthand description of the investment chain is provided in the Figure 3.1.

Figure 3.1 — The Investment Chain



Source: The Allen Consulting Group

The investment chain in the context of investing in sustainable land use comprises three levels:

- *Capital Markets* — Made up of the people and institutions that have funds to invest. They can be divided into three groups of investors, those interested in: buying debt (ie, lending money); buying equity (eg, shares); and those that entrust the day-to-day management of their funds to agents (ie, funds managers). The pool of investment funds is large, for example, as at March 2000, there was around \$620 billion invested in managed funds alone;
- *Landusers* — This group includes individual farmers, agricultural and forestry businesses and other landusers and natural resource managers that manage projects on a day-to-day basis and who are accountable (sometimes to themselves) for the use of investment funds. According to this group, lack of funds is the main barrier to addressing environmental threats on the land they manage. A key constraint here

was the lack of an appropriate return on investment in sustainable activities; and

- *Projects* — At the bottom of the investment chain is the projects themselves, which absorb funds and, hopefully, provide a return in terms of revenues or cost savings. A key challenge is to make projects with environmental benefits more attractive than activities that entail degradation or are merely neutral.

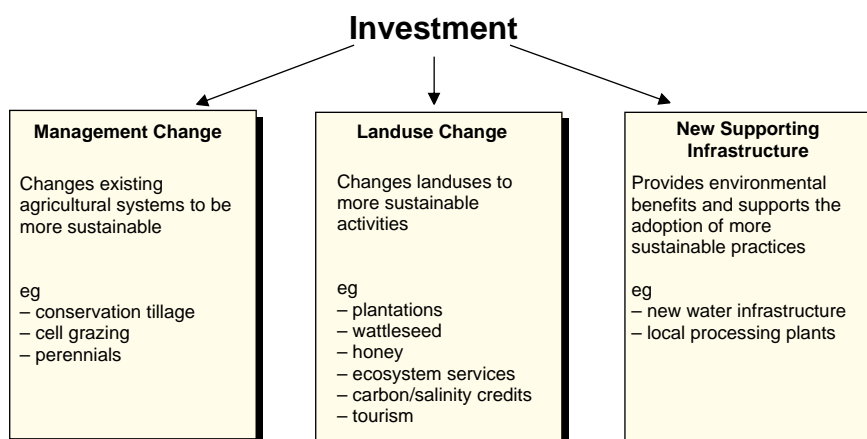
Section Four

Investment Opportunities

What kind of things could the private sector invest in that bring environmental advantages?

There are three main areas that provide opportunities for investment that will lead to more sustainable land use as shown in Figure 4.1.

Figure 4.1 — More Sustainable Investment Opportunities



Source: Refer to the full report.

Management Change

Investment in management change promotes the use of more sustainable production methods in current agricultural systems. Investment in this area maintains the current production type but seeks to ensure that the products are produced more sustainably through improved management practices.

There is extensive information available documenting (for different production systems) management regimes that are viewed as more sustainable than practices currently adopted by some land managers. Management changes that could be encouraged through investment include: planting salt tolerant species; conservation tillage; and more efficient water use.

Land Use Change

Investment in this area promotes change in the use of land to alternative crops and livestock or to other new products that are better suited to the environment and are more sustainable than traditional agricultural use. This investment can involve change in two distinct areas:

- the production of alternate agricultural products to serve new markets, for example, the change from wheat to wattleseed and other forestry products; or
- the production of new non-agricultural services in response to the creation of new markets (eg, revegetation for biodiversity credits or environmental services).

Over \$33 billion of the funding in *Repairing the Country* was earmarked for revegetation measures, particularly forestry. However, it appears that without additional investment and the creation of new markets few landuse change options including forestry are commercially viable in degraded areas.

New Infrastructure

Investment in new infrastructure could significantly assist in moving landuse onto a more sustainable footing. This investment could provide:

- on-ground capital works and expenditure that focus directly on the improved management of natural resources; and
- infrastructure to support new markets.

Section Five

Impediments to Investment

Businesses, farmers and other landusers face considerable impediments if they wish to invest in more sustainable activities. These reinforce the need for further policy action.

The major impediments to investment include:

■ **Market Failure** — Poorly defined property rights and hence price signals for natural resources encourage overuse and rapid depletion and degradation in areas such as river systems, groundwater, common grazing areas. A related issue is negative externalities arising from certain practices such as land clearing, nutrient run-off, salt leaching and chemical overspray, and un-priced positive externalities from the non-agricultural attributes (eg cultural, recreational, biodiversity) of natural resources.

Another market failure arises from information deficiencies such as poor knowledge among investors about the benefits of environmentally sustainable landuse activities. As a result, good practices are not reflected in prices (eg property prices) and are therefore not rewarded (the converse is that bad practices are not disadvantaged) resulting in an undersupply of investment in sustainable landuse.

■ **Policy Challenges** — Good, long-term policy is disadvantaged by short electoral cycles, particularly in Australia's federal system where there is usually an election somewhere at least every 12 months, resulting in continuous and sometimes conflicting policy change and leading to an element of 'sovereign risk'. For example, farmers who invested in native plantations only to be told later they cannot harvest them. Governments have also not put in place institutional frameworks to support commercial investment in sustainable natural resource

management like they have in other areas such as education and health. Poorly designed policies from the past that promote poor environmental outcomes are proving difficult to unwind such as:

- water pricing policy that encourages overuse;
- underpricing of native forests that discourage investment in plantations;
- income tax concessions that encourage overstocking; and
- lease provisions that require land clearing.

■ **Community Perceptions** — Short-term thinking by voters makes it difficult to implement policies with short-term costs but long-term benefits. Discussions on who should pay for environmental repair often degenerate into a blame game rather than an acceptance that everyone needs to contribute to solutions. A view that business involvement and profit is inconsistent with environmental values is a barrier to achieving widespread support for commercial investment in environmental repair. Unlike support for health, education and aged care, the community often sees little connection between their own interests and what is happening on private land in rural Australia.

■ **Poor Project Information** — Natural resource managers face difficulty in obtaining information about appropriate approaches and in identifying best practice. Environmental systems are complex, dynamic and interconnected and as a result it is often difficult to identify the key environmental outcomes desired by the community and how they link to alternative land management practices. The two key information needs for private investment are the ability to:

- define environmental outcomes at the national, catchment and property level; and
- identify the landuse changes that will bring these outcomes about.

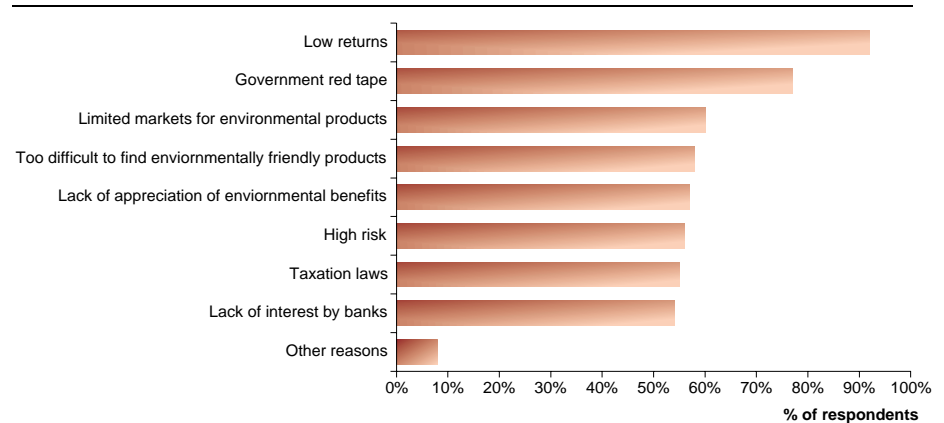
An important factor is the need to invest in research and development to expand the number of commercially-viable landuse activities that also deliver improved environmental performance.

■ **Capital Markets** — Land managers perceive a wide range of impediments to investing in improved environmental outcomes. These include:

- low rates of return — ABARE data indicates that traditional farming often generates relatively low returns and the perception is that investment in environmentally sustainable practices will produce even lower returns;
- high risk — investments in environmentally-friendly projects are often perceived as high risk;
- poor information — unlike traditional investments, there is very little information about opportunities, performance, costs, regulatory requirements and other factors relevant to investments in sustainable landuse;
- illiquidity — compared to other investment opportunities (eg shares and bonds), natural resource management projects may require long-term investments with long payback periods and buying or selling the asset involves high transaction costs;
- small unit size — institutions generally prefer larger investments to spread transaction costs and facilitate monitoring and evaluation, however, many sustainable landuse projects will be relatively small scale; and
- few existing institutions — There is a lack of institutions and investment vehicles providing opportunities for investors to buy into more sustainable resource management.

■ **Complexity** — environmental issues are complex and the public policy and political debate over them arguably more so. For these reasons there is a perception among investors that involvement in the sector is fraught with danger.

Figure 5.1 — Land Managers View About Barriers to Investing in the Environment



Source: Land Manager Survey 2001

The long list of possible impediments outlined above does not preclude mobilisation of private funds to address environmental degradation. It is important to recall that:

- low rates of return have limited but not blocked substantial non-government investment in education, health, aged care and many other activities that seek to advance a community or public interest;
- a commercial rate of return is not always the pre-dominant factor. There is a large and growing pool of investors that actively seek socially and environmentally responsible investment; and
- financial markets have a proven ability to adopt innovative approaches.

Section Six

Actions and Policy Measures

What are the traditional policy instruments used by governments to influence behaviour?

There is a wide range of measures that governments are using or could use to influence the behaviour of stakeholders and encourage more sustainable investment. An indicative list is provided below.

Figure 6.1 — Traditional Policy Instruments

Enhancing Information	Assistance	Regulation	Market-Based Mechanisms
• Monitoring schemes	• Subsidy to match private investment	• Standards & penalties	• Emission reduction
• Identifying best practice	• Stewardship payments	• Prohibition	• Tradeable permits
• Accreditation/labelling	• Reducing trust fund	• Self regulation	• National levy
• Rating standards systems	• Investment tax concession	• Conditional licensing	• Charges for resource use
• Demonstration farms		• Allocations/entitlements	• Performance bonds/refund
		• Covenants & management agreements	• Offset schemes
		• Remove perverse incentives	• Revolving fund
		• Streamline federal, state & local arrangements	• Clean-up levies
			• Ambient pollution charges

Source: The Allen Consulting Group

The main policy instruments can be grouped into four main types:

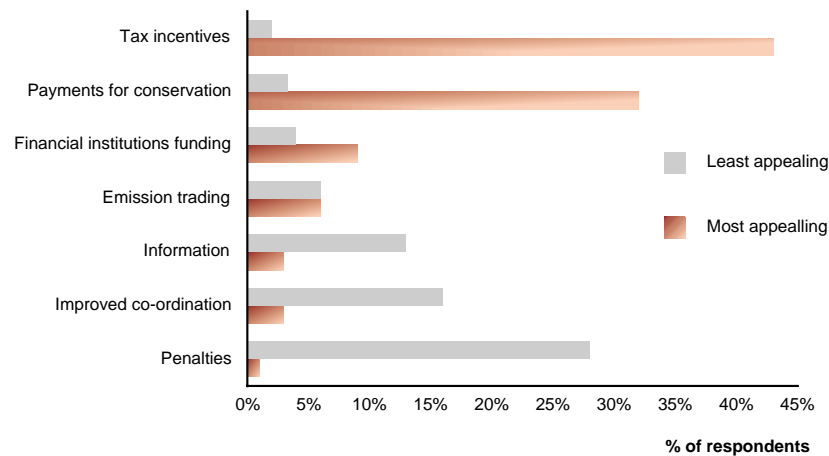
- *Enhancing Information* — lack of information about activities that are more sustainable is a key impediment. Policy instruments that improve information are an important part of the armoury available to governments. Accreditation of sustainable landuse projects and activities suitable for investment or purchase is an efficient way of indicating to the market the environmental merit of projects and products.
- *Assistance* — governments often provide financial assistance to industries in order to change behaviour and overcome market failures. Direct subsidies or tax incentives are commonly used to encourage desired behaviour and activities. These instruments can be used to reduce the costs and/or increase the returns to certain activities as a way of encouraging greater private sector investment in them. Conversely, tax penalties can be used to discourage undesirable behaviours or activities.
- *Regulation* — regulation involves mandating how businesses or individuals should behave. Regulation potentially offers a relatively high level of control over outcomes but administration and compliance costs can be high and may reduce incentives for innovation, particularly in relation to environmental issues. As a rule, regulation will impede investment in an activity rather than encourage it and often encourages investment in avoiding, curtailing and undermining regulatory objectives.
- *Market-based Instruments* — Market-based instruments affect the relative prices of alternative activities and can be used to encourage or discourage certain activities. Market-based instruments come in various forms such as charges, tradable rights, performance bonds and levies. Taxes can be designed as market based instruments (eg, carbon taxes) to increase the cost of undesirable actions and discourage investment and activity in the targeted pursuit.

The project team consulted widely to obtain views about the various instruments and their impact on investment. Views were also sought about instruments in the national survey of landusers. Key observations were that:

- landusers prefer tax incentives and payments for conservation;
- penalties or restrictions to natural resources appear to be a focus of dislike; and
- it is not clear that other instruments are well understood.

Findings from the survey are summarised in Figure 6.2 below.

Figure 6.2 — Landusers' Views About Policy Instruments



Source: ACG Landuser Survey 2001

While there are a large number of instruments available it is clear that they have not been a force for mobilising large scale investment into more sustainable landuse activities. A recurrent theme in discussions with stakeholders was that it is very difficult for government to pursue widespread use of many of the available measures. Doing so would risk the creation of large numbers of displaced land users and communities. This would add to the already significant challenges that communities are facing

in adjusting to global change. To make best use of the available instruments and to facilitate a politically sustainable transition to increased ecological sustainability governments require a context of more buoyant economic conditions in rural and regional Australia.

Most of the instruments impact on the project level of the investment chain. A few impact on firms. Very few directly address the challenge of accessing the largest pool of investment funds available — the capital markets. Tapping into capital markets is the obvious means of providing the impetus for growth that is essential.

It is also apparent that many of the existing measures fall within the responsibilities of the States rather than the Commonwealth level of government. Coordinated action is difficult to achieve but essential.

A further major theme is that none of the available instruments listed above, or indeed others, should be discarded out of hand at this stage. Many will be found to have a larger role to play. The real challenge is providing a context of growth.

Section Seven

Identifying New Leverage Opportunities

What are the instruments, actions and public policy reforms required to leverage private investment in sustainable landuse?

To make significant inroads into solving the problem of land and water degradation, governments need to address all three links in the investment chain, that is, at the funding, firm and project levels. What is needed is a framework that links and coordinates all three levels of the investment chain and, in particular, addresses the issue of a lack of funds available for investment in more sustainable landuse. Creating an environment of growth, brought about by a significant injection of private investment, will give landusers the ability to invest and grow their way to more sustainable landuse.

Sources of Funds

Mobilising private investment in sustainable projects requires the creation of a financial intermediary or investment vehicle that can link investors with landusers. The creation of tax-preferred equity vehicles (similar to Pooled Development Funds) would provide a mechanism to channel capital market investment funds to landusers for sustainable landuse projects. The focus of these investments would be on commercial activities with the preferential tax treatment reflecting the fact that returns in many cases will be below-market and will need to be supported to attract investors. These vehicles could be complimented by a public funding source that could purchase pure public good (ie, uncommercial) environmental outcomes as part of a package of funding for a sustainable landuse plan focused on an individual property or catchment.

Landusers

Landusers and other natural resource managers would be required to identify commercially-viable projects capable of attracting equity funding as outlined above. An important aspect of this stage is a need for investors to know that the projects are environmentally credible, which points to the need for accreditation of projects and the establishment of accreditation bodies capable of undertaking this role. Assistance would also be required for research and development in order to identify environmental problems, risks and sustainable solutions. It would be appropriate for landusers to be required to develop sustainable landuse plans which could comprise changes to existing practices and activities, the introduction of new ones and/or the development of infrastructure capable of improving the sustainability of landuse. Accreditation of these plans would be a pre-requisite for private sector equity funding. Landusers may also need support with capacity building to develop the skills needed to develop such plans and the business case needed to attract investors. Involvement by landusers would be purely voluntary, however, obtaining accreditation for projects would be a pre-requisite for private or public sector funding.

Projects

There are a number of measures that could be undertaken to support the projects and activities that might form part of a potential investment plan. Assistance could be provided for demonstration projects that could be easily emulated once commercial viability and environmental benefit was proven. Project finance assistance could be provided for off-farm projects that are integral to the development of sustainable on-farm projects. Tax deductions — such as those for capital works and research and development — and accelerated depreciation provisions could be extended to improve the commercial viability of projects and hence their attractiveness to investors. Direct assistance could be provided in other areas to support sustainable landuse such as Revolving Fund Assistance for the purchase, improvement and/or coventing, and resale of land.

Section Eight

Gaining Leverage

How much investment could be redirected to more sustainable activities over the next decade? How much would it cost government to leverage this investment? What options are there?

Two approaches have been developed for consideration:

- *The Strong Leadership Approach* — involves extending and expanding existing programs and tax concessions as well as creating new institutions linking capital markets to investment projects through landusers and other businesses and natural resource managers. This approach has the potential to mobilise significant private sector investment funds and generate a significant improvement in the sustainability of landuse.
- *The Progress With Caution Approach* — does not involve institutional change, focusing solely on the extension and expansion of existing programs and tax concessions.

The Strong Leadership Approach

Access to Capital and Capital Markets

Sustainable Landuse Investment Companies (SLICs), which would be provided for under legislation, would be tax-preferred investment vehicles along the lines of Pooled Development Funds able to invest in approved landuse projects and activities under ‘accredited’ sustainable landuse plans (SLPs). To access funds available from SLICs, landusers and others would identify sustainable landuse activities and projects and develop SLPs, which are accredited as improving the sustainability of landuse and environmental outcomes on the property or in the catchment in question. SLICs could invest up to 100 percent in smaller investee companies (ie,

those with gross assets of up to \$10 million) and up to 49 percent in larger companies. When investing in larger companies the remaining funds would be derived from unassisted investors including other equity investors (including perhaps the current landuser) or debt (eg from a bank).

A *Land Repair Fund (LRF)* would have a number of functions and administer a range of programs and tax concessions aimed at capacity building and enhancing and complimenting the environmental improvements flowing from the investment in SLPs by SLICs. The LRF would comprise the following programs:

- *Capacity Building* — This program would provide the support of environmental and/or farm management advisers to assist with the development of sustainable landuse plans and with the accreditation process. It would also provide funding for business advisers to assist landusers in the development of a business plan to attract SLIC funding.
- *Demonstration Projects* — Funding would be provided for a number of potentially high-value environmental/commercial demonstration projects that had received accreditation and could be easily emulated by others if their commercial bankability could be demonstrated.
- *Priority Project Assistance Grants (PPAGs)* — Grants would be available to directly fund high priority environmental activities or projects identified in the SLP development process as being of high environmental worth but cannot generate the commercial returns required for SLIC funding. Assistance grants could be sought for the non-commercial components of an SLP with a view to achieving an overall plan capable of attracting SLIC funding.
- *Revolving Fund Assistance* — The LRF would provide conditional funding to emerging revolving funds.
- *R&D Commercialisation Grants* — A program along the lines of R&D START would be established to assist in the commercialisation of new practices, techniques, projects, crops etc.

Facilitating More Sustainable Investment

Sustainability Accreditation Agencies (SAs) would be established to accredit SLPs on a fee for service basis. SAs could be based on, or work closely with, local catchment management committees to ensure proposed activities are consistent with catchment-wide objectives.

A *Natural Resource Protection Agency (NRPA)* would be established with a number of functions. It would act as a central repository of SLPs, which could over time contribute to and improve the existing database on the state and risks in relation to land and water resources. The NRPA could provide information to landusers and SAs on the environmental condition and risks relating to land and water in particular areas to assist them in the development and accreditation of landuse plans. The NRPA would also accredit SAs on a fee for service basis to ensure they have the skills and resources required to accredit SLPs.

Brokers could play a valuable role in bringing together the various stakeholders involved in the proposed new institutional arrangements and reducing search and transaction costs. It would facilitate more rapid change if new arrangements allowed for brokerage bodies that were not actually farmers or resource managers in their own right, but who could play a role in bringing investors, and buyers and sellers of projects together and in streamlining accreditation processes.

Project Level Assistance

Green Bond Scheme — This would follow the broad structure of the Infrastructure Borrowings Tax Offsets Scheme (IBTOS). Funding under the scheme would be available for off-farm infrastructure used to support the activities or projects contained in accredited SLPs (eg, improved irrigation infrastructure, mallee oil or wattle seed processing plants, sawmills).

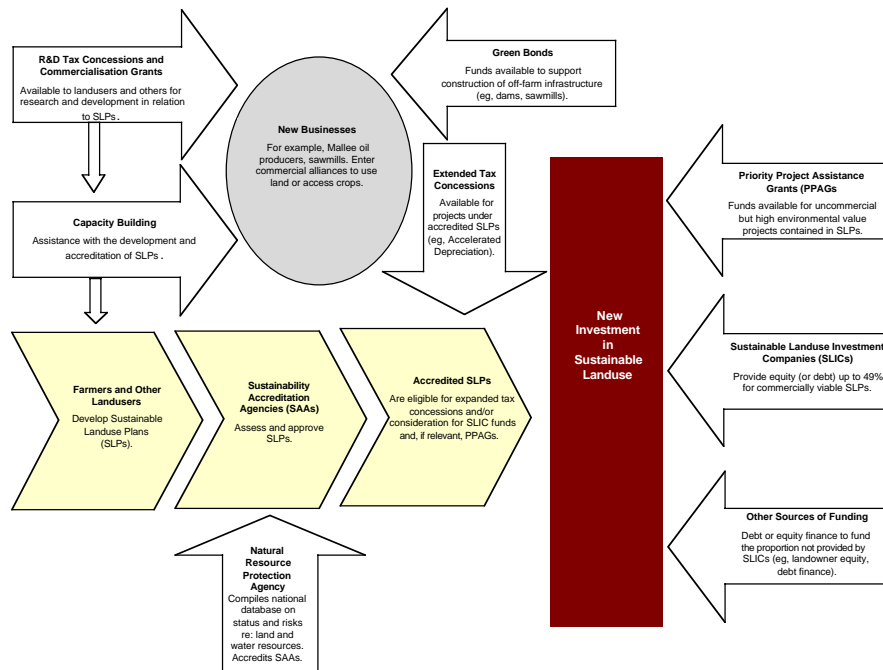
R&D Tax Concession — A 125 percent tax concession/rebate scheme would be established to assist landusers and others involved in the development of potentially creditable activities or projects to undertake research into new agricultural practices, landuse activities and projects that have the potential to improve environmental and sustainable landuse outcomes.

Accelerated Depreciation — Accelerated depreciation is currently available for grapevine plantings and for the capital expenditure incurred in establishing horticultural plants. This would be extended to alternatives to traditional crops identified as part of an accredited SLP.

Landcare Deduction — An immediate deduction is available for capital expenditure on soil conservation, prevention of land degradation and related landcare measures. This deduction could be extended to any activity related to the implementation of an accredited SLP.

Figure 8.1 shows the role of key stakeholders, institutions and programs in the proposed new institutional framework.

Figure 8.1 — Strong Leadership Approach — Key Relationships



Source: The Allen Consulting Group

The opportunities available for key stakeholders under the proposed new institutional framework are detailed in Box 8.1.

Box 8.1 — Opportunities for Key Stakeholders

Farmers— SLICs will provide a source of low cost, patient finance to introduce new or improved landuse activities and projects. Capacity building support and expanded tax concessions will assist farmers with identifying environmental risks, research into environmental risks and solutions, developing SLPs and business plans, achieving accreditation and obtaining SLIC funding. Tax concessions would be available for accredited activities even if SLIC funding is not achieved.

Large Agricultural Businesses Larger businesses will have access to low cost, patient capital and are likely to be involved in the full range of activities encouraged by the new arrangements. These include research and development, commercialisation of new technologies, products and services, changes to existing landuse activities, the introduction of new landuse activities and the development of off-farm infrastructure to support more sustainable landuse activities and practices.

New Businesses— Opportunities will exist for new businesses in all the areas encouraged by the proposed new institutional framework such as changed landuse practices, new landuse activities and on and off-farm infrastructure development. New businesses will bring new ideas and skills that can be exploited to improve environmental outcomes and sustainable landuse.

Communities— Communities will be empowered to play a role under the proposed new arrangements. For example, a community could identify an environmental problem in the local area caused by unsustainable landuse practices or activities, develop a sustainable landuse plan to reduce or eliminate the activity and seek accreditation and funding from SLICs, PPAGs and other investors.

Brokers— Opportunities will arise for brokers to bring together landusers, new businesses, SLICs and other investors to develop bankable proposals capable of obtaining SAA accreditation. With all the necessary institutions, stakeholders and programs in place, opportunities become available for intermediaries to bring all the parties together to produce a mutually beneficial outcome.

Source: Refer to the full report.

The Progress With Caution Approach

A more cautious approach is to concentrate on providing support and assistance to landusers and others using extensions or expansions of existing programs and concessions and some new programs but without the establishment of new institutions and agencies required by the Strong Leadership Approach.

This approach would contain the bulk of the measures contained in the Land Repair Fund and the tax concessions plus some additional measures and include:

- Demonstration projects support;
- The Green Bonds Scheme;
- Revolving Fund Assistance;
- R&D Commercialisation Grants;
- R&D Tax Concessions;
- Accelerated Depreciation; and
- Extension of the Landcare Deduction.

In addition, support would be provided for:

- *Public Private Partnerships (PPP) or Build Own Operate (BOO) Schemes* — the government could leverage private investment into sustainable environmental projects by establishing a process to consider private sector proposals and to select those that are commercial and bring environmental or community benefits; and
- *Sustainable Business Development Program* — this would extend the existing NHT and National Salinity Action Plan, with an expenditure program specifically designed to provide conditional catalytic funding to innovative commercial ventures that offered substantial environmental gains. Projects would be assessed within the context of evolving catchment management plans and would focus on key catchments that have already been assessed as being of high priority.

- *Additional Tax Deductions* — more aggressive tax deductibility would be applied for resources that are set aside for more sustainable uses. In particular, a proportion of the value of resources set aside under covenants would be able to be a deduction against other income. Details of this arrangement would have to be settled in consultation with lands offices in the States and Territories.

No institutional changes are proposed under this approach.

Leverage Estimates

Preliminary estimates have been prepared regarding the cost to government of these approaches and the amount of private sector investment they would stimulate. The findings are summarised in Table 8.1 below.

Table 8.1 — Leveraging Investment

	Progress with caution (\$billion over 10 years)	Strong Leadership (\$billion over 10 years)
Cost to Government	2.4	3.6
Private Sector Investment	5.0	12.7
Leverage Ratio	2.08	3.47

Source: See full report

Taking the Progress with Caution approach would stimulate a boost in investment towards enhanced environmental sustainability in land and water use in the country with additional private investment of around \$5 billion over ten years. If the approach was tried and was shown to work it would be desirable to extend it. It involves a cost to government of about \$2.4 billion over ten years with less risk for Government to the extent that it relies on approaches that are very well known and understood. This implies

a leverage ratio of about 2.08. That is two private sector dollars are mobilised for every one dollar spent by the Government.

The remaining risks regarding the Progress With Caution approach relate to issues of magnitude and targeting. Does it involve sufficient resources given the strong evidence that the resource requirement is very large? Resource mobilisation is constrained under the approach because there can be less certainty that assisted activities will in fact generate substantial environmental benefits.

The Strong Leadership approach would mobilise major financial resources. It is estimated that private investment levels would increase by \$12.7 billion over ten years. More private sector investment is raised reflecting increased assistance from Government. This involves a cost to government of about \$3.6 billion over ten years.

At 3.47, the leverage ratio for the Strong Leadership approach is nearly double that of Progress With Caution because it addresses key commercial risk and return issues directly (through tax preferred investment vehicles and extended funding arrangements). From an environmental perspective, this approach is less risky than the Progress With Caution approach because new institutional arrangements ensure that investment actually addresses independently verified plans formed within an integrated catchment management framework and national priorities.