INCOME TAX AND ENVIRONMENTAL PROVISIONS - GREEN GOLD OR LEAD WEIGHT?

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ABSTRACT

The income tax provisions pertaining to the mine site rehabilitation and land degradation are two tax expenditures that are able to assist environmental management. While environmental policy may not have necessarily been the impetus for their introduction, it has been a factor in their development over time. Using the policy behind each tax expenditure, derived from its history, this paper attempts to analyse their effectiveness with respect to environmental consequences. However, a lack of quality data means that their effectiveness cannot be ascertained. A conclusion drawn is that Australian tax policy is subject to the influence of various groups at any point in time resulting in a lack of clear direction and restrictive appeal. This raises the question: are income tax environmental provisions green gold or lead weight?

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I Introduction

The primary function of the income tax system is to raise revenue to fund the general functions of government. Equally, the taxation system can be used to assist environmental management.

As a rule, expenditure on the environment is not deductible from income tax unless it is related to the earning or production of income or a specific tax expenditure applies. The term 'tax expenditure' refers to any provision of the tax law which provides a financial benefit to a particular class of taxpayer or a particular activity in the form of a tax preference or concession, most commonly as an exemption, deduction or offset¹.

Income tax provisions that are able to assist environmental management are characterised by being expenditure that is not incurred in gaining or producing assessable income and not necessarily incurred in a business for such purpose. This paper discusses two specific Australian taxation provisions in terms of policy and environmental outcomes: mine site rehabilitation and land degradation. The former attempts to integrate tax and environmental concerns into policy that is industry specific; the latter has evolved into a hybrid of industry and activity specificity. After an introduction to each tax expenditure, their history is outlined drawing particular reference to community and governmental discussion prevalent at each stage of evolution. From this, the policy behind the tax expenditure is determined and/or inferred. This is followed by an analysis of the environmental consequences including cost versus benefit. The two Australian tax provisions are then comparatively analysed in terms of their tax and environmental objectives, their scope and constraints, and the type of deductions covered. The paper concludes with a summary of the shortcomings of the process of using these specific tax expenditures. That is, using the tax system for environmental purposes is not the issue per se but rather the process involved in using the tax system. Areas of future research are highlighted.

II INCOME TAX AND ENVIRONMENTAL POLICY

The Australian federal government uses taxation policy to encourage environmental responsibility. This is consistent with numerous Organisation for Economic Cooperation

¹ OECD, Tax Expenditures: A Review of the Issues and Country Practices (OECD, 1984) 7.

and Development (OECD), United Nations (UN) and World Bank reports that advocate the use of 'economic incentives to correct market failure in the management of natural resources and the control of pollution'. Indeed, the arguably preeminent report on sustainable development, Our Common Future (also referred to as the Brundtland Report), espoused that, in order to implement ecological sustainable development, public policy should make use of incentives to encourage the business sector to refrain from polluting where '[p]ollution is a form of waste, and a symptom of inefficiency in industrial production'. The term 'polluting' is not restricted to carbon emissions but also incorporates land degradation and other environmental damage.

Similarly, it is recognised that 'the sound management of private land may have to be encouraged by law'⁵ such as through the provision of taxation incentives and that tax policy should be used to encourage sustainable land use.⁶

The use of tax policy to encourage investment in natural resources is contentious as some taxpayers obtain a benefit not available to all. Yet the tax system has also been described as an appropriate tool for governments to implement policies achieve specified policy goals.⁷ It is also contentious from an environmental perspective: those who abstain from polluting or damaging the environment are not rewarded whereas polluters are rewarded through the tax expenditure.

Historically, the literature has tended to focus on stand-alone environmental taxes and charges. These have generally been premised upon the 'polluter pays' principle and have attempted to allocate a market price to the environmental activity or item being taxed. The use of tax expenditures is an alternative policy tool that utilises the income tax

² World Bank, Environmental Fiscal Reform: what should be done and how to achieve it (World Bank, 2005) 1. See also OECD, Environmentally Related Taxes in OECD Countries, Issues and Strategies (OECD, 2001); OECD, Taxation, Innovation and the Environment (OECD, 2010); United Nations Environment Program, The Use of Economic Instruments in Environmental Policy: Opportunities and Challenges (UNEP, 2004).

³ World Commission on Environment and Development, *Our Common Future* (Oxford University Press, 1987) 220.

⁴ See, eg, Ann Hamblin, 'Australia State of the Environment Report 2001 (Theme Report)' (CSIRO report for the Department of the Environment and Heritage, 2001); Oxford English Dictionary, "Pollution".

⁵ Gerry Bates, *Environmental Law in Australia* (Butterworths, 3rd ed, 1992).

⁶ Steve Hatfield Dodds, Address to the Fourth Annual Global Conference on Environmental Taxation, Sydney, June 2003.

⁷ Paul McDaniel, 'Tax Expenditures as Tools for Government Action' in Lester M Salaman (ed) *Beyond Privatisation: The Tools of Government Action* (The Urban Institute Press, 1989) 167.

system to deliver environmental goals. As such they are the result of selective tax legislation that benefits particular taxpayers. Since the government foregoes revenue that would have been collected in the absence of the special legislation, these policies have real costs, hence the term 'tax expenditures'.

The advantage of taxation-based measures is that they provide support for environmental projects where the private benefits are less than the overall cost of the project. Without such support, these projects may not be undertaken. They also encourage innovation, whether in technology or business practices, in order to achieve the government's policy goals. The alternative is for the government to impose a system of command and control that is generally difficult to establish and expensive to maintain.

Providing a tax expenditure for an activity has the dual impact of reducing the net benefits received from the activity and the net costs incurred in undertaking the activity. In effect, the tax system results in the community sharing financially both the costs and benefits of taxed activities. If it is assumed that all benefits and costs of an activity are financial and there are no externalities, including an activity within the tax system will reduce the private net return from the activity if it is profitable, and increase the private net return if the costs exceed the benefits (that is, reduce the private loss). Thus, the community will not only share in the gains from profitable activities but also share in the losses from unprofitable activities.

Tax expenditures are generally difficult to target to environmental projects with public benefits. ⁹ Indeed, they have been criticised as being 'generally poorly targeted, always too difficult to cost, diametrically opposed to usual distributional goals, difficult to administer, structurally almost invisible and unaccountable". ¹⁰ Being 'hidden' in the tax system means that there can be an escalation of the tax expenditure without any explicit budgetary decision

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⁸ Robert Douglas, 'Potential effects of selected taxation provisions on the environment' (Report to the Productivity Commission, 2002).

⁹ Ibid.

¹⁰ Robert McMullan, 'Parliamentary Debates, Senate Hansard, 5 May 1992, NSW, 2227. See also Graham Hill, 'Tax Reform: A Tower of Babel; Distinguishing Tax Reform from Tax Change' (2001) 1(2) *Australasian Tax Teachers Association* 1, 5.

being made.¹¹ Their costs are also more difficult to predict and monitor.¹² Thus there is a public cost associated with using tax expenditures as policy tools. The question is whether the cost is worth the public benefit. Are they green gold or lead weight?

III MINING SITE REHABILITATION

3.1 Introduction

The rehabilitation of mining sites is now widely accepted by the industry as an integral and expected part of mining.¹³ It is also mandated through the requirement to lodge and maintain bonds or similar financial security as a condition for state licensing.¹⁴

To be effective, a regulatory system for mine site rehabilitation should provide incentives to minimise damage, ensure sufficient funds are available to finance the rehabilitation, develop clear standards for rehabilitation and 'ensure that mining companies receive equitable tax treatment with respect to the costs incurred'. ¹⁵

Contained in subdivision 40-H of the *Income Tax Assessment Act 1997* (ITAA97), section 40-735 provides an immediate deduction for capital and non-capital expenditure incurred rehabilitating a mining site, subject to certain conditions.

3.2 History

Mining companies are considered special taxpayers with income tax provisions expressly and exclusively for the industry. Section 40-735 is one such provision. To illustrate: A comparable expense to mining site rehabilitation is repairs, the tax treatment for which does not differentiate between taxpayers whether by industry or activity. While the distinction between capital and non-capital expenditure is irrelevant for the purposes of section 40-735, it is a major consideration in relation to repairs.¹⁶

¹¹ Najma Rajah and Stephen Smith, 'Taxes, Tax Expenditures and Environmental Regulation' (1993) 9(4) *Oxford Review of Economic Policy* 41.

¹² Richard Wood, 'Overview of Rural Income Taxation: Issues, Implications and Importance' (1995) 63(1) *Review of Marketing and Agricultural Economics* 111.

¹³ Industry Commission, 'Mining and Minerals Processing in Australia' (Report No 7, Industry Commission, 25 February 1991).

¹⁴ See, eg, Mineral Resources (Sustainable Development) Act 1990 (Vic) Part 7.

¹⁵ Richard Auty, 'Mining as a generator of wealth: potential conflicts and solutions' (1998) 13(2) *Journal of Mineral Policy, Business and Environment* 4.

¹⁶ Lindsay v FCT (1961) 106 CLR 377; Sun Newspapers Ltd v FCT (1938) 61 CLR 337; Hallstroms Pty Ltd v FCT (1946) 72 CLR 634.

Referring to the mining industry as a special taxpayer, the 1975 Asprey Report said that the 'nature of the taxation treatment of anti-pollution and ecological expenditure should be no different in relation to mining from that accorded to other industries'. Nevertheless, the Committee recommended that a provision for the estimated total costs of site rehabilitation should be available as a deduction from assessable income. It was suggested that this be subject to the Commissioner of Taxation being satisfied that such amount was a reasonable sum to meet the obligations of the mining enterprise. However, it also recognised the difficulty of the tax system to allow deductions for expenses typically incurred once income-earning operations had ceased. 18

Deductibility for mine site rehabilitation expenditure was inserted into the *Income Tax Assessment Act 1936* (ITAA36) as division 10AB with effect 1 July 1991¹⁹ (but without the Commissioner of Taxation being de facto auditor). This had been announced in the 1990-91 Budget²⁰ on 21 August 1990.

The Budget announcement was followed by the release of a three-volume report in February 1991: The Industry Commission Inquiry into Mining and Minerals Processing (Inquiry). Commissioned by the then Treasurer on 18 October 1989, the Inquiry into the mining industry was broad, covering factors affecting minerals exploration and development, operating costs and access to technology while having regard to social and environmental objectives, the commonwealth/state arrangements and taxation structures and efficiencies. The Inquiry recommended that mining site rehabilitation expenditure be tax deductible, including the demolition of old plant. It also recommended the carry-back of such expenditure in financial years where there was insufficient income available. Only the first recommendation was adopted. Salary in the commonweal of the carry-back of such expenditure in financial years where there was insufficient income available. Only the first recommendation was adopted.

¹⁷ Taxation Review Committee, 'Full Report' (Report of the Commonwealth Taxation Review Committee, 31 January 1975) [19.30].

¹⁸ Ronpibon Tin NL v FCT (1949) CLR 47; FCT v Munro (1926) CLR 153; ITAA97 ss 8-1 and 8-5.

¹⁹ As part of Taxation Laws Amendment Act (No 2) 1991 comprising ss 124BA to 124BF.

²⁰ Explanatory Memorandum, Taxation Laws Amendment Act (No 2) 1991 (1991 EM).

²¹ Industry Commission, above n 13.

²² Ibid.

²³ See Taxation Laws Amendment Act (No 2) 1991.

As part of the 1997 Tax Law Improvement Program (TLIP), division 10AB ITAA36 was rewritten into ITAA97 as subdivision 330-I.²⁴ It was subsequently rewritten (in 2001) as subdivision 40-H as part of the uniform system of capital allowances.²⁵

Five years after its introduction and reflecting increasing societal concern, the Minerals Council of Australia, as the industry peak body, developed the Australian Minerals Industry Code for Environmental Management as a self-regulatory tool. By 1998 41 companies had signed the code and were producing publically available environmental performance reports. Mandatory environmental reporting for eligible entities was also introduced in 1998 under what was then the Corporations Law.

At an international level and in line with increasing community and societal environmental concerns on a meaningful scale, there were three major areas of development within the mining industry with respect to sustainability and the environment.

In 1991, the UN and the German Foundation for International Development organised the International Round Table on Mining and the Environment in Berlin. This resulted in the 'Berlin Guidelines', published in 1994 and revised in 1999. While the original guidelines focused on the technical and physical aspects of environmental management, the revised version reflected a greater understanding of, and concern for, social and community issues that had developed internationally over that decade.²⁹ Item 13 of the Berlin Guidelines states that governments should '[e]valuate and adopt, wherever appropriate, economic and administrative instruments such as tax incentive policies to encourage the reduction of pollutant emissions and the introduction of innovative technology'.³⁰

²⁴ ITAA97 comprising ss 330-435 to 330-455.

²⁵ By the New Business Tax System (Capital Allowances) Act 2001.

²⁶ Natalie Stoianoff, Mary Kaidonis and Lindel H House, 'Do Tax concessions for Mining Site Rehabilitation Work? Evaluating 10 Years of Reform' in Alberto Cavaliere et al (eds) *Critical Issues in Environmental Taxation International and Comparative Perspectives: Volume III* (Oxford University Press, 2006) 513.

²⁷ Ibid.

²⁸ Corporations Act 2001 s 299(1)(f).

²⁹ United Nations, Berlin II: Guidelines for Mining and Sustainable Development (UN, 2002).

³⁰ Ibid, 4.

In June 1994 the World Bank and two UN agencies organised the International Conference on Development, Environment and Mining.³¹ A key point noted was that the 'objective of rehabilitation of mine sites should be to restore them to a self-sustaining ecosystem that is as close as practical to its original state prior to mining activity.'³² The need for mechanisms to ensure the availability of funds to finance rehabilitation was also stressed.

The Global Mining Initiative was launched in 1998 by the chief executive officers of nine of the largest mining and metals companies.³³ This was perhaps the earliest large-scale industry-based effort to establish sustainability practices in the sector. Out of this came the Mining, Minerals and Sustainable Development project in 2000 (a fact-finding mission) and the International Council on Mining and Metals in 2001.³⁴

3.3 Policy

Particular from the early 1990s, there has been increasing societal concern over environmental issues. These concerns have influenced policy from both company and government perspectives and have led to increasingly stringent regulations governing activities that have an impact on the environment.³⁵ In its submission to the Inquiry, Coal & Allied Operations Pty Ltd acknowledged that many of the constraints imposed on the industry resulted from community concerns with respect to environmental management and rehabilitation of mining sites.³⁶

The Explanatory Memorandum (1991 EM) accompanying the introduction of the tax expenditure provisions notes that 'rehabilitation expenditure *should* form part of the

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³¹ World Bank, UNEP and UNCTAD, Development, Environment and Mining: Enhancing the contribution of the mineral industry to sustainable development: Post conference summary (World Bank, Washington DC, 1994).

³² Ibid 2.

Clarissa Lins and Elizabeth Horwitz, *Sustainability in the Mining Sector* 2007 www.fbds.org.br/IMG/pdf/doc-295.pdf>.

³⁴ George Littlewood, *The Global Mining Initiative* (Address to Mining 2000, Melbourne, 20 September 2000) < www.icmm.com/document/104>.

³⁵ Chris Allen, Andrew Maurer and Marat Fainstein, 'Mine site rehabilitation: An economic review of current policy issues' (ABARE report prepared for the Department of Industry, Science and Resources, August 2001).

³⁶ Coal & Allied Operations Pty Ltd (submission no 79), cited in Industry Commission, 'Mining and Minerals Processing in Australia Volume 2: Commentary, Statistics and Analysis' (Report No 7, Industry Commission, 25 February 1991) 33.

overall costs of the mining operation' [emphasis added]. The reasoning is that a right to quarry or mine is dependent on agreement to rehabilitate the site after operations have ceased. Rehabilitation requirements for mining projects are written into the laws of state and territory governments as a prerequisite for the issuance of exploration permits or mining leases. For example, in New South Wales (NSW) a title must be obtained prior to any operation involving prospecting, exploring or mining.³⁸ However, this title is dependent on the granting of development consent under the *Environmental* Planning and Assessment Act and its regulations.³⁹ Development consent requires the preparation of an Environmental Impact Statement which includes landscape management and rehabilitation. 40 Conditions for mining leases include requirements for the submission of a Mining Operations Plan (including a rehabilitation plan) prior to the commencement of operations and subsequent Annual Environmental Management Reports. Ensuring the compliance with NSW mining legislation, including regulating rehabilitation and supervising mine closures, is the responsibility of the NSW Trade & Investment - Division of Resources and Energy state government agency. Its powers include imposing and enforcing environmental management and rehabilitation conditions, and establishing rehabilitation security deposits.⁴¹ These deposits, also referred to as environmental bonds, ensure that funds are available for rehabilitation in the event of non-compliance. 42 Yet no tax deduction is available for these. 43

The reasons as to why a special deduction for mine site rehabilitation expenditure was warranted were provided by in the 1991 EM. It acknowledged that the majority of rehabilitation expenditure is capital in nature and therefore does not qualify for deduction under the general deduction provision. For capital expenditure to be deductible, it is restricted to expenditure incurred in the process of extracting minerals. This clearly excludes rehabilitation expenditure. And, in any event, such expenditure is generally incurred once the income earning operations have ceased and therefore

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³⁷ 1991 EM, above n 20, ch 13, cl 2.

³⁸ See, *Mining Act 1992* (NSW) Pt 3 Exploration Licences, Pt 4 Assessment Leases and Pt 5 Mining Leases.

³⁹ Mining Act 1992 (NSW) s 65.

⁴⁰ The development consent process is set out in ss 78A to 81 of the *Environmental Planning and Assessment Act 1979* (NSW) and its regulations made for the purposes of Part 4 of this Act.

⁴¹ See generally the Division of Resources and Energy website at http://www.resources.nsw.gov.au/ accessed 11 September 2013.

⁴² Mining Act 1992 (NSW) Pt 12A.

⁴³ ITAA97 s 40-745(b).

excluded from deductibility as not being incurred for the purpose of producing assessable income.⁴⁴

But then again, certain expenditure may be non-deductible, not because of government policy but simply because the importance of the expenditure was not previously realised.⁴⁵ The deduction for mine site rehabilitation expenses is one example. Another is allowing a deduction for the demolition of old plant. Both of these were only made deductible following lobbying from the mining industry.⁴⁶ In other words, there is a time lag between acknowledging business practice and legislation.

The deduction is restricted to the restoration of the site to its pre-mining condition or to a reasonable approximation thereof. The only latitude is to use the condition of the surrounding land (also at the time the operations or activity commenced) as a guide and only if the original condition of the site is unknown – not in place of or as a substitute for. It is also worth noting that partial site rehabilitation is deductible expenditure, even if there is no intention that the work be completed.⁴⁷

The concept of 'site' is also restrictive. The deduction is limited to expenditure incurred in rehabilitating only that area where the exploration and/or mining operations were conducted, that is, the 'mine site'. Although not specifically stated, it is probably fair to state that the area considered to be the 'mine site' is that area covered by the exploration permit or mining lease. Expenditure spent rectifying any other area, although damaged by the mining operations, does not qualify for the deduction.⁴⁸

Rehabilitation expenditure is not, however, limited to mining sites. Typical examples are the removal of plant, equipment and facilities from 'off-site' areas that are, in other contexts, considered to be part of mining operations.⁴⁹ Examples include trunk lines, access roads, storage facilities, wharves, conveyors and railways.

⁴⁴ Ronpibon Tin NL v FCT (1949) CLR 47; FCT v Munro (1926) CLR 153.

⁴⁵ Industry Commission, 'Mining and Minerals Processing in Australia Volume 3: Issues in detail' (Report No 7, Industry Commission, 25 February 1991).

⁴⁶ Industry Commission, above n 13.

⁴⁷ ITAA97 subsection 40-735(5).

⁴⁸ 1991 EM, above n 20, cl 4.

⁴⁹ Charles Birch, 'Rehabilitation Expenditures – does the law need cleaning up' (1999) (Nov-Dec) *Journal of Australian Taxation* 401. See also *FCT v Reynold Australian Alumina* 90 ATC 5018 which concerned a

Then there are areas even more removed from the actual 'site' but nevertheless impacted by the mining operations. An example is the Ok Tedi copper and gold mine in Papua New Guinea. The seventy-kilometre corridor of the Ok Tedi River has been declared 'biologically dead' and 150 square kilometres of Fly River floodplains downstream potentially affected by acid mine drainage.⁵⁰ Australian examples include Queensland's Mount Morgan gold and copper mine which has devastated the aquatic ecosystem of the Dee River⁵¹ and Tasmania's Mt Bischoff tin mine which has created a 'Dead Zone' in the upper 30 kilometres of the Arthur River.⁵² These outlying areas cannot be considered to be with the mine 'site'.

It was noted above that the mining site rehabilitation provision has been rewritten twice since its introduction. TLIP introduced a minor policy change by widening the deduction to include the cost of constructing dams and levees as part of the rehabilitation process. When explaining subdivision 330-I, the Explanatory Memorandum (1996 EM) stated that the dams and levees must be 'essential for rehabilitation'. The justification is that they are an essential part of the rehabilitation process and have little or no residual value to the rehabilitator and, as a result, should not be treated as an enhancement or redevelopment. The 1996 EM gave dams as a means of securing a water supply for revegetation as an example of a dam 'necessary for proper rehabilitation'. As such, tailings dams and dams for recreational purposes would not be deductible.

Not all issues relating to defining a mining site (such as what constitutes a mining building site) and what constitutes rehabilitation expenditure (such as sealing and stabilising operations, and planning costs), have been presented. Nevertheless, it is

bauxite conveyor and *Robe River Mining Co Pty Ltd v FCT* 90 ATC 5028 which concerned an iron ore railway.

⁵⁰ Stuart Kirsch, 'Acting Globally: Eco-politics in Papua New Guinea' (1996) 3(3) *The Journal of the International Institute*.

⁵¹ Productivity Commission, *The Dee River <www.pc.gov.au/_data/assets/pdf_file/0003/17265/sub008.pdf>*; Queensland Government Department of Natural Resources and Mines, *Mount Morgan Mine Rehabilitation Program* (2013) http://mines.industry.qld.gov.au/safety-and-health/mount-morgan.htm>.

⁵² Graham Green, 'North-west rivers environmental review. A review of Tasmanian environmental quality data to 2001' (Supervising Scientist Report 167, Environment Australia, 2001).

⁵³ Explanatory Memorandum, Income Tax Assessment Bill 1996, 11 (1996 EM).

⁵⁴ Ibid, 91.

⁵⁵ Ibid, 102

submitted that the above discussion demonstrates that rehabilitation expenditure incurred by mining operators is treated preferentially within the income tax legislation. It is also limited in its environmental features and scope of environmental application.

The policy behind legislative provisions is not always specifically stated. In such cases it can usually be gleaned from the history leading up to the legislation, from the explanatory memorandum accompanying the legislation and from the wording of the provision itself. With respect to the mining site rehabilitation provision, it would appear that the policy behind section 40-735 is more commercial than environmental. It has even been suggested that its purpose was to '[correct] an anomaly of the tax system as it applies to the natural resources industry'. ⁵⁶

3.4 Analysis

Rehabilitating a mining site serves an environmental purpose. However, section 40-735, as currently drafted, fails to deliver.

The provision does not achieve full deductibility for rehabilitation expenditure. There are two aspects to this: the specified exclusions and the result of the restrictive interpretation of terms such as 'rehabilitation' and 'site'. What qualifies as deductible expenditure is defined narrowly; the majority of major environmental disasters arise off-site. Further, permitting partial rehabilitation with no penalty for non-completion, especially intentional non-completion, is clearly contrary to environmental principles.

Tailings dams are often the most significant environmental liability yet these are specifically excluded. Tailings dams store waste material from mineral processing at mine sites.⁵⁷ A lack of tailings dams resulted in the Ok Tedi disaster, damaging agricultural land and displacing entire communities. The Los Frailes disaster in Spain in April 1998 caused approximately €152 million in socio-economic losses and approximately €147 million was spent correcting the environmental and agricultural impacts, including restoration of the area's natural resources.⁵⁸ This does not include the

⁵⁶ Stoianoff et al, above n 26.

⁵⁷ M Rico, G Benito and A Diez-Herrero, 'Floods from tailings dam failures' (2008) 154(1-3) *Journal of Hazardous Materials* 797.

⁵⁸ Ibid.

subsequent impacts on communities and local industries. Closer to home is Mount Todd. The company went into receivership leaving behind a tailings dam of acid water and heavy metals.⁵⁹ The environmental bond of \$900,000 was forfeited but, even with the additional \$5 million spent by the Northern Territory government, financing remediation has hardly begun.⁶⁰ Responsibility for the environmental clean-up rests with the Northern Territory Government. Hence taxpayers will pay for it.

The actual cost of section 40-735 cannot be accurately ascertained as it is not included in Treasury's Tax Expenditure Statements. While there is little detailed information, the estimates vary substantially. This may be because rehabilitation expenditure is minespecific. As examples, it is estimated that rehabilitating March Mining at Moliagul would cost \$1 million, Denehurst at Benambra \$7 million and Mount Todd in the Northern Territory estimated at \$122 million.

State governments have developed rehabilitation cost calculators to provide a consistent methodology for estimating rehabilitation costs. However, there is no requirement that they be adhered to and the calculations are only randomly audited. An example is the White Dam Gold Project in South Australia where the miner has adopted a rehabilitation rate of \$800 per hectare and an ongoing maintenance rate of \$140 per hectare against the calculator's rate of \$4,070 per hectare and \$715 per hectare respectively.

There is limited publicly available statistics on mine site rehabilitation costs from the Australian Bureau of Statistics. The most recent relates to the 2000-2001 financial year

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⁵⁹ A Bevenge, 'Danger lurks in Territory's most toxic waters' *ntnews.com.au* 14 January 2012 http://www.ntnews.com.au/article/2012/01/14/283275_ntnews.html>.

⁶⁰ Ibid; Stephen Garnett and Andrew Campbell, 'Insuring the environment – who pays when mining goes wrong' *The Conversation* 1 February 2012 http://theconversation.edu.au/insuring-the-environment-who-pays-when-mining-goes-wrong-5060>.

⁶¹ John Mitas, 'Rehabilitation Bonds' (MCA Annual Environment and Communities Seminar, July 2012) http://www.minerals.org.au/file_upload/files/presentations/aecs/DPI_Rehabilitation_ Bonds.pdf>; Bevenge, above n 59.

⁶² See, for example, Industry & Investment, 'Rehabilitation cost estimate guidelines' (New South Wales Government, November 2010); Department of Environment and Heritage Protection, 'Estimation of Mine Rehabilitation Costs' (Queensland Government, January 1995).

⁶³ Department of Primary Industries, 'Establishment and Management of Rehabilitation Bonds for the Mining and Extractive Industries' (DPI, Victoria Government, 2010); Gareth Parker, 'Govt agencies failing on mine policing: audit' *The West Australian* 28 September 2011.

⁶⁴ Exco Operations (SA) Limited and Polymetals (White Dam) Pty Ltd, 'White Dam Gold Project: Mine and Rehabilitation Program' (Mineral Lease #6275, Volume 1 – MARP, Revised February 2011) 8-11.

where current expenditure amounted to \$97.7 million or 0.3 per cent of total current expenses, and capital expenditure amounted to \$7.4 million being 0.2 per cent of total capital expenditure. On a per hectare basis this is approximately \$2,050 (current) and \$145 (capital). For these purposes, 'rehabilitation' includes landscaping, re-vegetation and removal of buildings, fixtures and equipment to a reasonable approximation of its pre-mining condition. The only other information relates to capital rehabilitation expenditure of \$22.7 million (1994-1995) and \$15.7 million (1995-1996). It would appear that there is a year-on-year decline in capital rehabilitation expenditure which may be the result of more rehabilitation work being done while the mine is still operative, that is, more current than capital expenditure. Further research is required to test this hypothesis.

When section 40-735 was introduced, the cost to the revenue was expected to be \$10 million per annum from the 1992-1993 income year.⁶⁷ Taking into account the removal of the Bass Strait oil platforms, the cost was expected to increase to around \$40 million a year from early 2000s.⁶⁸ However, the actual or estimated expenditure far exceeds the original projections. Being specific to mining, the mining industry is being subsidised by the taxpayer to help it meet the costs of mining site rehabilitation.

It is also informative to examine the relationship between mining earnings and expected rehabilitation expenditure. In a 2001 report prepared for the Department of Industry, Science and Resources, the Australian Bureau of Agricultural and Resource Economics (ABARE) stated that annual provisions for rehabilitation expenditure (as determined by the value of rehabilitation bonds) had risen from around \$160 million to \$285 million in the decade while gross value of mine production for the 1998-99 income year equated to \$34.6 billion. Expected rehabilitation expenditure represented only 3.3 per cent of

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⁶⁵ Susan Linacre, 'Environment Protection Mining and Manufacturing Industries Australia 2000-2001' (ABS Catalogue No 4603.0, Australian Bureau of Statistics, 4 September 2002); Dennis Trewin, '2003 Year Book Australia' (No 85, ABS Catalogue No 1301.0, Australian Bureau of Statistics, 2003).

⁶⁶ William McLennan, 'Environment Protection Expenditure, Australia 1994-95 and 1995-96' (ABS Catalogue No 4603.0, Australian Bureau of Statistics, 25 March 1998) 32.

⁶⁷ 1991 EM, above n 20, 5

⁶⁸ Productivity Commission, 'Industry Commission Annual Report 1989-90' (Appendix 13, Budgetary assistance) 206

⁶⁹ Allen et al, above n 35.

the gross value of production. By 2011 the expected expenditure was \$420.7 million⁷⁰ with 2009-10 industry operating profit before tax exceeding \$50 billion.⁷¹

Two specific examples: the White Dam Gold Project's forecasted rehabilitation expenditure represents a mere 0.02 per cent of its 2012 profit margin on production.⁷² The Wonarah Phosphate Project, on the other hand, has apportioned 0.09 per cent of its projected net revenue from mining operations for the rehabilitation of the site.⁷³

From this it can be deduced that, generally and on average, expenditure incurred by the mining industry on rehabilitation costs is a small percentage of their profits. This, in turn, appears disproportionately low when compared to the cost incurred by governments in stabilising and/or rehabilitating abandoned mine sites. As previously mentioned, Mount Todd is expected to cost in excess of \$100 million to rehabilitate. This seeming disparity and the insignificance in respect of total earnings raises questions of whether the industry needs government, and hence taxpayer, support. In other words, it is arguable that mining companies should self fund the rehabilitation of mine sites without the benefit of a tax expenditure.

IV LAND DEGRADATION

4.1 Introduction

Over half of Australian agricultural land is considered degraded.⁷⁴ A significant contribution to this has been the clearing of over 80 per cent of native vegetation.⁷⁵ Environmental issues associated with land degradation include soil erosion, siltation and salinity. By definition, land degradation threatens the quality and quantity of soil resources⁷⁶ which, in turn, threatens productivity yields and hence income.

⁷⁰ Construction Material Processors Association, 'CMPA Submission: Extractive Sector Rehabilitator bonds' 28 March 2011 < www.cmpavic.asn.au/downloads/F-PAS-150.pdf> at 30 November 2012.

⁷¹ Brian Pink, '2012 Year Book Australia' (No 92, ABS Catalogue No. 1301.0, Australian Bureau of Statistics, 2012) 571.

⁷² Derived from Exco Resources Ltd, 2012 Annual Report http://www.excoresources.com.au/ uploads/downloads/Exco-2012-AR.pdf >.

⁷³ Derived from Minemakers Limited, 'Development Projects Wonarah Rock Phosphate' http://www.minemakers.com.au/projects-development-wonarah.php>.

⁷⁴ Norman J Thomson, 'Fiscal Incentives for Australian Bushland' (1986) 10(5) Environmental Management 591.

⁷⁵ Ibid.

⁷⁶ Such as topsoil, embedded nutrients and moisture as well as soil biology.

While technological developments have compensated for reduced yields resulting from land degradation, studies have identified yield declines due to land degradation as high as 30 per cent. Gross output on farm production in 2009-2010 was \$48.7 billion, learly double the \$25 billion in 2003-2004. Yield declines of even one or two per cent on adversely affected farmland would result in significant lost revenue even apart from the environmental consequences of poor land management. The threat to the viability of Australia's agricultural industries resulting from land degradation can be put another way: degradation costs \$1.5 billion annually in lost production or around six per cent of agricultural production.

The importance of native vegetation, food security and pristine landscapes to future generations cannot be evaluated in monetary terms. Yet the benefits are increasing as the adverse affects of excessive clearing become more defined.⁸¹ As a result, there are clear arguments in favour of public intervention in private rural and farmland management.

Contained in subdivision 40-G of ITAA97, section 40-630 provides an immediate deduction for capital expenditure incurred, subject to certain conditions.

4.2 History

It would appear that, from the onset of income tax legislation, primary producers were able to deduct certain capital expenditure expended on rural land. Even the first taxation Royal Commission, established on 24 September 1920 and chaired by Warren Kerr, inquired into, inter alia, special rules for primary producers, 'particularly in relation to losses resulting from adverse weather conditions'.⁸²

⁷⁷ R Junor, D Marston and S Donaldson, 'A situation statement of soil erosion in the Lower Namoi area' (Soil Conservation Service of New South Wales, 1979).

⁷⁸ National Farmers Federation, 'NFF Farm Facts: 2012' (National Farmers Federation, 2012).

⁷⁹ Productivity Commission, Trends in Australian Agriculture (Research paper, 2005).

⁸⁰ Paul Gretton and Umme Salma, 'Land Degradation and the Australian Agricultural Industry' (Staff Information Paper, Industry Commission, 1996); Colin Mues, Lynelle Moon and John Grivas, 'Land Care Tax Provisions: Deductions versus alternative instruments' (ABARE research Report 96.6, 1996).

⁸¹ Thomson, above n 75.

⁸² Report of the Royal Commission on Taxation, First Report (2 November 1921) iii-ix.

In reviewing available extrinsic legislative material, the first reference to deductions for capital expenditure for 'improvements to pastoral properties' was made in 1941 when discussing the 'war tax'.⁸³ The next reference, in 1958, specifically referred to section 75 ITAA36 as allowing a tax deduction to primary producers for the capital cost of 'developing rural lands' in Australia.⁸⁴ That is, for the clearing, draining and otherwise preparing land for agriculture or pasture.

In 1963 the definition of 'primary production' was extended to include 'forest operations'. That forestry operations should be treated as primary production was an outcome of the Commonwealth Committee on Taxation (Ligertwood Committee). The amending legislation also extended the section 76 deduction for expenditure on fences to cover constructing or altering a fence to prevent animals pests entering land used in primary production and to mitigate the effects of deposits of mineral salts. Previously expenditure was only deductible if it was incurred on acquiring wire or wire netting and placing it in position on a fence. The section of the control of the con

From 21 August 1973, it was no longer possible to obtain a section 75 deduction unless there was a pre-existing contract between the primary producer and a supplier of relevant goods and services.⁸⁸ The expenditure would only be deductible either by way of depreciation under the general depreciation provisions or in equal annual instalments over 10 years in accordance with new section 75A.⁸⁹ Within the scope of section 75A(1) was

- (a) the eradication or extermination of animal or vegetable pests from the land;
- (b) the destruction and removal of timber, scrub or undergrowth indigenous to the land;
- (c) the destruction of weed or plant growth detrimental to the land;
- (d) the preparation of the land for agriculture;
- (e) ploughing and grassing the land for grazing purposes;
- (f) the draining of swamp or low-lying lands where that operation improves the agricultural or grazing value of the land;
- (g) preventing or combating soil erosion or flooding of the land; or

88 Memorandum, Income Tax Assessment Bill (No 5) 1973 cl 17.

⁸³ Treasurer Chifley, Second Reading Speech, Income Tax Assessment Bill (No 2) 1941.

⁸⁴ Explanatory Memorandum, Income Tax and Social Services Contribution Assessment Bill 1958, 1.

 $^{^{85}}$ Explanatory Memorandum, Income Tax and Social Services Contribution Assessment Bill (No. 2) 1963, cl 4.

⁸⁶ Commonwealth Committee on Taxation *Report* (G. Ligertwood, Chair, 1961).

⁸⁷ Explanatory Memorandum, above n 85, cl 24.

⁸⁹ Explanatory Memorandum, Income Tax Assessment Bill (No 5) 1973 cl 18.

(h) conserving or conveying water for use in carrying on primary production on the land.

Section 76 was also terminated under the same terms as section 75 with the ordinary depreciation provisions applying to post 20 August 1973 expenditure.⁹⁰

These amendments were only to last seven years. In his policy speech leading up to the 1980 election, then Prime Minister Malcolm Fraser announced full tax deductibility for capital expenditure on soil conservation by a primary producer.⁹¹ This was costed at \$1 million and became effective from 1 October 1980. The kinds of expenditure to benefit from this measure were those that were then deductible by way of equal instalments over 10 years and, for fencing, deductible under the depreciation provisions. Specifically, subsection 75A(1)(a), (c), and part of (g) relating to soil erosion were transferred to new section 75D as subsection (1)(a), (b) and (c).⁹² Section 76 became new subsection 75D(1)(d)⁹³ while (e) and (f) related to capital expenditure incurred in the construction of levee banks or similar improvements having like uses and construction of measures to control salinity or assist in drainage control but not extending to the draining of swamp or low-lying land, respectively. Anti-flooding expenditure would remain in section 75A. Section 75D therefore became the 'soil conservation' measures.

Effective 23 August 1983, the land clearing provisions of section 75A were abolished.⁹⁴ These were the initial clearing of land by the destruction and removal of timber, scrub or undergrowth indigenous to the land, the initial preparation of the land for agriculture, the ploughing and grassing of land to be used for grazing purposes and the draining of swamp land. The then Treasury Keating specifically stated that, while having no impact on deductions for capital expenditure on soil and water conservation, the amendment will 'remove the encouragement through the tax system of environmentally and economically unsound activities' and estimated to save \$3 million a year.⁹⁵

⁹⁰ Ibid cl 19.

⁹¹ Malcolm Fraser, Policy Speech delivered at Melbourne, 30 September 1980 http://electionspeeches.moadoph.gov.au/speeches/1980-malcolm-fraser

⁹² Explanatory Memorandum, Income Tax Assessment Amendment Act (No. 6) 1980 cl 8, 9.

⁹³ Ibid cl 4, 9.

⁹⁴ Explanatory Memorandum, Income Tax Assessment Amendment Act (No. 4) 1983 cl 7.

⁹⁵ Paul J Keating, Second Reading Speech, Explanatory Memorandum, Income Tax Assessment Amendment Act (No. 4) 1983, 5.

The availability of the immediate deduction was tightened in 1985 by inserting a 'primarily and principally' test. ⁹⁶ Expenditure on all the subsection 75D(1) operations, except for (e) being the construction of levee banks or similar improvements, now were required to be incurred primarily and principally for that purpose. This was to differentiate between expenditure that was deductible immediately (under section 75D) and that which was deductible over five years (under section 75B). Subsection 75A(h), dealing with conserving or carrying water had been enacted as its own section 75B in 1980⁹⁷ permitting full deductibility in the year the expenditure was incurred. ⁹⁸ Full deductibility was later withdrawn and replaced with deductions in equal instalments over five years. ⁹⁹

At the same time as the introduction of the primarily and principally test, the scope of section 75D was broadened: references to 'soil erosion' and 'salinity' was replaced with 'land degradation'. The Explanatory Memorandum explains that this term was intended to include the 'decline of soil fertility or structure, degradation of natural vegetation, the effects of deposits of eroded material and salinisation'.¹⁰⁰

Significant amendments were again made in 1991 following the review of the Landcare objectives. They gave effect to the undertaking of the Government announced in the July 1989 Statement of the Environment and in the 1990-91 Budget. In the first place, section 75D was extended to all taxpayers who carried on a business on and from rural land, excluding mining and quarrying operations. Secondly, the deduction for the cost of fences was no longer limited to fencing already degraded land. Examples given were fencing off an area where the soil is lighter or where there is valuable native vegetation in order to prevent degradation through overgrazing. The only requirement being that the fences were erected in accordance with an 'approved whole farm plan',

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⁹⁶ Explanatory Memorandum, Taxation Laws Amendment Bill (No. 4) 1985 cl 12.

⁹⁷ Six months prior to the enactment of section 75D.

⁹⁸ Explanatory Memorandum, Income Tax Assessment Amendment Act (No. 3) 1980 cl 4,5.

⁹⁹ Explanatory Memorandum, Taxation Laws Amendment Bill (No. 4) cl 11. ¹⁰⁰ Ibid 52.

¹⁰¹ Originally a grassroots movement established in 1985, Landcare became a national program in July 1989 when the Australian Government, with bipartisan support, announced its 'Decade of Landcare Plan' and committed \$320 million to fund the National Landcare Program.

¹⁰² 1991 EM, above n 20, 127-128.

¹⁰³ Ibid 128-129.

now referred to as a 'land management plan'. The prevention of land degradation became the qualifying criterion.

As part of TLIP, the landcare provisions (as they were now referred to) were rewritten into ITAA97 as subdivision 387-A.¹⁰⁴ While it was not intended to change its meaning, the rewrite did change the sentence structure and ordering. As with the mining site rehabilitation provision, the introduction of the Uniform Capital Allowance regime in 2001 applied to the landcare provisions. Contained in subdivison 40-G, this renumbering also did not change the effect of the special primary producer provisions.¹⁰⁵

The most recent significant amendments to the landcare provisions came in 2005.¹⁰⁶ In the first instance, access to the tax concession was extended to rural land irrigation water providers. Secondly, the definition of 'landcare operation', used to determine eligible capital expenditures for the landcare tax concession, was amended to include repairs of a capital nature (in addition to alternations, additions and extensions already legislated for). This was further broadened to include a structural improvement, repairs of a capital nature, or alteration, addition or extension that is 'reasonably incidental' to the assets already deductible under a landcare operation associated with a levee or similar, or drainage works.¹⁰⁷ The examples given by the Explanatory Memorandum are that of a bridge constructed over a drain that was constructed to control salinity or a fence constructed to prevent livestock entering a drain that was constructed to control salinity but not the bulldozer that was used to construct the drain.

4.3 Policy

At an international level, the ratification of the UN Convention to Combat Desertification by 193 countries, including Australia, reflects a global consensus about the need to prevent and reverse land degradation. The land degradation provision was already

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 $^{^{104}}$ Explanatory Memorandum, Tax Law Improvement Act 1997 Ch 11. The corresponding provisions are sections 387-55 and 387-60.

¹⁰⁵ Explanatory Memorandum, New Business Tax System (Capital Allowances) Act 2001 cl 6.3.

¹⁰⁶ Explanatory Memorandum, Tax Laws Amendment (2004 Measures No. 6) Act 2005 cl 6.7, 6.24.

¹⁰⁷ Ibid d 6 26

¹⁰⁸ Commonwealth Intergovernmental Working Group for the UNCCD, 'Australian Actions to Combat Desertification and Land Degradation' (National Report by Australia on Measures Taken to Support Implementation of the United Nations Convention to Combat Desertification, April 2002).

well established when the federal and state governments endorsed the National Strategy for Ecologically Sustainable Development in 1992.¹⁰⁹ This Strategy resulted in the establishment of the National Landcare Program, now the Caring for our Country initiative.¹¹⁰

Section 40-630 ITAA97, and its forerunner section 75D ITAA36, provide a 100 per cent deduction in the year of expenditure for capital works that are primarily for the control or prevention of land degradation. This provision is designed to provide an incentive 'to confront the problems associated with erosion, salinity and other forms of land degradation'¹¹¹ and to encourage primary producers and users of rural land to undertake capital expenditure that assists in the long-term sustainable use of the land.¹¹² The land degradation measures, also referred to as the Landcare provisions, provide an incentive for farmers and other businesses conducted on rural land to undertake capital works to combat land degradation. Being capital, they are explicitly designed to provide investment incentives. Examples of Landcare operations are the construction of drainage works to combat salinity, the construction of a levee or the erection of fencing to limit further degradation and assist in reclaiming the affected area.¹¹³

The relationship between the land and the environment has always been a factor of Australian public policy.¹¹⁴ Determining the extent of land degradation and devising mitigation solutions has been on policy agendas for many decades and certainly predates the increasing societal concern over environmental issues from the early 1990s. These include processes to manage the use of surface and ground waters, measures to improve water quality, financial incentives for improved vegetation management, diversifying the commercial use of agricultural land and providing comprehensive and integrated regulatory frameworks.¹¹⁵

¹⁰⁹ Ecologically Sustainable Development Steering Committee, *National Strategy for Ecologically Sustainable Development* (Australian Government, 1992).

Department of Agriculture, Fisheries and forestry, *National Landcare Program* 2009 http://www.daff.gov.au/natural-resources/landcare/national_landcare_program>.

¹¹¹ Parliamentary Research Service, Taxation Laws Amendment Bill (No. 2) 1991, 2.

¹¹² Explanatory Memorandum, Tax Laws Amendment (2004 Measures No. 6) Act 2005 cl 6.4.

¹¹³ ITAA97 s 40-635.

¹¹⁴ Commonwealth Intergovernmental Working Group, above n 108.

¹¹⁵ Ibid.

Throughout the progression from section 75 ITAA36 to section 40-630 ITAA97 there have been numerous government-initiated reports and inquiries regarding issues of land degradation and the articulation of policy agendas for sustainable resource management in the primary production sector, addressing key questions such as how to cost and treat land degradation. These included the development of land use policy, soil conservation policy, and public good conservation. The interrelationship between the economy and the environment was also prominent in these reports. For example, one government standing committee, when reviewing the impact of taxes on land degradation (among other areas), noted the lack of integration between economic and environmental policy making.

While concern about land degradation problems amongst Australian landholders is now well established, many do not recognise the multiplicity of subtle or insidious manifestations. In 1997 ABARE conducted an inquiry into the land degradation tax concession and its effect on the undertaking of landcare works. 121 It found that the tax deduction was probably the most efficient tool available to provide broad-based incentives for landcare works with an uptake rate of around 60 per cent. Another study found that some form of landcare work is undertaken on more than one third of all farms. 122 However, such landcare work may or may not be significant in terms of ameliorating land degradation. 123 It is also important to note that reviews of landcare

¹¹⁶ Examples include Australian Standing Committee on Soil Conservation (1971), Commonwealth and State Government Collaborative Soil Conservation Study (1978) and Department of Environment Conference on Conservation and the Economy (1984).

¹¹⁷ Senate Standing Committee on Science, Technology and the Environment, *Land Use Policy* (AGPS, 1984).

¹¹⁸ Department of Environment, Housing and Community Development, 'A basis for soil conservation policy in Australia' (Report No 1, AGPS, 1978).

¹¹⁹ House of Representatives Standing Committee on Environment and Heritage, 'Public good conservation: Our challenge for the 21st century' (AGPS, 2000).

¹²⁰ House of Representatives Standing Committee on Environment and Conservation, 'Fiscal Measures and the Achievement of Environmental Objectives' (AGPS, 1987).

¹²¹ ABARE, 'Landcare Taxation Arrangements' (Evaluation Report, Department of Primary Industries and Energy, February 1997).

¹²² John Cary et al, 'Human and Social Aspects of Capacity to Change to Sustainable Management Practices' (Report for the National Land and Water Resources Audit Theme 6, Projects 6.2.2 and 6.3.4, Bureau of Rural Sciences, June 2001).

¹²³ John Cary and Ian Thompson, 'Some Resource Management Realities in Environmental Policy', in Justine Graham, Ian Reeve and David Brunckhorst (eds) *Landscape Futures: Social and Institutional Dimensions. Proceedings of* the 2nd International Symposium on Landscape Futures (Institute for Rural Futures, University of New England, 2002).

tax provisions acknowledge the argument that tax deductions provide greater benefit to primary producers with high taxable incomes.¹²⁴ The regressive distribution of benefits under a system of tax deductions has also been recognised in other studies.¹²⁵

It is clearly evident that environmental policy played a major role in shaping the land degradation provisions not only in respect of the operative provision of section 40-630 but also in regard to the eligible activities listed in section 40-635.

4.4 Analysis

From an environmental sustainability perspective, 'landcare operations' are defined narrowly as they do not cover expenditure, for example, in nature conservation areas. Further, it is unclear whether fencing off areas of bushland is included. While this was an example given by the explanatory memorandum introducing the 1991 amendments, the latter was qualified as being in order to prevent degradation through overgrazing. Areas of bushland have ecological importance even apart from their soil and water conservation values. In addition, without a definition of 'pest', the provision may provide tax deductions for eradicating or exterminating native animals as well as introduced species and for the clearing of native vegetation and regrowth.

Three activities most commonly cited by primary producers as deserving greater government assistance are soil and pasture improvements that cannot be claimed as operating expenses, catchment planning and protection of river corridors. Environmentalists, on the other hand, are more concerned that environmental issues, such as biodiversity loss, may not be sufficiently addressed. 128

A criticism that has been levied is that only activities conducted for profit-making purposes can be considered primary production; a non-profit organisation can never be

¹²⁴ Department of Primary Industries and Energy, 'Review of taxation arrangements relating to the prevention and treatment of land degradation' (Paper prepared for the Minister of Resources, March 1990).

¹²⁵ J Haynes and M Sutton, 'Taxation Measures and Soil Conservation' (Australia Bureau of Agricultural Economics, Occasional Paper 93, 1985).

¹²⁶ 1991 EM. above n 20, 128-129.

¹²⁷ Mues et al, above n 80.

¹²⁸ R Ashby and Lachlan Polkinghorne, 'Taxation of Primary Producers and Landholders: Improving Natural Resource Management Outcomes' (RIRDC Publication No 04/026, A report for the Rural Industries Research and Development Corporation, 2004).

a primary producer.¹²⁹ This result is inevitable when using the income tax legislation to deliver environmental outcomes – taxable income is required in order to benefit from a tax deduction. A similar argument can be presented for hobby farmers. However land degradation does not discriminate between landholders. It is acknowledged that landholders who are not taxpayers only as a result of their land holdings¹³⁰ need incentives to invest in natural resource management.¹³¹

Arguably, the most acute problems associated with land degradation are sedimentation and salinisation. These are referred to as problems on non-point pollution, that is, it is either impossible or excessively costly to determine the contributions made by individual landholdings.¹³² It is therefore not feasible to penalise the primary producers individually for imposing external costs in direct proportion to the size of the costs. In one study it was estimated that 96 per cent of the external costs associated with dryland salinity are borne by the general community.¹³³

Problems such as these generate the largest off-farm costs. Incentives to landholders to invest in addressing landcare works would result in the greatest benefits to society, especially if these works would not be undertaken without the incentive. The impacts from land degradation extend beyond their geographical location and include issues related to food security and environmental health. However, it is difficult to accurately quantify the off-farm (or off-site) costs of degradation and hence equally difficult to match the level of incentive to the level of societal benefit.

As stated in the 1991 Parliamentary Digest, section 75D was designed to provide an incentive 'to confront the problems associated with erosion, salinity and other forms of land degradation'. As noted above, the original insertion of section 75D providing full tax deductibility for capital expenditures on soil conservation was costed at \$1 million

¹²⁹ Douglas, above n 8.

¹³⁰ Although they may be taxpayers for other reasons such as salary and wage earners.

¹³¹ Ashby and Polkinghorne, above n 128.

¹³² Geoff Edwards, 'Commentary' in Anthony Chrisholm and Robert Dumsday (eds) *Land Degradation: Problems and policies* (Cambridge University Press, 1987).

¹³³ Suzanne Wilson, 'Formulating cost efficient salinity management plans: a case study in the Kyeamba Valley' (Paper presented to the National Conference of Land Management for Dryland Salinity Control Conference, Bendigo, October 1993).

¹³⁴ Parliamentary Research Service, Taxation Laws Amendment Bill (No. 2) 1991, 2.

per annum. While the amendments are peppered with anticipated costs and savings, none of these amount to more than \$5 million. 135

There is limited data on annual expenditure on land degradation available from the Australian Bureau of Statistics, covering only the periods 1991-92 to 1996-97.¹³⁶ This includes both capital and non-capital expenditure whereas the tax expenditure is restricted to capital expenditure only.

Treasury's Tax Expenditures Statements generally show the combined landcare deduction for primary producers, the three-year write-off expenditure on water facilities for primary producers and, in later years, the water facilities and the land care concession for irrigation water providers, ranging between \$20 million and \$30 million.¹³⁷ The only exception was 2007 where the landcare deduction for both primary producers and irrigation water providers where shown individually as nil.¹³⁸ It is therefore not possible to determine, nor even estimate, what the land degradation tax concession is likely to be costing taxpayers.

It is submitted that the landcare and the water facilities are not comparable for two reasons. Firstly, landcare expenditure is written off immediately while expenditures on water facilities are written off over three years.¹³⁹ Secondly, qualifying rural businesses are able to claim the deduction for landcare expenditure but not for water facilities.¹⁴⁰

In a survey conducted for the 1993-94 income year, the average size of landcare expenditures claimed amounted to \$2,800 with a total cost to the revenue of around \$10.9 million.¹⁴¹ The most common activities were tree establishment and weed control, although the expenditure per farm was relatively small. The largest individual landcare investments were in earthworks to control erosion or treat salinity. Further, the more

¹³⁵ See, for example, John Button, Second Reading Speech, Taxation Laws Amendment Bill (No. 2) 1991, 3; Keating, above n 95, 5.

¹³⁶ Financial years run from 1 July to 30 June.

¹³⁷ See, for example, Treasury, 'Tax Expenditures Statement 2009' (2010); Treasury, 'Tax Expenditures Statement 2008' (2009); Treasury, 'Tax Expenditures Statement 2004' (2005); Department of the Treasury, 'Tax Expenditures Statement 1996-97' (1997).

¹³⁸ Treasury, 'Tax Expenditures Statement 2007' (2007).

¹³⁹ Cf ITAA97 ss 40-630 and 40-540.

¹⁴⁰ Cf ITAA97 ss 40-630(1)(b) and 40-525(1).

¹⁴¹ Mues et al, above n 80.

profitable farms were more likely to undertake landcare expenditures and also spent more, on average, on landcare works. Expenditure to control salinity or fencing to separate land classes were more likely to be claimed under the landcare provision in order to take advantage of the accelerated rate of depreciation offered by the tax concession. Expenditure on pest management, however, was more likely to be claimed as normal operating expenses due to there being no timing or other advantage to counteract the increased compliance costs involved in separating the expenditure.

The survey also concluded that only about half of the \$10.9 million cost was directly attributable to the land degradation provision, the other being claimed as normal operating expenditure. No mention was made of the capital/non-capital differential. The survey also found that, if the capital items could otherwise have been depreciated, then the present value of tax revenue foregone as a result of claims may be less than \$2 million. For those with a landcare issue but not making any landcare investment, the reason was inadequate cash available. This is highlighted by an analysis covering the 2000-01 income year that found that 26 per cent of all farms made no farm cash income while 23 per cent made less than \$25,000, totalling 49 per cent.¹⁴²

The 1997 ABARE inquiry also raised concern about the low level of uptake of the provisions. This resulted in the introduction of the tax offset which, as noted above, was short-lived. In a survey of primary producers it was suggested that a tax deduction of 150 per cent to 200 per cent would be a greater incentive to invest in measures to combat land degradation. The current deduction was considered inadequate considering the time spent on the landcare work and the fact that direct tax deductions could be gained from other activities that more directly increased farm income. In recommending a deduction of 120 per cent, a report for the Rural Industries Research and Development Corporation it was held that the 'extra deduction must be high enough to encourage and identify natural resource management expenditure ... [but] be viewed against the cost to tax revenue'. 144 It was considered that this would have a dual benefit:

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¹⁴² Ashby and Polkinghorne, above n 128.

¹⁴³ Suzanne Jenkins, 'Native Vegetation on Farms Survey 1996' (Resource Management Technical Report No 164, Department of Agriculture, Western Australia, 1997).

¹⁴⁴ Ashby and Polkinghorne, above n 128, 47.

additional expenditure on landcare activities and, being separately disclosed, easier for policy-makers to measure.

Estimates of the impact on land degradation vary widely. During the 1970s and 1980s there were four large-scale studies that focused of the extent and impacts of land degradation. These provided a perspective of the extent of the financial problem posed by land degradation. The first, organised by the Australian Standing Committee on Soil Conservation in 1971, estimated that the cost of controlling soil erosion with structural measures in non-arid regions was \$350 million. This was followed by a three-year study (1975-78) known as the Commonwealth and State Government Collaborative Soil Conservation Study. Housing and Community Development, it consisted of 12 separate reports. It was estimated that the cost of treating all the degraded land in Australia was \$675 million.

The other two large-scale studies focused on measuring the costs of salinity degradation. In 1982 The Working Party on Dryland Salting in Australia reported that scalding (the major form of dryland salting in Australia) affected 3.78 million hectares, resulting in \$5.4 million in annual productivity losses to agriculture and would cost \$18.1 million to repair. A consultant's report, however, put productivity losses at \$22 million per year with abatement costs of land salinisation at \$10 million per year.

What the above discussion shows is that there is little semblance between estimated costs of abatement and the costs incurred by primary producers, whether or not the tax deduction is taken.

Land degradation is a complex problem and demands a comprehensive approach. The problems of land degradation, the divergence between private and social objectives in

¹⁴⁵ Michael Blyth and Andrew McCallum, 'On-site costs of land degradation in agriculture and forestry' in Anthony Chrisholm and Robert Dumsday (eds) *Land degradation: Problems and policies* (Cambridge University Press, 1987) 79-98; Ian Hannam, 'Soil Conservation in Australia' (2003) 58(6) *Journal of Soil and Water Conservation* 112A.

¹⁴⁶ Department of Environment, Housing and community Development, *Commonwealth and State Government Collaborative Soil Conservation Study report* (AGPS, 1978).

¹⁴⁷ Working Party on Dryland Salting in Australia (Report on salting of non-irrigated land in Australia, Soil Conservation Authority, Victoria for Standing Committee on Soil Conservation, 1982).

¹⁴⁸ A Peck, J Thomas and D Williamson, 'Water 2000: Consultant's Report No. 8: Salinity Issues Effects of Man on Salinity in Australia' (AGPS, 1983).

land use and the lack of private resources makes some intervention by the government inevitable. Nevertheless, it is thought that the environment is increasingly being used as a justification to financially support farmers.¹⁴⁹

Notwithstanding the tax concession as an incentive, over the period 1990 to 2000, Australia had the sixth highest annual rate of land clearing in the world.¹⁵⁰ It is also the only developed nation in the top 20 land-clearing nations.¹⁵¹ This raises questions over the effectiveness of the tax exemption, at least as currently drafted. A broader application and/or an increased rate should be considered.

V COMPARATIVE ANALYSIS

Capital expenditure is not normally deductible unless a particular provision makes it so. Those that do usually allow deductions to be claimed over a period approximately corresponding to the consumption of the benefit from the expenditure. However, a few provisions allow for capital expenditure to be fully deducted in a single income year notwithstanding that the benefits will be consumed over a longer period. These provisions serve particular policy objectives, usually to encourage certain activities. Two such provisions are mine site rehabilitation and land degradation (or landcare). A comparison of their features is contained in table 1.

	Mine site rehabilitation	Land degradation
Policy driver	Commercial	Environmental
Environmental	Actual damage	Preventative and actual
driver		damage
Constraint	Industry	Industry/activity

¹⁴⁹ Eric Bignal, 'Using an ecological understanding of farmland to reconcile nature conservation requirements, EU agricultural policy and world trade agreements' (1998) 35(6) *Journal of Applied Ecology* 949.

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¹⁵⁰ D Lindenmayer and M Burgman, *Practical Conservation Biology* (CSIRO, 2005).

¹⁵¹ Ihid

 $^{^{152}}$ Explanatory Memorandum, New Business Tax System (Consolidated and Other Measures) Act (No. 1) 2002.

Scope (applicant)	Mining and quarrying	Primary producers, water
		irrigators and eligible rural
		businesses
Scope (application)	On-site	On-site
Deductions	Capital and non-capital	Capital only
Test	None	Primarily and principally

Table 1: Comparative analysis

VI CONCLUSION

The income tax system influences the way taxpayers invest in environmental projects. Using the tax system to encourage investment in natural resource management is both wise and desirable. While policy makers are generally loathe to use the tax system to encourage one form of investment over another, encouraging private investment in natural resource management is desirable if it provides both a public and private benefit and links the environmental project work to the direct investment made by governments. In this case the government investment is the revenue foregone.

As evident from the discussion on the introduction of the mine rehabilitation and land degradation tax expenditures, any expected cost has been severely underestimated. This is often an outcome of the tax legislative process as there is no outlay of funds (as with direct payments or grants) and the real cost will only be incurred at some future date in the form of reduced tax collections.¹⁵⁵

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¹⁵³ Ashby and Polkinghorne, above n 128.

¹⁵⁴ Ihid

¹⁵⁵ Wayne Gumley, 'A case for reform of tax expenditures applicable to agriculture in Australia' (2006) 2(4) *International Journal of Environment, Workplace and Employment* 303.

Once established, the tax expenditure is administered as part of the tax system and therefore not monitored to the same extent as spending programs.¹⁵⁶ A report by the National Commission of Audit also noted that tax expenditures were not accurately costed nor within direct ministerial control of spending in relevant portfolios and concluded that 'tax concessions are a largely non-transparent form of assistance' which 'reduces accountability' and 'increases the likelihood that poorly targeted concessions will remain on offer'.¹⁵⁷

Nevertheless, once implemented tax expenditures become entrenched and difficult to abolish. From an environmental perspective, this is an advantage especially as taxation-based measures provide additional support for environmental management projects where the private benefits are less than the overall cost of the project. ¹⁵⁸

What emanates from the above discussion is that Australian tax policy is subject to the influence of various groups at any point in time and that influence is dependent, to some extent, on which political party is in government. A criticism of Australian tax policy is that it 'is subject to frequent change, is very complex and is lacking in clear direction. Much publicised policy announcements tend to be watered down at the implementation stage and their availability and appeal is severely restricted.' 159

This then raises the question: income tax and environmental provisions – green gold or lead weight?

Further research is required to ascertain the effect these tax expenditures have had on encouraging rehabilitation of mine sites and the prevention and rectification of land degradation and whether the environmental benefits justify subsidisation by taxpayers. A good starting point would be reliable data with respect to anticipated costs, actual expenditure and tax expenditure claims.

¹⁵⁶ Julie Smith, 'Tax expenditures: the \$30 billion twilight zone of government spending' (Information and Research Services Research Paper, No 8, 2003).

¹⁵⁷ National Commission of Audit, 'Report to the Commonwealth Government' (June 1996) [11.2].

¹⁵⁸ Douglas, above n 8.

¹⁵⁹ Margaret McKerchar and Cynthia Coleman, 'The Australian Income Tax System: Has it helped or hindered primary producers address the issue of environmental sustainability?' (2003) 6(2) *Journal of Australian Taxation* 201.