

Dollar dreaming

A literature review of economic assessments of indigenous social investment

Investments in indigenous communities can deliver major economic returns in northern Australia.

Economic analyses show that a focus on communities is likely to be far more effective in 'developing the North' than government spending on capital-intensive infrastructure for large-scale irrigation, mining and gas industries.

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Summary

Developing northern Australia is a priority for the Turnbull Government, like many governments before it. The focus of these efforts is often on capital-intensive major projects such as irrigation dams or mining infrastructure. Such investments generally provide terrible returns to the taxpayer, generate few jobs and fail to ‘develop the North’. For example, the Ord River irrigation scheme has returned just 17 cents for every dollar and while recent expansion did increase employment, it was at a cost of \$6 million per job.

By contrast, investment into social and environmental programs that focus on Indigenous communities can provide large economic benefit, as well as social and environmental improvements. This paper reviews four economic assessments of such programs:

- A cost benefit analysis of the Yuendumu Mediation and Justice Committee by University of Canberra economists estimated net benefits of \$14.1 million at a benefit cost ratio of 4.3:1. Major benefits included reduced prison, policing and justice centre costs, as well as increased productivity in the community.
- Assessment of the Mornington Island Restorative Justice Project by research agency Colmar Brunton commissioned by the Department of Prime Minister and Cabinet found the project had helped restore order in the community and increased community safety and trust. The assessment did not quantify benefits such as reduced crime rates and policing costs but found that they were ‘significant’.
- Analysis of five Indigenous Protected Area and Work on Country programs by Social Ventures Australia, commissioned by Department of Prime Minister and Cabinet found these programs delivered returns on investment of between 1.5:1 and 3.4:1. Key benefits include better environmental management, increased skills and confidence in indigenous workers and increased economic opportunities in the protected areas.
- A cost benefit analysis of Healing Centres by Deloitte Access Economics estimated average benefit cost ratio of 4.4:1 for indigenous healing centres. These centres focus on reducing intergenerational trauma and disadvantage in communities and creating physically, socially and culturally safe spaces led by and for Indigenous people.

These economic assessments show that investing more in Indigenous communities should be a priority for governments wanting to ‘develop the North’.

Introduction

The development of northern Australia has been a long-standing issue for Australian governments and the Turnbull government is no different, establishing the ministerial role of Minister for Resources and Northern Australia in 2015 and unveiling a host of new initiatives within the framework of ‘Our North, Our Future’ — the first White Paper on developing northern Australia.¹ These initiatives include the Northern Australia Infrastructure Facility (that provides concessional loans for infrastructure projects across the north), the Northern Australia Roads Programme and the National Water Infrastructure Development Fund, to name just a few.²

Most attempts to ‘develop the North’ emphasise large-scale capital-intensive projects, often focused on irrigated agriculture, mining or gas projects. For example, the Ord River irrigation scheme in the east Kimberly region of Western Australia has been supported by governments since the Menzies era. Despite this support, the taxpayer has received little in return. The return on public investment in the Ord scheme between 1959 and 1991 was just 17 cents for every dollar, representing a financial loss of \$511 million. Despite these dire figures, a further \$334 million was invested by taxpayers since 2009 on expanding areas of irrigation. This has created around 60 jobs, a cost of about \$6 million per job.³

Governments are reluctant to learn the lessons of the Ord River scheme — that subsidising capital intensive projects is costly and brings little by way of economic development outside of the project area. The Northern Territory (NT) government is enthusiastically supporting the North East Gas Interconnector (NEGI), now often referred to as the Northern Gas Pipeline (NGP), between the Northern Territory and eastern states, despite minimal prospects of jobs and the potential to expose the NT to east coast gas prices.⁴ The Federal and Queensland Governments’ subsidisation of the Adani coal railway is another example.

¹ Australian Government (2015) *Our North, Our Future: White Paper on Developing Northern Australia*, <http://northernaustralia.gov.au/files/files/NAWP-FullReport.pdf>

² Office of Northern Australia (2015) *Infrastructure*, <http://northernaustralia.gov.au/page/infrastructure>

³ The Australia Institute (2017) *Dam the Expense: The Ord River Irrigation Scheme and the Development of Northern Australia*

⁴ The Australia Institute (2015) *Passing Gas: Economic Myths Around the Northern Territory’s North East Gas Interconnector Pipeline*, <http://tai.org.au/content/passing-gas-economic-myths-around-northern-territory-north-east-gas-interconnector-pipeline>

By contrast, there are investments governments can make that are strongly supported by economic analysis. Economic assessments reviewed in this paper show that investments into social and environmental programs that focus on Indigenous communities can provide large economic benefit, as well as social and environmental improvements.

This paper reviews four economic assessments of government investment in social and environmental programs with an indigenous focus. Most of these assessments are based on forms of cost benefit analysis.

Cost benefit analysis is a tool to help decision-makers understand the consequences of a policy or program. In the public policy realm, it is one practical means towards verifying that the government is making the best possible decision — or allocation of resources — for the public.

Cost benefit analysis measures the value of a policy for the community as a whole through its 'net social benefits' — or its social benefits minus its social costs.⁵ Most importantly, a cost benefit analysis attempts to measure these costs and benefits in monetary terms, even when those outcomes are not easily quantifiable. Where quantification is impossible or highly uncertain, analysts should state that uncertain values exist that decision-makers need to consider against the quantified net benefits. This then makes a decision-maker's job of weighing up pros and cons a much simpler one as they are directly comparable to each other.

Given this process of measuring outcomes in dollar terms, cost benefit analysis is typically used as a tool for valuing 'tangible' policies or projects, such as allocating real resources such as water, building a new railway or making investment decisions.⁶

However, this cost benefit approach is much more difficult to undertake when assessing social welfare programs in which many of the presumed costs and benefits cannot be meaningfully converted into dollar terms. For example, with outcomes such as changed behaviour or quality of life there may be no clear-cut economic payoff. When these social benefits are difficult to measure, then there is a high risk that their true value will be underestimated or simply overlooked. This is not a new problem and, given the difficulty of valuing social programs, well researched and meaningful cost benefit analyses are all the more powerful.

⁵ Boardman (2011) *Cost-Benefit Analysis: Concepts and Practice*, Pearson

⁶ Department of Finance and Administration (2006) *Handbook of Cost-Benefit Analysis*, https://www.finance.gov.au/sites/default/files/Handbook_of_CB_analysis.pdf

Independent Cost Benefit Analysis of the Yuendumu Mediation and Justice Committee⁷

The remote community of Yuendumu — 300 kilometres northwest of Alice Springs — is one of the largest Aboriginal communities in central Australia. Until recently, Yuendumu was also defined by a seemingly intractable conflict between the community's west and south camps, which developed after demographic change and a weakening in institutional support mechanisms for internal conflict management. In particular, the Aboriginal and Torres Strait Islander Commission closed in 2003 and then in 2010 the local Yuendumu Council was replaced with the Alice Springs based Central Desert Regional Council.⁸

In 2011, Northern Territory's chief minister reportedly stated on ABC News that the Northern Territory government 'had done everything it could' to facilitate reconciliation in Yuendumu.⁹

Seen by many as a last resort, locals and respected Indigenous elders established the Yuendumu Mediation and Justice Committee (YMJC) to address the community conflict. Thanks to the YMJC project's use of Indigenous-led agreement processes, the original community dispute was resolved and associated violence had dramatically fallen by 2012.

In 2014 University of Canberra economists Professor Anne Daly and Greg Barrett undertook a cost benefit analysis to identify and value the economic impact of the YMJC in order to inform future government policy and funding decisions for the project.

The cost benefit analysis was based over a 10-year period (2014–2023), with the costs and benefits discounted back to real 2014 dollars. All estimated future values were adjusted using a discount rate of 2 per cent — calculated from the 10-year Commonwealth bond interest rate of 4 per cent less the inflation rate of 2 per cent.

⁷ Daly and Barrett (2014) *Independent Cost Benefit Analysis of the Yuendumu Mediation and Justice Committee*,

http://centraldesert.nt.gov.au/sites/centraldesert.nt.gov.au/files/attachments/yuendumu_cba_0.pdf

⁸ Ibid

⁹ Ibid

Overall, the net present value of the YMJC was estimated at \$14.1 million, which was calculated from the total benefits of \$18.5 million less \$4.4 million in costs.

More specifically, the total present value of costs (\$4.4 million) consisted of:

- \$2.4 million of costs associated with resources such as labour, vehicles and services that were unable to be used elsewhere and therefore constituted an opportunity cost to the community.
- \$1.7 million in costs for compensating YMJC members' time and associated costs of transport and accommodation. This was calculated based on 20 YMJC members mediating for an average of one day per year on a mediator's wage of \$32.68 per hour.
- \$0.3 million from the opportunity cost of using the Peace Park gathering area for mediation rather than alternative community uses.

The total present value of benefits (\$18.5 million) was composed of numerous social benefits, with some of the most significant including:

- \$2.4 million of benefits through reallocating services provided by the Northern Territory's Community Justice Centre to alternative uses.
- \$2 million in benefits accrued through reducing Northern Territory police numbers and costs in the Yuendumu community.
- \$4.1 million of benefits due to reduced imprisonment rates and related prison conflict, as valued through costs of prison staff, services and supplies.
- \$3.1 million of benefits in increased productivity. This was valued from 200 children in Yuendumu increasing their productivity by 5 per cent over their 30-year working life, with a median weekly income of \$270.
- \$2.7 million worth of benefits from the increased productivity of Yuendumu community resources and activities, such as the Yuendumu Local Implementation Plan and other non-government projects.

In balance, these findings give an overall benefit-to-cost ratio of 4.3:1. To give some perspective, the OECD defines a ratio below 1 as 'poor' and a ratio above 2 as 'high'.¹⁰

¹⁰ OECD Economics Department (2010) *The Land Transport Sector: Policy and Performance*, <http://www.oecd-ilibrary.org/docserver/download/5km3702v78d6-en.pdf?expires=1494388331&id=id&accname=guest&checksum=0E585EF208248BB2660BCA534713FE9A>

As with all economic analysis, assumptions are important. This cost benefit analysis method assumes a 10-year time frame, although benefits could accrue over a much longer period. Uncertainty increases over longer time periods and cost-benefit estimates are sensitive to changing conditions. To account for this, the authors undertook two sensitivity analyses that assume more pessimistic conditions to test the robustness of their conclusions. The first assumes a 50 per cent reduction in benefits over the 10-year time period. While this brings the total present value of benefits down to \$8.1 million, the net present value of YMJC is still a positive \$3.75 million and the benefit-to-cost ratio becomes 1.9:1. The second sensitivity test uses a more conservative discount rate of 5 per cent, which has little impact on the project overall, with the same benefit-to-cost ratio of 4.3:1.

Overall, the report undertaken by Daly and Barret highlights the significant benefits — over and above the costs — of the JMJC project.

Mornington Island Restorative Justice Project Evaluation¹¹

Mornington Island is the largest of the Wellesley Islands group in the Gulf of Carpentaria, Queensland. In 2008, the island's community was divided between a decreasing number of elders who placed great value on traditional connections to land and sea, and a growing youth population who were increasingly engaged in high levels of substance abuse and violence.

At this same time, the federal court handed down the Native Title Determination on the Wellesley Islands, recognising Exclusive Native Title over the majority of the land.

In this context, the Mornington Island Restorative Justice Project was established in May 2008 as a community-based peacemaking service that is both inclusive of island culture and conforms to criminal justice system requirements. By 2014, Mornington Island's crime rate had fallen, relationships with local police had improved and residents were more willing to undertake conflict resolution.¹²

In April 2014, the Department of Prime Minister and Cabinet commissioned the independent market research agency Colmar Brunton to undertake a participatory research evaluation of the Mornington Island Restorative Justice (MIRJ) Project. The evaluation used qualitative and quantitative surveys, participatory research, secondary data and a cost benefit analysis to assess the overall effectiveness of the project in meeting its objectives. The purpose of the MIRJ evaluation was to better understand how the project affects the local community, how well it is meeting its objectives and its cost effectiveness relative to mainstream criminal justice responses.

The report found that the MIRJ Project has been successful across a number of measures. In qualitative terms, benefits included increased community safety and trust, greater confidence in the mediation process, restoration of elder authority and respect, and more appropriate responses to criminal incidents.

¹¹ Colmar Brunton (2014) *Mornington Island Restorative Justice Project Evaluation*, https://www.dpmc.gov.au/sites/default/files/publications/indigenous/Mornington-Island-Restorative-Justice-Project-Evaluation/pdf/MIRJ_Project_Evaluation_PDF.pdf

¹² Ibid

However, these benefits were extremely difficult to qualify in quantitative terms. As the authors note, 'Most people on Mornington Island feel that mediation/peacemaking is meeting most of its goals and that it's helping improve community safety... However, attribution to the MIRJ Project is difficult to isolate and prove causality'.¹³

At face value, the cost benefit analysis finds that the MIRJ Project costs more than conventional justice — \$689 per case versus the MIRJ cost of \$1,099 per case. However, this highlights the weaknesses of the cost benefit analysis rather than the project. Colmar Brunton suggest that 'there are significant benefits and cost-savings that should be taken into account that are currently unable to be measured in dollar terms'.¹⁴ For example, due to a limited data set and an inadequate model, they were unable to estimate in dollar terms key benefits produced by the MIRJ Project such as reduced crime rates and recidivism, reductions in policing costs and the higher quality of legal proceedings.

Given the large collection of positive qualitative data on the project a more vigorous cost benefit analysis would likely reap a more positive quantitative assessment.

¹³ Colmar Brunton (2014) *Mornington Island Restorative Justice Project Evaluation*, https://www.dpmc.gov.au/sites/default/files/publications/indigenous/Mornington-Island-Restorative-Justice-Project-Evaluation/pdf/MIRJ_Project_Evaluation_PDF.pdf

¹⁴ Ibid

Consolidated Report on Indigenous Protected Areas following Social Return on Investment Analyses¹⁵

In the mid 1990s, representatives of Indigenous people and the Australian government co-developed the Indigenous Protected Area (IPA) program. An IPA is formed when traditional owners enter into a voluntary agreement with the Australian government to manage their land or sea country for conservation with government support.

The IPA program initially served two purposes. First, it fulfilled the government's commitment — under the 1994 International Union for Conservation of Nature guidelines — to establish a comprehensive protected area system representative of the Australian ecosystem. Second, it facilitated growing interest from Indigenous people across Australia to reconnect with country, culture and language.

The program is managed through the Indigenous Affairs Group of the Department of Prime Minister and Cabinet (DPM&C) and funded through the Department of the Environment. \$73.08 million was allocated to the program from 2014–2018. As of 2015, there were 72 dedicated IPAs across Australia.

In 2007, the Working on Country (WoC) program was established to create job opportunities for Indigenous people and support traditional knowledge of and connections with land, sea and culture. The WoC program complements the IPA program through funding rangers to care for country. The WoC program has a funding commitment of \$335 million for 2014–2018. As of 2015, there were 108 government funded ranger groups across Australia — employing over 1,600 Indigenous rangers — and 50 IPA projects that involved WoC funded ranger groups.

In 2016, the DPM&C commissioned SVA Consulting to explore the nature and value of changes resulting from investment in five IPA programs. These five programs were Warddeken in the Northern Territory, Giringun in Queensland, Birriliburu and Matuwa Kurrara Kurrara in Western Australia, and Minyumai in New South Wales. SVA Consulting used the Social Return on Investment (SROI) methodology to conduct the analysis.

¹⁵ Social Ventures Australia (2016), *Consolidated Report on Indigenous Protected Areas following Social Return on Investment Analyses*, https://www.dpmc.gov.au/sites/default/files/publications/SROI-Consolidated-Report-IPA_1.pdf

The study concludes that the IPA and associated WoC programs have been hugely successful, overcoming barriers to address Indigenous disadvantage and engaging Indigenous Australians in meaningful employment to achieve large-scale conservation outcomes. This success is underpinned by the alignment of Indigenous and broader community interests and priorities.¹⁶

The SROI analysis undertaken in the report is a form of cost benefit analysis — it examines the social, economic, cultural and environmental outcomes created and the costs of creating them by using relevant financial proxies to estimate values.

In order to estimate the benefits derived from the IPA programs, the study first identifies what these benefits or outcomes are through a ‘theory of change’ technique. The outcomes are mapped across short, medium and long-term timeframes. Through the SROI analysis, only the material outcomes — those that have been realised and are therefore measurable — are valued.

This stage of the analysis identified a wide range of benefits. For instance, the program greatly improved local environmental management, including better fire control, reduced feral animal numbers and less noxious weeds, as well as monitoring of threatened species. These improvements were essentially land management savings for the government.

The IPA program also leveraged other economic opportunities for the communities involved, including revenue from carbon-offset projects and third party investment in other related projects.

There were also numerous payoffs for rangers, such as increased pride and sense of self, stronger connection with land, better health and wellbeing, and work readiness skills.

The more ‘intangible’ benefits were estimated through stakeholder consultation and quantitative data and then given financial proxies based on related market prices. For example, the value of the increase in confidence experienced by rangers was proxied by the cost of a public speaking course.

These outcomes were then sorted in terms of relative importance and valuation filters were applied to the financial proxies to ensure that the analysis was not over-claiming.

¹⁶ Social Ventures Australia (2016), *Consolidated Report on Indigenous Protected Areas following Social Return on Investment Analyses*, https://www.dpmmc.gov.au/sites/default/files/publications/SROI-Consolidated-Report-IPA_1.pdf

The analysis concluded that, from 2009–2015, government and third party investment of \$32.5 million generated social, economic, cultural and environmental outcomes valued at \$96.5 million.

SVA Consulting then generated SROI ratios through comparing the total adjusted value of these outcomes experienced by stakeholders to the investment required to create that value in each project. The final SROI ratios ranged from 1.5:1 in Minyumai to 3.4:1 in Warddeken.

Overall, this SROI analysis is thorough and well-researched. However, it is limited by a lack of accurate data as well as difficulties associated with measuring intangible outcomes. Furthermore, the SROI model used assumes that there is no continuous change without continuous investment. That is, the outcomes last for the period of investment only. This goes against the main premise of such community initiated projects that the investment is not a short-term or temporary fix but, rather, has ongoing and entrenched community impact. This assumption could therefore underestimate the true value of the outcomes.

Prospective Cost Benefit Analysis of Healing Centres

Colonisation and subsequent policies have had lasting detrimental impacts on Australia's Indigenous community. The negative effects of disruption to Indigenous culture and cultural identity continue to be passed from generation to generation, cumulatively leading to widespread disadvantage across the Indigenous community. This disadvantage is reflected in high rates of incarceration and substance abuse among Indigenous people.

Following the Australian government's Apology to the Stolen Generations and Aboriginal and Torres Strait Islander Peoples in 2008, the Aboriginal and Torres Strait Islander Healing Foundation was established with the purpose of reconnecting Indigenous people with culturally effective healing methods for trauma and loss.

In 2011–12 the Healing Foundation funded 21 Healing Initiatives across Australia. These Healing Initiatives supported various forms of community-based healing methods, including developing local Healing Centres (HCs). While each is unique in practice, HCs operate on the common principles of being a physically, socially and culturally safe and meaningful space led by Indigenous people. The activities undertaken through HCs are broad, ranging from mental health treatment and medical services to spiritual and cultural awareness programs and skills training for the workplace. Many of the communities involved in the project expressed interest in developing their own HCs that could meet their community's particular healing needs. In 2012, the Healing Foundation commissioned KPMG to investigate this request and provide an insight into how to establish and operate HCs. This report found that those Indigenous people consulted considered healing as their single most important priority.¹⁷

Given the positive outcomes of the report, in 2013 the Healing Foundation made funding available for 13 organisations to design and develop a HC for their respective communities. This funding was not intended to support the ongoing operational costs of a HC.

Then, in 2014 the Healing Foundation commissioned Deloitte Access Economics (DAE) to estimate the *potential* net social benefits of these HCs as compared to the status

¹⁷ KPMG (2012) *Healing Centres: Final Report — 21 December 2012*, Healing Foundation

quo, in order to support a business case for further investment in the ongoing operation of HCs.

DAE used a cost benefit analysis method to estimate these potential net benefit. This was particularly challenging for two reasons. First, many outcomes of HC activities are spiritual in nature and extremely difficult to value in dollar terms. Second, as none of the benefits had been realised, DAE had to rely on other studies on similar projects to estimate the cost-benefit ratio. As there were no extant cost benefit studies conducted on Australian Indigenous HCs, DAE then had to rely on studies of projects that were either based overseas or not Indigenous.¹⁸

By averaging the findings of seven of these studies and extrapolating the figures over 10-years using a discount rate of 7 per cent, DAE finds a likely average benefit cost ratio of 4.4:1 for the new HCs. This demonstrates that community healing initiatives have high cost benefit ratios. However, given the limitations mentioned, this analysis should not solely inform investment decisions for the relevant parties involved.

¹⁸ Deloitte Access Economics (2014), *Prospective Cost Benefit Analysis of Healing Centres*, Healing Foundation

Conclusion

There is a wide range of community-led engagement programs in northern Australia with an equally wide range of outcomes and purposes. The cost benefit analyses discussed above highlight that well-managed and well-scoped projects deliver strong economic returns and contribute to developing northern Australia in a way that is sustainable and socially responsible. We note that there are no shortage of projects that have not been well scoped or well managed in northern Australia and the field of indigenous social investment. Management and implementation are clearly crucial to achieving the benefits that these papers estimate.

In light of the renewed political emphasis on developing northern Australia, figuring out what kind of development we want in the area is crucial. With cost benefit analyses of Indigenous social programs showing that they can provide large net economic benefits, investing more in Indigenous communities should be a priority for governments wanting to 'develop the North'.