

OUplace

NUMBER 34



WESTERN QUEENSLAND HOMELANDS PROJECT



JEANNIE LIDDLE: EDUCATOR AND CAT BOARD MEMBER
RAINWATER HARVESTING
POWER UP WITH E-TOOLS
INVESTING IN THE OUTBACK





Our Place Magazine is printed on a 55% recycled paper and BUSH TECHS are printed on a certified green paper. Printed by Colmans Printing using a chemical free plate process and vegetable based inks.

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ourplace

Our Place is published three times a year by the Centre for Appropriate Technology, an Indigenous science and technology organisation, which seeks to secure sustainable livelihoods through appropriate technology.

SUBSCRIPTIONS:
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Opinions expressed in Our Place are those of the authors and not necessarily those of the CAT Board or staff.

WARNING: This magazine contains images of Indigenous and non-Indigenous people. Caution should be exercised while reading this magazine, as some of these images may be of deceased persons.

Our Place Number 34, April 2009
© Centre for Appropriate Technology Inc.
32 Priest Street, Alice Springs NT 0870
Print Post: 545270/00016

Production/design: Colleen Danzic
Editing: Metta Young, Peter Taylor

The production of Our Place is funded by the Department of Families, Housing, Community Services and Indigenous Affairs.

Jeannie Liddle

Educator and CAT Board member.

Jeannie Liddle has a passion for Indigenous education and has worked as an Educator for many years. She is also a Centre For Appropriate Technology (CAT) Board member.



Jeannie Liddle's life is interwoven with institutions that revolved around the removal of Indigenous children from their families. Her family have three generations affected by 'Stolen Generation' policies; Jeannie's Grandmother, her mother (who was born at Deep Well Station), and herself.

Her family are East Arnernte people. Her Grandmother was born at Undoolya. She was moved to Santa Teresa mission, then to Arltunga and then moved back to Santa Teresa during WWII, before being taken to 'The Bungalow' in Alice Springs (formerly the Old Telegraph station) which was used for about three decades as a Children's home and school for children of 'mixed race' who were removed from their families.

Jeannie's mother, uncle and aunt were taken away from their family in the early 1930's to work at a dairy farm in the Adelaide Hills near Mount Barker. They were promised an education, which they never received, and had to do dairy work as well as housekeeping.

Jeannie was born in Adelaide around the end of WWII. When she was two years old, Jeannie, her mother, uncle and aunt returned to Alice Springs and lived in the Gap Cottages (near where the Gap Motel is situated today). The cottages were transitional dwellings provided by the Native Affairs branch for part-Aboriginal people who, once they demonstrated they "could live in a house", were eventually provided with standard public housing.

Jeannie had a fun childhood living there. She recollects some stories of spending time with other CAT Board members who grew up in 'The Cottages'. Her family eventually moved to the east side of Alice.

Jeannie remembers to this day the exact date, 8 May 1959, she and her brother were informed they were going on a 'holiday' but not told where they were going. Jeannie and her brother were very excited. When their plane landed in Melbourne they were so overwhelmed — what a difference to Alice Springs!

In Melbourne Jeannie was sent to Firbank Church of England Girls

Grammar School. She took it all in her stride, believing that 'this is just what happens to Aboriginal people'. But she was very concerned by what had happened to her brother, who had been separated from her and she had no idea where he had been taken. She was told he was at another school and they would be given the opportunity of spending time with each other, but that never eventuated. Even though her brother was at a Grammar school in Ballarat, only 70 miles away, it was three years until she saw him again.

Despite all the heartbreak of being separated from her family, Jeannie is glad that she and her brother were able to receive a good education — an opportunity which their mother and grandmother never received.

Jeannie will never forget the day she started school. All 1500 girls were rushing around getting ready, putting on ties, starchy shirts, stockings and suspender belts. The other girls helped Jeannie get dressed while she wondered what on earth were these things she was supposed to wear!

Every Sunday, Jeannie and the

continues page 4 >



One of the Gap Cottages.

other boarders wrote letters to family, but Jeannie was unsure if her family ever received them. Perhaps they didn't have anyone to read the letters to them.

In Year 11, Jeannie turned 17, which meant she was no longer a Ward of the State. The school allowed her to stay to the end of the year. She was then given the remainder of her 'Child Endowment' (the equivalent of one dollar) and put out onto the street. Jeannie didn't know what to do or where to go.

Jeannie really wanted to be a teacher, but it required a lot of money to go to teachers college. Instead she became a nurse and was provided accommodation, meals and a salary.

Her brother meanwhile, had befriended a German family. The father was a teacher at the Grammar school he attended. He told them he had a sister somewhere in Melbourne but didn't know what had become of her. They began searching and found her just before she started nursing. Jeannie and her brother were considered part of the family.

When Jeannie finished nursing she returned to Alice Springs and worked for a couple of years at the Children's Receiving Home, which took in children that were in transit, being placed for adoption or were sick.

Then she became a Welfare Officer primarily helping those who were moving into town from the bush for the first time.

By this time Jeannie had five children of her own.

Jeannie then applied for a job as a Teachers Assistant in a special needs class at Traegar Park Primary school — an all Indigenous school.

From a very young age Jeannie had always wanted to be a teacher to help people. She always believed education would increase opportunities for Aboriginal People.

Jeannie felt that with her nursing background she would be suited to this role. She got the job and really enjoyed working at this school.

She then became a Home Liaison Officer, negotiating between the school and parents about concerns with schooling. She moved to Alice Springs High School and she really loved working there so much she stayed for 18 years.

Jeannie worked with both Indigenous and non-Indigenous children and their families. At the school they developed a breakfast program to encourage the children to come to school early for breakfast and do their lessons. Sometimes the Aboriginal children brought the white kids along with them. It was good for the Aboriginal children to see that they weren't the only ones in difficult circumstances.

She took the children on excursions visiting schools and universities outside of the Northern Territory, so her students could see the vast array of opportunities available. As a result some of the students as adults have degrees, apprenticeships and employment. They tell her they remember a lot about what she taught them.

CAT had been running for about a year when James Bray, the CAT Chairman, invited Jeannie to join the CAT Board. CAT appealed to Jeannie's focus on the importance of providing education and training for Indigenous people that would enable them to make changes in their lives and to create opportunities for themselves. Jeannie accepted the invitation to serve on the CAT board.

Jeannie is excited about CAT and Batchelor Institute for Indigenous

Tertiary Education joining together to form the Desert Peoples Centre (DPC). 'I hope Aboriginal people really embrace what is happening at the DPC and make changes in their lives. When young people see what can be achieved by their older family members who went to school and gained qualifications, they realise that it is important and they follow in their footsteps.'

'Aboriginal People need to understand what is needed to survive in the world today. You can't expect others to look after you. You've got to stand up, be strong, and participate in the journey. Hopefully, the programs that will be offered through the DPC will give them that confidence and provide opportunities.'

'With the emphasis on Conservation these days, and with all the bush tucker that is being grown and produced, (these things being taken note of around the world) and the knowledge that Aboriginal people have about these things that has helped them survive all these years, we really are in the "box seat" in this area if we do it properly. We need to take hold of our own culture, work hard, learn how to compete in this new world, and make a difference in our lives. This is really important.'

Jeannie is very happy with her life at the moment. She has retired and has lots of contact with her six grandchildren, three live in Amsterdam, three in Adelaide. Their parents are passionate about them knowing where they come from. They love the bush and are proud of who they are.

Jeannie remains passionate about the future for young Indigenous people.

'It is really important that young people take the opportunities offered to them. It won't be easy — life isn't easy. Life is like a game of cards. You deal with the hand you are given — try to make it better — and keep trying until you are a winner. Don't give up, don't blame others for your hand — life is what you make it.' ■

NEWS

Crowne Plaza Solar Photovoltaic System launch



On Wednesday 18 February a 305.4kw PV Solar System was launched at Crowne Plaza in Alice Springs. This installation is the largest roof-mounted solar system in Australia and is part of a \$4m investment in renewable energy efficiency at the hotel. The installation will reduce the hotel's energy consumption by 40–80% (depending on the time of year). The project was managed by CAT Projects and partially funded by the Australian Government.

ABOVE, from left: Brian Elmer, General Manager, Alice Solar City; Wilf Johnston, Project Manager, SunPower; Kieron Ritchard, VP Operations, APNZ, IHG; Lloyd Berger, Principal Investnorth, Crowne Plaza, Alice Springs (CPAS) building owner; Frank Hubbard, Manager, Corporate Sustainability, IHG; Adam Glass, General Manager, CPAS; Damien Ryan, Mayor, Alice Springs Town Council; Grant Behrendorff, Chairman, Alice Solar City; Lyndon Frearson, Senior Project Manager, CAT Projects.

RIGHT, from left: Left: Lyndon Frearson; Jim Bray, Chairman, Centre For Appropriate Technology; Bruce Walker, CEO, Centre For Appropriate Technology; Grant Behrendorff.

An interactive display at the Crowne Plaza's Sustainability Corner shows the PV Solar System generating clean electricity for the hotel. The display is also streamed into guests' rooms on a dedicated 'Solar Channel'. Information on the energy saving measures implemented across Crowne Plaza are on display as well.



Crowne Plaza's Sustainability corner.



TrainingPlus

The TrainingPlus Program (TPP) commenced with its first group of participants on 2 March 2009.

The TPP works with unemployed Aboriginal people from Central Australia around training, education and employment. It has been funded as a pilot strategy to help Indigenous unemployed better navigate transitions into training and employment.

Like other pre-employment programs TPP works with individuals to develop training and career plans, as well as reinforcing employability skills such as punctuality, communication and team work.

The TrainingPlus Program also has some distinct advantages in its ability to broker accredited and non-accredited training for its participants. Being one of the first initiatives of the Desert Peoples Centre, The TPP can draw on the expertise of the DPC's partner organisations: Batchelor Institute for Indigenous Tertiary Education and the Centre for Appropriate Technology.

With a current focus on preparing individuals to enter the building and construction fields or the renewable energy sector, the TPP has been able to tailor a unique training program that combines skills development in areas such as Language, Literacy and Numeracy, Information Technology and more conventional technical training in areas such as carpentry and metal work.

The TPP utilises a case management approach where each participant works with a case manager to develop an individual career path. This support continues when the participants obtain employment, with a case manager working with the employer and the participant to ensure a favourable outcome.

To date the TPP has had positive results with two out of nine participants from the first intake, transitioning to full time employment.



Desert Knowledge Australia Solar Centre Interactive Website now complete

Go to www.dkasolarcentre.com.au to learn about the \$3.1m initiative of Desert Knowledge Australia that showcases and demonstrates a range of solar technologies in commercial scale solar installations. See how solar technologies work and the different types of technologies.

Learn about Desert Knowledge Australia, Desert Knowledge Precinct and Alice Solar City.

The DKA Solar Centre website was managed by CAT Projects, and funded by the Australian Government.

Alice Solar City — one year old!

On Friday March 20 Alice Solar City celebrations were held at Araluen with a free BBQ, face painting, a jumping castle, a visit from Yamba, live music, stalls, light bulb give-aways and free competitions. The celebrations were followed by the screening of Al Gore's film 'An Inconvenient Truth' and a documentary 'Telling The Truth'.



Bushlight India Project sharing desert knowledge with remote Indian villages

Bushlight India is an Australian government funded project which is undertaking a remote village electrification program in India using learnings from the highly successful Bushlight project managed by the Centre for Appropriate Technology.

Bushlight in Australia has implemented sustainable renewable energy services in more than 130 remote communities over the last 7 years utilising a consultative community energy planning process and high quality renewable energy systems.

The Bushlight India project is currently working to adapt the Australian Bushlight Community Energy Planning Model and technology for use in remote Indian villages, and will commence the on-the-ground implementation of renewable energy systems in Indian villages later this year.

In March representatives of four key Indian partners in the Bushlight India project visited Alice Springs to attend a planning workshop and to see first hand the process and technologies developed by the Australian Bushlight project.

These visitors are:

- Mr Angshuman Majumder from the West Bengal Renewable Energy Development Agency (WBREDA) in Kolkata
- Mr. T.N.Ramesh from Tata BP Solar in Bangalore
- Mr Sameer Maithel from Greentech Knowledge Solutions in Delhi
- Mt Joe Madiath from Gram Vikis in Orissa

During their stay in Central Australia the four Indian partners visited local renewable energy installations and Indigenous communities, and shared their extensive experience in working with remote villages to develop and support sustainable livelihoods.

Alice Springs based Bushlight India staff from CAT International Projects, a subsidiary of the Centre for Appropriate Technology, will be travelling to India regularly over the next 2 years to work with project partners and to implement renewable energy systems in several remote village in eastern India.

Funding for the project has been provided by the Australian government through the Asia Pacific Partnership program administered by the Department of the Environment, Water, Heritage and the Arts.



Western Queensland Homelands Project

Marmanya Repairs & Maintenance

During October 2007, Cheryl, Andre and Brian from the North Queensland CAT office visited Marmanya to initiate a new project to provide support for looking after housing infrastructure and services at Marmanya.

Marmanya is part of the small community of Urandangie about 180kms SW of Mount Isa in Western Queensland. It is the traditional land of the Waluwaru people. Strong ties exist between Urandangi and other eastern Alyawarre communities in particular with the larger community of Alpururulam (Lake Nash) and the smaller community of Urlampe across the border in the NT.

The area surrounding Marmanya is generally flat and slopes towards the Georgina River Floodplain. Vegetation

comprises open eucalypt forest with a sparse under-storey of native grasses. The soils are typically sandy. During the wet season, the area can experience extensive flooding in above average rainfall periods.

The project is funded by the Australian Government Department of Families and Housing, Community Services and Indigenous Affairs (FaHCSIA). The aim of the project is to provide support to the Marmanya Community by assisting them with the management of repairs and maintenance on housing, essential services and infrastructure. The project will not build new infrastructure or provide new services, but rather ensure existing infrastructure is safe and working. The project will also examine the costs involved in managing infrastructure and providing services at Marmanya.

From the beginning of the project it was clear that there were many issues with the infrastructure and essential services at Marmanya. The following is a brief summary of those issues.

Energy

Since 1996 energy has been supplied by a single diesel generator. However, this generator failed and in 2006 the Indigenous Coordination Centre (ICC) purchased six Honda EU 30is, 3 KW petrol generators to supply each house. When CAT first visited the community in 2007, only two generators were still working.

Water

Water to Marmanya is supplied from a town bore and header tank 2.5 km away at Urandangi. Many leaks in the water supply system were identified during the first visit and it

Continues page 8 >

“ The future of the small community of Marmanya relies on its people, and the residents of Marmanya have shown great enthusiasm to learn new skills and to contribute towards the development of their small community. ”

was decided to contract a plumber to fix it. Each of the six houses have a 20kL poly rainwater tank and the community hall has two of these tanks.

Sewerage systems

Sewerage at the houses is managed via flush toilets, with grey water diverted through grease traps to the septic systems. Several of the covers for the septic systems were discovered to be in poor condition and it was decided to replace them. In September/October 2007, the tanks were pumped out by a contractor.

Building

Building stock at Marmanya consists of six houses and a community hall. The houses were constructed around 1986 with funding provided by the then Office of Aboriginal and Torres Strait Islander Affairs. The houses are 2, 3 and 4 bedroom (two of each) and are made of steel frame and cladding. Each house was constructed of two demountable sections separated by a wide central covered corridor or breezeway, with roller doors at each end for wind protection. The houses are elevated approximately 400mm above ground level and have electric hot water systems. The six are all of similar design, with rooms opening off the breezeway. In 2002 additions to the houses were made in a project coordinated by CAT. Horizontal sliding doors were installed to replace the roller doors which had failed and covered outdoor kitchen/verandas were added to the rear (north) of each house. The community hall is made of Besser blocks with corrugated sheet metal roofing. The hall consists of two bathrooms including shower cubicles, an office space and a main hall area.

The project

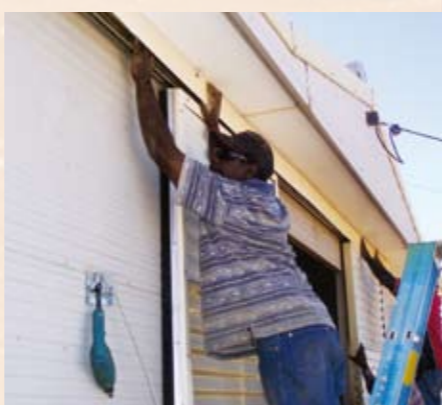
During the first visit it was noted that in general, the houses are in reasonable condition though are showing signs of reaching the end of their design life. The designed life cycle of this style of housing is not significant and these houses are already more than 20 years old. The majority of problems identified were consistent across most if not all houses.

During the first visit, lots of notes and photos were taken. CAT staff talked to residents of Marmanya and explained what they had found out and how they were going to try and fix some of the issues identified. Discussions were also held with Marmanya residents about what work they could do themselves, what CDEP might do and what work should be undertaken by contractors.

The first step in the project was to compile a detailed ‘Infrastructure Audit’ report that talked about all the technologies at Marmanya.

The report discussed things like the buildings, water supply, electricity supply, power lines, roads, fences, water tanks and of course the houses. The report also talked about what was working well and what wasn’t.

Staff from CAT met in Mt. Isa for meetings with staff from Isa Skills and the coordinator of the CDEP program. A representative from the community (Wayne) and staff from ICC Mt. Isa also attended those meetings and talked about the list of things to be done and who (residents, CDEP, contractors) should do it. It was important in those meetings to emphasise the need for residents to be involved. Once it was decided what CDEP and Marmanya residents could do, it was clear what jobs were left for CAT to organise for contractors like carpenters, plumbers and electricians. It was indicated in those meetings that CDEP Isa Skills



were happy to help support the local residents to do a lot of the work. These were all the ‘little’ things that needed fixing up in the houses — like fixing the doors, the holes in the floors, installing new door knobs, installing new fixtures in the showers, toilets and more.

Work starts

After much organising, discussions, planning, meetings and ordering materials, Yosi from the Cairns office of CAT, flew over to Mt. Isa to start organising the first week of the community driven renovation works.

Material was bought from local suppliers in Mt. Isa and tools and equipment were provided in-kind by Isa Skills.

On Tuesday morning, 14 July work started in Marmanya. Three local residents; Wayne, Mark and Innle, joined Yosi to do the work. The first major job was to replace all the steps of the houses. Each house has two sets of steps on either side and the old steps were made of wood planks. Although not completely broken, those steps had many splinters which caused injuries particularly to the younger kids. We replaced the old wooden steps planks with recycled plastic planks that are made in Victoria. It was a slow job that required grinding, drilling, cutting, fixing brackets and bolting the new ones in place.

During the first week many other tasks were undertaken by the work crew: replacing old doors with new ones; installing new door knobs; installing new shower curtain rods, toilet roll holders and latches; cutting out broken floor sections; and drilling draining holes in window frames. After a week and much work still needing to be done, it was decided that Yosi would continue working with the crew. After a week back in Cairns organising more materials Yosi returned to Marmanya.

As well as completing the work started in the first week, the main task for the second week was to fix all the sliding doors. CAT installed those doors several years back but there was a need to replace and install new tracks and new gliders as the sliding mechanism was deemed unsafe. This was a major job. Each door had to be cut off and new holes had to be drilled for the new gliders. Each track had to be cut off from the brackets and a new track had to be installed.

And finally, the doors, both quite heavy, had to be lifted, aligned with the new guides and secured by nuts. Final adjustments to the bottom guides completed the work. The crew worked long days with much enthusiasm and by the end of that week 16 doors out of a total of 22 were fixed.

During the week, we also managed to fix all the holes in the cement sheeting floors by replacing the broken pieces with 17mm form ply. We also completed replacing all the step planks in five of the six houses and all other work such as installing new doors and knobs.

A broken water tank was removed and one in good condition from the community hall was installed in its place.

Several old steel water tanks were removed from the community to the dump area and all tanks now have new taps. Now, all that is needed is some rain.

The final work to be completed at Marmanya was the plumbing. CAT obtained quotes from a licensed plumber based in Mt. Isa and work was completed in October.

What Next?

The energy supply is still an on going issue and it is clear that a long term solution must be found so occupation of houses can become more permanent.

There is also some further minor repairs and maintenance to coordinate, and sewerage tanks and waste water drains need some attention. At this stage, the project continues until the end of June 2009. There has been widespread flooding in the area since December 2008 which has slowed some of our work as access to Marmanya has been hindered.

The future of the small community of Marmanya relies on its people and the residents of Marmanya have shown great enthusiasm to learn new skills and to contribute towards the development of their small community. There is also a vibrant primary school operating next door and high attendance has been recorded. Other service providers in the area such as Queensland Health, Boulia Shire and Western QLD Primary Health and the Urandangi Hotel have been supportive of this project. ■

YOSI HENIG

The Centre for Appropriate Technology
Cairns



Rainwater harvesting

Rainwater harvesting helps people to stay on country in Mabunji outstations.

Seven new rainwater harvesting systems have been installed by the Mabunji Aboriginal Resource Centre at outstations in the Borroloola area. These supplement existing water supplies and provide water that is tasty and easy to manage in terms of risk.

In the beginning at Mabunji — traditional water sources

Mabunji outstations rely on a variety of sources for drinking water including bores, springs, traditional soaks and billabongs. Many water sources

are traditional supplies dating back hundreds of years. For example, the water sources on the Sir Edward Pellew Group of Islands were shared with Macassans during their trepang harvesting voyages to northern Australia.

The water from existing sources is pumped, stored in tanks and distributed to houses or central taps.

Responding to demand in Mabunji — the ‘Sweet Water Plan’

Traditional surface water and more recent ground water sources are no longer able to meet the demands of bigger settlements in the Mabunji

area. Resource Centre Officer John Mason explained ‘the water supplies are notoriously unreliable’. Examples of water management problems include bores running dry, contamination of shallow water sources with floodwaters or by brackish waters in extended dry seasons and problems with bore pumps. When water supplies run out, residents are either forced to cart water at their own cost or camp in town for extended periods. These outstation communities pay a high price both economically and socially for water.

The Mabunji Aboriginal Resource Centre Directors developed the

“To the residents of the outstations, rainwater harvesting means, among other things, the ability to live on country during the dry season, improved taste, greater control over their water supply system, reducing dependency on fuel for generators and minimising environmental impact.”

‘Sweet Water’ plan to address these water supply problems in their outstations. The plan centres on rainwater harvesting to supplement bore supplies and provide water that is palatable and easy to manage. The Sweet Water plan focuses on delivering clean drinking water to one tap in the kitchen area. Water for other uses (such as washing) can be sourced from the existing bore, billabong, soak or spring.

To the residents of the outstations, rainwater harvesting means, among other things, the ability to live on country during the dry season,

improved taste, greater control over their water supply system, reducing dependency on fuel for generators and minimising environmental impact.

The CAT project

The collaborative research project between the Mabunji Aboriginal Resource Centre, Centre for Appropriate Technology (CAT) and the Cooperative Research Centre for Water Quality and Treatment (CRCWQT), now succeeded by Water Quality Research Australia (WQRA), explored a community-driven approach to secure a sustainable

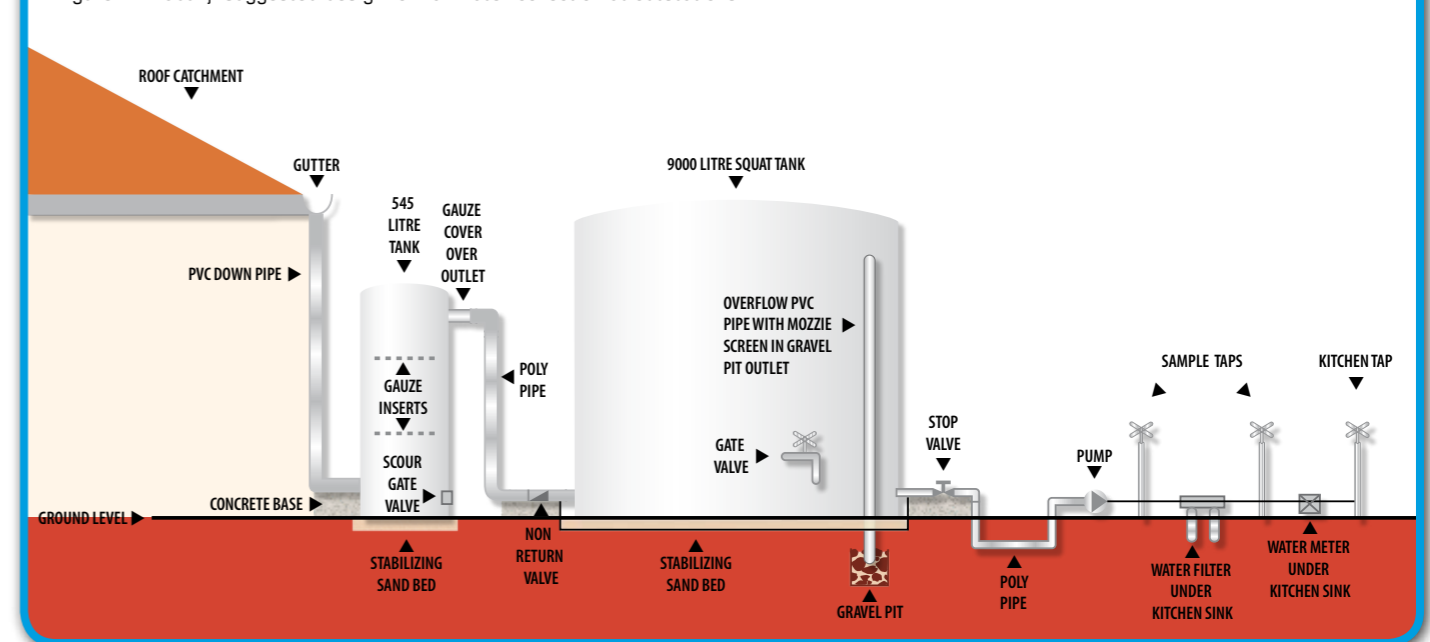
drinking water supply of rainwater to outstation households.

The project was carried out in conjunction with the construction of new houses in nine outstations and infrastructure upgrades in a further two outstations under the Commonwealth funded National Aboriginal Health Strategy (NAHS).

Rainwater harvesting systems were installed at Garrinjini, Babungi (Vanderlin Island), Wadawarra, Waltja (Cow Lagoon), Mynyalini, Millibunthurra and Wurlbu and residents were guided through maintenance regimes.

Continues page 12 >

Figure 1: Mabunji-suggested design for rainwater collection at outstations



“Mabunji outstations rely on a variety of sources for drinking water including bores, springs, traditional soaks and billabongs. Many water sources are traditional supplies dating back hundreds of years.”



Technical design and improvements

The design of the rainwater harvesting systems was negotiated with outstation residents, with a focus on reducing risks associated with unreliable technology, tampering of equipment, inadequate rainwater and management issues. Figure 1 (previous page) illustrates some of the measures used, such as a leaf trap, large tank size and a dedicated kitchen tap.

Optional improvements to the rainwater harvesting system can include relocating the tap and filters for easier use and tying down the tanks to keep them safe during storms. The size of the tank should also be relative to the access to the outstation — where access is limited, a larger system can be installed to provide additional storage when required.

Dollars and sense — how do rainwater tanks compare?

Based on initial costs of buying and installing the rainwater tanks and the yearly costs of maintaining the tanks, rainwater tanks provide a more reliable water supply with reduced risk of contamination to outstations at lower cost and with higher social benefits than carting bore water, treating existing water or delivering packaged water for the Mabunji outstations.

Success of the rainwater harvesting systems

Use of the rainwater harvesting systems ranged from occasional use to supplement bore supplies when pumps or bores failed to everyday use where the quality of bore water was poor or where alternative supplies such as lagoons could not meet the amount needed. Maintenance of the systems by the outstation residents reflected their use — where use was regular, so was maintenance; where existing bores provided a reliable, sustainable water source, the rainwater harvesting system was only used if the bore failed and maintenance by the community was limited.

Ongoing evaluation of the rainwater harvesting systems showed that the water was generally suitable for drinking.

Acknowledgements

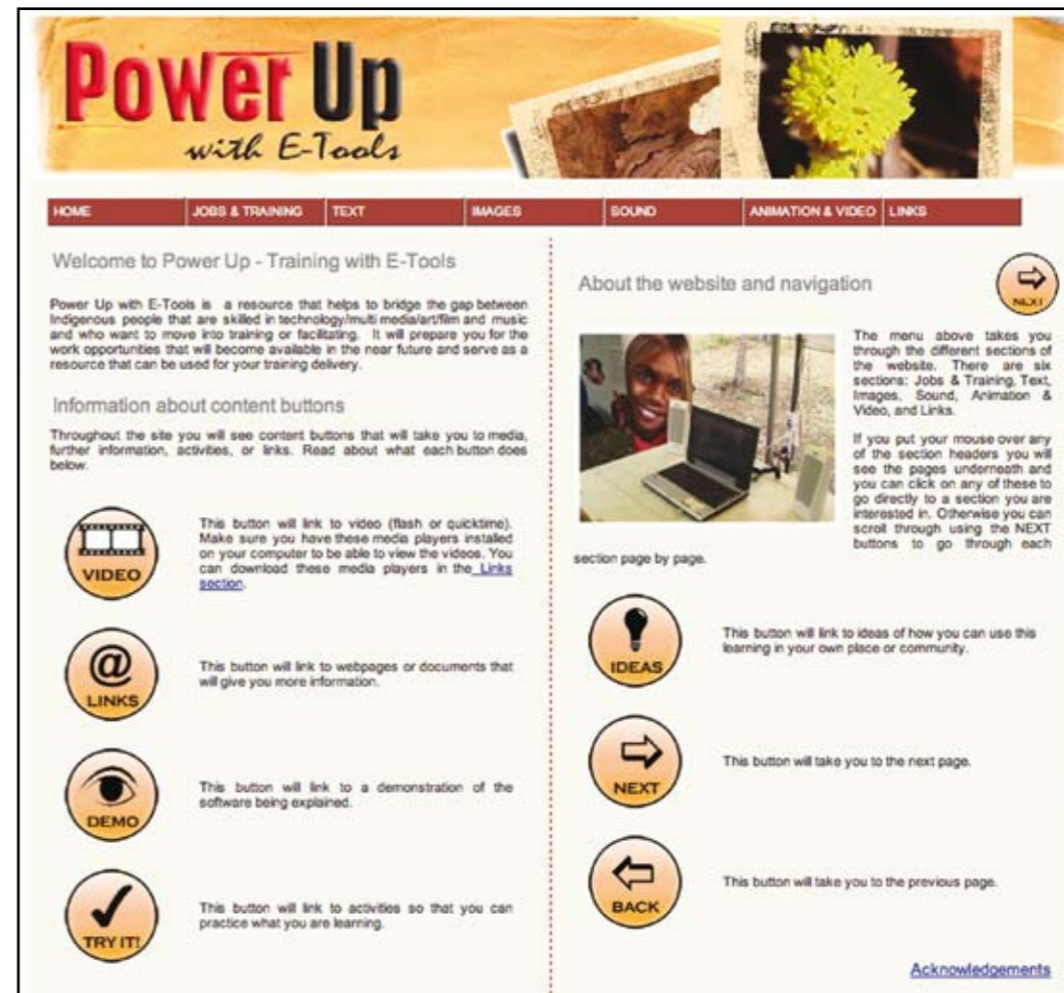
This project was a collaborative effort of the seven Mabunji outstations, Mabunji Aboriginal Resource Centre, Government agencies, water industry participants and CAT. The Resource Centre initiated the research project through its Sweet Water Plan. The Commonwealth Government funded the infrastructure, including new houses and rainwater harvesting systems. The Cooperative Research Centre for Water Quality and Treatment (CRCWQT), now Water Quality Research Australia (WQRA), funded the research staff and water testing. CAT provided on the ground negotiation, research and logistical leadership. Residents of the seven Mabunji outstations participated in the planning, design and evaluation processes. ■

HELEN SALVESTRIN

The Centre for Appropriate Technology
Alice Springs

Power Up

A new free resource for Indigenous people interested in multimedia and training



www.powerup.cdu.edu.au (http://powerup.cdu.edu.au/)

Last year, the Northern Territory Flexible Learning Innovations program funded by the Australian Flexible Learning Framework, gave a group of people the opportunity to build a resource especially for Indigenous people who were interested in learning more about multimedia or training others in how to use multimedia. The result was Power Up, a web and CD resource specifically designed to help meet current and expanding Indigenous workforce needs.

Work opportunities currently exist in online broadcasting, web design, marketing, art centres, schools, knowledge centres and health centres for people with multimedia skills. Knowing how to use digital cameras, audio and video devices and edit the output can also

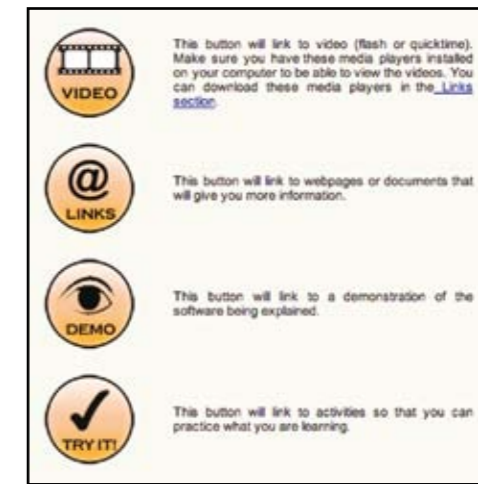
mean that you can teach others how to use them. Power Up provides demonstrations, lesson plans and sample workshop resources for people interested in teaching others.

With Indigenous organisations and individuals having free access to products like Marvin (www.marvin.com) for creating animated characters that can be used to tell local stories, and the Our Art, Our Place, Our Way online resource, www.artcentreway.com, for developing artists, art workers and art centres, knowing how to use multimedia is becoming increasingly important.

Alicia Boyle, Education Coordinator, Desert Knowledge Cooperative Research Centre and Ruth Wallace, Director, Social Partnerships in Learning Consortium, Charles Darwin University led the project,



“ Everything in Power Up is based on standard, freely available software so that it is a resource for everyone. ”



individual demonstration and learning files available for local customisation through a source on LORN (Learning Object Repository Network), <http://lorn.flexiblelearning.net.au/Home.aspx>.

Future Developments: Power Up Plus

Power Up Plus will deliver a substantially enhanced Web and CD resource that will include:

- Audio of key text recorded in English (and two principle NT Indigenous languages) by Indigenous speakers;
- Additional multi-media demonstrations embedded as learning objects, for current content, and for new content — for learning, teaching and assessment purposes. In addition, some demonstrations will be built in ARED V2 and a simple 'how to' guide will be developed to accompany the use of ARED V2;
- A mapping of the resource content to the Australian core skills framework for both teaching and assessment purposes;
- 'How to' guides to link resources such as image, audio and video files to Web 2.0 for sharing beyond the local PC including their use in e-portfolios. ■

whilst the principal content was created by Cath McKay and Huni Bolliger, who have both spent many years teaching multimedia with Indigenous students through the Northern Territory Open Education Centre.

Power Up has been designed so that it is very easy to find your way around. It has been divided into six sections depending on what you want to find out more about. In the Jobs and Training section you can learn about the sorts of jobs that are available in multimedia and the types of skills you need to work in those jobs. The Jobs and Training section also has lesson and workshop plans to help trainers.

The Text section is about the right sorts of fonts and faces to use in multimedia projects. The section about Image provides information about digital cameras and related equipment and shows you how to take a good digital photo, edit it and save it in a range of formats for different uses. The Image section also shows you how to make a good digital story by using individual digital photos and incorporating transitions, sound and music. Sound introduces the audio editing software Audacity and shows you how to record, edit and store sound files. The Animation and Video section covers stop motion, claymation and computer animation and shows you how to plan for a video shoot,

record, edit and store your production. In the Links section, Power Up shows you where to go to get the software you need and where to go to find even more information about multimedia.

In each section of Power Up there are useful Videos demonstrating equipment and skills and the Demo button will take you to a video showing how to use the software. The Try It button provides activities for you to practice new skills and the Ideas button provides suggestions about what you might like to do in your community. If you are teaching others how to use multimedia, these videos, demonstrations and activities can be used as resources in your own programs.

Everything in Power Up is based on standard, freely available software so that it is a resource for everyone. Power Up will be available to access via the Web, www.powerup.cdu.edu.au or on a DVD, with





INVESTING IN THE OUTBACK:

A Framework of Indigenous Development within Australia.

The low level of development in remote Australia has permitted Aboriginal culture to persist much longer here than in settled areas. However, Aboriginal settlements in this region of Australia experience an extreme economic context, arising from a lack of economic opportunities, their small size and large distances between them, the lack of human and institutional capital, and the high level of mobility between and within settlements. Economic globalisation has favoured intensification in urban centres in Australia, resulting in increasing capital leakage from rural and remote areas. Market failure has led to a welfare economy. The impact of that welfare economy in the unique

settlement conditions across remote Indigenous Australia manifests in disadvantage and dysfunction across all socio-economic indicators. Indigenous Australians have seen significant change over the past ten years. First practical reconciliation that foreshadowed the end of rights based agendas or at least a balancing of these agendas with a stronger emphasis on responsibilities (1997); the introduction of whole of government and COAG trial sites (2000); the dissolution of ATSIC (2004); and the debate since 2006 about the end of separateness and the viability of remote communities. But perhaps the most acute change underway is the Northern Territory Emergency Response (NTER) that has been rolling out since June 21 2007.

Responding to Failure in the International Context

The Northern Territory Emergency Response is not dissimilar to the response used by the Federal Government to address the failed states of the South Pacific where police have been brought in to stabilise situations so that citizens can walk the streets and access services. In such international interventions better systems of governance are introduced to improve efficiency, usually by placing Australian public servants in line positions, and ultimately corruption and abuse of power are stopped in their tracks. The situation is normalised so that services and aid targeted at poverty reduction can be delivered. It appears clear that what the nation has seen

“THE TASK IS NOT SO MUCH TO SEE WHAT NO ONE HAS YET SEEN, BUT TO THINK WHAT NO ONE HAS YET THOUGHT, ABOUT THAT WHICH EVERYBODY SEES.”

Erwin Schrodinger

unfold in Indigenous Australia has mimicked what we have seen in other fragile, weakly performing states and their peripheral community situations.

Another response we have seen internationally and in Australia is retreat, withdrawal and intervention to secure and force change. Invariably in these situations the view forms that it is all too messy and complex. There are too many issues of mandate of different scales of government to sort out, too many horizontal co-ordination problems at the same scale; it requires long term investing in governance that is difficult to sustain. It is an issue that doesn't deliver in short-term electoral cycles so government retreats:

- to create direct relations between the highest level of authoritative governance and local recipients (in the NT case directly linking the federal government and the children in risky places).
- to sideline all the intermediating agencies (e.g. introduce tent clinics to usurp the community controlled health services next door)
- to make the local family/ community directly accountable to the central government (e.g. through income management)
- to use the hardest edge of central government to intervene, to cut away all the other messy arrangements, and make it easy to access land (e.g. use the army to resolve logistic matters and directly lease parcels of land).
- to hone down the outputs to the directly measurable ones (e.g. number of kids checked,

decrease in outbreaks of violence, or number of sexually transmitted diseases).

This mode of response improves direct security and responds to symptoms demonstrably. It is highly desired by community members who want relief and it places executive staff in control of local institutions with direct lines of accountability to the central government. It may put kids in school and get infrastructure built and it sets off a round of small and relatively inconsequential income generating projects. It creates islands of exceptionalism where things are said to 'work' and can be held up as a success in terms of very narrow output classes, provided the activities are hugely and unsustainably resourced according to national and global service standards, and provided they are thoroughly policed on a continuing basis.

But the tight focus on stabilisation, income management and reducing welfare dependency has eclipsed a more serious long term discussion of the bigger issues of political economy and delivery of services.

This is not to say federal/state transfers in support of welfare (as entitlement for all Australian citizens) can't be handled better or that serious debate about the enabling and disabling effects of various modalities should be put aside — it's just that if a person is welfare dependent, in the absence of economic opportunity, they will basically remain welfare dependent.

Policy makers and governments can play around the margins in

health, security, education and jobs outcomes — but it will be very difficult to get more than 'better targeting' and related efficiencies.

Ultimately this stabilising and narrow response increases dependency, reduces local capacity and disables institutions that enable people to engage in civic life.

Implications for Indigenous Futures

The NTER has unfolded amidst significant other change processes. The NT Local Government reform has dissolved existing Community Council structures, the NT Housing reform agenda is engaged in massive expenditure on public housing that is distorting the local construction market, the associated training and employment agenda is attempting to cope with labour and skills shortages to meet both the change and the boom/bust economy, and at the same time there are changes proposed for native title, royalty payments and land reform.

Many of the similarities and learning from the international context go unnoticed in Australia because of the language, stereotyping and expectations that we have built up over the years around Indigenous issues and the limitations of communicating such complex issues in the popular media.

Too often we are blinded by our own history and rhetoric to the point we are unable to conceive of change in a positive or incremental way. We argue about the pieces that are put on the table, instead

Continues page 18 >

“THE REAL GAP THAT NEEDS BRIDGING BETWEEN INDIGENOUS AND NON-INDIGENOUS PEOPLE IS THE INCOME GAP, FOR WITHOUT THIS REDUCTION THE HEALTH GAP WILL REMAIN RESISTANT TO CHANGE.”

of debating whether they are the right pieces on the right table.

To date local analysis of Indigenous issues has coalesced around social dysfunction, welfare reform, the viability of small remote communities and reducing gaps with the mainstream.

It appears the alignment of views around the damaging impact of welfare is such that there is little political will to return to the practices of the past or to explore alternative options for the future.

But we see in the earlier discussion that there are some deeper questions that will need to be addressed when the police and doctors have done their work and the community managers want to go home. The disabling effects of ‘executive solutions’, and executive short cuts will need addressing and healing in a reconstruction phase following the emergency intervention. It is clear that as we approach the stage beyond the stabilisation of Indigenous communities we will need to find a new pathway. It may also be, inexorably, that the short-term executive solution makes the challenge even greater — despite the fact that it may stabilise the existing, worrying situation. This is a policy paradox but one that should not be allowed to mask the underlying long term issues.

Associated initiatives in Indigenous Affairs

There are two other significant initiatives associated with the NTER. Parallel commitments to close the gap in Indigenous health disadvantage and a significant investment in housing are being delivered in the NT.

A comprehensive framework that contemplates sustainable and better futures cannot escape analysis of how health issues and housing responses

might articulate with the earlier analysis leading to a focus on political economy and governance.

For a long time the overwhelming concern in Indigenous people has been to improve their health through medical interventions, to reduce the obvious gaps between key measures of health. Poor health and housing have been the visible signs of Indigenous disadvantage. Invariably people have been unquestioning about health for what, and more focussed on health as a public good. However, health is a proxy measure for an ability to access and enjoy a range of rights and opportunities available to people in Australia.

The growing body of evidence on the societal determinants of health indicates ‘that the scale of income differences in a society is one of the most powerful determinants of health standards in different countries, and that it influences health through its impact on social cohesion’.

Across remote Australia there is no doubt that the income differentials between Indigenous people and other residents are large and increasing, and the relationships between Indigenous groups and other outback residents are at times fraught with tension and various manifestations of violence.

There is a significant message for people in the Australian outback that flows from this analysis. It becomes critical to the futures for Indigenous as well as non Indigenous people that the intervention into NT Indigenous affairs strikes at the core of the bigger economic picture as well as the Indigenous specific activities.

The real gap that needs bridging between Indigenous and non-Indigenous people is the income gap, for without this reduction the health gap will remain resistant to change.

As things stand at the moment most writers acknowledge there is market failure in most areas of remote Australia so that a future that substitutes the market for welfare will require more innovative interventions if people won’t, can’t or don’t move.

Government will need to use all manner of tax and non-tax measures — as they do in most other realms — to influence economic outcomes. This is often the missing piece in responses to failed state situations. Under this analysis a focus on jobs or employment will of themselves not be sufficient.

There is also a very apparent case for exercising some caution around the risk involved in planning indigenous economic development responses around a resource led commodity boom. We need to encourage a diverse response to livelihood opportunities that includes the services and knowledge sectors of the economy even if they are currently underdeveloped.

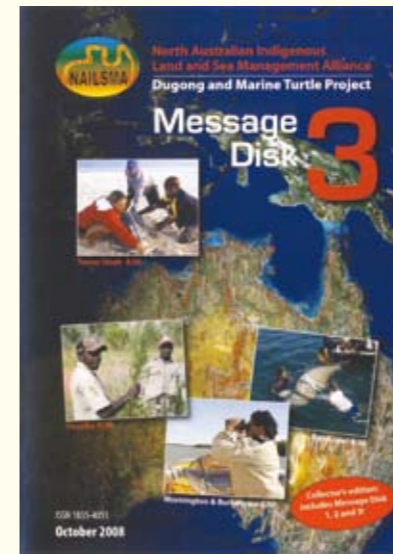
The sooner it is recognised that people who live further from major medical facilities are at greater risk, the sooner we will establish a degree of balance and realism in discussions about development and sustainability across remote Australia. You don’t live in the bush to experience city life or access services that only become viable if significant numbers of people use them.

As a result, you don’t solve problems in the bush by defining them in terms of services available in a city. The benefits that result from living with a large number of people don’t exist, or are at least more expensive when the group is small and dispersed. To make it work you have to trade off more of what you know and do.

Such a position requires Government to rethink how it

North Australian Indigenous Land and Sea Management Alliance Dugong and Marine Turtle Project

NAILSMA DUGONG AND MARINE TURTLE PROJECT MESSAGE DISK 3 (3 DVDS) WWW.NAILSMA.ORG.AU



Message Disks 1–3 showcase the NAILSMA Dugong and Marine Turtle project. Numerous short stories feature the work of Sea Ranger groups from across Northern Australia provide insights into the varied tasks, challenges and accomplishments they are making to ensure the sustainability of Dugong and Marine Turtle populations.

The Indigenous Ranger groups are partnering with researchers, Government and industry in using new and innovative management approaches and combining Traditional Knowledge with modern research methods.

While the DVD’s primarily focus is on the Rangers work to protect and manage dugongs and marine sea turtles, there is also coverage of their work in many other critical areas, including quarantine and surveillance work, cultural heritage, habitats and species protection, removing ghost nets and beach pollution, feral animals, weed control and much more.

While watching the interviews, videos and slide shows about this very important work being done by Indigenous Rangers, the viewer is treated to some excellent contemporary Indigenous music.

applies some basic equity principles that don’t necessarily result in the statistical equality that comes with policies of practical reconciliation and mainstreaming. It also challenges community to fully understand the reality of their expectations or the politicisation of their inequality by external interests.

It will require a shift from a primary focus on normalising services and minimising disadvantage to a process that is principally driven by investment potential in a regional economy.

New institutions for engagement, enterprise and development

One of the challenges for Government and the NTER will be to achieve a transition from the emergency intervention of law and order into a longer-term sustainable development phase that responds to the underlying conditions. Again international experience suggests significant institution building is required to provide the vibrant community sector that adds to social cohesion. This is not to deny the significant social capital that bonds Indigenous people,

rather than in a systemic view of the future the required linking and bridging capital will need developing between Indigenous and non indigenous residents of the outback.

If the outback is to move ahead it will require new entities that encapsulate the norms and rules for enterprise, development and social cohesion providing services, support and hand ups as required.

The development phase of the intervention needs to identify new forms of institutions. Behavioural change begins with individuals but supportive organisations give the leg up to embed that change and support new engagement models. The support of effective and creatively managed organisations by government, NGO’s and the philanthropic sector is a crucial addition to market-based policy frameworks focussed largely on the individual.

The challenge for future policy is to strike the right balance of Government intervention, market incentives and community aspiration to harness the opportunities that might arise from the changed circumstances and ongoing differences.

A unifying principle that provides investment and development opportunities for all and gives direction to future investment in remote Australia is needed — an investment approach that embraces Indigenous and non-Indigenous interests. That provides a vision that reconciles the past with a future that is determinedly in the national interest. It also provides a framework in which Indigenous peoples can achieve a greater stake in the political economy that engages them. ■

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MARK STAFFORD SMITH

This article has been edited. The full version is available at www.icat.org.au.

REFERENCES
Craig, D. and D. Porter. 'Development Beyond Neoliberalism: Governance, Poverty Reduction and Political Economy.' New York: Routledge, 2006
Dillon, M.C., 'National Security and the Failed State in Remote Australia', Australian Policy Forum 07-01B, Nautilus Institute at RMIT, 25 January 2007
Holmes, J. (2002). 'Diversity and change in Australia's rangelands: a post-productivist transition with a difference?' Transactions of the Institute of British Geographers 27, 362-384
Stafford Smith, M and Moran, M., 'The Community — Settlement nexus — drivers of viability and resilience in remote areas of desert Australia'. (in press), p2



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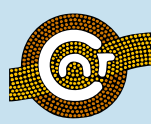
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